

THE UNIVERSITY OF HULL

The Influence of Economic, Political and Socio-cultural
Factors on the Development of Health Services in
Saudi Arabia

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. by

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on

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Saudi Arabia

In this thesis I examine the influence of economic, political and socio-cultural factors on the development of health services in Saudi Arabia. There are four main parts and a conclusion. In Part One I review the situation in developing countries. Many commentators have argued that economic factors, and to some extent political factors, are the main determinant of health services development in developing countries. Socio-cultural factors are generally neglected in these analysis. In this thesis I redress the balance by examining the relationship between economic, political and socio-cultural factors in the development of the Saudi health care system.

In Part Two I analyse the Saudi resource situation. Although the health service is not considered a priority in the overall Saudi development strategy, the government provides generous financial resources for its development. However, non-financial resources remain a problem. Relatively abundant financial resources can provide a short-term solution to some of the resource shortages, such as the lack of skilled manpower, but the use of expatriate

health personnel may have unanticipated negative consequences.

In Part Three I examine the resource allocation process. The Saudi political system contains a mixture of modern and traditional elements, and the decision making process is affected by traditional social relationships. The King and public bureaucrats play a key role in the allocation process, but local leaders and Governors have wide scope to influence their decisions. While health provision is not a political issue in the country, it contributes to the social cohesion between the government and the general public.

In Part Four I examine the influence of socio-cultural factors on the development of the Saudi health service. In the Saudi society socio-cultural factors affect the behaviour of individuals in their interaction with the health system. For example, the annual pilgrimage to Mecca by millions of moslems from all over the world presents a formidable challenge to health authorities. Health authorities accept the importance of socio-cultural factors, and respond by compromising policies.

In the conclusion I consider the policy and theoretical implications of the study. In particular I examine the need for the formal recognition and incorporation of socio-cultural factors into health policy decision making. This would lead to the generation of

alternative policy options which complement other options based on economic and political considerations. The socio-cultural oriented approach can contribute significantly to the improvement of the long term prospect for health services in Saudi Arabia, and developing countries generally.

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Preface

The growing disillusionment with existing systems of health care in developing countries is generating demands for new policies to meet the health needs of the people. The provision of health services to poverty-stricken communities, especially in rural and remote areas, presents a formidable challenge for health policy makers. The recognition of the influence of economic factors has resulted in the development of the primary health care approach in the late 1960s and the 1970s. Since the beginning of the 1980s there has been a gradual change in attitudes towards traditional medical practices and in some developing countries they are revived and incorporated into the formal systems of health care.

These trends in the development of health services in developing countries reflect a gradually increasing change in the perception of health problems and their solution in developing countries. They emphasise a need to involve people in the provision of services which are to be provided in their local communities to make them accessible and acceptable to the people. This indicates an important shift towards a recognition of the influence of socio-cultural factors on health provision. In this thesis I examine the prospect for this development, and use the case of the Saudi health system to illustrate the emerging trend and argue for an explicit socio-cultural-oriented approach to health

provision in developing countries. It is, however, too early to predict specific policy consequences from this approach, and more research is needed to identify areas of health provision where the socio-cultural oriented approach can contribute positively.

There are four parts and a conclusion in this study. The first part consists of three chapters. In the first chapter I present the objectives of the study in the context of health services development in developing countries, and review the situation in terms of the influence of economic, political and socio-cultural factors on health services development. In the second chapter I give a brief introductory description of Saudi Arabia with emphasis on its similarities and differences with other developing countries, and their implications for health provision. In the third chapter I explain and justify my methodology.

Part two deals with the issue of resources available for health services in Saudi Arabia, and the impact of different resources on the present and future direction of the Saudi health system. There are two chapters in this part; number four and five. In chapter four I consider the influence of economic factors on the development of the Saudi health system and compare it with other developing countries. The analysis is at the macro level, and is primarily concerned

with health development in the last two decades. In chapter five I concentrate on hospital development in the country. The features of the Saudi hospital policy are examined and their future implications are explored.

Part three examines how Saudi health resources are allocated, and brings out the effects of political factors on the development of the Saudi health system. This part also contains two chapters; number six and seven. In chapter six I consider the relationship between politics and health provision at the national level. The political and health decision making processes are examined and their effects on health services development are assessed. In chapter seven I analyse the politics of health in the Ministry of Health. The relationship between the Ministry and other government agencies is described, and its effects on the functioning of the Ministry is analysed.

Part four evaluates the process of health provision through the response of the patients and their pattern of utilization of health services, with emphasis on the role of socio-cultural factors on the behaviour of patients. There are three chapters in this part; number eight, nine and ten. In chapter eight I examine the impact of socio-cultural factors on health provision at the national level. In chapter nine I analyse the provision of primary health care

services and health provision during the annual pilgrimage to Mecca. In chapter ten I investigate the growing contribution of charitable societies to health provision in the country, and assess their potential and prospect.

In chapter eleven I consider the policy and theoretical implications of the study. I suggest some prescriptions for exploring an alternative path for the development of the Saudi health system in the future. I also consider the implications of the Saudi case to the wider issue of health services development in developing countries.

Finally, there is one point relevant to my research that I want to mention. It complements my discussion of the methodology presented in chapter three. The official fiscal and calendar years in use in Saudi Arabia are different from the Gregorian year. Almost all data available in the country, including government statistics, are based on the Hijra (lunar) calendar. To avoid complications and preserve comparability I simplified the presentation by equating one Gregorian year to one Hijra year though one Gregorian year is actually one Hijra year and 11 days. The government fiscal year starts in the middle of the Hijra year, and I consistently used the end of the fiscal year rather than its beginning. For example, I refer to the fiscal year 1404/05 (1984/85) as simply 1405 (1985).

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To my wife, Fathia
To my daughter, Zahara

PART ONE

BACKGROUND TO THE STUDY

Introduction

In this part I define the problem which I shall examine in this thesis, and discuss the methods which I used in its pursuit. There are three chapters in this part.

In the first chapter I state the objectives of the study, and examine its general context. The development of health services in developing countries provides the context for case-studying the development of health services in Saudi Arabia. In the second chapter I give a brief account of Saudi Arabia with emphasis on background information. This introductory chapter indicates the reasons for studying Saudi Arabia, and its similarities with and differences from other developing countries. In the third chapter I discuss my methodology, and the difficulties which I experienced while collecting data for the study.

CHAPTER 1: HEALTH SERVICES IN DEVELOPING COUNTRIES:

DEFINING THE PROBLEM

1. Introduction

The provision of health services by the state in many developing countries is a relatively recent phenomena, as recent as the establishment of the country itself in many cases. The adoption of organised health services by developing countries came long after a considerable progress has been achieved in the fight against diseases and ill-health in developed countries. The latter process led to the evolution of present day medical and technological advances, which become available to developing health delivery systems. The awesome task of evolving a suitable health organisation to control diseases and prevent ill-health took place in developed countries many decades ago, and so saved developing countries a lot of work. The difficulties of developing countries, thus have been reduced to the task of adopting largely successful solutions for the control of diseases in their territories and the promotion of good health amongst their population.

However, the process of setting up an effective organization for the provision of health services, including curative, preventative and promotive services, is still largely one of trial and error. There are relatively few aspects of the provision of health services which are widely accepted in all forms of organization, and even in developed

countries a number of arrangements to deliver health services have evolved. The medical profession, which is central to any arrangement for the provision of health services, is deeply involved in the process of setting up and managing these arrangements. The clinical bias of medical practitioners coupled with their lack of training in administration and related spheres of knowledge, which are necessary for the creation and running of an efficient organisation for the delivery of health services, are largely responsible for the wide variation in delivering health services observed now all over the world.

There are many variables interacting in the process of providing health services through organised institutions. In general terms, these variables can be differentiated into a number of broad areas of influences. Political, economic, social and cultural factors constitute the main categories. Economic factors determine the resources that a country provides for the provision of health services not only at the national level but also at the individual level. Economically prosperous countries can afford to allocate more resources for health authorities, and in such countries the per capita income is usually high enough to allow individuals to spend some of their income on improving their health directly and indirectly.

Political factors decide the manner in which available resources for health provision are to be used. The decision to provide public health services is mainly a political one.

How much influence political factors have on health provision is not easily ascertained. Socio-cultural factors determine the pattern of utilization of health services, through their influence on the consumers of the services. They affect the behaviour of patients and therefore influence the success or failure of health services' provision to meet its objectives. In any situation these factors interact at all levels, and the form or organization adopted for delivery of health services is necessarily the result of their interaction. Such developmental interaction is evident in many developing countries trying to set up organised systems for the provision of health services.

Almost all developing countries are relatively young in experience with regard to setting up systems for the delivery of health services. This enables the observer to gain an understanding of the effects of the various influences affecting the process. This knowledge can enhance our apprehension of the main forces at play in the developmental process and the way in which these forces interact and shape the outcome of the process of developing health services. In this chapter I shall identify the main categories of influence which dominate the process of developing systems for the provision of health services in developing countries, and shall present the case for studying the development of the Saudi health services. There are three sections in this chapter. The first section states the objectives of the study within the context of developing countries. The second section examines the

relationship between health and development in developing countries. In the third section I shall examine the development of health services in the developing countries from an economic, political, and socio-cultural perspectives. The characteristics of the process of developing services in developing countries will be identified for comparison with the case of Saudi Arabia.

2. The Objectives of the Study

Before I consider the objectives of the study I would like to define the boundaries of the area under study. Health services development in developing countries can be analysed within a national, cross-national, and international frameworks. National analysis is the case study approach, and cross-national analysis involves comparing specific individual countries. International analysis ignores national boundaries and considers health issues within a global context, mostly in terms of marxist or capitalist ideologies. This study which analyses the development of health services in Saudi Arabia, is primarily within the national framework. However, it also contains elements from the cross-national framework as I compare and contrast the development of health services in Saudi Arabia with that in other developing countries, and present the Saudi case as an extension of trends observed in the development of health services in developing countries.

The study does not deal with the case of Saudi Arabia within an international framework. Analysis of health services development within an international framework is gaining momentum, and is undoubtedly relevant. Navarro, Waitzkin, Doyal and others have contributed significantly to the development of an international framework for the analysis of health services development, particularly in developing countries. However, the validity of their approach does not contradict the case for national and cross-national analysis of individual countries. The substantial differences in national situations and the benefit of cross-national comparisons mean that the validity of the study is not affected by its limitation to national and cross-national analysis.

In this study I want to analyse the development of health services in Saudi Arabia in the context of health services development in developing countries. I shall examine the development of health services in developing countries in terms of resources for health, their allocation, and the perception of patients of the process of health provision. I will concentrate on the dynamic interplay between the influences. In attempting to understand how economic, political, and socio-cultural influences interact in the process of health systems development in developing countries I hope to identify trends and their implications for health in developing countries.

When I examine the interaction between the various variables I shall aim at developing a theoretical framework for the process. My analysis of the case of Saudi Arabia would both contribute to and illustrate my aim. The Saudi case is special. While Saudi Arabia shares many characteristics with other developing countries, it differs from them in a number of important aspects, which makes it specially suitable for the study. In the second chapter I shall give a brief description of Saudi Arabia, and indicate the similarities and differences and their relevance between Saudi Arabia and other developing countries.

An important feature of Saudi Arabia is its socio-cultural character. In my analysis I shall concentrate on the influence of socio-cultural forces on the development of Saudi health services. Comparison with other developing countries would contribute to our understanding of the influence of socio-cultural forces on health services development.

To summarise, the main objectives of the study are:

1. To examine the development of health services in developing countries in terms of economic, political, and socio-cultural influences. The interaction between them is analysed and trends are identified.
2. To give an account of the development of Saudi health services, and to analyse it in terms of economic, political, and socio-cultural influences.

3. To compare and contrast the Saudi case with the development of health services in other developing countries.
4. To closely analyse the influence of socio-cultural forces on the development of health services in Saudi Arabia, and to compare it with the situation in other developing countries.

3. Health and Development in Developing Countries

Three relevant features of developing countries are important in the development of their health systems. Demographic imperatives of developing countries are quite significant for the provision of health services. The type and geographical distribution of prevalent diseases are also important. And finally, the relationship between overall development and health services development need to be considered. The significance of international collaboration in the health field is considered in the context of overall development.

The most important demographic characteristic of developing countries is their relatively young populations. The proportion of the population under the age of fifteen is usually more than 40% (Office of Health Economics, 1972, p.5). The main reason for the step-like age structure of populations in developing countries is the relatively high fertility rate coupled with short life expectancies. The

annual population growth rate in many developing countries is 3%. Crude mortality rates, where recorded, are relatively high, particularly amongst children. In some areas one-half of all children born die before reaching the age of five (Morley, 1973). The cycle of high fertility and mortality rates influences health both at the family and community levels (World Bank, 1980, p.21). The resultant effect is that "all these demographic imperatives give rise to special health care considerations" (Gish, 1970, p.73).

High fertility rates in developing countries leads to rapid population growth. King noted that:

"Most developing countries will double their population in as little as 25 years, but Kenya with a growth rate of 3 1/2 per cent will double hers in less than 20." (1966, p.18:2a)

The dilemma of developing countries is exacerbated by the contribution of health services to population growth, as the health status of the population improves, the death rate falls and the rate of population growth increases unless fertility is controlled. Such excessive population growth may be a deterrent to development, particularly the development of health services with limited resources. Bryant argues that "too rapid a rate of population growth will damage the economy and limit the possibilities of increasing the well-being of the people", and therefore "population growth must be limited" (Bryant, 1969, p.99).

However, Hofsten, considering the wider implications of population growth, argues that:

"There are many less-developed countries that could doubtless feed a population considerably larger than their present one. It should be remembered that the total population of Africa and Latin America combined is less than 700 million, compared with 800 million for China alone. Thus, it can not be maintained that population growth as such makes economic progress impossible to achieve. On the contrary population growth in many cases may actually stimulate progress."

(1982, p.171)

Some of the health characteristics of the populations in developing countries are falsely blamed for the inadequacies and ineffectiveness of their health systems. Some of these characteristics such as pattern of diseases, demographic features, and rapid population growth are definitely part of the many health problems of developing countries (Hopwood, 1977), whereas others such as concentration of health facilities in urban areas, health manpower shortages, and shortage of health training facilities have resulted from the pursuit of inappropriate policies or from inefficient planning and execution. The latter characteristics are signs of the failure of health authorities in developing countries in dealing with the real health problems of their nations.

The pattern of diseases in developing countries also gives rise to special health considerations since most developing countries are tropical or sub-tropical, and have their own special problems of diseases. King defined tropical diseases as a "group of diseases, which are spread by vectors that need a warm climate, and which are not usually transmitted in the colder parts of the world"(1966, p.1:5). Most tropical diseases are communicable diseases transmitted either directly or indirectly through vectors (Brown, 1982, p.172). Parasitic and childhood diseases, particularly whooping cough and malnutrition, are prevalent in developing countries (Fendall, 1972b). Although common diseases in developing countries are problematic themselves, the synergistic relationship between them makes them more deadly. This is particularly dangerous in children and infants in cases of infections and malnutrition (Taylor, 1980, p.1706).

The principal diseases of developing countries are largely caused by inadequate water supplies, poor sanitation, bad housing, and over-crowding, particularly in urban centres (Gish, 1975, p.10). The universal delivery of piped water to households and the construction of sewerage and waste disposal systems are essential prerequisites for the making of health infrastructures in developing countries.

Different developing countries are in differing stages of development. The process of development is often taken to mean economic growth. However, it does not merely mean economic growth, but it should mean a "rationally guided effort toward better human conditions, material and otherwise" (Harkavy, 1973, p.628). This encompasses socio-economic changes conducive to more effective utilization of natural resources for the benefit of society as a whole. Changes in the definition of the development process have had significant consequences to the relationship between overall development and the development of health services.

In the 1950s when an economic growth model of development was predominant, health services were not singled out for particular attention. It was believed that economic growth would lead to improvement in health through increased Gross National Product and per capita income (Taylor, 1980, p.1711). But rapid population growth in developing countries neutralized the increases in per capita income, and the failure of the trickle down theory was seen as a factor in the population explosion. Taylor and Hall summarized the consequences:

"Rates of economic development lower than has been hoped for and ever more steeply rising population growth have precipitated a reaction against public health programs. Among economists, agriculturalists, and even health professionals

the philosophy arose that one should 'hold back' on using modern weapons against diseases because they are 'too effective'. To satisfy the recognised popular demand, simple and relatively ineffective measures of curative medicine could be substituted. It was said that the emphasis should be, instead, on agriculture, community development, education, and industrialization and that family planning should be pushed as a separate program."

The assumption underlying the allocation of resources in developing countries in favour of developmental activities and against the provision of health services is that it is more rewarding for the country to invest in industrialization, for example, than to invest in improving health services. However, recent studies of the relation between health and economic development have undermined the assumption. Griffith et al investigated the effect of investment in the economy and the health services on the national income of Ceylon in the period from 1947-1948 to 1958. Contrary to the general assumption about the effect of investment on productivity, they found "that in circumstances of Ceylon during the period, health measures were not only related to the economy but were at the time more important economically than capital formation" (Griffith et al, 1971, p.269).

In the 1960s when the basic needs model of development was developed, health was "seen as an end in itself" (Elliott and Cole-King, 1981, p.568). It was recognized that the provision of health services was necessary for the development process (Grosse and Harkavy, 1980). This encouraged investment in health which was considered a human capital investment. It was argued that health services contributed to development in that they are "an instrumental value in the developmental process in that they affect social and economic conditions" (Ramalingaswami and Ramalingaswami, 1973, p.169). Thus, while resources are important for the development process, health services should be given priority, it was argued, because they are both contributory to and beneficiary of the development process.

The relationship between health services development and the development process is complex, and can be both negative or positive. Elliott and Cole-King considered this multisectoral relationship and suggested "the creation of a new smaller cadre of 'health development professionals'" to coordinate policies between the health sector and other developmental sectors (1981, p.575). Sometimes the development process creates new health problems or worsen already existent ones. For example, irrigation projects in many developing countries such as Sudan and Egypt have resulted in the appearance and spread of parasitic infections dependent on snail vectors which inhibit

irrigation canals and artificial lakes (Simon, 1967, p.91). Ramalingaswami examined the health aspects of some developmental activities in India and concluded that:

"The developing countries bear a double burden: the existing one of poor health conditions consequent upon under-development, whose hallmarks are poor sanitation, malnutrition, and rapid population growth, and the evolving burden of new health problems consequent upon economic development." (1981, p.556)

While health services development is part of the development process in developing countries, and therefore subject to developmental constraints, it is influenced by factors peculiar to itself arising from the health environment in developing countries and indirectly related to the development process. This establishes the case for a separate theoretical approach to health services development in developing countries different from the theories put forward for the development process. In the next section I shall analyse health services development in developing countries and explore the case for a theoretical conceptualization for it.

4. The Development of Health Services in Developing Countries

In this section I shall examine the development of health services in developing countries from an economic, political, and socio-cultural perspectives, and concentrate on the trends emerging from the dynamic interaction between them.

4.1 The Economic Perspective

Provision of health services, whether in developed or developing countries, requires an input of resources. Irrespective of the method used to finance health services the main determinant of the availability of resources is always the economic status of the country. Where the economy is growing resources for health services can be provided, and where the economy is experiencing problems, securing resources for health services becomes more difficult. The majority of developing countries are by definition economically under-developed, which creates difficulties for their attempts to develop their potential and improve the well-being of their populations. The consequence of this for their health services is that resources became scarce as other national concerns compete for the limited resources available. This has happened in many developing countries.

In the early 1950s the Sudanese government adopted a plan to develop and expand the health system in Sudan with

an emphasis on preventive aspects of medicine spread through an extensive network of dispensaries and hospitals in rural areas supported by specialist hospitals in the provinces. But the "implementation of the plan in its early years went more slowly than predicted, as its progress was limited by the hard realities of finance" (Bayoumei, 1979, p.103). Other developing countries such as Thailand, India, Ghana, and Ethiopia experience similar lack of resources, which hinder the development of their health systems. Torrey, writing about health services in Ethiopia, concluded that the "lack of funds will continue to slow the upgrading of health in Ethiopia as it will in other developing countries" (1967, p.285).

The concept of lack of resources as an explanation for the failure of developing countries to develop their health services has gained wide support over the years (Evans et al, 1981; Davey and Wilson, 1971; Fendall, 1972a). Even where a concept of non-economic influence is advocated, the limiting effect of the scarcity of resources is acknowledged (MacPherson, 1982; World Bank, 1980; Doyal, 1979). The proportion of Gross National Product allocated to health services in developing countries is usually less than 2%, and the government health expenditure per head is not sufficient for the provision of adequate health services (World Bank, 1975).

The scarcity of resources for health services in developing countries dictates some degree of prioritization.

Health expenditure is usually given a low priority relative to other developmental activities (World Health Organization, 1973, p.35). Subsequently, relatively small budgets are allocated for the provision of health services for large populations. This has necessitated the prioritization of policies within the health system so that the best use can be made of the limited resources available for health services. The prioritization of policies has been associated with the spending of limited resources on selected programmes. Many developing countries are investing their limited resources in curative medical services, particularly large and sophisticated hospitals. This was done largely at the expense of public and preventive health services. Curative medical services are usually more expensive than preventive services because of the reliance on foreign supplies and expertise, both of which can be a heavy burden on the foreign reserves of the country (Carney, 1965, p.277).

The spending of limited resources on curative medical services is commonly associated with an inequitable distribution of facilities. The vast majority of populations in developing countries live in small rural settlements and communities (King, 1966). For example, in India, where considerable urbanization has taken place, 80% of the population lived in rural areas in 1971 (Ramalingaswami and Ramalingaswami, 1973). This predominantly rural character creates additional difficulties in the provision of health services, as health

facilities need to be made within easy access to the majority of the population. However, available facilities are concentrated in urban areas at the expense of rural areas (Gish, 1970, p.67).

The inadequacies of health systems in developing countries are often blamed on shortages of particular resources, especially health manpower. Almost all developing countries are short of trained health personnel, particularly professional staff (Gish, 1970, p.70). Since health services in developing countries are hospital-based, the need for specialist staff and skilled personnel has increased. Although reliance on expatriate health personnel is costly and can be a source of problems, developing countries have no other option. Shortages of health manpower are exacerbated by the reluctance of doctors to work in rural areas and their concentration in urban areas. Some developing countries introduced compulsory one or two years service in rural areas for graduating doctors. Other developing countries have a different solution:

"Continuous service from an auxiliary with limited training may be better than service from a constantly changing succession of discontented young and relatively inexperienced doctors required to serve their two years of rural posting before getting on with what they may see as their ultimate career...working in hospital medicine or in urban private practice." (Abel-Smith, 1976, p.89)

The attraction of auxiliaries is that they are cheaper to employ to provide health services (Frankenberg and Leeson, 1974, p.266; Elliott, 1978, p.18). Against a background of limited resources and an increasing need for health services, the lower costs of training and employing auxiliaries compared to health professionals are welcome features (Whittlemore, 1976, p.11). There are other aspects to the use of auxiliaries which are sometimes seen as the logical rationale behind their use (Sharpston, 1974). For example, the delegation of monotonous routine tasks to auxiliaries frees the doctor to the more interesting duties (King, 1966, ch.7). However, medical practitioners have generally opposed the widespread use of auxiliaries (Office of Health Economics, 1972), and the opposition of the profession has meant that there are no internationally agreed standards or general recognition of auxiliaries.

The methods used by developing countries to train their own doctors and other health personnel have been often identified as a major reason for their failure to develop effective systems for the provision of health services. Developing countries adopted patterns of medical education similar to those in western developed countries. They are designed to cater for the needs of advanced industrialised communities, where the emphasis is on hospitals and sophisticated technology. The realities of the situation in developing countries, thus, has been ignored. Bryant described the problem as:

"...the failure of medical educators to appreciate the constraints under which health care must be delivered in these countries - that these constraints require a different technology, different attitudes, even a different ethic".

(1969, p.202)

Medical education, as Gish put it, "has to be geared to the type of health problem experienced by a given country's entire population" (1970, p.72). An extension of the general problem of training health personnel in developing countries is the medical "brain drain" from developing countries. Many doctors trained in developing countries practice in developed countries, which constitutes a considerable drain of the resources of the developing countries (Gish, 1971).

4.1.1 Summary

Most developing countries are economically poor and subsequently have insufficient resources to support their development programmes, which include the improvement and expansion of their health systems. This has led to severe competition for resources between various sectors, amongst which the health sector has often not commanded much support. Such national economic realities in developing countries have given rise to the view that economic constraints are the main factor behind the inadequacies of health services in developing countries.

Economic influences are evident under all circumstances. As a sine qua non, resources must be made available for the development of health services. The rising cost of providing health services has shed some light on the role of economic influences in the development of health systems. Since resources are essential for the development of health services, their lack represents a severe limiting force, and their abundance creates scope for the affecting forces to come into play. Thus, economic influences in developing countries are a major constraining, rather than directing, force in the process of developing health systems, and other influences have been identified as the main constraining forces. Evans et al argued for a political perspective, to which I turn next:

"Political considerations may override all other priorities, and little progress can be expected unless there is a political commitment to apply resources where the need is greatest."

(1981, p.1119)

4.2 The Political Perspective

The majority of developing countries have been under colonial rule for some time prior to gaining independence. Colonial powers such as Britain and France are largely responsible for the pattern of development of the health services in these countries. The colonizing countries introduced health services primarily for their

colonial officers, business men and other employees serving in the colonial administration. Leng considered the pattern of health and the development of health services in the Malay Peninsula from the later nineteenth to mid-twentieth century and concluded that:

"the development and distribution of health care services in Malays during the period of British colonial rule were influenced both by the economic need to provide capitalists with a tolerably healthy workforce and the political need to win support for the government among the people."

(1982, p.397).

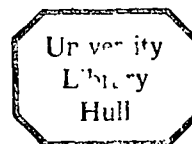
Since the main objective of the colonizing countries was to make profits, it was important for them not to spend too much in developing health services for the colonized countries. The British colonial administration in Sudan, and also in other colonized African countries, minimised their health expenditure by training locals to provide simple and relatively cheap health services. The present Sudanese health service is still heavily dependent on auxiliary and paramedical personnel to provide services to the majority of the Sudanese population, particularly in the remote rural areas of the country (Bayoumei, 1979). The use of locally trained people, which was developed by the British colonial administration, has spread into many developing countries, and became essential to their systems for providing health services. People trained locally in

short programmes requiring low levels of education are generally referred to as auxiliary personnel.

In the Senegal, which was colonized by France, Bryant found that:

"Through the years of the colonial period, the French developed a health service ... and few of Senegal's health facilities are staffed adequately even for minimal needs." (1969, p.62)

Thus, many developing countries such as Nigeria (Schram, 1971), Tanzania (Turshen, 1977), Ghana (Twumasi, 1981), India (Ramalingaswami and Ramalingaswami, 1973), and Papua New Guinea (MacPherson, 1982) when they gained independence found that they have some form of health infrastructure started by colonial administrations. The use of health services' provision to gain political support continued in some developing countries even after the colonizing countries have left (Onoge, 1975). The extent of the provision of health services has become a yardstick by which many people in these countries measure their political leaders. A former director of the Medical Services in Ghana described the situation in Ghana after it had gained independence from Britain:



"... politicians regard the health services as a means of currying political favour, and hospitals and health centres have been built in some areas in the face of expert advice to the contrary: the politicians of these areas want to secure a return to power." (Sai, 1973, p.125)

There are many motivations for politicians to foster the relationship between the political system and the obligation to provide health services (Evang, 1973, p.334). A significant motive which is "relevant to the future of medical services in developing countries from a political view is that they may serve as social control mechanisms through which social discontent may be reduced and social integration increased" (Office of Health Economics, 1972, p.35).

In many developing countries politicians have extended the relationship between the political system and health services system to other uses. They used the provision of health services as a political weapon to increase the dependence of the population on governments and to promote their personal interests. Whether they succeed or not is dependent on a number of other variables. One view of how the use of health services' provision as a political weapon is operating has been described:

"In a democratic society, governments want to be re-elected and thus adopt policies which they believe will be or will become popular with their electorate. And less democratic governments normally find it more convenient to govern by consent than by force. But the consent they may be seeking is that of the urban middle class and the skilled worker, for policies which favour the wealthy most of all." (Abel-Smith, 1976, p.181)

In many developing countries the development of health services had been, and is still being, influenced by the activities of Christian missionaries. Missionary health activities have preceded colonization in some countries such as Kenya. Catholic and Protestant churches amongst others have participated in providing medical care to indigenous populations in developing countries both for humanitarian reasons and because they "recognised health work as a potentially converting element" (Mburu, 1981, p.524). They concentrated their efforts on remote and rural areas which were usually not served adequately, or not at all, by public services. Lasker, who investigated the role of health services in the colonial rule in the Ivory Coast, concluded that:

"Missionary health activities increasingly played a part in supplementing the public system, particularly in the less favoured parts of the country."
(1977, p. 284)

In southern and south eastern Asian countries the church maintains a significant role in the provision of health services. In India and Indonesia about 20% of hospital beds are provided by the church (Asian Ecumenical Conference, 1972). Missionaries provided mostly curative services through dispersed outposts, health centres, and small local hospitals, and in the process have worked to undermine indigenous traditional health practices (Oliver, 1952, p.210). Although missionaries have contributed to the introduction of western medical practices to developing countries, their involvement had been rather limited:

"Missionaries may not have provided quality care but certainly provided a significant portion of the services however inadequate in quantity and extent of coverage." (Mburu, 1981, p.522)

The development of health services in developing countries which have escaped direct foreign political influence through colonization was also affected by the colonial powers. Foreign interference was secured through aid, technical assistance, and foreign advisers. For example, the development of health services in Thailand was markedly influenced by the involvement of the Rockefeller Foundation of the United States of America. The Rockefeller Foundation assisted the Thai government in organising medical education and training doctors at the beginning of the century. The Foundation laid down conditions, which were accepted by the Thai government, for its participation in

training a small annual number of doctors to a high professional standard, and concentrating their training on hospital-based medicine (Donaldson, 1982, p.107).

The Thai government proposed reducing the period of training of doctors and starting shorter courses in medicine so that a larger annual number of doctors can be trained to serve in the rural health service, which provides health care for over 80% of the Thai population. The Rockefeller Foundation rejected the proposals and used its power to implement its programme, irrespective of the national need of the Thai people.

The 1950s signalled the start of an era of international cooperation in many fields including health. The formation of the World Health Organization was particularly significant for developing countries. The World Health Organization and many other international agencies worked closely with governments of developing countries to contain and eliminate infectious diseases, and to improve living conditions. The World Health Organisation supplied technical assistance and advice as well as undertaking mass campaigns to deal with specific problems such as malaria, health education, and population control. Many developing countries have benefitted from these efforts. Myrdal, in his study of development in South Asia, noted that:

"One factor strengthening the hold of modern medicine in the South Asian countries was their participation in the newly created WHO, a venture that implied close and regular contacts between their health authorities and those of the advanced countries." (1968, p.1576)

The growth of international health activities has not been without controversy. Health activities of international agencies and bilateral health cooperation have been shown in a number of occasions to be primarily concerned with the interest of developed countries more than developing countries. Cleaver, in his analysis of the history of malaria control and its resurgence in the 1970s, concluded that "malaria decontrol is perhaps part of an international business strategy to re-establish growth" (1977, p.577). And White, in his examination of British official aid in the health sector, reasoned that the pattern of aid was not aimed at the health priorities of recipient countries because:

"considerations of British economic interest, reflected in the fact that a high proportion of aid is in the form of technical assistance, while part of the remainder is also tied to British goods and services (balance of payments considerations), and commercial considerations in the choice of recipient countries;"

(1977, p.46)

The political complexion of governments in developing countries continued to exert considerable influence on the development of their health services after their gaining independence and self-rule. Political independence did not affect the pattern of health services provision significantly (Leys, 1975; Doyal, 1979), and health policies similar to pre-independence policies were adopted. In Tanzania, following independence the health services followed the same pattern which existed before independence, and which concentrates on building large hospitals in urban centres and towns. This had been the case because:

"The demands of the urban elite, their bourgeois nationalism, and neo-colonialism are the main determinants of the current health policy of the country." (Segall, 1972/3, p.39)

Governments of developing countries provide health services free at the time of use, and their provision is supplemented by contributions from the private sector and voluntary organizations such as missionary services. Private services and the services of voluntary organizations are usually provided on fee-for-service basis. A view, which is rarely expressed explicitly, is that developing countries are burdening themselves by undertaking the responsibility to provide services free at the time of use. The difficulties arise not because of the commitments of governments to provide the services, but because the commitments are usually for comprehensive health services.

In most cases the health status of the population is such that it requires the intervention of the government.

Almost in all developing countries the process of development has encouraged urbanization. Morley noted that:

"In a period of 50 years the urban population of developing countries will have grown from under 100 to over 600 millions and by 1980 may exceed the urban population of economically advanced countries." (1973, p.27)

Health facilities are mainly located in urban centres with scant coverage of rural areas (Gish, 1973, p.399). The services are usually hospital-based services, which are expensive to have and to run. The limited resources of developing countries are usually insufficient to run them. The services are concentrated in urban areas because the ruling urban elites are concerned to provide adequate health services for themselves without regard to the health resources of their countries or the health needs of their rural populations. Leeson gives a good example of such urban elitism from Zambia:

"One civil servant had to be flown to a London kidney unit where he remained until a kidney unit was specially built and equipped for him in Zambia (he died shortly afterwards)." (1974, p.436)

In 1967 the socialist government of Tanzania adopted a socialist health policy which emphasizes the development of preventive and rural health services with an intention of decreasing spending on hospitals, and it banned the building of new hospitals (Segall, 1977). The socialist government of neighbouring Mozambique was more radical in implementing its policy for the development of the Mozambican health services. Prior to independence emphasis was placed on developing relatively extensive hospital-based services in large towns and urban centres. The socialist government concentrates on serving the rural health service to provide a range of preventive and curative services. The government was determined to implement its policy, and it nationalised all health facilities in the country and banned the practice of private medicine so that its efforts are not undermined (Segall, 1977).

The goals that socialist countries such as Tanzania and Mozambique are aiming at are probably illustrated by what has been achieved in socialist China (de Haas and de Haas-Posthuma, 1973) and Cuba (Fernandez, 1975; Navarro, 1972). The Cuban government provides a comprehensive health service based on an organised network of polyclinics and rural hospitals backed up by a system of general and special hospitals. In the words of Stein and Susser, who studied the Cuban health system:

"The Cubans have shown that it is necessary to prevent the major ills that afflict them. They have done this by setting up well defined goals in accord with a national programme and by keeping them always in view; by planning to achieve these goals; by creating a professional corps and mobilizing the whole of this corps together with the mass of the population to implement a humane service; and by continually evaluating the results and responding flexibly to them."

(1972, p.566)

Political factors can also affect health services negatively in developing countries. In Argentina the health policies of the military junta which seized power in 1976 have precipitated "a generalized deterioration in the health status of the Argentinian population" (Esudero, 1981, p.564). Horn analysed the health policies of the military modernizers of Brazil where economic development has been described as the economic miracle, and concluded that:

"The road taken by the politicians, military or civilian, will largely determine the choices open to health officials and the economic path which could spell optimism or gloom for resolving the health and social needs of millions now neglected." (1982, p.107)

4.2.1 Summary

The health care systems of most developing countries originated during colonial domination. Colonial rulers provided some health services for the natives so as to win their political support and ensure stable supply of labourers for economic activities. The patterns of health services created by colonial powers were inappropriate for the countries concerned, especially for the bulk of the rural population.

The end of colonization in many developing countries was not accompanied by significant improvements in their health systems because ruling elites, who were westernly-oriented, have kept and maintained the status quo.

The inertia of colonial arrangements has usually been too strong for post-independence administrations to be able to achieve significant changes. In socialist developing countries where political ideologies are used to create improvements in health services, considerable progress has been made.

Although commentators have traditionally placed emphasis on political influences in some developing countries as the predominant force shaping their health systems, this influence although visible may in fact be much weaker than it appears to be. In many developing countries the historical base on which they have developed their health systems has been largely determined by political forces (Office of Health Economics, 1972, p.32). However,

since political stability in most developing countries is rare, the continued influence of any political force is difficult to assess. In addition, it has become generally accepted internationally that the task of providing health services is always the responsibility of the political system in the country concerned. Thus, some degree of interaction between the political system and the health services system in any developing country will always be present, a reflection of this widely accepted principal.

The inadequacies of the economic and political perspectives to explain health services development in developing countries have indicated the need for a broader perspective. Some commentators recognised the potential of socio-cultural factors. Scotney, in relation to maternal and neonatal care services in the developing world, noted that:

"The slow extension of such services can be attributed largely to their cultural inappropriateness. They generally embody values and make use of procedures emanating from industrial societies, and people do not easily accept a service that originates in a different culture, especially when the people administering and providing it are often of different origin, trained in ways of thinking alien to the local people, and sometimes even unable to use the local language." (1981, p.531)

4.3 The Socio-cultural Perspective

Prior to colonization many developing nations were relatively simple independent or semi-independent societies. Since independence most have developed into complex centralized states. From a socio-cultural point of view, the process has had many important implications. Many social organizations and structures have been weakened, modified, or even changed altogether. Similarly, cultural identities have been suppressed, weakened, or replaced. The practical implications of this was to curtail the influence of socio-cultural forces in the newly formed western-styled independent states. Now, in developing countries socio-cultural influences such as traditional forms of social organization are most evident at the micro level. However, in some states political institutions have adapted, developed, and incorporated these traditional forces through patronage systems.

In developing countries traditional indigenous healing systems with deep social and cultural roots provide medical care to a considerable proportion of the population. In China, Pakistan, India, and Ceylon the government has taken measures to promote them. In the late 1960s, Myrdal has estimated that "the medical needs of perhaps four-fifths of the Indian population are being met by indigenous practitioners" (1968, p.1599). The introduction of western medical practices into developing countries had the effect of reducing the importance of traditional indigenous healing systems, though in some countries plans to revive them are

popular (Said, 1983, ch.5). The interaction between traditional systems and western medical systems is not necessarily one of conflict. Shiloh, after analysing the interaction between the middle eastern and western systems of medicine, postulated that "clash and conflict during interaction is neither natural nor 'inevitable" (1968, p.241).

Most indigenous healing systems in developing countries are recognised (Dunlop, 1975), but they are usually left to decline. In India and many other countries which were colonized, colonial administrations encouraged western medical practices, while adopting a relatively *laissez-faire* attitude towards indigenous systems of medicine. They generally hoped they would decline (Banerji, 1979, p.511). Colonial rulers and governments which succeeded them have usually considered indigenous systems as backward and unscientific because of their traditional and cultural elements. They did not pursue active campaigns against traditional systems, but they followed a policy of discouragement by consistently failing to incorporate them into the health services, which they provided to the public. The process of development with its consequences of industrialization, modernization, and change has diffused the reaction of socio-cultural forces to the introduction of western systems of medicine in developing countries. King described the ensuing "stress" as "cross-cultural conflict" (1966, ch.4). New summarised the outcome of the interaction between traditional and modern health systems:

"However, as modern medicine became available, the seemingly more efficacious means of providing health care pushed aside the indigenous medicines. Yet, folk medicine has continued to persist in all cultures." (1977, p.485)

In developing countries religion is the most influential socio-cultural force affecting the health of the individual directly and health services' utilization and development indirectly. Henderson and Primeaux have noted that:

"Religions contribute to understanding health care because they offer what is perhaps our most comprehensive beliefs about the basic nature of human beings - beliefs that have significantly affected theories and practices of medical care." (1968, p.186)

In countries where political institutions are not clearly separated from religious institutions, religious influences are exerted at the policy formulation stage. Religions, through their systems of meanings, values, and beliefs, tend to control many aspects of the way their followers live. This aspect of traditional health cultures in developing countries is quite significant. For example, in Nigeria some religious groups practice the custom of ceasing coitus with pregnancy and after birth until the child is two or three years old (Ajose, 1954, p.1024). This

is important for the health of the mother and her children, and is probably more effective and better than available scientific contraceptive methods.

Most religions in developing countries claim close association with causation and treatment of diseases, especially when "the premise that health is supernaturally given and maintained and that disease is supernaturally caused" is part of the religious beliefs (Malefijt, 1968, ch.10). This gives religious authorities an important social role as religious healing becomes an integral part of the people's health culture. Although in few instances religious healing can be useful due to its psychological effect, it frequently harms the patient both physically because the treatment is ineffective and financially because it may involve sacrifices and ritual performance. Foster pointed out that the resultant "fatalistic attitude" towards illness is a major reason for high infant mortality rates in many developing countries as it deters parents from seeking modern effective forms of treatment for their children (1962, pp.66-68).

In South Asia the Hindu religion prohibits the killing of animals and limits its followers to vegetarian diet. Some religions including Islam prohibit the manufacture, sale, and drinking of alcohol. Similarly, there are many taboos and customs which are sanctioned by religions in developing countries. Such taboos and customs may be beneficial or harmful to the individual's health, but these

consequences are rarely considered and religious doctrines are followed blindly. Myrdal, in his study of the development of South Asian countries, found that some religiously-sanctioned customs can contribute to the improvement of the individual's health:

"For example, the ritual washing of the body observed by some castes in India and by groups in other South Asian countries can certainly be a health-protecting custom. It can also be a basis for attempting to educate people to more hygienic habits." (1968, p.110)

The role of women sanctioned by religions in developing countries contrasts sharply with that enjoyed by women in developed countries. Many religions imply that physiological phenomena relating to women such as menstruation and child bearing as having supernatural basis with detrimental consequences to mothers and their children. An example of important significance concerns the relationship between the women patient and the doctor:

"Medical and public health workers, for example, have been seriously handicapped in their efforts to reduce infant and maternal mortality by widely prevalent ideas about female modesty and the proper relationship of a physician to a pregnant woman. In Moslem countries, in Latin America, and in many other areas, it is quite unthinkable that

a man other than a woman's husband should have the degree of intimacy with her required by gynaecological examination." (Foster, 1962, p.73)

In developing countries kinship characteristically represents traditional patterns of interpersonal relations between people. As simpler societies are gradually transformed into more complex urban societies, kinship becomes important as a "basis for social cohesion and collective action" (Keesing, 1975, p.129). Foster noted that in developing countries kinship patterns of relations are progressively fulfilling a number of functions:

"The mutual obligations of these relationships take the place of many of the activities of more highly developed state forms: social security and welfare, an effective police system, cooperative and credit facilities, and the like."

(1962, p.92)

The utilization of health services by individuals in developing countries is one area where kinship's influence can be significant not only for the individual but also for the direction and development of the health system. For example, in some countries the admission of a patient to hospital is not regarded as a matter for the individual or the doctor but one which concerns the family of the individual or the most senior member of his family. In a study of the role of familism in making decisions for

hospitalization of family members in rural Nigeria Abasieming found that "Among rural people in the study area, a decision as to whether a sick person should be hospitalized or not was not yet the exclusive responsibility of an individual but that of the family" (1981, p.45). In Korea, Foster noted that:

"If, for example, a young wife is found to have active tuberculosis requiring hospitalization, the physician must first explain the problem to her parents-in-law who occupy the position of authority in the family; her husband does not have the right to make the decision. Or, if a mother finds her child has malaria, she must first ask her parents-in-law's permission to take the child to a modern health centre. If they say no, she is reduced to patronizing an herb doctor."

(1968, p.1601)

Maternity and child care in developing countries is still largely a family matter, despite the continued efforts of health authorities to introduce modern health practices. Deliveries in developing countries are mostly handled by relatives or members from the mother's social group, usually known as traditional birth attendants, and deliveries take place in the home. Myrdal found that in South Asia "home confinement is the rule except in Ceylon, where almost 60% of all births took place in institutions in 1961, more than 90% of the births in India still take place in private

homes." (1968, p.1601) Parker et al studied the use of self-care during pregnancies in rural areas of India and Nepal, and found that:

"Deliveries in North India were predominantly the responsibility of traditional birth attendants. Eight-five percent were conducted by them while only 2% were unattended by some trained or traditional professional. It is almost the reverse in Nepal with 69% of deliveries in the terai and 79% in the hills involving only the pregnant women, her family or friends. TBAs managed only 19% of deliveries in the terai and 3% in the hills." (1979, p.23)

The influence of kinship on the response of people to their health needs is a deeply rooted socio-cultural phenomenon in many countries, and is not affected by the availability or otherwise of better different alternatives. Lin et al studied the relationship between ethnicity and patterns of help-seeking for psychiatric patients in the United States of America, and concluded that "pathways to treatment do vary in relation to cultural factors" (1978, p.10). They also found that patterns of help-seeking are influenced by kinship:

"Chinese patients were kept within the family for prolonged periods of time in the beginning of their illnesses. Many were isolated within the home and allowed few inter-personal contacts. Remarkably advanced psychotic symptoms were tolerated as long as there was no excessively violent or disruptive behaviour. When external assistance was sought, the family physician was contacted for what was thought to be a physical etiology for behaviour disorders." (1978, p.10)

4.3.1 Summary

While the influence of socio-cultural forces on the development of health services in developing countries is mostly indirect, operating at the individual's level, it is not necessarily evident at the national level, especially where the political institutions are insulated from its influence. Socio-cultural forces such as traditional indigenous healing systems, religion, and kinship play an important role in the lives of individuals in developing countries. Although they are sometimes barriers to general improvements in health conditions, they can equally be beneficial and stimulants to improvement in health conditions. Developing countries have generally ignored their socio-cultural realities in their strive to improve their health conditions and develop their health systems. Socio-cultural forces determine the mode of

utilization of health services, and subsequently affect the direction of their development.

The influence of socio-cultural factors on the development of health services in developing countries has not been extensively researched because in many developing countries indigenous social and cultural patterns have been superseded by western patterns. However, many researchers have pointed out the potential influence of socio-cultural factors, and gave examples, most at the local level, to illustrate it. Barton, in a survey of tropical health, noted that:

"A community's cultural and behaviour patterns can encourage or minimize the transmission of disease indirectly, through the type of house that they build and live in, the distribution of the family in the various rooms throughout the house, the clothes that they wear or the lack of them, the diet, and customs related to feeding. All these can be dictated by general tribal or religious beliefs and customs." (1977, p.93)

5. Conclusion

The rationale behind most health policies in developing countries is that they have been tested in western Europe and proved to be successful. But when they were applied in developing countries, they did not succeed in improving the

health situation. Health services systems in developing countries should be adapted to suit the requirements of populations in developing countries. This means that wherever possible the emphasis should be on designing local solutions for the local problems of developing countries. It should be recognised that:

"... the experiences of the already developed countries cannot necessarily be expected to be repeated in the presently developing world. Differing cultural structures and newly available technologies could cause them to take different courses."

(Office of Health Economics, 1972, p.8)

The issue of the development of health services in developing countries has not been developed theoretically until late. A considerable amount of literature on the issue has been produced, especially since the 1970s. Most commentators have recognised that the process of providing health services in developing countries is subject to political, economic, and socio-cultural influences (Bridgman, 1972), and they tended to give priority to economic factors. An understanding of the various forces in action and their effect on each other has not been achieved yet.

The interaction between the factors was analysed usually in the context of development and international

health. This has allowed significant analysis of the political and economic factors involved within the theoretical concepts dealing with international health and development respectively.

Thus, the discussion of political factors affecting the development of health services in developing countries has been concentrated at the international level, and analysis of the situation at the national level is only used to give examples illustrating the origin and implications of the problems of health services in developing countries within an international context. This approach does not provide a theoretical framework for understanding the influence of political factors on health services' development at the national level, and underestimates the contributions of economic and socio-cultural factors.

The influence of economic factors on the development of health services in developing countries received more theoretical treatment in the context of development than either political or socio-cultural factors. The economic realities of developing countries provided the substance for fitting the problem of health in developing countries in the general theoretical framework of development. However, examples of countries such as Brazil and Tanzania, where successful development, as the case with Brazil, and little economic growth, as the case with Tanzania, have not improved or slowed health services' development respectively, have indicated the need for a broader

perspective which involve socio-cultural factors as well as political and economic factors.

The contribution of socio-cultural factors to health service development in developing countries has not been given adequate consideration, and no attempts were made to incorporate them into a theoretical conceptualization. Socio-cultural factors are potentially influential. Their potential influence needs to be demonstrated, and its practical implications for the pattern of health services in developing countries should be exposed before health policies are decided upon. This would widen the choices available for policy-makers by providing alternatives derived from the local environment to the options copied from western developed countries.

The socio-cultural context of health services development in developing countries needs to be seriously taken into consideration if the difficulties of developing countries are to be understood and faced effectively. Socio-cultural influences affect and are affected by political and economic influences, and health systems in developing countries are a function of this interaction. The process of development, with its implied changes in socio-economic structures, accelerates the interaction. The resultant dynamic situation is valuable for researchers interested in development of health systems, as well as those interested in the development process. It also represents a useful addition to the on-going debate on

which "the interdependence of economic development, social structure, political organisation, and health patterns is plain", but "causal sequences in the relations between all these elements are far from plain" (Stein and Susser, 1972, p.551).

In this study of the development of the Saudi health services I shall analyse Saudi health policies, and elucidate the contributions of the various forces affecting the process of setting up health systems. The Saudi society is relatively permeated by religion, and its socio-cultural forces, unlike other developing countries, are quite influential. The study may indicate the potential socio-cultural wealth of the Saudi society, and its contribution to the development of the Saudi health system.

Saudi Arabia is particularly suitable for this study. It shares many similarities with other developing countries, and is different from them in a number of important aspects. Before I discuss the methodology which I used in the study in the third chapter, I shall present a brief introductory account of Saudi Arabia in the next chapter. The similarities and differences which Saudi Arabia has with other developing countries would be identified, and their health implications signalled out for more detailed analysis in the remaining parts of the thesis.

CHAPTER 2: SAUDI ARABIA

Saudi Arabia is a major economic power, but few outsiders have any real knowledge of the country. Its sudden oil wealth, which gave it unprecedented prominence, started an interesting experiment in development. The development drive moved fast on all fronts; economic, political and socio-cultural. The Saudi thrust toward modernization provides a unique opportunity to study the different aspects of development, including health services development.

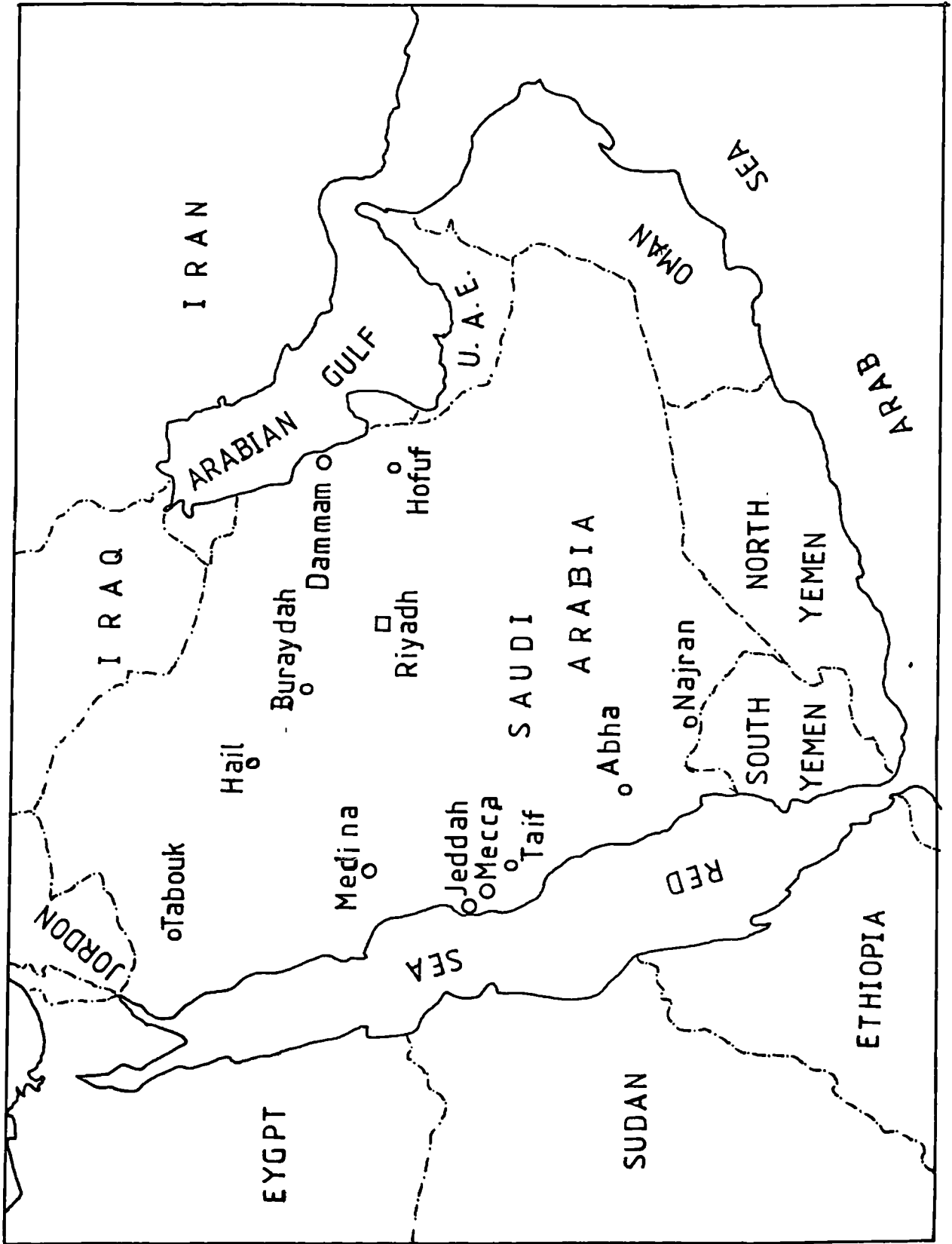
The provision of health services is one area which the Saudi government gave special consideration to from the start. The efforts to set up a health delivery system has met many difficulties. The challenge facing the Saudi authorities in their continuous efforts to establish a suitable health system is formidable. In this chapter I shall provide a brief introductory account of the country to set the scene for my main analysis. In the following paragraphs I shall describe the land, history, government structure, the economy, the socio-cultural identity, and the health situation in Saudi Arabia. The features of Saudi Arabia which make it particularly suitable for this study will be emphasised throughout the chapter.

1. Geography

Saudi Arabia is located in the south western corner of Asia. It occupies most of the Arabian Peninsula, about four-fifths of its total area. It is bounded on the north by Jordan, Iraq, Kuwait; on the east by the Arabian Gulf, Qatar, United Arab Emirates, and Oman; on the south by Oman, People's Democratic Republic of Yemen, and the Yemen Arab Republic; and on the west by the Red Sea and Gulf of Aqaba (figure 2.1). The area contained by these boundaries is vast, and different sources give different estimates of it. The official estimate is 2,240,000 square kilometres, which is six times as big as the United Kingdom's area (Ministry of Information, n.d.b).

The terrain of Saudi Arabia is diverse, including mountainous areas, coastal areas, and large desert areas. In the west a narrow fertile plain, whose width varies from 10 to 40 miles, runs parallel to the western coast and extends from Aqaba in the north to the Yemen in the south. To the east of the plain and parallel to the coast runs a mountain range whose western side rises almost vertically out of the coastal plain, and is broken here and there by a number of great valleys known locally as Wadis. The highest mountain in the range rises about 9,000 feet above the sea level. Among the wadis the most important are wadi Fatima in Mecca region and wadi Bisha in Asir region. In the wadis water wells are abundant and water-borne vector-diseases are common. Malaria was endemic in wadi Fatima until the

Figure 2.1 Saudi Arabia



late 1950s, and schistosomiasis is still endemic in Asir region. The eastern side of the mountain range declines less steeply into the Nejd plateau.

To the east of the Hejaz mountain range stretches the Nejd plateau, which covers the central region of the country, with an elevation between 4,000 and 6,000 feet. The main part of this area is a relatively flat plateau, but there is a number of mountain ranges running from south-west to the north-west. The Dahana sand belt separates the Nejd plateau from the eastern coastal plain, whose elevation falls to sea level. The Dahana sand belt connects the northern Great Nafud desert with the famous Rub Al-Khali (the empty quarter) in the south.

The size of the country and the nature of its terrain create difficulties for health authorities. It means that extra resources are needed to cover the whole population, and presents a challenge to the establishment of an effective organization for the delivery of health services as transport and communication are likely to be problematic. The desert regions constitute a natural barrier separating the north and the east from the rest of the country.

The climate of Saudi Arabia is generally hot in the summer and relatively cool in the winter. In the western and eastern coastal regions humidity in the summer months may keep the temperature below 35 C (95 F). In the central region the temperature may reach as high as 49 C (120 F).

The preservation of medical supplies particularly drugs in such conditions is problematic especially in remote areas where electricity supply is unreliable or non-existent. Cities on high grounds in the western and south-western mountainous regions such as Taif and Abha have temperate weather during the summer months. Rainfall is generally scarce throughout Saudi Arabia except in the south-western coastal region where adequate rainfall is usually recorded. In the eastern coastal region, and to some extent the central region, sand storms occur frequently during the summer months. It is also common to experience dust-blowing strong north-westerly winds in the summer in the eastern region. It is perhaps not surprising that eye diseases are prevalent in the region.

2. History

Saudi Arabia was founded by the late King Abdulaziz Al-Saud following three decades of war which he had spent in uniting the people of the Arabian Peninsula under his leadership. Prior to the start of his rule, which was marked by his recapturing of Riyadh in 1902, the country had been divided. The western coastal region, where the holy cities of Mecca and Medina are situated, was under the Ottoman rule. In the eastern coastal region there was only the two oases of Al-Hasa and Al-Qatif, and they were under the Ottoman rule also. The remainder of the country was populated by warring nomadic Bedouin tribes.

Abdulaziz built up the Kingdom gradually by gaining control over the Nejd region first and then extending his rule to the eastern region, Al-Hasa. He then added the south-western region, Asir, to his control, and finally he conquered the western region, Hejaz, in 1926. The efforts of King Abdulaziz culminated in the establishment of the Kingdom of Saudi Arabia in September 22, 1932 (Ministry of Information, n.d.c). Since then the Kingdom of Saudi Arabia has been ruled by the house of Al-Saud, the Royal family of Saudi Arabia. Table 2.1 lists members of the royal family who ruled Saudi Arabia since its formation in 1932.

Table 2.1 Members of Al-Saud royal family who ruled Saudi Arabia since 1932

<u>King</u>	<u>Period of Rule</u>
Abdulaziz	1932 - 1953
Saud	1953 - 1964
Faisal	1964 - 1975
Khalid	1975 - 1982
Fahid	1982

3. Demography

The population size of Saudi Arabia has to be estimated because there is no effective system of birth and death registration. The only national census was conducted in 1974. It put the population at just over 7 millions (Ministry of Finance and National Economy, 1975). In 1990

the population is expected to reach 15 millions (El-Mallakh, 1982, p.22).

The natural rate of growth of the Saudi population is not known, though it ^{is} thought to be high. In 1977 the crude birth rate was estimated to be 49 per 1,000 population, and the crude death rate was estimated to be 18 per 1,000 population giving a natural increase rate of 3.1% (World Bank, 1980). There is a considerable labour influx into the country caused by the rapid economic development which is taking place. Thus, net immigration is estimated to increase the natural population growth rate to an estimated annual rate of 4%.

The Saudi population is ethnically homogenous. It is made up of nomads, villagers, and towns people. Recently the number of expatriates has increased rapidly because of rapid economic growth in the country. The expatriate population is estimated at about 2 millions. The population is rapidly moving into the cities. In 1932 about two-thirds of the population were nomads, in 1974 27% of the population were nomads (Al-Ruwaithy, 1979). The nomadic population is probably now just over 10%, and declining.

At the present time the population is concentrated in large cities and towns, and metropolitan areas are developing in highly populated regions. The major cities are Riyadh and Jeddah with populations approaching one million, Mecca, Medina and Dammam with over 200,000

(Mostyn, 1981). Other large cities include Hofuf, Abha, Taif, Hail, Al-Jawf, Jizan, and Tabuk. Population centres are generally located in the coastal regions and the centre (see Figure 2.1).

The demographic structure of Saudi Arabia is characteristic of a developing country. The Saudi population is a youthful population. The under 15 years of age make up 45% of the population (Knuerhase, 1975). The mortality rate of children under the age of five is high. The average life expectancy had been relatively low in the 1950s, averaging 40 years for males and 45 years for females, but it is now believed to have improved significantly.

4. Economy

Saudi Arabia initially depended on pastoral economy and subsistence agriculture. At the beginning of the century nomadic bedouins lived on the raising of sheep, goats and camels, while villagers earned their living from subsistence agriculture (Lipsky, 1959). The direction of the economy and with it the fate of the people was changed when oil was discovered in the eastern region of the country in 1938 in commercial quantities. Since then a flourishing oil industry has grown up, and the country now has a huge income from oil.

Oil revenues are being used to fund ambitious development plans. In 1975 a Royal Commission was created to be responsible for channelling the country's oil wealth into industrial development based at two newly created towns; Jubail at the eastern coast and Yanbu at the western coast. The rationale behind the government policy of diversification through industrialization is quite simple:

"Dependence on oil is the obverse of the advantages derived from the abundance of oil. Rapid expansion of oil production has provided the Kingdom with both government revenues and foreign exchange to finance development. However, economic growth in Saudi Arabia has been primarily a produce of this one sector rather than the substantial development of agriculture, mining and manufacturing that is normally responsible for such growth. Moreover, it has led to the situation where further development of the economy over the coming decades is mainly dependent on growth in revenues and foreign exchange earnings from oil; a situation that must gradually be changed by diversifying production, exports, and sources of government revenue."

(Central Planning Organization, 1970, p.21)

Saudi Arabia is a major oil producer producing more than 15% of the world production at its peak, 8.1% of total world production in 1984 (British Petroleum, 1985). It is

the world's largest single exporter of oil, and has the largest known oil reserve in the world (British Petroleum, 1985). The Gross National Product has consistently grown. In 1984 the per capita income was estimated at 58,400 Saudi Riyals (approximately £12,000) (Sebai, 1985).

In addition to the oil resources Saudi Arabia has other potential resources, which it has started to exploit by investing money earned from oil in their development. Such resources include mineral deposits of iron, copper, silver, and gold (Ministry of Information, n.d.c). The realization that oil is a depletable resource has been the main impetus for the industrialization which has characterised development in Saudi Arabia. A number of economic avenues are being pursued in order to diversify the sources of income of the country and reduce its dependence on oil.

5. Government Structure

The formal government apparatus of Saudi Arabia has evolved gradually over the years. The country has no secular written constitution, but uses the holy book of Islam, the Koran, and the Suna, the sayings, doings and teaching of the prophet Mohammed, peace be upon him, as its constitution. The King is the head of the government and he is also the chairman of the Council of Ministers. The Council of Ministers holds legislative and executive powers. Ministers are usually appointed by the King who can also replace them at any time.

Government is conducted through two types of organizations; government ministries and associated agencies and independent agencies directly accountable to the Council of Ministers. The Saudi government is characterised by strong centralization of power, and the Minister plays a key role in decision making. Ministers are usually deeply involved in the decision-making process in their ministries, even simple and routine decisions. The allocation of public resources for health services and their management are considerably affected by such political practices. In part three I shall examine relevant political practices in more details, and analyse their effects on health services development in the country.

The current government organization has superceded localised power bases, but these still exist although they have little effective authority. Under the local government organization the country is divided into eight main administrative areas, each called an Emira, and run by an Amir (Governor) (Al-Awaji, 1981). The Governor is a representative of the King, and he governs the Emira, i.e. holds all the power. The Emira might be divided into a number of small districts, also called Emira. Emirats (the plural of Emira) are distinguished by adding the name of the area. For example, Riyadh Emira and Mecca Emira.

The Emira organization was gradually weakened as the powers of Governors were taken and given to newly-formed government ministries and agencies. For example, the Emira

used to collect taxes and duties, administers justice, and investigates complaints and crimes, but these are done now by the Ministry of Finance and National Economy, Ministry of Justice and Ministry of Interior respectively. Emirats are now attached organizationally to the Ministry of Interior. In relation to health services the Emira organization still makes a significant contribution at the local level. I shall detail its role in part three.

6. Socio-Cultural Identity

Islam had not only been the major force which enabled King Abdulaziz Al-Saud to unite Saudi Arabia, but it is also the base upon which the country is governed. The Saudi society derives its norms, beliefs, and values from Islam and Islamic culture, and this is reflected "in the deduction of the Government to upholding Islam and to maintaining its associated cultural values" (Ministry of Planning, 1980, p.3).

Islam is different from Christianity in that there is no division between the religious and the secular. It is not merely a religion of faith, but rather a way of life. It provides for the regulation of all aspects of life of its followers. In Saudi Arabia Islam is applied to the lives and activities of all people with the result that the social organization of the Saudi society is distinctive. For example, women in Islam are given a particular role within

which their activities are restricted compared with the activities of women in the western world.

One of the basic five pillars of Islam is the Pilgrimage. Every moslem is obliged to undertake a pilgrimage to Mecca once in his or her lifetime if possible. The pilgrimage entails the performance of certain activities at specific times in specific places. Every year many moslems from all over the world undertake the pilgrimage to the holy city of Mecca, and may visit Medina. In 1983 there were more than 2.5 million pilgrims (Ministry of Planning, 1984, p.124). The provision of health facilities for such a large number of people for the duration of their pilgrimage, which varies between three months and 15 days, is a formidable task which the government accepts as one of its most important obligations.

Kinship dominates social organizations in Saudi Arabia. In the Saudi family norms "an individual's well-being is the responsibility of the whole family, and the family's well-being is the individual's primary concern" (Knuerhase, 1975, p.26). The family-based organization of Saudi communities provides for all the needs of their members without the need for any outside interference.

The influence of Islam extends to the highly-valued culture of the people of Saudi Arabia, which has its roots in the centuries-old history of the Arabs. The people of Saudi Arabia are:

"proud of the civilizing influence exerted by the contributions of their ancestors in law, science, mathematics, literature, and philosophy, and many ... believe that they can recapture some of this lost glory." (Knuerhase, 1975, p.37)

There is a number of sub-cultures in Saudi Arabia. An example is the culture of the bedouins, bedouinism, which is dominant in many communities. Bedouins have a distinctive life-style with a definite tribal organization and a general outlook (Saad-Edin and Donald, 1978). Bedouins used to be nomadic but now a large majority of them have settled or are in the process of settling.

7. The Health Situation

The health situation in Saudi Arabia is not dissimilar to that usually found in developing countries. However, it has been changing rapidly over the last few years as the efforts of the government aimed at building a health infrastructure are nearing completion. Twenty-five years ago Lipsky (1959) described a poor health situation with poor sanitary facilities, low nutritional standards, and widespread diseases. This has now changed. The main factor behind the change has been the substantial increase in the oil revenue of the country and the subsequent improvement in education, transport, communication, and the growth of urbanization and bedouin settlement.

The principle health problems in Saudi Arabia range from communicable diseases such as malaria and schistosomiasis to those of a modern society with stress-related diseases, pollution, and an ever increasing number of road accidents. Piped water supplies, sewerage systems, and waste water treatment are available in most urban and some rural areas. As a result many infectious diseases, particularly diseases which depend on vectors for spreading, have been contained or eradicated. However, the disappearance of communicable diseases and poverty-linked diseases was accompanied by an increase in the incidence of modern life diseases.

8. Conclusion

Saudi Arabia shares many features with other developing countries, and is different from them in a number of important aspects which have profound implications for the development of health services in the country. The demographic characteristics of Saudi Arabia are typical of developing countries. They present special health problems whose solution requires persistent determination and extensive resources. The latter does not appear to be an obstacle because the Saudi economy is healthy and growing. This contrasts sharply with the majority of developing countries where lack of resources constrains their health services development as well as their overall development. In this context the Saudi case would enable us to observe

the situation in developing countries when the overall resources constraint is apparently removed.

The political organization of the country is a blend of traditional and modern elements. While Saudi Arabia has not modelled its political structures on western or socialist models like many developing countries, its state apparatus bear many similarities with other developing countries. The political dimension in the Saudi case should broaden our understanding of the politics of health and enhance our knowledge of the contribution of politics to health services development in developing countries.

The religious importance of Saudi Arabia to moslems all over the world raises to prominence the socio-cultural dimension in the Saudi case compared with other developing countries. The Saudi case provides an opportunity for ascertaining the relevance of socio-cultural factors to the development of health services in developing countries. The socio-cultural identity of Saudi Arabia has extensive and far reaching implications to the Saudi health system. It influences many aspects of the daily life of the people. These aspects are likely to be the targets of the instruments of the health system. Thus, conflict between the two may be encountered.

In the next chapter I shall describe the methods I used in the study.

CHAPTER 3: METHODOLOGY

1. Introduction

The discussion of methodology is not only relevant because of its bearing on the data presented and subsequently the analysis and the findings of the study, but also because of the continuing debate about its format and direction in social science research. In this context methodology needs to reflect the relationship between the objectives of the study and the techniques used for collecting data on one hand, and to justify the approach used in the study in preference over other possible and acceptable approaches on the other hand. In most research the choice of methodology arises from the natural development of the research itself. The evolution of the research, thus, dictates the methods used at the different stages of the research.

In my case the research problem did not evolve during the study period. I thought about health services development in Saudi Arabia while I was doing training at my undergraduate studies. I also thought of the wider issues of health services development in developing countries while I was doing my Master's degree. When I started the study I was clear in my mind about the problem which I was studying. I decided what data I required and decided what techniques I was going to use to collect the required data. This did not

restrict me to particular methods, and I was free to modify my approach as circumstances required.

In the following sections of this chapter I shall discuss my methodology in detail. In the first section I shall review the possible approaches available to study the problem I have chosen, and justify my choice of the comparative case study approach. I shall also outline my research design and the difficulties I faced and indicate how they relate to the objectives of the study. In the second section I shall describe the various techniques I used for collecting data.

2. The Research Strategy

2.1 The Comparative Case Study Approach

The availability of a variety of methods on which the social scientist can rely has had a mixed blessing. On one hand, some think "that the examination of a given social phenomenon is often best accomplished through the use of several different methods" (Babbie, 1973). On the other hand, some social scientists are concerned about the lack of "formalization and systematization" of the various methods used in social investigations (Becker, 1978). The argument is that;

"Methods of collecting the information are not so developed and systematized. There is a wealth of experience and a formidable literature describing

them, but few would claim that this amounts to a coherent set of principles or a theoretical framework." (Moser and Kalton, 1971, p.238)

The two points of view are not necessarily in conflict since not all social data are amenable to systematized treatment as possible in the case of some social surveys data. Thus, the need to use a combination of methods to achieve a thorough understanding of social phenomena places more emphasis on the methodological design and its execution. As Babbie put it:

"The worth of all scientific findings depends heavily on the manner in which the data were collected and analysed." (1973, p.339)

An added advantage is that "a combination of methods is often appropriate to make use of their different strengths", especially since that "each method has its limitations". (Moser and Kalton, 1971, p.239)

In most research the choice of methodology is determined by the nature of the problem being researched. My problem is the study of the development of health services in Saudi Arabia in the context of the development of health services in developing countries. This has two aspects; the examination of the Saudi case, and comparing it with other developing countries. Both aspects have methodological implications.

The comparative case study strategy, which I used in the study, is appropriate because it allows the use of a number of methods, systematic and non-systematic. The case study approach entails the collection and examination of as much data as possible so that the most comprehensive possible description and explanation of the many components of the social problem or phenomenon under study is presented in a logical sequence. The case study approach provides insights into the problem or phenomenon and stresses principles and trends of general applicability (Babbie, 1973). It also involves "the use of data from other abstract levels than the purely sociological" (Goode and Hatt, 1953, p.333). This flexibility is suitable for the analysis of the Saudi case from an economic, political and socio-cultural perspectives, and for the presentation of the various factors that influence the development of health services in developing countries. The case study approach includes the use of participant observation, interviewing, surveys, and other methods for data collection.

The comparative approach is relatively less developed, and comparative cross-national health research is still in an early stage of development (Weinerman, 1971). When the researcher compares two or more different populations which have different social, political, economic, and cultural organizations, additional important variables are introduced. Such comparative cross-cultural research can pose a number of methodological problems, which are generally a function of the study situation (Elder, 1973).

The comparative case study approach has its advantages and disadvantages (Walton, 1973). It includes the use of a number of methods for data collection, some of which are unsystematic. However, the use of combination of methods which complement each other, and careful research design are sufficient to remedy or contain the major limitations of the comparative case study strategy. In the next sub-section I discuss the design of the research and indicate the suitability of the strategy adopted to the study situation.

2.2 The Design of the Study

The study of health services development in developing countries and in Saudi Arabia is an extensive undertaking that necessitates the use of a number of techniques to collect the required data. The volume of data required for the analysis is increased by the wide scope of the objectives which span a number of dimensions. The case study approach provides for the collection of a large amount of detailed data through a number of techniques. The rationale is to tap as many sources as possible to ensure completeness and accuracy by checking sources against each other, and to try to systematize the techniques used so as to attain comparability of data collected.

The process of collecting data about developing countries including Saudi Arabia is usually difficult. The circumstances and characteristics of developing countries create obstacles for the use of conventional techniques for data collection. Developing countries generally do not have

arrangements to routinely collect vital statistics about populations, economic and social activities or other aspects of life (Goldthorpe, 1975; Gesler, 1984). Where attempts had been made, the data produced are characteristically incomplete, inaccurate, and incomparable. In this respect Saudi Arabia is no different. The difficulties were further compounded by the sheer size of Saudi Arabia, which makes going round collecting data a time consuming process as well as an expensive undertaking.

The problem of lack of information is more serious in the Saudi case than it is in most developing countries. There is a limited amount of literature on Saudi Arabia (Al-Farsy, 1978), and most of it deals with its oil policy, politics and its history. Occasionally a mention is made of the health situation or efforts to improve it in the context of development in the country. The government publishes some statistics. This lack of secondary sources meant that I have to generate all the data I needed and analyse them without the benefit of contributions from other researchers. The latter point has implications for the presentation of the research outcome as this study is probably the first attempt dealing with the health services of the country in a comprehensive fashion.

I found the environment in Saudi Arabia on the whole difficult for research. This has come out clearly in my experience of using the survey method. The difficulties which I encountered and the outcome of the survey reflect

the general attitude towards research in the country. I shall describe in detail my experience when I discuss my methodological techniques in the next section. This, however, does not imply a hostility to research in the country, and my experience of interviewing health officials, which I shall also describe in the next section, demonstrates an eagerness on the part of health officials to assist researchers and encourage research activities. The dilemma of the Saudi environment lies in its hinderance to the organization of systematic research.

The obstacles of lack of data and difficulties in collecting them were successfully overcome by the broadly based strategy which I adopted. The use of combination of techniques, particularly participant observation and interviewing, enabled me to realise my objectives within the timetable I set for completing the research. From the beginning I identified the problem and planned my methodology accordingly. It included two phases; a library-based phase and a fieldwork phase. The two phases did not run concurrently, but were inter-spread over the research period in response to the research need. Approximately two-thirds of the time were spent on fieldwork in Saudi Arabia, and one-third on library-based work including courses, analysis, and writing up at the University in Hull and in Saudi Arabia. Table 3.1 shows the chronological distribution of time spent on the research, and table 3.2 shows the amount of time spent in each

different activity during the three years period of the research.

Table 3.1 The distribution of the research time, 1983-1986

<u>Date*</u>		<u>Activity</u>	<u>Location</u>
<u>From</u>	<u>To</u>		
Oct 1983	Nov 1983	Library-based work	Hull
Dec 1983	Jul 1984	Observation	Saudi Arabia
Aug 1984	Sep 1984	Interviewing	Saudi Arabia
Oct 1984	Nov 1984	Library-based work	Hull
Dec 1984	Jan 1985	Library-based work	Saudi Arabia
Feb 1985	Aug 1985	Survey/Interviewing	Saudi Arabia
Sep 1985	Jul 1986	Library-based work	Hull

* Although dates are indicated by the month, the start and end of activities might have been at the beginning, in the middle of, or at the end of the month.

Table 3.2 The distribution of the research time by activity

<u>Activity</u>	<u>Duration in Months</u>
Preparation including courses	10
Observation	8
Interviewing	4
Surveying	5
Analysis and writing up	7

2.2.1 The library based phase

Having formulated the problem which I am going to tackle in the research, and having decided on the methodology to be used, I conducted a literature review of the material published on the development of health services in developing countries, and the development of the Saudi health system, and the relationship between socio-cultural factors and health generally. I consulted books, periodicals, journals, and official reports. I also used sources published in the Arabic language. Most commentators have recognised economic, political, and socio-cultural influences, but tended to give priority to economic factors. I have found a reasonable amount of literature on the development of health services in developing countries.

For references on the development of the Saudi health system I relied on official Saudi sources, which I supplemented and cross-checked by data I collected in the fieldwork. The main source was the Ministry of Finance and National Economy. Its General Department of Statistics collects and publishes a wide range of statistical data about the country. The Statistical Yearbook gives an annual statistical summary of most activities in the country including health and social services. Although the Statistical Yearbook is published annually since 1965, its data tend to be incomplete, and their presentation has changed a number of times over the years, a process which limits their utility.

The Saudi Ministry of Health did not publish an annual report until 1981. Its annual reports are usually completed late, the 1983 report became available only at the end of 1985. They provide a wide range of statistics about health activities, particularly throughput statistics, and are useful though not without deficiencies. The Ministry of Health also publishes ad hoc publication as part of its public relation activities. Such publications include "The Five Hospitals are a Civilizational Indicator in Health Services Field", and the "Guide to Health Institutes and Nursing Schools". Most other ministries and government agencies publish annual reports which give detailed statistics about their activities. The availability of such official records is beneficial though the quality, scope, and timing of their publication leave much to be desired.

The library-based work was done in Hull and in Saudi Arabia. In Saudi Arabia I had a wide range of facilities available to me. I made use of the libraries of King Faisal University, Dammam; King Saud University, Riyadh; University of Petroleum and Minerals, Dhahran; Institute of Public Administration, Riyadh; and a number of other libraries. The collection of theses of Saudi graduates from American and British universities in King Saud University was particularly useful, though only a handful graduates have done their research in the health field. Some of the theses of graduates from the university's programme in health and hospital administration were also in the collection.

The library of the Institute of Public Administration was equally useful. Its Documents Centre contains royal decrees, Council of Ministers resolutions, and many important government publications. It provided access to many official publications which are valuable for researchers of Saudi topics. The publications of the institute itself were also beneficial, particularly the proceedings of symposia on health organization and conditions in the country which the institute organized recently.

The use of secondary sources continued alongside the fieldwork throughout the research period. At the end of the first year I devoted two months to library-based work, and to evaluate progress made. Throughout the research period the outcome of the library-based work was practically integrated with the findings of the fieldwork, and in a step-wise fashion each achievement, whether attained in the library or in the field, was used to orient the fieldwork.

2.2.2 The Fieldwork Phase

The fieldwork which lasted just over one and a half years was conducted in two areas in Saudi Arabia; the town of Safwa in the Eastern Province, and the capital Riyadh in the Central Province. In the field most of the time was devoted to the collection of data using three main methodological techniques; participant observation, interviewing, and a postal questionnaire survey. A

detailed description of each of these methods would be given in the next section.

While in the field I collected data and cross-checked them in an informal fashion besides the formal methodological arrangements. Informal discussions with health officials, even after leaving the Ministry of Health, academics and professionals have contributed to my understanding of the operation and management of the Saudi health system. Some of the discussions were initiated during my informal visits to health facilities. While I was in Saudi Arabia I visited health facilities within my reach when I had the time. I visited health facilities in the coastal area of the Eastern Province and in Riyadh. I went to the Western Province to perform the pilgrimage in 1985, and noted the health situation in the pilgrimage region and the preparations taken by health authorities.

During the period from August 1984 to August 1985, with the exception of October and November 1984 when I was in England, I systematically observed the reporting of health related news in the local newspapers. I concentrated on one daily newspaper, Al-Riyadh, though I read other newspapers most days and when I could not obtain Al-Riyadh newspaper, as happened a number of times. The reporting of health related news in daily Saudi papers is usually uniform, and comes from the same official sources (Shobaili, 1971). My observation consisted of going through

the paper, every page of it, and reading reports and articles relating to health services in the country or health generally. Items which I considered directly relevant to my research, such as reports of hospital projects and interviews with health officials, I cut them out and collected them in a separate file. I used these newspapers cuttings to check information which I obtained from other sources, and to provide examples of the public's contribution to health services development in the country.

Both in my formal fieldwork and informal activities I was well placed to observe the environment around me. Being a native of the country I was readily accepted in the various situations, and was able to develop contacts and recruit informants. My personal experience in the field has been the most interesting and satisfying part of the research. It has also provided me with access to a number of secondary sources and official publications about health services in the country. Together with the data collected in the field it helped me to gain a comprehensive understanding of the Saudi health system. In the next section I shall describe the main techniques which I used in the study.

3. The Techniques of the Study

I used three techniques in the fieldwork; participant observation, interviewing, and a postal questionnaire-based survey. In the following paragraphs I shall describe each technique in detail.

3.1 Participant Observation

Observation has been described as "the classic method of scientific enquiry" (Moser and Kalton, 1971, p.244). It is both a direct and an indirect means of obtaining information. Becker, having used participant observation in his classic work "Boys in White", commented that "observational research produces an immense amount of detailed description" (1978, p.313). An added valuable advantage of direct observation is that:

"It eliminates errors arising from misunderstandings and misinterpretations of words and the bias likely to be present in a verbal report secured from a person who must rely on his memory for many of them." (Lunberg, 1942, p.129)

Observational research requires that a researcher enters into the social system being observed and become, as much as possible, an ordinary member like other members of the system. As a native I was able to gain access to the Saudi health scene easily, and my incorporation into the

social system offered me a unique chance to interact with members both formally and informally, and to observe them interacting. The absorption of the researcher into the social system he or she is observing may sometimes provide him with valuable access to new facts and information, and can in the words of Blum, "serve to energize and stimulate analysis" (1971, p.197). Becker (1978) noted that the involvement of the researcher enables him to conduct his analysis sequentially.

Observational research is "usually unsystematic out of necessity", and it "is a highly individual technique" (Moser and Kalton, 1971, p.251), which has its limitations and disadvantages. There are the dangers of the so-called control effect and the biased viewpoint effect (Moser and Kalton, 1971), as well as the handicap of not being able to be in many places at one time. And since it is an individual-centred technique, that may create an objectivity problem. However, some shortcomings can be overcome or contained once the researcher becomes aware of them and consciously worksto avoid them.

In order to understand the organisation and management of public health services in Saudi Arabia, it was appropriate to observe the working of the system from within. I chose the Ministry of Health because it is the largest provider of health services in the country. I had the choice of observing the working of the Ministry of Health at the local level as an external observer, or as a

participant observer. I chose the latter option because it offered a better chance for observation and it was quicker to get than the former. To gain an external observer status one needs to get the permission of the Ministry and agreement of the local health authority which is a lengthy process that can take more than one year. On the other hand, the participant observer status was secured by working for the Ministry of Health. I stayed in the Ministry of Health for nearly 8 months, from 26 November 1983 to 11 July 1984.

I managed to get a job in the Ministry of Health relatively quickly because of my qualification in health administration. I was also able to get the job and the area which I wanted to work in. I was employed as a hospital director, and was assigned to a small hospital in the town of Safwa in the Eastern Province of the country. The hospital was working on out-patient level only at the time, and its in-patient departments were closed because a major renovation work was going on. The staff were greatly reduced and in all numbered about 100. In the out-patient clinics approximately 400 patients were seen daily. There were two health centres in the villages of Al-Oujam and Um-Alsahiak which are attached to the hospital.

Thus, my introduction to the local scene, and in due course the regional and national arenas, had proceeded smoothly. Once I was in the job, I had to do two things at the same time. Being an employee of the Ministry of Health

I had work commitments, but at the same time I also observed the environment surrounding me and pursued my research interests. I noted all the activities that went on around me. I usually wrote my notes at home straight after the end of my daily work, and in exceptional occasions such as the annual meeting with the regional treasurer in which the region's resources were allocated to its hospital units I noted my observations immediately after the event.

Of course, some aspects of my work were confidential, and these, for ethical reasons, were not recorded in my field notes. For the same reasons I have informed my superiors of my dual responsibility, and also some of my colleagues and friends at the hospital, the regional administration, and the Ministry. This has generally helped me as some of those who knew have helped me when they were able to, and the others were not alarmed by my research interests.

In my work role I was able to gain a thorough understanding of the organization and operation of most of the Ministry of Health departments at the local and regional levels, and was able to observe their work from a close privileged position. My work role has also secured access for me to official reports and published material, and most importantly it introduced me to many people, now friends, working at the local, regional, and national levels as well as in other health institutions. Thus, I was able to have formal and informal conversations with many people, both

officials and lay, and I had the chance to interview many people formally and informally. Many of the people with whom I worked or have come to know by way of work have become informants, each in his area of work, and in this way I established many valuable contacts.

In addition to my responsibility for the day-to-day running of the out-patient clinics at the hospital, I was also responsible for the two attached health centres. This has offered me the chance to observe primary health care provision through health centres in rural villages setting. I arranged my work schedule so that I spent half a day in each of the health centres each week. In the health centres I observed patients as they were processed through the centres' environment. The workload at the centres was relatively small, 40 to 70 patients a day, and I was able to follow individual cases and talk to patients and health workers. I noted my observations during intervals when there were no patients, and I had plenty of time to discuss the various aspects of health provision at the centres with the doctors in-charge and other health workers.

When I took up my post, it was already decided that a health centre should be opened in a nearby village, called Abu-Maein, and be attached to the hospital. I became involved in the preparations for its opening, and although I left before it was opened my involvement had been an enriching experience. It offered me the chance to observe the process of deciding and organizing the opening of a new

health centre. Later, in chapter nine, I shall return to the issue of health centres in more detail.

In my work for the Ministry of Health I was greatly helped by my bi-lingualism. Arabic is the official language in Saudi Arabia. Some aspects of the work was conducted in English, and in a number of instances such as when we had English-speaking visitors it was useful to be able to communicate in the two languages. My period of work with the Ministry was not problem-free, even with respect to my research interest. In some instances, particularly at the beginning, it was difficult to understand some of what was going on, but by following up such instances to know more about it, it was possible to fit the observations into the logical sequence of the work system.

3.2 Interviewing

The Ministry of Health provides services to 60-70% of the population while the remaining 30-40% rely on services provided by other ministries and government agencies and the private sector. So after nearly 8 months with the Ministry of Health I found that a complementary understanding of other providers is needed in order to attain a comprehensive grasp of the health system of the country. I resigned my job and started filling the gaps in my comprehension of the system. I needed to interview officials from all other institutions providing health services, as well as to collect statistical data about their organizations and

activities. Luckily, most of the providers have strong central administration, which meant that it was possible to do most of the interviewing in Riyadh, where their headquarters are usually situated.

Interviewing lacks standardization, but can be improved qualitatively "through the use of interview guide" (Goode and Hatt, 1953). It complements other methods of data collection. When the need is for as comprehensive a collection of data as possible, as in the case study approach, different methods are used at different stages of the research to fill in the gaps in the researcher's understanding of the problem and its circumstances.

The number of formal interviews I conducted during the field work period is shown in Table 3.3 classified according to the level of management of the interviewees and the level of administration. Table 3.4 shows the number of interviews recorded for some of the institutions providing health services (see appendix I for the names of the institutions and the positions of the interviewees). The number of interviews with health officials at the regional level is lower than the national level because my work experience has allowed me closer relations with regional officials with whom I have had many discussions and exchanges. Informal interviews are not included in the tables, and short interviews were considered part of the contact-setting exercise. In some cases I had to make a number of contacts before being able to make the interview.

Table 3.3 Record of the number of interviews by the level of management and type of administration

<u>Level of Administration</u>	<u>Total</u>	<u>Level of Management</u>	
		<u>Top</u>	<u>Middle</u>
Regional	22	9	13
National	40	23	17
Total	62	32	30

Table 3.4 Record of the number of interviews by the institutions of the interviewees

<u>Institution</u>	<u>Number of Interviews</u>
Ministry of Health	13
Other Ministries	17
Government Agencies	16
Private Sector	8
Other Interested Individuals	<u>8</u>
Total	<u>62</u>

My experience with the Ministry of Defence and Aviation, though exceptional, illustrates the nature of my interviewing experience including its difficulties. The Medical Services Department of the Ministry of Defence and Aviation is responsible for the medical services of the Ministry. In August 1984 I made my first contact with the General Director of the Medical Services Department who explained to me that I had to apply in writing and indicate as exact as possible the information I wanted for

my research. I pursued the matter in November 1984 after returning from England. I submitted my request for information to the General Director who transferred it to the head of the Public Relations section. Because of the sensitivity of the issue of giving information relating to the Ministry, the head of the Public Relations section needed to get clearance from higher authorities.

When clearance was granted I interviewed the head of the Public Relations section who gave me a general introduction to the development of the medical services in the Ministry, its organization, and its future prospects. He then arranged for me to see senior officials in the department including the heads of Planning, Supplies, and Contract Operation Departments. I was given available publication of the department and manpower statistics which I asked for. A summary of the experience is given in table 3.5. The cooperation of the officials in the department had been excellent, and the assistance of the head of the Public Relations section was generous and fruitful.

Table 3.5 A chronological summary of contacts with officials in the Medical Services Department, Ministry of Defence and Aviation

<u>Date</u>	<u>Activity</u>
28 Aug 1984	Met the General Director.
21 Nov 1984	Submitted written request, and met head of Public Relations Section.
26 Nov 1984	Met head of Public Relations Section, still awaiting permission.
8 Dec 1984	Permission granted, interviewed head of Public Relations Section.
9 Dec 1984	Met head of Planning and Medical executive officer.
11 Dec 1984	Interviewed heads of Supplies and Contract Operation Department.
30 Dec 1984	Collected manpower statistics.

My strategy in interviewing was to meet a number of health officials from the same institution, from top and middle management, so that I can get information on the present situation and future plans, and at the same time double-check where possible. I usually interviewed the person in charge of the health services division or the head of the medical department, depending on the internal organization of the institution, and two or more senior officials. In most cases a prior appointment was not needed. It was possible to make the initial contact in the first visit without difficulties. In many cases my work experience with the Ministry of Health had helped to further

smooth the introduction either because of previous contact, or as a response of the interviewee to knowing my background.

The interviews were always informal being conducted in the Arabic language. I usually introduce myself and briefly explain to the interviewee the purpose of the interview, and sometimes I indicate why I need the information and mention its possible benefits to the country and his institution if applicable. Usually, mutual trust prevails and the interview proceeds without hinderance, but in some instances I was asked to provide a proof of identity and of my status as a researcher. I usually produce a university letter confirming that I am conducting research on the development of the Saudi health system, and it is always accepted and followed by an apology and extended explanation for the reason for asking for proof.

Although the interviews were informal they were not open-ended, I used a pre-prepared list of topics to ensure that I get the information I wanted. (See appendix II for the list of topics). The listed topics included; a brief historical introduction, present organization, operation, difficulties, manpower situation, and future plans of the interviewee's institution. In this so-called focussed-type interview I still managed to allow the interviewee to express himself in the way he wants. In many cases I was supplied with annual reports and statistical data. The response I got varied, but generally in most cases I was well received.

In some cases officials went out of their ways to ensure that I got what I wanted. For example, when I interviewed the director of planning in the Saudi Red Crescent Society, he asked one of his staff to give me the latest available statistics about the activities of the society, including parts of the society's annual report which was being drafted at the time. In some interviews confidential matters were mentioned, and those, for ethical reasons, were not recorded in the field notes. I established good relations with some interviewees, and was able to see them again and again as I needed.

Since most interviews were conducted on an informal cordial basis I did not take notes during the interview for not wanting to alarm the interviewee as most of them will do if notes were taken. Instead I only took notes when necessary, and immediately after the interview I wrote up the notes, being aided by the list of topics which I used in the interview. The informal manner in which I conducted the interviews was part of Saudi life. In some cases we were constantly interrupted by departmental staff pursuing their daily routines, and it was considered normal. In other situations the interviewees called some of their staff and asked them to give us an up-to-date account of the point under discussion.

3.3 Survey Method

I planned to conduct three surveys, but was able to complete only one. The first survey was to collect data about the health manpower situation and particularly about Saudization. My purpose had been to systematize the process so that I can compare the manpower situation in the various health institutions, and compare their Saudization policies. I prepared tables which require only the insertion of the data required in the allocated space against the variables indicated. I took the tables round with me to all public institutions providing health services, except the Ministry of Health for which reasonable data were available, hoping to collect them when they are filled in. But to my disappointment I found that in most institutions they were not able to fill them in because the information required was not available. The response I got in some cases was to be given whatever they had of official departmental statistics. Therefore, I decided not to undertake a search for comprehensive data on manpower, but to accept such data as was on offer.

The second survey was to collect data about the hospitals of the Ministry of Health for a detailed analysis of hospital development in the country. I prepared an initial questionnaire aimed at producing a profile for each hospital, and knowing that individual hospitals will not be able to fill it in completely I took it to the Director of the Hospitals Department at the Ministry of Health. Again I was disappointed when the Director informed me that some

data such as capital and equipment costs were just not known and other data are not available. He explained that the department itself was trying to compile complete files on each hospital with all basic important and up-to-date information i.e. almost the same data I requested in the questionnaire. I accepted his offer of filling in the data they had, but when I got the questionnaires back I found that for some of them even the number of beds was not recorded.

The third survey was to collect data about the health activities of charitable societies in the country. I sought the assistance of the Charitable Societies Department at the Ministry of Labour and Social Affairs, and found that they did keep up-to-date records of the activities of the societies including health related activities. However, I thought that doing the survey might generate more relevant data. I had a choice of involving the department in doing the survey or doing it independently. I chose the latter option because the process of getting ministerial permission for the department's involvement required months.

I collected a list of charitable societies in the country from the department (see appendix III for the full list of names and addresses). After finalizing the questionnaire, which was written in the Arabic language, I posted one to each society with a covering letter on 5th February 1985 (see appendix IV for the questionnaire and the letter). I explained in the letter my research and the

purpose of the questionnaire and asked for assistance by filling in the questionnaire and returning it to me. Initially I got a limited response with just over 30 societies returning the questionnaire or writing to me. So I wrote a reminding letter and posted it to the societies which had not replied yet on the 6th April 1985. Following my reminder I heard from another 20 societies. Thus, in all I got a response of 66% (see table 3.6).

Table 3.6 Responses to the postal questionnaire sent to charitable societies in Saudi Arabia, 1985

<u>Response</u>	<u>Number</u>	<u>%</u>
Total number of questionnaires posted	82	100

Returned questionnaires, complete	28	34
Returned questionnaires, incomplete	8	10
Replied by letter	18	22

All responses	54	66

Table 3.6 shows that only one third of societies had completed and returned the questionnaires. The societies which replied by letter explained that they do not have health-related activities, or have just been formed and so unable to fill in the questionnaire. In analysing the reasons why the remaining 28 societies did not return the questionnaire or reply, I found some indications which illustrate the difficulties of conducting research in Saudi Arabia. Out of the 28 societies which did not respond,

eleven were feminine societies. It is likely that some of them might have considered replying to a male researcher as inappropriate action for women to take. On the other hand of the 54 societies which have responded, 8 were feminine societies.

A number of the societies which responded after sending the reminder said that they did not receive the questionnaire, and one society, Al-Ber charitable society in Taif, received my reminder, which was posted on 6th April 1985 on 11 July 1985. Apparently my questionnaire has not reached them, and my reminding letter took over three months to reach them. In view of such unusual circumstances the response of 66% which I got seems reasonable.

I obtained a summary of the activities of charitable societies from the central department, and was given copies of annual reports of some active societies. This in effect has ensured that my examination of the role of charitable societies in health provision in the country is complete and as thorough as possible. I shall analyse the findings of the questionnaire in chapter ten.

PART TWO

ECONOMIC INFLUENCES

Introduction

In this part I consider the health situation in Saudi Arabia from an economic perspective, and discuss implications of the resource situation for the developing Saudi health system. I shall also consider the relevance of the Saudi case to the debate about the importance of economic factors to health services development in developing countries. In this part I shall first describe health resources in Saudi Arabia, this will be a background to the analysis of the influence of economic factors on health services development.

There are two chapters in this part. In chapter four I examine Saudi health resources at the macro level, identify the main features, compare the Saudi case with other developing countries, and analyse the theoretical implications of the Saudi case. In chapter five I consider the case of hospital development in the country, and analyse it in detail. The analysis brings out the main features of the Saudi health resource situation, and assess their implications for the development of the Saudi health system.

The analysis in this part has been handicapped by general lack of statistics about health expenditure and health support services. The problem was more acute in the private sector, since very few private enterprises publish annual reports. Although expenditure statistics for government institutions are published, it is difficult to

calculate specific expenditures because the figures are not broken down to indicate various categories of expenditure.

CHAPTER 4: SAUDI HEALTH RESOURCES

1. Introduction

Most scholars interested in health services development in developing countries have been concerned with the resource issue and its effect on health provision. There is a general consensus that human and financial resources for health services are in short supply (Benyoussef, 1977, p.400; Cumper, 1984). It appears that the conclusion is based on the observation that many people especially in rural areas in developing countries are not provided with minimum basic health services. However, a recent review of health care in developing countries concluded that substantial expenditure is spent on health provision by governments (Taylor, 1982, p.20).

When health expenditure in developing countries is compared with that in developed countries, as most commentators inadvertently do, it is found that health expenditure per capita in developing countries is comparatively small and inadequate (World Bank, 1980, p.375). Such comparisons concentrate on public expenditure and ignore private expenditure on health services which "greatly exceeds expenditure on government services" (Abel-Smith and Leiserson, 1978, p.62). Golladay and Liese reported that public expenditure on health may represent as little as a third of total expenditure on health services in

developing countries (1980, p.16). Analysis of health expenditure in developing countries is often restricted to public expenditure because of the lack of statistics about private health expenditure.

The health manpower situation in developing countries is more reflective of the resource situation than health expenditure. There is an acute shortage of trained health manpower (Fendall, 1972, p.207). The training of health personnel is modeled on western systems of medical education which produces professionals not adequately prepared for dealing with the vast health problems of developing countries, especially in rural areas (Simon, 1980, p.69). Health manpower resources in developing countries are maldistributed in favour of urban centres over rural areas (Navarro, 1974, p.22).

The resource situation in Saudi Arabia in comparison with other developing countries provides a contrasting opportunity for understanding the influence of economic factors on health provision. The oil wealth of the country has provided the impetus for a rapid development process which included the health sector. Although oil was discovered in Saudi Arabia in 1938, it did not provide sufficient revenues to support national development plans until the late 1960s. The 1970s brought a large increase in oil prices, which gave Saudi Arabia a considerable surplus that could be invested in development. Saudi oil revenues have multiplied more than 54 times over a

period of 10 years, 1971-1981 (see table 4.1). The Saudi Arabian Economy is a one-product economy, oil. Oil revenues dominate the country's total revenues, providing approximately 90% of it (see table 4.2).

Table 4.1 Saudi Oil Revenues (million US dollars)*

<u>Year</u>	<u>Revenue</u>
1939	3.0
1946	10.0
1956	290.0
1966	790.0
1971	1,885.0
1976	30,755.0
1980	84,466.0
1981	101,813.0
1982	70,479.0

* figures are rounded.

Source: Saudi Arabian Monetary Agency, Annual Reports, various issues.

Table 4.2 Oil Revenues as a Proportion of Government Revenue, Selected Years (million Saudi Riyal)

<u>Year</u>	<u>Total government revenue</u>	<u>Oil revenue</u>	<u>%</u>
1971	7,940	7,122	90.0
1975	100,103	94,190	94.0
1980	211,196	189,295	90.0
1981	348,100	319,305	92.0
1982	368,006	328,594	89.0

Source: Ministry of Finance and National Economy, Statistical Yearbook, various issues.

The government is currently trying to diversify sources of national income. The Saudi diversification policy, which is intended to "reduce dependence on the production of crude oil as the primary source of national income" (Ministry of Planning, 1980, p.3) concentrates on industrialization as an alternative future source of national income. Saudi development plans emphasise the establishment of hydrocarbon-based industries using oil as the raw material. The Saudi government envisages an important role for the private sector in the development process.

The Saudi economy is a free market system in which the government has defined its role as a promotor of free enterprise through generous incentives and the provision of the necessary physical infrastructure and the maintenance of stable environment conducive to progressive economic activities. However, as the country is in a fairly early stage of economic development, the government has to interfere to influence the economy more than would normally be expected in a free market system.

The Saudi government attaches great importance to "the social well-being and personal fulfilment of all citizens" (Ministry of Planning, 1980, p.3). Health and other social services are provided free of charge by the government since:

"Improvements in the health and well-being of individuals and communities are necessary to enable the various elements of society to contribute more effectively to development, and to benefit more extensively from the process of development."

(Central Planning Organization, 1970, p.145)

In this chapter I shall examine the practical implications of economic development to the developing Saudi health system. There are three sections in the chapter. In section one I examine health expenditure and indicate the pluralistic approach to health provision in the country. In section two I deal with the difficult subject of technology and expertise, and assess related Saudi policies and their implications. In section three I examine health manpower, and identify trends and discuss their implications for the future development of health manpower in the country. The situation in developing countries which I examined in chapter one constitutes the base line against which the analysis of the Saudi case is presented.

2. Health Expenditure

2.1 Introduction

Health expenditure includes both government spendings and the expenditure of citizens on health services. Though the Ministry of Health is formally the guardian of the health of the nation, many other government ministries and agencies spend considerable amounts on the provision of health services for their employess and their dependents. Expenditure statistics for the Ministry of Health are generally available, though their quality is often poor. Expenditure statistics for other government ministries and agencies are not available because they consider the provision of health care facilities a secondary function.

To overcome this difficulty when assessing expenditures on health services in the country I shall assess it indirectly by concentrating on statistics relating to the number of health facilities and health personnel. Since facilities and manpower can be used in different ways, with different expenditure implications, the absolute numbers of health facilities and health personnel can not be taken as an accurate indicator of overall health expenditure. Instead changes over the years in the number of health facilities and personnel will be used as an approximate guide to the general level and trends in health expenditure.

Information about private expenditure on health services in Saudi Arabia is not available. Private health

enterprises are reluctant to release financial statistics about their operations. There are no arrangements for conducting surveys such as General Household surveys to estimate average family expenditure on health. To overcome this difficulty I will measure private spendings on health indirectly by considering private health facilities and personnel. Again absolute figures may be misleading, so I will relate private expenditure to the rate of change of the number of private health facilities and the number of privately employed health personnel. I shall include pharmacies, chemist shops, private clinics, and drug wholesalers.

In spite of the use of indirect means of assessing private health spendings, there remains the possibility of not covering all aspects of private spendings on health services. For example, many Saudis travel abroad for private medical treatment, but I shall not include this in my discussion. Recent reports have indicated that the number of Saudis seeking medical treatment abroad is declining (Al-Riyadh, October, 1983). In the following paragraphs I shall consider health expenditure under three headings; Ministry of Health expenditure, other public sector expenditure, and private sector expenditure.

2.2 Ministry of Health's Expenditure

Budget appropriations for the Ministry of Health have steadily increased over the years. In the early 1960s annual increases were small, and in the late 1960s there were two occasions on which the annual budget of the Ministry of Health fell. Since the early 1970s there has been a rapid growth in budget appropriations for the Ministry of Health. In 1975 the budget doubled, and in 1976 it trebled (see table 4.3). This generous spending on

Table 4.3 The Growth of the Ministry of Health Budget Appropriations, 1961-1985 (millions SR)*

<u>Year</u>	<u>National budget</u>	<u>Ministry budget</u>	<u>% of total budget</u>
1380/81 = 1961	1,786.0	58.4	3.3
1381/82 = 1962	2,166.0	68.5	3.2
1382/83 = 1963	2,452.2	87.5	3.6
1383/84 = 1964	2,686.0	103.5	3.9
1384/85 = 1965	3,112.0	117.4	3.8
1385/86 = 1966	3,961.0	156.5	4.0
1386/87 = 1967	5,025.0	160.0	3.2
1387/88 = 1968	4,937.0	141.9	2.9
1388/89 = 1969	5,535.5	169.6	3.1
1389/90 = 1970	5,966.0	168.3	2.8
1390/91 = 1971	6,380.0	177.1	2.8
1391/92 = 1972	10,782.0	279.3	2.6
1392/93 = 1973	13,200.0	420.9	3.2
1393/94 = 1974	22,810.0	582.8	2.6
1394/95 = 1975	45,734.0	1,163.0	2.5
1395/96 = 1976	110,935.0	3,197.3	2.9
1396/96 = 1977	131,296.1	2,972.7	2.3
1397/98 = 1978	134,253.5	3,384.1	2.5
1398/99 = 1979	144,558.3	4,040.5	2.8
1399/00 = 1980	180,285.7	4,177.0	2.3
1400/01 = 1981	245,000.0	5,656.4	2.3
1401/02 = 1982	298,000.0	7,709.7	2.6
1402/03 = 1983	313,400.0	8,803.7	2.8
1403/04 = 1984	260,000.0	8,401.0	3.2
1404/05 = 1985	260,000.0	11,735.0	4.5

Source: Ministry of Finance and National Economy, Statistical Yearbook, various issues.

* the figures are not corrected for inflation.

health services by the government corresponded to the sharp increases in oil prices in the early 1970s, which increased Saudi oil revenues substantially.

The rise in the Ministry of Health budget was related to the overall rise in public expenditure in Saudi Arabia . The percentage of the national budget allocated to the Ministry has remained relatively constant between about 2.5% and 3.5% (see table 4.3). Since 1981 the share of the Ministry of the national budget has been gradually increasing, reaching a 4.5% in 1985. This recent rise in the share of the Ministry coincides with a government commitment to upgrade and expand health facilities in the country as an integral part of the development process underway in the country.

Although the percentage share of the Ministry of Health of the national budget is both comparatively small and has remained so consistently, in real terms it has been increasing substantially over the years because the national budget has consistently increased, particularly in the 1970s. In 1961 total government expenditure was only 1,786 millions Saudi Riyals. In 1970 it was 6,966 millions Saudi Riyals, which is three times as much as 1961 expenditure, and in 1980 it was 180,258.7 millions Saudi Riyals, which is more than 30 times as much as the 1970 expenditure. The trend of rising public expenditure continued in the 1980s.

When the Ministry of Health budget appropriations are examined, a clear shift in policy associated with reduced recurrent expenditure and increased capital expenditure can be identified. In the early 1960s relatively insignificant amounts were allocated for capital expenditure. The mid-1960s and mid-1970s saw a relatively sharp increase in allocations for capital projects. Although the expansion of capital expenditure in the mid-1960s was short-lived, the mid-1970s increase continued well into the 1980s. The percentage increase in budget capital expenditure was accompanied by a steady decline in the percentage share of budgeted recurrent expenditure. The situation has stabilized in the 1980s with just over 50% of the Ministry of Health budget being allocated for recurrent expenditure, and the rest for capital expenditure (see table 4.4).

Table 4.4 Ministry of Health Budget Appropriations by Category of Expenditure (million Saudi Riyals)

<u>Year</u>	<u>Recurrent Exp.*</u>	<u>%</u>	<u>Capital Exp.</u>	<u>%</u>
1380/81 = 1961	58.4	100.0	0.0	0.0
1385/86 = 1966	128.4	82.0	28.1	18.0
1390/91 = 1971	166.2	93.9	10.9	6.1
1395/96 = 1976	1,135.7	35.5	2,061.6	64.5
1399/00 = 1980	2,355.0	56.4	1,822.0	43.6
1400/01 = 1981	3,236.4	57.2	2,420.0	42.8
1401/02 = 1982	4,038.0	52.4	3,671.7	47.6

* recurrent expenditure includes salaries and allowances, general expenses, and miscellaneous expenses.

Source: Ministry of Finance and National Economy, Statistical Yearbook, various issues.

Since capital investment in health care generally increases current expenditure, the shift in expenditure patterns and the higher levels of capital expenditure will generate problems in the future. Capital expenditure will generate more recurrent expenditure. The continued expansion of the Ministry of Health budget over the years has contained the difficulties, but there may be a limit to this process.

The position of Ministry of Health with regard to financial resources is strengthened by the fact that the health sector has a relatively low priority in the allocation of the country's public revenues (Kneurhase, 1975, p.230). Although Ryan argues that the health sector is considered a priority sector in Saudi Arabia (Ryan, 1984, p.14), expenditure statistics do not support her. Raymond analysed the figures for 1973-75 and found that:

"In Saudi Arabia an annual per capita expenditure of \$91.22 for health, while impressively up from \$4.52 in 1971, pales in comparison to \$303.39 for defence, \$243.91 for interior, \$315.56 for education, and \$3312.04 for industrial development projects." (1978, p.37)

2.3 Other Public Sector Expenditure

Many ministries and independent public agencies provide health services for their employees and their families. The services they provide include primary health care and hospital care. The scale of provision varies considerably from one ministry or agency to another. The involvement of these government institutions in running health services for their employees and their families has developed slowly over the years. In recent years this trend has accelerated as confidence in the Ministry of Health facilities has deteriorated and employees' expectations have risen (Al-Ammari, 1976). Currently there are more than 15 different government institutions providing health services (see table 4.5).

Table 4.5 Government Agencies Providing Health Services for their Employees and their Families.

<u>Organisation</u>	<u>Primary Health Care</u>	<u>Hospital Care</u>	<u>Other Services</u>
Ministry of Defence and Aviation	Yes	Yes	Some national referral hospitals
Ministry of Interior	Yes	Yes	
Ministry of Education	Yes	No	For male students at schools
Ministry of Higher Education	Yes	Yes	Teaching and national referral hospitals.
Ministry of Labour & Social Affairs	Yes	No	For residents of social welfare institutions.
Ministry of Municipal & Rural Affairs	No	No	Responsible for environmental health.
Ministry of Pilgrimage and Endowment	No	No	Coordinate the services during pilgrimage.
National Guard	Yes	Yes	Some national referral hospitals
Saudi Red Crescent Society	Yes	No	Provide ambulance and first aid services.
Girls Education Authority	Yes	No	For female students at schools.
General Presidency of Youth Welfare	No	No	Provide sport medical services for sportsmen.
King Faisal Specialist Hospital & Medical Research Centre	No	Yes	National referral hospital.
King Khalid Eye Specialist Hospital	No	Yes	National referral hospital.
General Organisation of Social Insurance	No	Yes	For victims of industrial accidents.
Royal Commission for Yanbau and Jubail	Yes	Yes	Environmental services.

Source: compiled from field notes.

The involvement of a relatively large number of public institutions in the provision of public health services has wide implications for health services in the country. It means that some services are duplicated. The cost of health services is increasing generally, and in this context duplication represents a serious waste of valuable limited resources.

There is a wide variation in the type and scale of provision made by the various institutions. Some ministries such as the Ministry of Defence and Aviation have become involved in the provision of Services because it is essential for their prime function. The recipients of the services are dispersed across the whole country. This constitutes an important impediment to the provision of comprehensive services by any single institution. As a result some of the services are relatively limited (see table 4.6). However, since most institutions have just started to set up their own health facilities, it may be that they will expand their services considerably.

The variation in scale of provision results in geographical maldistribution of services. Some cities and regions have many services while others do not. For example, the Ministry of Interior only provides a hospital service in Riyadh and primary health care service is provided in regional cities and towns. Although this maldistribution tends to reinforce the rural/urban maldistribution which will be discussed elsewhere, there are

some important variations. Some health providers locate their health facilities in rural and remote areas while others locate them in urban centres. The Ministry of Defence and Aviation, for example, has medical facilities near its military installations in rural and remote areas in the south west and north of the country respectively.

Table 4.6 Health manpower and facilities for different ministries and government agencies, 1983.

<u>Organisation</u>	<u>Doctors</u>	<u>Para- medical staff</u>	<u>Adminstra- tive staff</u>	<u>Beds</u>	<u>Health centre</u>
Ministry of Defence and Aviation	1,218	5,239	6,004	2,265	50
Ministry of Interior*	71	323	63	120	33
Ministry of Education	323	446	123	none	108
Ministry of Higher Education*+	423	2,263	373	1,074	-
National Guard	374	994	-	613**	32
Saudi Red Crescent Society	40	1,341	196	none	119++
Girls Education Authority	117	221	18	none	-
King Faisal Specialist Hospital***	74	628	1,261	250	none
King Khalid Eye Specialist Hospital	45	467		263	none
General Organisation	40	119	114	85	none
Royal Commission for Yanbua and Jubail				173	13

* figures for 1984

** figure for two hospitals which when fully operational will have 1,000 beds.

*** figures for 1980

+ figures for four teaching hospitals only

++ figure includes first aid posts, dispensaries, and ambulatory first aid post

Source: Compiled from field notes.

The fragmentation of health provision has created variations in the quality of services provided because different providers were able to provide more resources for health services than other (Al-Ammari, 1976). The diversity of health providers and the variation in the quality of their services have increased competition in the provision of high quality medical care (to the benefit of the beneficiaries of their services and the general public). The competition is not over resources' allocation, but concerns providing modern and sophisticated services. I shall discuss this latter in the context of the emerging pluralism of the Saudi health system. In the following paragraphs I shall briefly describe the services of the Medical Services Department of the Ministry of Interior and the Saudi Red Crescent Society. They are typical of the variation in type, scale, and organization of services in the public sector.

2.3.1 Ministry of Interior's Services

The Ministry currently runs 17 prison health centres, 12 health centres, and one hospital, Riyadh Public Security Hospital. Prison health centres are located in the largest prisons. The other 12 health centres serve the police force, and are located in regional cities. Health centres are usually staffed by one or more doctors and a number of paramedical staff. In large regional cities such as Dammam specialist services may be provided, and the staff therefore may include some specialists. Health centres provide

treatment for minor ailments and difficult cases are transferred to Ministry of Health hospitals or other hospitals.

Riyadh Public Security Hospital was opened in 1967 to serve members of the Police force and their families. Initially it had 20 beds and it was expanded in 1979 to 120 beds. A second expansion phase is underway and is expected to increase bed capacity to 474 beds. The Ministry does not run the hospital directly, but has contracted a specialist firm to run it. The Ministry specifies in the contract the number of doctors, nurses, and other staff categories, who work in the hospital. It also sets standards for the ancillary services such as cleaning and catering. The Ministry has a liaison office to coordinate the running of the hospital, and to supervise the implementation of the contract.

Until 1984 the medical services of the ministry had been administered by a small department within the Public Security Division. In 1984 a new Medical Services Department was established. At the moment there is no separate budget but the establishment of the new Department may lead to the allocation of a separate budget for the services.

2.3.2 Saudi Red Crescent Society

The society was established in 1963 to provide first aid services to accident victims and transport patients to hospitals, as the ambulance service of the Ministry of Health is not legally required to transport patients either from the site of an accident or from homes. The Ministry of Health's ambulance service is restricted to transporting patients between hospitals. The society services are considered complementary to the Ministry of Health services, and it was established to fill this crucial gap of transporting patients to hospitals. The services provided by the society during the pilgrimage season, which include first aid, primary health care, and some hospital care, have become a major responsibility for the society.

The society provides its services through a network of first aid posts and health centres. First aid posts, which are mostly located on the highways, provide ambulance services to accident victims. In 1983 there were 97 first aid posts, 8 ambulatory first aid units, and 14 health centres. Health centres provide primary health care to city dwellers and accident victims in the cities.

During the pilgrimage season the society increases its services and concentrates them at air and land entrances into the country, and the routes from them to the pilgrimage region. It opens many temporary first aid posts and health centres to provide these additional services. In 1983 it opened more than 49 temporary posts in the holy cities

(Saudi Red Crescent Society, 1985, p.72). The society also operates a field hospital during the pilgrimage season. The society staffs these additional facilities by redeploying its workforce and through temporary recruitment.

The society is an independent agency headed by a chairman who is responsible to its board of directors. The directors of the board are usually nominated by the Minister of Health and appointed by the King. The society's budget has grown steadily since it was founded in 1963 (see table 4.7). The 1982 budget was 94.4 millions Saudi Riyals, which is more than ten times its budget in 1972. The society spends more than 85% of its budget on salaries, general expenses, and other forms of recurrent expenditure. Capital expenditure is relatively small, averaging 10-15% of the total society's budget.

Table 4.7 The Saudi Red Crescent Society's BudgetAppropriations, selected years(million Saudi Riyals)

<u>Year</u>	<u>Budget</u>	<u>Recurrent</u> <u>Expenditure</u>	<u>%</u>	<u>Capital</u> <u>Expenditure</u>	<u>%</u>
1389/90 = 1970	5.5	5.1	93.0	0.4	7.0
1390/91 = 1971	5.5	5.5	100.0	0.0	0.0
1391/92 = 1972	9.0	8.1	90.0	0.9	10.0
1392/93 = 1973	11.0	9.5	86.0	1.6	14.0
1393/94 = 1974	11.5	9.8	85.0	1.7	15.0
1394/95 = 1975	18.8	15.9	85.0	2.9	15.0
1395/96 = 1976	32.3	22.1	68.0	10.2	32.0
1396/97 = 1977	22.0	22.0	100.0	0.0	0.0
1397/98 = 1978	45.8	35.8	78.0	10.0	22.0
1398/99 = 1979	53.3	47.7	90.0	5.5	10.0
1390/00 = 1980	59.3	52.5	88.0	6.9	12.0
1400/01 = 1981	81.3	68.1	84.0	13.2	16.0
1401/02 = 1982	94.4	81.0	86.0	13.4	14.0
1402/03 = 1983	147.4	134.0	91.0	13.4	9.0

Source: Ministry of Finance and National Economy,
Statistical Yearbook, various issues.

The multiplicity of health providers has created a need for coordination between the various providers in order to integrate their services with the services of the Ministry of Health, the main provider in the country. At the present time there is a serious lack of coordination between the providers. There is no formal arrangements for coordination, and communication between providers is poor (Al-Otaibi, 1985).

The fragmentary feature of the Saudi health system differs in its extent from other developing countries (where health provision is also provided by a number of public agencies, each is responsible for a major aspect of health provision). Such situation requires the integration of the various services to improve efficiency and utilize available limited resources effectively. The Saudi situation requires coordination of services to reduce overlapping and duplication as well as to integrate the various services into a comprehensive provision. The financial resource position in both situations is the determinant of the differing nature of the fragmentary feature.

2.4 Private Expenditure

The private health sector is growing rapidly with the encouragement of the government. In 1984, it was estimated that about 15% of all health provision in the country was provided by the private sector (Al-Rabbiah, 1984, pp.81-99). Medical services, and particularly hospital services, are

the major area of involvement of the private health sector. Government inducements and economic prosperity have made health provision a big business in the country. The government allowed the Ministry of Health to guarantee payment for 15% of private hospitals' beds throughout the year, but very few private hospitals take advantage of the offer.

The services provided by the government are supplemented by private fee-for-service services. The simplest form of private service is the single-handed private clinic, in which a doctor aided by untrained assistant provides medical treatment for clients. Difficult cases which the doctor can not treat are referred to the local hospital. Unfortunately, published health statistics provide no information on these single-handed clinics or give any information about their activities such as the number of patients they see. Some data about their activities are collected routinely by the Ministry of Health which license them to practice in the country, and keep a register for them. The Director of the Licensing Division of the Ministry of Health told me that in 1403 (1983) there were 475 private one-doctor clinics in the country.

Another type of private services is the health dispensary, commonly referred to as polyclinics. These usually function as health centres. They have more than two doctors, a number of paramedical staff, and some diagnostic facilities such as laboratories and X-ray. Specialist

services are often provided, mostly in paediatrics and obstetrics and gynaecology. The emergence of this type of facilities is relatively recent, and their numbers have expanded rapidly since 1980 (see table 4.8).

Table 4.8 Growth of Private Health Facilities in Saudi Arabia, Selected Years.

<u>Year</u>	<u>Number of Hospitals</u>	<u>Number of Beds</u>	<u>Number of Health Centres</u>
1389/90 = 1970	19	944	-
1394/95 = 1975	22	1,195	-
1397/98 = 1978	22	1,328	-
1398/99 = 1979	25	2,019	22
1400/01 = 1981	28	2,685	64
1401/02 = 1982	31	3,264	105
1402/03 = 1983	32	3,440	164

Source: Ministry of Finance and National Economy, Statistical Yearbook, various issues.

The rapid expansion of private services was mainly a result of the simplification of licensing procedure by the Ministry of Health which was officially introduced in 1983 (Ministry of Health, 1984b). Prior to 1983 licensing applications were submitted to regional health directorates, but approval was centralized in the Ministry in

Riyadh. The process was decentralized in 1983 as part of the Ministry's regionalization policy, and each health directorate was allowed to grant licences, and the time laid down for processing applications was shortened from years to weeks.

The simplification of licensing procedure has also affected private hospitals. The number of private hospitals, which remained fairly constant in the early and mid-1970s, has substantially increased in the early 1980s. Investment in private hospital business was encouraged by generous government incentives, including the provision of interest-free loans of up to 50% of the cost of the project. Private hospitals provide both in-patient and out-patient services, and in some cases emergency services.

The growth of private health manpower reflects the expansion of private sector services. The number of doctors, paramedical staff, and administrative staff has consistently grown since 1970. Following a slow growth at first, manpower grew rapidly after 1975. By 1981 the number of doctors had increased five fold and the number of paramedical staff three fold compared to 1970 figures (see Table 4.9). The higher rate of growth for doctors compared with paramedical staff suggests that the expansion of one-doctor clinics and health centres was larger than the expansion of hospitals.

Table 4.9 Growth of Private Health Manpower in Saudi Arabia, selected years*

<u>Year</u>	<u>Doctors</u>	<u>Number of Paramedical</u>	<u>Administrative Staff</u>
1389/90 = 1970	162	875	599
1394/95 = 1975	268	1,301	870
1399/00 = 1980	756	2,322	1,515
1400/01 = 1981	967	3,014	1,369
1401/02 = 1982	1,526	4,907	4,609

* The figures do not include all private health manpower in the country. For example, staff employed in private companies' health facilities are excluded.

Source: Ministry of Finance and National Economy,
Statistical Yearbook, various issues.

The growth in supply of drugs through retail outlets is related to the expansion of private health services. Before 1980 drugs were supplied through pharmacies, wholesale drug stores, retail drug stores, and herbal shops, and it was possible to buy any drug without a medical prescription. Since 1980 new regulations made many drugs such as antibiotics prescription-only drugs, and laid down standards for the sale and use of drugs.

Since 1980 only two types of establishments were licensed to supply drugs in the country; pharmacies which must be run by a qualified licensed pharmacist, and drug stores which act as agents for manufacturers and supply pharmacies. The number of pharmacies has been growing steadily throughout the 1970s. The growth rate was relatively large in the late 1970s and early 1980s (see table 4.10), and since many drugs are sold over-the-counter such growth seems to indicate that many people are spending more money on their health.

Table 4.10 Growth of the Number of Pharmacies and Drug Suppliers in Saudi Arabia, selected years.

<u>Year</u>	<u>Pharmacies</u>	<u>Whole Salers</u>	<u>Retail Drug Store</u>	<u>Herbal Shop</u>	<u>Drug Store</u>
1390 = 1970	14	201	297	38	-
1395 = 1975	26	176	320	19	-
1396 = 1976	37	183	327	19	-
1397 = 1977	37	183	327	19	-
1398 = 1978	73	192	322	-	-
1399 = 1979	135	200	287	-	-
1400 = 1980	344	102	-	-	102
1401 = 1981	478	-	-	-	112
1402 = 1982	608	-	-	-	119
1403 = 1983	806	-	-	-	137

Source: Ministry of Finance and National Economy, Statistical Yearbook, various issues.

The growth of private health services is a product of the increasing demand for health services. Saudi citizens form one client group using private fee-paying services. Expatriates working in the country, who make up more than one quarter of the total population, are a major client group of private services. The labour laws of the country require that each employer employing more than twenty persons is legally responsible for their health needs. Employers depend totally on private services to fulfil their legal obligations, though some large employers may run their own health facilities. Most employers contract the services of private health facilities where they can get up to 15% discounts (Khusro, 1981).

Demand for health services and availability of financial resources to pay for it has allowed the private health sector to grow rapidly. It is the government policy to encourage the private sector so as to allow a pluralistic approach to health provision to develop in the country. The government hopes to see a strong private participation in the health field which can contribute to the solution of health problems in the country.

One example of the increasing involvement of the private sector is evident in the style of management used by the Ministry of Interior for the running of its hospital in Riyadh. Hospital management in Saudi Arabia has become a big business (Whelan, 1980, p.45; Garratt, 1981, p.28), and it is contributing to the rapid growth of the private health

sector (Khusro, 1981, p.9). The implications of this trend for health for health training and health manpower situations will be considered in the remaining sections of this chapter.

The nature of the role of the private health sector in Saudi Arabia adds to the variations observed in other developing countries. Unlike most socialist developing countries where the private sector is restricted or banned, the Saudi government is actively supporting the expansion of the private sector. This makes Saudi Arabia different from most developing countries which accept private involvement in health provision. While the principle of private involvement in health provision is politically determined, its extent and growth are economically determined.

3. Technology and Expertise

3.1 Introduction

The provision of modern health services, particularly medical services, requires a wide and growing range of health appliances and equipments of increasing sophistication and complexity. In developing countries there are problems with the supply, maintenance, and utilization of medical equipment. The availability of technology and expertise is important for the provision of health services.

Health technology and expertise can be assessed by examining health support services and health training. In health support services I include pharmaceutical manufacturing, hospital supply manufacturing, and maintenance, all of which are highly technical and require a constant input of scientific knowledge. Health training includes instructions in basic health activities, undergraduate and postgraduate training, research, and the necessary skills to utilise and maintain equipment. In the following paragraphs I shall describe health support services and health training in Saudi Arabia and include an assessment of current policies aimed at improving the Saudi stock of health technology and expertise. I shall also consider the relevance of the Saudi position to its health services development.

3.2 Health Support Services

The development of health support services in Saudi Arabia is essential because the Saudi health system is expanding and it is high technology-oriented, using an extensive range of modern equipment. In Saudi Arabia there is very little domestic production of health supplies and medical equipments, and the country has to rely heavily on foreign suppliers (Worldwide Medical Markets, 1983, p.44), even for everyday hospital supplies. The reliance on foreign manufacturers and suppliers creates problems in maintaining equipment and ensuring a regular supply of materials.

The Saudi government is very concerned about general industrial development. Although health support services do not command high priorities in industrial development, they benefit from the general concern for industry. For example, the formation of the Saudi Arabian Standards Organization has helped to reduce problems created in the health service because of the absence of national standards for materials, machines, processes, and buildings. In the absence of national standards foreign contractors building hospitals and supplying medical equipment have introduced different foreign standards into the country.

The Saudi government has accepted the greater importance of maintenance of equipment and is placing great emphasis on meeting its maintenance needs, especially in its strategy for the fourth development plan 1405-10 (1985-90). The first basic strategic principle of the plan stated that the government intends to effect its objectives by:

- "10 Making full provision, with regard to any projects, for all foreseeable future maintenance and operational requirements. In project design consideration should be given to reducing maintenance requirements as far as possible;
- 14 Including general principles of maintenance as part of the educational curricula for the post-elementary stages to enable individuals to carry out simple maintenance tasks;

15 Encouraging the private sector to invest in maintenance projects;..."

(Ministry of Planning, 1984b, p.2)

The promotion of industry as an alternative source of national income has been the hallmark of all Saudi development plans. The Saudi government provides encouragement and financial incentives to industrial investors. The incentives include:

- "1 Loans on favourable terms from the Saudi Industrial Development Fund (SIDF);
- 2 Tariff exemption on imported equipment and materials;
- 3 Selective tariff protection from imported products;
- 4 Tax incentives;
- 5 Assistance in studies and operations;
- 6 Provision of infrastructure, including industrial estate;
- 7 Provision of low cost utilities and fuels;
- 8 Training subsidies for manpower;
- 9 Adoption of Government procurement policies giving preference to Saudi producers."

(Ministry of Planning, 1980, p.217)

The Saudi Industrial Development Fund , which was established in 1974, provides interest free loans of up to 50% of the total project cost including initial working

capital, and many investors have made use of its services to set up local industries. The Fund levies a service charge of between two and three percent on industrial loans to cover administration costs. In 1982 there were 526 operational companies which were helped by the Fund. The establishment of 8 industrial cities in urban centres has encouraged many investors to set up industrial businesses. Plots of land in industrial cities are rented at nominal rents, and all necessary utilities are provided to the plots, sometimes at reduced prices.

The government industrial policy, which aims at establishing a basic industrial infrastructure, has had some impact on the health support services and industries although Saudi Arabia remains heavily dependent on foreign suppliers. Many backup industries and services have been established in the country which constitutes a step forward.

Pharmaceutical manufacturing in Saudi Arabia is limited, and there is only one operational company, Pharmaceutical Solutions Industries, Jeddah, and another one is in the planning stage. Hospital manufacturing is non-existent, and needed medications in specialist hospitals are flown into the country, sometimes within 24 hours, mostly from the United States of America and Britain. Some health services providers, both public and private, have representatives abroad who arrange for their supplies, and can provide a quick service.

However, although Saudi Arabia has few health support services, the scope and scale of production of health-related products is increasing as a result of government encouragement and financial incentives. For further developments the emphasis placed on industrialization generally needs to be focussed on the promotion of health support services. The potential for health support services is enormous. The present state of affairs, in which the day-to-day running of health facilities is almost totally dependent on imported supplies, is highly unsatisfactory. Satisfactory assurance of stability and continuity of supplies can only be realized through the establishment of national health support services. The progress made so far towards that end is minimal, and more needs to be done even if the government makes this a priority area for industrial development.

The steps taken by the government to encourage the participation of the private sector in the development of health services are exceptionally generous. The government policy is to enable the private sector to play a prominent role in the provision of health services. The reluctance of private investors to invest in health industries is hard to explain. It would appear that the lack of advice, directives, and technical assistance coupled with the lengthy routine of licensing are the main obstacles. The new regulations introduced in the 1980s have simplified the procedure, but the question of guidance and assistance remains.

The lack of national technology and expertise creates two problems, waste of resources and dependence on foreign countries. Both problems are made more acute by the high technology-oriented approach of Saudi health authorities. When expertise is lacking, it is easy to be given inferior equipments as modern ones, and to be over-charged for purchases of medical appliances. Reports of sales of substandard and outdated equipment are increasing (Hassan, 1984, p.14), and more cases of overcharging for the supply of medical appliances are coming to light. For example:

"A leading hospital got two SMACKS (a kind of sophisticated scanner used in extremely rare cases) for \$1 million each, when the actual market price was only \$250,000." (Khusro, 1981, p.9)

Al-Khalidi (1984) investigated the serviceable life of selected high technology hospital equipment in a sample of military hospitals, and found that, especially in turn-key projects, equipment of bad quality, of relatively old models or not suitable for the tropical climate of the country are supplied to the hospitals when the contractual specifications were for up-to-date equipment. The solution of the problems lies in effecting a transfer of technology into the country, which is a slow process. Saudi Arabia is active in acquiring modern western technology. Ryan noted an increased use of computers in the health field in the country which imports under 50% of the computer hardware export market for the whole of the Middle East

region (1984, p.20). Saudi Arabia is the largest contributor to the Voluntary Fund for Health Promotion, contributing 38% of its fund up to late 1979. (Simon, 1980, p.125) The fund is organised by the World Health Organization Regional Office for the Eastern Mediterranean for the promotion of technical cooperation in the region.

The ability to make equipment available is the first step, and it needs to be followed by the ability to use them efficiently, to maintain them effectively, and to repair them when they break down. Saudi Arabia is like other developing countries where the latest modern medical techniques are available (Piachaud, 1979, pp.629-41), but where maintenance and repair services are extremely limited. This keeps the developing countries dependent on their foreign suppliers all the time.

3.3 Health Training

During the early stage of the development of health services in Saudi Arabia relatively little attention was paid to the training of health personnel. There was a lack of resources, both financial and non-financial, and inadequate organization. Prior to the provision of local training institutions in the 1960s the country trained its nationals abroad as the short-term costs of training abroad are less than the cost of establishing local training institutions.

The development of health training in Saudi Arabia was selective. Initially, attention was directed to the training of support health personnel and paramedical staff because the expanding facilities needed large numbers of them, and training programmes were relatively rudimentary and cheap. Health training was gradually expanded to provide for undergraduate and postgraduate training of health personnel.

3.3.1 Paramedical Training

The Ministry of Health assumed total responsibility for training paramedical staff to meet the needs of the country. It established Health Institutes to train public health inspectors, technicians, nurses, statisticians, assistants, and dietetic assistants (Ministry of Health, n.d.a). Public health inspectors are offered four specialties, and technicians are graduated in six different specialties. The first Health Institute was opened in 1959 in Riyadh, and since then many more were opened. The Ministry of Health has also established a number of Nursing Schools to train female nurses. The Ministry of Defence and Aviation also trains paramedical staff. It has a nursing school in Taif, opened in 1957, and a number of training centres attached to hospitals. Training centres usually provide in-service training for the Ministry's health personnel.

Health Institutes and Nursing Schools are usually located near general hospitals so that some hospital staff can participate in teaching, and students are given practical training in the hospital. Initially entry requirements were relatively low, Primary Certificate of Education, to encourage enrollment. However, since 1983 the entry requirement has been raised to Intermediate Certificate of Education, and all health institutes and nursing schools were renamed Male/Female Secondary Health Institutes. Recently, the Ministry of Health has accepted students from other ministries and government agencies, and has given some scholarships to students from neighbouring Arab countries.

Secondary Health Institutes are run by the Department of Health Institutes of the Ministry of Health. The Department is responsible for the curricula of all programmes. The present curricula have not been changed since the first health institute was opened in Riyadh in 1959. As a result pressures for change have developed. Although the practical elements of the training programmes have been up-dated and remain relevant, the theoretical elements have become out-dated. The practical aspects have ensured that trainees are made familiar with common health problems and therefore able to manage when they take up employment. Nevertheless, the standards of trainees were generally low, and this has had an impact on the standard of health care in Ministry of Health facilities.

The curriculum is now under review. The Department of Health Institutes has asked King Saud University to draw up new up-to-date curricula which are going to be adopted in all institutes. The new curricula are less rigid and are to be up-dated regularly to avoid falling behind current advances in medical knowledge. The Department of Health Institutes ensured training to University level. Graduates of the Secondary Health Institutes are eligible for more advanced university courses after two years work experience. This recognition of institutes' qualification is a major improvement in paramedical training in Saudi Arabia.

In 1970 there were only six health institutes in Saudi Arabia, now there are 32 (see appendix VIII). Most of the increase has taken place in the early 1980s. The growth of Secondary Health Institutes reflects the growing demand for paramedical staff for the growing Saudi health system. The pattern of the growth has not been satisfactorily planned (see table 4.11). The Ministry of Defence and Aviation is planning to open new colleges for training allied health personnel, one for men and another for women.

Table 4.11 Growth of Secondary Health Institutes in Saudi Arabia, 1970-1984

<u>Year</u>	<u>Women</u>	<u>Men</u>	<u>Total</u>
1970	3	3	6
1975	2	1	3
1980	3	0	3
1984	7	13	20
Total	15	17	32

Source: Department of Health Institutes, Ministry of Health.

The number of students in different institutes varies considerably depending on popular acceptance of their health programmes in their localities. For example, some institutes' intake reaches 70 students, whilst others is only 15 students. The intake of the same institutes can fluctuate sharply from one year to another. The Department of Health Institutes is currently working to develop two prototype designs for Secondary Health Institutes, one for 300 students and the other for 500 students. Eventually the Ministry of Health would house all institutes in buildings of either design.

Although paramedical training in Saudi Arabia appears to be selective and inconsistent, it is considerable and expanding. Its beginning was typical of the development of

auxiliary training in developing countries. At one stage, in the late 1960s, a World Health Organization consultant predicted that:

"It may well be that a system of auxiliary training, so admirably developed, will find a permanent place in the country's educational system - with rising entry requirements and improved teaching the product could become an indispensable component of the health system."

(Brockington, 1969, p.6)

However the momentum was not maintained and auxiliary training was neglected as graduate programmes for health professionals were started at universities. Problems of curricula and administration have undermined paramedical training in the country (Zahrani, 1983, ch.5). The recent reorganization of Secondary Health Institutes indicates an official concern at the shortcomings of paramedical training and their implications for the development of health services in the country.

3.3.2 Undergraduate Health Education

Although there are eight universities in Saudi Arabia, the number of health-related undergraduate courses in the country is limited (see table 4.12). Health-related courses include science, medicine, pharmacy, nursing and dentistry courses. The courses are usually 4-5 years long, except

medical courses which are 6-7 years long. Almost all these scientific courses are taught in English, which is problematic for many Saudis and tend to affect standards (Gallagher, 1985a).

Most health-related courses are available for both men and women, but since men are strictly separated from women, this means that undergraduate facilities are duplicated. (The wider resource implications of the segregation of sexes will be discussed in part IV which deals with the socio-cultural factors affecting the Saudi health system.) For example, there are seven medical schools although only three universities have four medical faculties. Most health-related undergraduate courses were started in the early 1970s and therefore their contribution to the health manpower is still limited. This is especially true of courses for women.

Graduate medical education has grown rapidly since the mid 1970s. The Ministry of Higher Education devoted substantial amounts of resources for the expansion of medical schools and the initiation of training programmes. Since the late 1970s Saudi medical professionals returning from abroad were given considerable financial resources for developing medical training (Basalamah, 1981). The Saudi Medical Journal and universities' committees have provided a forum for debating health issues perceived to be crucial for the developing Saudi health system.

Table 4.12 A List of University Colleges where Health-related Undergraduate Courses are Taught in Saudi Arabia.

<u>College</u>	<u>University</u>	<u>Sex</u>	<u>Opening Date</u>
Faculty of Science*	KSU	M -	1958
Faculty of Science	KAU	M -	1973
Faculty of Science	UPM	M -	1970
Faculty of Science	GSGC	- F	1979
Faculty of Pharmacy	KSU	M F**	1959
Faculty of Medicine - Riyadh	KSU	M F	1969
Faculty of Medicine - Abha	KSU	M -	1981
Faculty of Dentistry	KSU	M F	1976
Faculty of Medicine & Medical Sciences	KSU	M F	1975
Faculty of Medicine & Medical Sciences	KFU	M F	1975
Faculty of Allied Medical Sciences***	KSU	M F	1976

* Health-related courses offered by Faculties of Sciences include; biochemistry, biology, physiology, chemistry, and bacteriology.

** The pharmacy course for women was started in 1982.

*** Courses offered by this faculty include; radiology, laboratory science, physiotherapy, nursing, and medical technology.

KSU King Saud University

KAU King Abdulaziz University

KFU King Faisal University

UPM University of Petroleum and Minerals

GSGC General Secretariate for Girls Colleges

The opportunity was taken up by the returning Saudi medical professionals, and with the assistance of western advisors and consultants (Harrell, 1976, p.677) impressive plans were drawn up for medical training facilities in the country. In the process more emphasis was placed on medical training, whose graduates are more likely to end up working in health services, than on science disciplines, for example, whose graduates are qualified to work in a number of fields including health services.

3.3.3 Postgraduate Health Training and Research

Postgraduate courses are in their infancy in Saudi Arabia, and not many programmes are available. There are few postgraduate health-related programmes in the country. They are provided by universities, Ministry of Health, and the Ministry of Defence and Aviation. For example, King Saud University, offers a Master of Science course in health and hospital administration, and King Faisal University offers training programmes for doctors. They are 3-4 years long, and prepare doctors for fellowship examinations of the Arab Board. The university also awards higher degrees in some specialties.

The provision of postgraduate education is currently under review in Saudi universities, especially in medical subjects. Already a number of post-graduate health programmes have been planned to start in the fourth development plan 1405-10 (1985-90). The Ministry of Higher Education oversees university education, and is responsible for coordinating the development of postgraduate courses at universities. Until health postgraduate studies are sufficiently developed, the country will continue sending its students abroad for postgraduate studies.

The Ministry of Health in cooperation with foreign universities has developed some postgraduate programmes to meet its need for specialized health personnel. For example, a diploma course in paediatrics is organised at the Shemmasi Hospital in Riyadh. It is aimed at qualifying

doctors to work in paediatric departments at Ministry of Health hospitals. The Ministry organises, on an ad hoc basis, many short training courses. The participation in and sponsorship of meetings and conferences to discuss medical issues by the Ministry have recently increased substantially. Generally, postgraduate activities of the Ministry are primarily aimed at enabling it to overcome operational difficulties.

The Ministry of Defence and Aviation has also contributed to postgraduate health education, and its contribution is significant. It organises short in-service training courses for its health personnel, and sponsors medical conferences and meetings. For example, it participates in sponsoring the annual Saudi Medical Conference, and had hosted conferences on heart transplant and other medical issues of practical implications to the country. Although the contribution of the Ministry of Defence and Aviation to postgraduate health education is limited, in many cases it had been pioneering.

Research activities are generally limited in Saudi Arabia. Until the mid 1970s there was little research, especially in science and technology. In 1977 the government established the Saudi Arabian National Centre for Science and Technology which helps to organise research activities in educational institutions. The centre is:

"Charged with the responsibility of promoting and coordinating applied scientific research, coordinating the activities of scientific research organizations and centers in accordance with the Kingdom's developmental requirements, and developing the scientific and technological potential of the Kingdom."

(Saudi Arabian National Centre for Science and Technology, 1982, p.3).

Since the 1970s Saudi universities have taken many steps to encourage research, including medical and health-related research. Professors and lecturers are helped to conduct research, especially in scientific fields. A number of incentives are offered to researchers to encourage them. They include facilities, assistance with publication, and financial rewards. Research activities at universities and other educational institutions are strengthened by the centre. The centre sponsors research by university staff, and organises research aimed at national problems with university departments, ministries, and other concerned bodies (Huraib, 1982, ch.8). Currently there is a number of medical research projects underway in the universities.

There is a highly sophisticated programme of research on cancer and nuclear medicine conducted in King Faisal Specialist Hospital and Medical Research Centre where research facilities are provided to attract leading

expatriate specialists. The growth of research activities is also helped by the publication of scientific journals by ministries, universities, and specialist institutions. For example, the Ministry of Defence and Aviation sponsored the publication of the Saudi Medical Journal in 1980.

Postgraduate health education and research activities are growing rapidly. The involvement of universities and ministries in developing postgraduate courses need to be coordinated to enhance their progress and avoid unnecessary duplication. Short training courses should be organised as part of planned long term programmes. Health research is concentrated on medical aspects of health. While maintaining the momentum of research in medical issues at such an early stage of development of health services, attention should be given to other aspects of health service provision as well. A rational policy on research generally, and health research in particular, is emerging with the expansion and strengthening of the Saudi Arabian Centre for Science and Technology. When such a policy is clearly formulated, the need to gear research more to the country's health problems and less to expatriate specialists' interests would become more persistent than it is at the moment.

An evaluation of the Saudi asset of health training facilities is difficult to make because without population statistics and assessments of need and demand the process is crudely a guesswork. Mejia et al (1979) suggested that

there is a lack of training facilities in the country in 1979. The situation has changed now, and it is probably the reverse. The situation will become clearer when I discuss the capacity of present training facilities in the next section.

Saudi Arabia compares favourably with other developing countries with regard to training facilities. While there is a shortage of them in most developing countries (Fendall, 1972a, p.207), Saudi Arabia is not short of them though it is not clear whether present facilities are sufficient to meet its need or not. There is also a difference in the type of facilities. Most developing countries have well developed facilities for auxiliary training, but similar Saudi facilities are comparatively less developed. The reason underlying the difference between Saudi Arabia and other developing countries is the high cost of training and education in developing countries generally (Abel-Smith, 1976, ch.12) which Saudi Arabia is better placed to face.

4. Health Manpower

4.1 Introduction

Saudi Arabia is short of health manpower, and extremely short of Saudi health personnel. This shortage has resulted in a heavy dependence on expatriates drawn from many different countries. The dominance of expatriates of the Saudi health system poses serious difficulties to its development and expansion. Mujahid suggested that

"dependence on foreign manpower was a significant constraint on growth in medical facilities" in the country (1978, p.44). The low productivity of Saudi health training facilities implies that the country will remain dependent on expatriate personnel for many year (Sebai, 1985, ch.5).

In the 1950s and up to the late 1960s almost all Saudi health personnel were trained abroad through personal initiatives and scholarships awarded by the government. The policy of training health personnel abroad still exists, though the degree of reliance on it has been reduced. Saudi health training facilities were established to train Saudis, and meanwhile expatriate health personnel were recruited to provide health services.

The Saudisation of the health system is not only a national goal of the government, it is also a valid and practical solution to the country's health manpower problem as will become clear when the two parts of this section are considered; quantity and quality of health manpower in Saudi Arabia. The two aspects are complementary, and are chosen as they best illuminate the real difficulties of health manpower situation in Saudi Arabia.

4.2 Quantity of Health Manpower

Saudi Arabia relied on training Saudis at university level abroad in the 1960s and early 1970s, but the number of Saudi graduates in health-related subjects was limited.

Table 4.13 indicates the relative limited number of Saudi graduates in medical sciences abroad. It shows that the number of students sent abroad, particularly in the mid 1970s, to study medical sciences was far greater than those graduating. This pattern of graduate production is caused by a large number of students changing the subject which they were sent abroad to study.

Table 4.13 A comparison of the number of Saudis sent abroad and those graduating abroad in medical sciences*, selected years.

<u>Year</u>	<u>Number of Saudis Graduating Abroad**</u>	<u>Number of Saudis Sent Abroad</u>
1971	21	25
1975	50	614
1980	107	89
1981	80	89
1982	245	80
1983	78	

* Medical sciences include medicine, public health, psychology, nursing, midwifery, radiology, dentistry, and pharmacy.

** Figures include under-graduates and post-graduates.

Source: Ministry of Higher Education, Statistics of Saudi Students Abroad, various issues.

A large number of medical sciences students graduating abroad studied medicine. They did their studies in many different countries, which were chosen either by personal preference or by the government. The figures given in table 4.13 include only government sponsored students. There is no comprehensive record of those students who financed their own studies, although they were supposed to register with the Saudi Education Office in the country where they study. Generally, they constitute a sizeable proportion of Saudis graduating abroad.

Tables 4.14-16 show the relatively low production of graduates on health-related subjects from Saudi universities. For most courses students are just beginning to graduate, which means that it would be some time before their full contribution to the national health manpower situation is evident. Many of the first graduates have not joined the health service as they are recruited by universities' faculties, and are sent abroad to finish their postgraduate studies and return to teach at universities.

Table 4.14 Medical Graduates from Saudi Universities, 1975-84

<u>Year</u>	<u>KSU-Riyadh</u>	<u>KSU-Abha*</u>	<u>KAU</u>	<u>KFU</u>	<u>Total</u>
1394/95=1975	--	--	--	--	--
1395/96=1976	22	--	--	--	22
1396/97=1977	27	--	--	--	27
1397/98=1978	26	--	--	--	26
1398/99=1979	41	--	--	--	41
1399/00=1980	76	--	35	--	111
1400/01=1981	53	--	54	18	125
1401/02=1982	78	--	66	20	164
1402/03=1983	107	--	76	42	225
1403/04=1984	102	--	96	40	238

* The faculty of Medicine of Abha branch of King Saud University was opened in 1981.

KSU King Saud University

KAU King Abdulaziz University

UPM University of Petroleum and Minerals

GSGE General Secretariate for Girls Colleges

Source: Compiled from various statistical reports.

Table 4.15 Science Graduates from Saudi Universities, selected years

<u>Year</u>	<u>KSU</u>	<u>KAU</u>	<u>UPM</u>	<u>GSGE</u>	<u>Total</u>
1389/90=1970	27	--	--	--	27
1394/95=1975	103	--	8	--	111
1399/00=1980	77	71	10	--	157
1400/01=1981	83	82	3	--	168
1401/02=1982	95	91	4	3	193
1402/03=1983	112		9		

KSU King Saud University

KAU King Abdulaziz University

UPM University of Petroleum and Minerals

GSGE General Secretariate for Girls Colleges

Source: Compiled from various statistical reports.

Table 4.16 Pharmacy, Dentistry, and Allied Medical Sciences Graduates from Saudi Universities, selected years.

<u>Year</u>	<u>Pharmacy</u>	<u>Dentistry</u>	<u>AMS</u>	<u>Total</u>
1389/90=1970	10	--	--	10
1394/95=1975	39	--	--	39
1399/00=1980	45	--	1	46
1400/01=1981	31	--	5	36
1401/02=1982	35	7	3	45
1402/03=1983	38	11	1	50

AMS Allied Medical Sciences

Source: Compiled from various statistical reports.

The number of graduates from Secondary Health Institutes, which were started many years before any form of health training in the country, exhibits a similar trend (see Table 4.17). Secondary Health Institutes are under-utilized, though in recent years the number of their students has increased substantially. Part of the improvement is due to the opening of a number of new institutes.

Table 4.17 The Number of Graduates from Secondary Health Institutes, selected years.

<u>Year</u>	<u>Male</u>	<u>Female</u>	<u>Total</u>
1389/90 = 1970	136	25	161
1394/95 = 1975	217	63	280
1399/00 = 1980	144	39	183
1400/01 = 1981	175	37	212
1401/02 = 1982	140	55	195
1402/03 = 1983	183	92	275

Source: Ministry of Health, Statistical Report, various issues.

National production of health personnel is the main reason for the acute shortage in the country. Alawi and Mujahid concluded that the reasons for the shortage include: "The failure of some of the medical and the related educational institutions to attain and maintain full capacity enrollment, in addition to the relative newness of

most of the educational programmes offered by them" (Alawi and Mujahid, 1982).

Although most Saudi training facilities are new, and are just beginning to graduate students, the difficulties lie in the production process itself rather than the facilities. The difference between the capacity of training facilities and the actual number trained is unusual. All health-related programmes and courses are run for small numbers of candidates. The statistics for Riyadh Male Secondary Health Institute, which is the oldest training facility in the country, illustrate the point vividly. The average number of students graduated annually over its life time up to 1983 was 78. This figure includes the number of trainees completing short training courses which were started in the 1970s. If the trainees are excluded, the annual number of graduates becomes 63. There are no official figures for the capacity of the institute, but the present buildings are sufficient to train 150-200 students annually.

Many explanations have been offered for the low intake of Saudi training facilities. Zahrani studied allied health training and suggested that the lack of incentives was a significant factor behind the low enrollment figures (Zahrani, 1983, ch.5). Islam (1979) analysed enrollment and drop-out figures of Saudi female medical students at King Abdulaziz University, and suggested that a number of them withdraw when they get married. Low enrollment figures and

relatively high attrition rates, particularly in medical schools (Middle East Education, 1981, p.14), are the main reasons for the low production of Saudi health personnel. Sawyer (1982) indicated that the use of doctors for non-medical tasks, which is common in Saudi Arabia, is contributory to health manpower shortage in the country.

The combined training, overseas and in Saudi Arabia, is not adequate to meet the manpower requirement of the rapidly expanding health services. The shortage is made up of expatriate health personnel. This is confirmed by examining the number of doctors and paramedical staff working in the Ministry of Health and the private sector by nationality. Saudi doctors account for only 5% of the total number of doctors working in the country, and Saudi paramedical staff constitute only 15% of those paramedical staff working in the Ministry of Health and private sector (see tables 4.18 and 4.19). The statistics indicate that the percentage of Saudi health personnel has declined since 1970. Although the absolute number of Saudi health personnel has increased, their relative proportion of health manpower has declined with the overall expansion of the service.

Table 4.18 The Number of Doctors Working in the Ministry of Health and the Private Sector by Nationality, selected years.

<u>Year</u>	<u>Total</u>	<u>Saudis</u>	<u>%</u>	<u>Non-Saudis</u>	<u>%</u>
1390 = 1970	951	112	12.0	839	88.0
1395 = 1975	2,543	159	6.0	2,384	94.0
1400 = 1980	4,550	207	5.0	4,343	95.0
1401 = 1981	5,585	272	5.0	5,313	95.0
1402 = 1982	6,649	346	5.0	6,303	95.0

Source: Ministry of Finance and National Economy,
Statistical Yearbook, various issues.

Table 4.19 The Number of Paramedical Staff Working in the Ministry of Health and the Private Sector by Nationality*, selected years.

<u>Year</u>	<u>Total</u>	<u>Saudis</u>	<u>%</u>	<u>Non-Saudis</u>	<u>%</u>
1391 = 1971	4,710	1,529	33.0	3,181	67.0
1395 = 1975	8,945	2,402	27.0	6,543	73.0
1400 = 1980	13,475	2,491	19.0	10,984	81.0
1401 = 1981	17,202	2,640	15.0	14,562	85.0
1402 = 1982	20,561	2,739	13.0	17,822	87.0

* All private paramedical staff were assumed to be non-Saudis.

Source: Ministry of Finance and National Economy,
Statistical Yearbook, various issues.

The expansion of the Saudi health system has mainly been achieved by the employment of overseas health personnel. This development has created a number of difficulties for health services with wide implications, including problems of communication, standards and different cultures. Although Saudi health authorities try to recruit personnel mostly from Arab countries, so that communication and culture problems are reduced, other considerations necessitates the extension of recruitment to non-Arab and non-Islamic countries. Thus, for example, in most hospitals in Saudi Arabia there are doctors and paramedical staff from as many as 15 to 20 countries besides Saudi nationals. Expatriates, mainly Egyptians and Pakistanis, dominate the Saudi health system (Lackner, 1978, p.163). Egyptian personnel constitute the largest single group of health personnel in the country. In some instances expatriate dominance can hinder the improvement of health services. The working of so many nationals with different motives and interests makes it inevitable that operational problems are bound to arise frequently.

The extent of health manpower shortage in Saudi Arabia can be further illustrated if manpower statistics concerning the sex and speciality of doctors are examined. The shortage of female personnel, especially doctors, and of specialists, particularly paediatricians, is a serious problem which can only be solved satisfactorily by the recruitment and training of Saudis. Expatriates can not

satisfactorily fill in this gap because of communication and cultural factors.

Despite the small number of Saudi doctors, Saudi health authorities have managed to improve the ratio of doctors to population by recruiting expatriate doctors. In 1975 there were 3.8 doctors per 10,000 population, compared to 6.7 doctors per 10,000 in 1980 (Ministry of Planning, 1980, p.345). In 1984 the ratio was 11.5 doctors per 10,000 (Ministry of Planning, 1985, p.324). In the light of the emphasis being placed on medical education, the country is expected to achieve a comparable doctor to population ratio with western countries in a relatively short period.

Although the use of expatriate health personnel provides a short term solution to manpower shortages, it generates long term problems. The Ministry of Health recruits health personnel mostly from developing countries such as Egypt and India because such countries can provide the numbers wanted and at a relatively low cost. Recent Saudi experience with expensive contract management of hospitals has exposed the consequences of such recruitment policy to the standard of services. Inadequate selection procedures have contributed to the shortcomings of the dependence on expatriates.

There is a number of aspects of the expatriate solution which undermine the policy's successful statistical appearance. Expatriate doctors are often assigned to isolated areas without provisions for career development and

continued education (Banoub, 1982, p.67). Social and cultural factors, which will be discussed in part IV, and living conditions have increased the turnover rate among expatriate health personnel. In a study population of doctors recruited from Europe and North America by management contractors, 42% of them spent less than two years working in the country (Nasser, 1985, p.69), despite their high salaries and pleasant working and living conditions.

4.3 Quality of Health Manpower

The relationship between the quality of health manpower and standards of health services is a direct one, and the significance of this relationship is particularly relevant to the Saudi health system. As Saudi health personnel are trained in many countries as well as at home, serious consequences to the standards of health services in the country have resulted. Each Saudi doctor, who has been trained according to one system, for example American, British, or German, tries to practice in the way prescribed by his or her training. As a result medical work is organised in a number of different ways in different regions or hospitals, and sometimes conflicts between systems of practice take place.

The reliance of the Saudi health system on expatriates reinforces these problems. These expatriates bring their own systems of practice and standards. Naturally, when they

work in Saudi Arabia they, intentionally or otherwise, exemplify their training environment, and the result is a multiplicity of patterns of practice and the existence of different standards. Many expatriates have been attracted to Saudi Arabia by high salaries and may have little consideration to Saudi culture or Saudis. Most do not speak the native language. These factors affect standards both directly and indirectly.

When management contractors were used in the mid 1970s, a radical change in the quality of health services in the country was felt. Management contractors recruited health personnel, particularly specialists and nurses, from Western Europe and North America. The combination of highly professional staff and the availability of sophisticated equipment resulted in the provision of high quality medical care. The difference in standards between public facilities run by the Ministry of Health and by management contractors created a new impetus in the health system. The Ministry of Health started recruiting from Western Europe, though on a relatively smaller scale, and other public health providers opted for contract management.

Standards of health services in Saudi Arabia are varied because of the different backgrounds of its health personnel. The training of Saudis abroad as well as in the country is affecting standards, especially in the absence of national organization and standards of health services. Expatriates' dominance makes it difficult to establish and

maintain national organization and standards. The lack of in-service training programmes, which would help to focus efforts on local and national health problems, is contributing to the decline in standards of health services. However, since the introduction of contract management of hospitals and the expansion of health services into the high medical technology arena, a considerable improvement in the quality of services has been achieved. The change appeared in urban areas and is slowly reaching rural and remote areas.

Taking the population per doctor ratio as an indicator of health manpower provision, Saudi Arabia is comparatively better than most other developing countries which suffer from a shortage of skilled health professionals (Benyoussef, 1977, p.399). In contrast to other developing countries Saudi Arabia has managed to buy time while it searches for an effective national solution to its health manpower problem. Its experience with dependence on expatriates is similar to other developing countries where it has been tried. In Iran, Zeighami et al (1978) questioned whether the government can continue paying the cost of expatriate health personnel for more than a few years. His comment is equally relevant to the Saudi situation.

5. Comment

The Saudi government provides generous funding for the development and expansion of health services in the country; both to the public and the private sectors. The Ministry of Health annual per capita expenditure on health is more than 1,100 Saudi Riyals (approximately more than £200 or \$300)* which is comparable with the spendings of developed countries and many times more than the average for developing countries. A trend of growing health expenditure is reflected in the consistent increase in the Ministry of Health budget appropriation. However, public per capita expenditure on health could at least be double the Ministry of Health expenditure because of the relatively large number of ministries and other government agencies which provide health services. Statistics for private health facilities and personnel indicate a growing health market which reflect an increasing expenditure on health by individuals. Not only is there generous expenditure on health services when compared with western developed countries, but this

* The calculation of per capita expenditure on health varies depending on the figure used for the population and the exchange rate between the Saudi Riyal and pound Sterling or American dollar. Population figures are not available, and one can only use estimates. I used the Ministry of Health estimate (Al-Ammari and Al-Turki, 1984, pp.9-80). Exchange rates vary daily, the range for the Sterling pound is 4-6 Saudi Riyal, and the dollar is 3.25 - 3.75 Saudi Riyal.

expenditure has been rising rapidly. In contrast with other developing countries there appears to be few restrictions in the availability of financial resources for the expansion of health care in Saudi Arabia.

It is not possible at the present time to ascertain the adequacy of training facilities in Saudi Arabia and the extent of their shortcomings in training adequate numbers because reliable statistics are not available. The need for developing a system for the collection and up-dating of vital statistics is urgent. Until efforts towards this are completed, the management of health services development would be a matter of personal opinion. If health statistics are collected routinely, an impetus for increased concern with developing national health industries may be generated.

The present lack of national health support industries and services is alarming. It amounts to a lack of national base of technology and expertise, i.e lack of health infrastructure. Efforts underway to redress the situation are insufficient. There is a need for a programme of action to be drawn within the context of a national policy aimed at reducing dependence on foreign suppliers of health supplies.

The private sector can be expected to play a prominent role in such a programme when it is provided with advise and technical assistance. An increased participation by the private sector in the promotion of national health

industries would strengthen the pluralistic feature of health provision in the country.

In a relatively short period of time Saudi Arabia was able to recruit a substantial number of expatriate health personnel to run its health facilities. The ready availability of financial resources can be seen from the recurrent expenditure on the cost of running two military hospitals of 1 million Saudi Riyals a day, and on the cost of running King Faisal Specialist Hospital of close to \$1 million a day (Whelan, 1980, p.45). However, there is in the long term a limit to what the country can spend (Maxwell, 1981, p.163). When oil revenues become insufficient to meet the expenditure of government, health services will have to compete for available limited resources, and health spendings would need to be rationalized. As the price of oil falls so the consequences to the Saudi health system becomes clearer. Ryan noted a modification in the "previous 'money no object' tendency" in the country, and an increased concern for saudization (1984, p.25).

6. Conclusion

The impact of the Saudi economic prosperity on the Saudi health system is evident throughout the system. Financial resources for health services are plentiful, but non-financial resources are problematic. The government is the main source of resources, and its involvement dominates the health system. It is making available generous financial resources for the development and expansion of health services. Substantial expenditure is spent on health services through an increasing number of ministries, independent government agencies, and private enterprises, but with little or no coordination of their activities. This fragmentation of health provision inevitably leads to the duplication of facilities and the inefficient use of available resources. The wasteful outcome of fragmentation is enhanced by the lack of national planning for health services or coordination between various providers of services. There is now an urgent need for containing this trend towards fragmentation before more resources are spent by the various providers.

The Saudi asset of technology and expertise is limited, and it will take many years to build up this important part of its health infrastructure. The Saudi government is involved in initiating a process of mastering technology and acquiring scientific expertise from western countries. The returns of the current investment in technology and expertise will only be realised in the next few decades. The increasing involvement of the private sector in the

health industry in the country is promising, and priority should be given to private investors in health support services to encourage them. While dependence on foreign suppliers is unavoidable, the government need to adopt a long term plan for health support services and industries to reduce the degree of dependence on foriegn suppliers and reduce the rising cost of health provision in the country.

Saudization represents the only satisfactory long term solution to the most pressing problem the Saudi health system is facing; the shortage of health manpower. While temporary solutions, such as recruiting expatriates or using contractors, are unavoidable, they need not be problematic and hinder progress and improvement of health services in the country. It is necessary to formulate a national policy for health manpower development. Despite the availability of training facilities, the shortage of health manpower will not be resolved without ensuring planned and coordinated enrollment of sufficient numbers of students at training facilities.

In the next chapter I shall examine hospital development in the country and assess the impact of resources both financial and non-financial on the nature and direction of its growth.

CHAPTER 5: HOSPITAL DEVELOPMENT IN SAUDI ARABIA1. Introduction

In developing countries hospitals dominate health services (Roemer, 1976, ch.5). They are often acquired for prestige without rational consideration of their return in terms of human welfare and services (King, 1966, p.1:12). And since hospitals are expensive to build and operate, in many developing countries investment in hospitals has meant that resources for other services, particularly preventive services, are reduced substantially or not made available at all (Gish, 1973, p.408).

The emphasis placed on hospital services in developing countries is significant because of its resource implications. The cost of hospital services is usually high, and can be damaging to health provision in developing countries. It can absorb as much as 80% of recurrent health budgets (Segall, 1973, pp.39-50). Many developing countries opt for sophisticated high-technology hospitals which are expensive to equip and maintain, and subsequently the cost of the hospital services increases substantially (Bridgman, 1972, p.18)

In this chapter I shall consider the case of hospital development in Saudi Arabia. This chapter will illustrate the economic influences that affect the development of the Saudi health system, and will develop theoretical issues

relating to hospital development in developing countries. The hospital service is an important integral part of any health system, and its study exposes many underlying principles of the system of health being studied. Hospital services are supported by all kinds of resources available for the provision of health services, and the study of hospital development, thus, can be considered as an evaluation of the process of resources' allocation in the health system being studied.

The analysis in this chapter will focus on public hospital development. The contribution of the private sector will be considered in less detail. Private hospitals provide less than 15% of the total number of hospital beds in the country, and the Ministry of Health provides more than 70% of the total number of beds in the country.

It is appropriate at this early stage to point out that for some hospitals the number of beds and the cost of the project are quoted differently by different sources, or by the same source at different times. I used as many sources as I possibly can get to ascertain the actual number of beds and cost of the project, but in some cases there are no apparant explanations. For example, in the publication "Features of Healthcare Development" under the heading completed projects, Hafer Al-Batin, Rabigh, and Al-Qunfuda hospitals were described as 170 beds hospitals. But under

the project profile, they were described as 100 beds hospitals (Ministry of Health, n.d.b). Local newspapers reported that Rabigh and Al-Qunfuda hospitals are 100 beds hospitals (Al-Riyadh, May 1985) and Hafer Al-Batin is 170 beds hospital (Al-Riyadh, April 1985). Apparently all three hospitals were planned as 100 bedshospitals, but later a 70 beds extension was added to Hafer Al-Batin hospital.

I shall discuss hospital development over the last two decades, 1965 to 1985. There are five sections in this chapter. In the first section, I will present hospital development in the country from a historical perspective. The aspirations, achievements, and shortcomings of public health authorities, particularly the Ministry of Health, will be described. In sections two, three, and four I shall analyse specific resource issues and their implications to hospital development. In section two I examine the significance of financial resources. Difficulties and problems are identified, and related to the overall development of hospitals in the country. Similarly, in sections three and four I deal with the resources of technology and expertise and health manpower respectively.

In the fifth section I shall examine in detail one particular development; The Five Hospitals project. Finally, in the discussion, comment and the conclusion I integrate the findings of the sections of the chapter, and relate their relevance to economic factors in the country. The significance of the Saudi case in hospital development

to other developing countries is considered in a theoretical framework for health services development in developing countries.

2. An Overview of Hospital Growth

Before 1970 hospital growth in Saudi Arabia was not related to^a specific development plan. Since 1970 there have been a series of five years development plans for all sectors including the health sector. Table 5.1 shows the growth of the number of the hospitals and hospital beds in the country since 1970. The accelerating rate of growth identifiable since the late 1970s is continuing.

Table 5.1 The Growth of the Number of Hospitals and Hospital Beds in Saudi Arabia, Selected Years.

<u>Year</u>	<u>Hospitals</u>	<u>Beds</u>
1970	74	9,039
1975	98	12,111
1980	109	17,547
1981	116	18,849
1982	119	20,775
1983	126	25,047

Source: Ministry of Planning (1984a) Achievements of the Development Plans 1390-1403 (1970-1983), Ministry of Planning, Riyadh, Saudi Arabia.

In 1965 there were 70 hospitals with 6,656 beds in the country. They were provided by the Ministry of Health, Ministry of Defence and Aviation, and the private sector. At the start of the first development plan, in 1970, there were 9,039 beds, which is an increase of more than 35% over a five year period.

Although the data shown in table 5.1 indicate a substantial progress in the provision of hospital service, the country's ambitions were not realised. In the 1960s the Ministry of Health and the Central Planning Organization (which became the Ministry of Planning in 1975), with technical assistance from the World Health Organisation (Chu et al, 1963), formulated a proposal to provide comprehensive health services for all the people in the country, (Shamsuddin, n.d.) The proposal was incorporated into the First Development Plan, 1970-1975. A major objective of the First Development Plan was to;

"Commence the construction of new facilities and the reconstruction of old ones in accordance with the requirements of a general health network for the country that will provide health care throughout the Kingdom".

(Central Planning Organization, 1970, p.146)

The plan aimed at the establishment of a national health network based on a hierarchy of central, regional, specialised, principal, and local hospitals. However, at

the end of the plan period the achievements fell short of the objectives because;

"progress under the first five-year plan was hampered by a number of factors including;

- Lack of skilled manpower at all levels.
- Organizational and management difficulties.
- Insufficient information and research on the characteristics of the country and on the appropriate form and size of an effective health system.
- Lack of integration of the preventive, curative, and educational components of the health system.
- A low level of enrollement and output in the Kingdom's training schools; in the period 1390-94, only 152 female nurses and 357 technical assistants graduated from the nursing schools and health institutes".

(Ministry of Planning, 1975, p.375)

The Second Development Plan recognised the short-falls of the First Development Plan, and contained a number of programmes and projects aimed at increasing the number of hospital beds per 1,000 population from 1.4 (or 714 population per bed), which was the ratio in 1975, to 2.5 (or 400 population per bed) by the end of the plan period. It declared that "an additional 11,500 hospital beds will be established during the plan period" (Ministry of Planning, 1975, p.378). Again there was a short fall. The number of

beds per 1,000 population was only 1.9 (or 526 population per bed) at the end of the plan period (Ministry of Planning, 1980, p.345).

The Second Development Plan included the participation of a number of public organizations, in addition to the Ministry of Health, in its projections for health services development. It stated that the Ministry of Education would establish six hospitals for students, and that the Ministry of Higher Education would construct a 40 beds hospital at the Islamic university (Ministry of Planning, 1975, p.370). At the end of the plan period none were constructed, and even today there are no hospitals for students or a hospital at the Islamic university.

The Third Development Plan stressed the involvement of public organizations in the provision of health services, including the hospital service. The Ministry of Health aimed at increasing the number of its beds in the country by the completion and operation of hospitals started in the Second Plan, the expansion of existing hospitals, and the construction of 36 new hospitals with a total capacity of 10,700 beds, of which 5,388 beds would be operational by 1985. The remaining 5,162 beds would be operational when construction work finishes in the first two years of the fourth development plan.

The objectives of the Third Development Plan are being translated into action, though it only started in 1982-83.

Now, a substantial number of new hospitals have been built, and many more hospitals are under construction and a number of hospitals are in the planning stage. The Ministry of Health increased its hospital beds from 11,968 in 1980 to 18,913 in 1984, an increase of 58% in just four years (Ministry of Planning, 1985, p.324). Other public institutions and the private sector have also increased their numbers of hospital beds over the same period. The total number of hospital beds in the country in 1984 reached 26,410 which means a ratio of 2.2 beds per 1,000 population (or 455 population per bed) (Ministry of Planning, 1985, p.324).

The growth of the hospital sector in Saudi Arabia compared to other developing countries is spectacular. The rapid growth rate initiated since the 1980s is meant to make up for previous slow growth rates. Although the number of hospitals in the country is increasing, it is not quite clear how many are already present, and how many are being and going to be built. Available figures are compiled and published by the Ministry of Planning and Ministry of Finance and National Economy without giving details so that the figures can be checked. Other sources give different figures. For example, the total number of hospital beds in 1404/05 (1985) has officially been put at 26,410 beds (Ministry of Planning, 1985, p.324), and privately expected to be 36,500 beds in 1985 (Graham, 1984, pp.19-24). The way to ascertain the real figure is to count the number of hospital beds in the country, which is very difficult,

costly, and a lengthy process. However, close examination of published figures support the indication that the actual number of beds is probably higher than published figures (for more details and lists of hospitals see appendix V).

The initial concern of the present policy of rapid hospital growth, which was to increase the number of beds in the country, is shifting towards the formation of a hierarchy of hospitals, so that an organization of local, regional, national, and specialist hospitals can be created. While it would be some time before present hospitals can be organised in such a fashion, the shifting process is gradually filling up a serious gap in the present hospital provision. The gap is caused by lack of coordination between and integration of hospitals so that a referral system can be established. The failure to implement earlier plans for hospital development has created a situation that can not be changed to the originally planned situation by present policies. Present policies do not add up to a comprehensive hospital plan for the country, and it is not clear whether there is a national plan for the hospital service or just a series of varying targets. The situation has been described by one commentator;

"Saudi health plans have generally been haphazard, and have come in for heavy criticism from doctors and patients alike over the last few years. The government has gone in for grandiose schemes such as the computer-run King Faisal Medical City in

Riyadh, a specialist hospital which has five beds for open heart surgery and also carries out kidney and cornea transplants". (Stokes, 1980, p.37)

There are now two types of hospitals in the country, old and new. Old hospitals contrast sharply with new hospitals, particularly with regard to medical equipment. New hospitals are sophisticated. They are equipped with the most advanced innovations in medical technology. For example, King Faisal Specialist Hospital in Riyadh, which is part of King Faisal Medical City, is equipped with a cyclotron and a DT generator which are used in cancer treatment and research. "There is only one other DT generator in the world (University of Pennsylvania in the United States) at present" (Hassan, 1981, p.11). Special facilities for organ transplantation, nuclear medicine, neurosurgery, and other advanced surgical procedures are included in new large hospitals. The philosophy of this policy is exemplified by the case of King Faisal Specialist Hospital;

"The medical city can provide all that modern medicine can offer, but it is poised to change and develop with the world around it. In the years to come, the King Faisal Medical City will play an important role in the progress of medical science and health care delivery. The evolution of medicine and the delivery of quality health care are an integral part of mankind's quest for good health. Dedicated to the advancement of these

objectives, the King Faisal Medical City will help fulfill the aspirations of the Kingdom to be among the leading nations of the world in social development". (King Faisal Foundation, 1975, p.10)

In the mid 1970s the idea of ^a flying hospital service was discussed because it offered a solution for delivering hospital services to the remote areas of the country. The Ministry of Health studied the proposal and the Minister of health visited a number of foreign countries including Australia to discuss assistance for setting up a Saudi flying hospital service. Eventually, it was decided that flying hospitals should only be set up by the Ministry of Defence and Aviation because it is relevant to its other functions. Now, the Ministry has a fully equipped flying hospital on board an adapted Lockheed C-130 Hercules transport plane. The flying hospital is linked to the computer system of Riyadh Armed Forces Hospital so that diagnosis can be made in the hospital and relayed to the flying hospital (Ministry of Defence, n.d., pp.28-32). The flying hospital includes Gulfstream 2 and Lear Jet planes, and an order has been placed for a Gulfstream 3.

While new hospitals are being constructed in all parts of the country, urban centres are selected for the large and most advanced hospitals. Consequently urban areas are better provided with hospital services. The need to utilize new hospitals to provide high quality services has resulted in the introduction of hospital management companies into

the Saudi health system. Most of the new hospitals are run by management companies, mostly from Europe and America (Taban, 1983, pp.20-27). These include Whittaker Corporation, Hospital Corporation of America, and Allied Medical Group. Hospital management arrangements are also made through foreign governments. Although the cost of this new style of management is very high, it has ensured the provision of high standard medical care in most of the new hospitals.

The emphasis on hospitals, modern medical technology, and the use of western hospital management companies is undoubtedly expensive, but financial resources to pay for them are not in short supply. The high quality service provided by the arrangement is considered a valuable achievement which is worth its cost. It has meant that patients do not need to travel abroad for specialist medical care. It is part of the government aspirations to see medical advances achieved in the country.

The expanding market of hospital management in the country has increased competition between companies, and encouraged private sector involvement. A number of Saudi companies have formed joint venture companies and competed for hospital management contracts. These include Saudi Medcentre and Saudi Medical Services Limited (Hassan, 1984, p.14).

In comparison with other developing countries, Saudi Arabia is following basically similar hospital policy, though at a relatively larger scale. The emphasis placed on hospital development and the tendency to go for sophisticated medical equipment are common features, though most developing countries restrict them to their teaching hospitals and centres of excellence because of shortages of resources. The use of hospital management companies is not usual in most developing countries, but dependence on expatriate skilled health staff is maintained. They are either recruited directly on contractual basis or through aid and technical assistance arrangements. While Saudi Arabia does not use such arrangements to recruit expatriate staff, its reliance on the international market is supplemented by inter-government arrangements.

3. Financial Resources and Hospital Development

The recent rapid growth of hospitals in Saudi Arabia is closely linked to the availability of relatively abundant financial resources for the health sector after the oil prices boom in 1973. The Ministry of Health and other public agencies were provided with generous financial allocations which they used to provide hospital beds quickly with little consideration to the cost factor or long term prospect. The aim of their policies was to provide apparently needed hospital beds quickly. In this section I analyse some aspects of hospital growth in the country to illustrate the impact of the availability of financial

resources on the nature and direction of hospital development in the country.

3.1 Size of hospitals

Saudi policy on the size of hospitals has gone through a cycle. In the late 1950s and early 1960s when financial resources were comparatively limited the Ministry of Health built small 25 to 60 beds hospitals in rural areas to serve dispersed small populations (Chu et al, 1963, p.37). In the late 1960s and early 1970s as more financial resources become available for the health sector there was a preference for the construction of large hospitals in relatively large towns and cities to serve them and surrounding villages and communities (Arab News, September 1983). It was felt then that such policy gives maximum benefits from available limited resources. Hospitals were generally concerned with essential services, for example, no residential buildings were built to accommodate hospital staff.

Since the late 1970s changes relating to hospital size have been introduced. While continuing to build large hospitals where needed, the Ministry of Health has started to build small hospitals again. The new strategy is to build smaller hospitals with residential complexes and public utilities to serve dispersed communities, rather than building one large hospital to serve dispersed communities. So, depending on the need of communities as decided by

concerned health authorities, hospitals with 100, 50 and 30 beds were planned (Al-Riyadh, May 1985). Some 100 bed hospitals have been completed, and work is underway in many small hospitals in different parts of the country.

When a decision is made about the size of a hospital to be built, it is not unusual for health authorities to decide later to increase or decrease the number of beds, though it has always been to increase the number of beds. The ready availability of funds to pay for extensions has practically overcome the technical difficulties involved in altering plans particularly at advanced stages of projects' execution. The alteration may happen more than once. The number of additional beds may be small, and it can be substantial. For example, Hafer Al-Batin hospital was planned as a 100 beds hospital, but plans were altered to include an extension of 70 beds.

The Ministry of Defence and Aviation was the first to include residential buildings to accommodate hospital staff, especially nurses, in its hospital complexes. Now, the Ministry of Health and other public agencies have followed this example, and it has become almost a normal practice to include residential complexes and necessary public services and amenities in the design of new hospitals. Public services and utilities are normally available in the areas where the hospitals are built, though their standard may not be as desired.

The trend towards including housing compounds in hospital complexes was caused by the need to provide pleasant living accommodation for expatriate staff. New hospitals constitute whole districts or small towns with hundreds of residential buildings of varying types, a social centre with shops and recreational facilities, electricity generating station, sewage treatment station, water purification station, and other necessary public utilities and services. Such provision has proved to be an effective incentive, and medical care provided in new hospitals is noted for its high quality. Saudi health personnel are attracted to new hospitals because of the incentives involved. This would be significant in the future when competition for Saudi health personnel increases. Now, there are many new hospitals being built, and the number of Saudi health personnel is relatively low.

This development has had a significant impact on hospital services in the country. The large housing complexes of new hospitals indicate a considerable increase in the number of staff of these hospitals, which consequently means improved standards of services. They also strengthen institutional relationships between members of staff. The standard of hospitals' housing is relatively high which leads to improvements in the quality of life of staff. This can contribute to improved productivity because it increases the morale of the staff.

3.2 Cost per bed

The increased sophistication of hospitals built in Saudi Arabia since the early 1970s has raised their costs considerably. Although it is difficult to obtain accurate figures for the cost of hospitals because cost information are not usually published, it is possible to roughly calculate the cost per hospital bed. A limitation of such calculation is that actual costs are always higher because changes in prices and additions, modifications, and alterations that health authorities may ask for raise costs. Table 5.2 shows rough calculations of the cost per bed in the country based on cost information about Ministry of Health hospitals published by the Ministry. The hospitals referred to in the table have been built in the late 1970s and early 1980s or currently under construction.

The cost per bed varies considerably from one hospital to another for a number of reasons. The project may include the construction of the hospital buildings, the construction of personnel residence complex, furniture, equipment, and maintenance requirements. Some contracts may include all these things, whereas others may include only some. The released cost figures are usually for the construction contract, and equipping the hospital may be subject to a second subsidiary contract. The relatively high cost per bed reflects the modern and sophisticated characteristics of new Saudi hospitals, as well as the inclusion of extra buildings such as personnel residence complexes.

Table 5.2 Cost Per Bed Calculations for Some Ministry of Health hospitals (million Saudi Riyals).

<u>Project</u>	<u>No. of Beds</u>	<u>Total Cost</u>	<u>Cost Per Bed</u>
Majmah, Hafer Al-Batin and Qurayyat hospitals	300	630.0	2.10
An-Nammas, Balsamr, Samtah, and Farasan hospitals	350	667.4	1.91
Rabigh, Al-Ula, Adheam, and Qunfuda hospitals	400	682.5	1.71
Afif and Al-Aflaj hospitals	200	337.8	1.69
Al-Majardah, Surat Obeidah, and Tathlith hospitals	300	491.3	1.64
Al-Bukayriyah, and Al-Midhnab hosp.	200	301.5	1.51
Five hospitals project	2,275	3,085.5	1.36
Al-Kharj General hospital	200	269.9	1.35
Al-Imman hospital, Riyadh	200	235.0	1.18
Hawtat Beni Tameem hospital	100	107.0	1.07
Huraymela General hospital	100	105.0	1.05
Abha and Mecca (Asir Central and Al-Noor) hospitals	1,148	1,039.2	0.91
Burayda (Qasim Specialist) hosp.	574	492.9	0.86
Unaizah General hospital	345	295.3	0.86
Bisha General hospital	345	285.1	0.83
Riyadh Medical Complex (King Fahid Medical Complex)*	1,425	\$573.4	\$0.40
Gulf hospital, Dammam *	574	\$125.0	\$0.22

* cost is given in dollars because the contracts are awarded in dollars.

** capital cost.

Source: Ministry of Health (n.d.b) Features of Healthcare Development, Ministry of Health, Riyadh, Saudi Arabia).

The cost is also influenced by the location of the hospital, which is related to availability of local needed services and the accessibility of the hospital site. The terms of the contract may increase the cost significantly. For example, the specification of relatively short period for the completion of the project means a substantial increase in the cost of the project.

However, despite all the limitations of the calculation of the cost per bed, it is a useful indicator of the cost of hospital construction in the country. The average cost per bed is 1.1-1.3 million Saudi Riyals, which is slightly more than reported figures (Graham, 1984, pp.19-24). Although the rapid expansion of the hospital service in the 1980s has generally resulted in a decrease in the cost per bed because of increased competition between contractors (see table 5.2), the cost per bed is still high. The scale of hospital construction at such high costs indicates the government expenditure policy on the health sector. While public agencies including the Ministry of Health are spending generously on hospitals, there appears to be no concern with the cost effectiveness of their policies or their recurrent expenditure consequences.

The situation in other developing countries with regard to hospital construction is similar to the Saudi situation. The cost per bed in Saudi Arabia is comparatively higher than other developing countries because of the high level of sophistication in Saudi hospitals. Most developing countries depend on foreign construction companies and sources of materials and medical equipment .

3.3 Construction period

Most hospital construction in Saudi Arabia is contracted to be completed in relatively short periods. For contractors, this requirement is a major determinant of their bids. And since it is government policy to take the lowest bid tendered, the period for completion of hospitals is effectively crucial in the allocation of contracts.

The period for completing Qatif New hospital, on the basis of a turnkey arrangement, was 28 months. The hospital has 345 beds with a large residential complex for staff. The period for completing Mecca 476 beds hospital was 26 months, while that for completing Domat al-Jandal 100 beds hospital was 24 months. The last two projects also included building staff residential complexes.

When one takes into consideration the geographical location of hospitals and other relevant factors, it would become evident that periods for building hospitals in the country are relatively short. It is understandable that health authorities are keen to get new hospitals completed and operated as soon as possible, especially in view of the inadequacy of the number of beds in the country. However, the specification of relatively short periods is possibly detrimental to the quality of work, and inevitably leads to delays, particularly in view of the other difficulties associated with hospital construction in the country.

Health authorities can usually withhold payment for delays in completing the work in the specified period, but such penalties are often ineffective. Contracts usually have penalty clauses. The penalties are mostly small percentages of the value of incompleting work, and even when the percentage is increased with the length of delay, as specified in the conditions of the contract, the sums involved are not significant.

Contractors make substantial profits even when financial penalties are levied against them for delays or other minor failures in meeting contracts' conditions, though every contractor would like to avoid delays and other shortcomings if possible. In practice, it is common that hospitals are not completed as scheduled. It is not always clear whether the delay is caused by the contractor, by the administrative procedure of health authorities, or by changes in specifications.

The significance of the aspect of the construction period is that it results in increased cost of hospitals. While the willingness of health authorities to pay the increased cost reflects the financial resources situation in the country, it has serious implications for the hospital service. It represents an inefficient, and even wasteful, way of using financial resources. The frequent occurrence of delay of hospital projects, and the potential for harmful consequences to the quality of work need to be taken into consideration. Saudi Arabia is paying generously to provide

hospital beds as quickly as possible. This poses questions as to the benefits of and justifications for the policy. Saudi aspirations for the rapid achievement of comparable international standards of hospital care are the source of the driving force behind its hospital construction program. Apparently alternative policy options have not been explored before the adoption of present policies.

3.4 Expansion, Conversion, and Rental of facilities

A considerable part of the recent growth of hospital beds in Saudi Arabia has been achieved through the expansion of existing hospitals, conversion of residential buildings into hospitals, and the rental of hospitals or converted hospitals. These measures are undertaken to provide needed beds quickly. Conversion and rental have increased since the 1970s.

The expansion of existing hospitals follows the same procedure as the construction of new hospitals. Sometimes the design of extensions is prepared at the Ministry, and in all cases prepared designs and specifications are tendered and the lowest offer is taken. Expansion projects are usually small, and they are mostly awarded to local building contractors.

The general lack of experience of local contractors in hospital construction has often resulted in prolonged delay of expansion projects. When a contractor fails to honour

his contract, the subsequent legal procedure involves finding another contractor to complete the work at the expense of the original contractor. The implementation of this procedure takes years and creates many difficulties because failing contractors always complain of unjust treatment.

Conversion projects are a temporary and limited expedient. The Ministry of Health started this type of projects to ease over-crowding in existing facilities and provide additional needed beds (Rahman, 1983, p.9). The Ministry bought a number of luxury hotels for conversion into hospitals. Plans for the conversion were prepared and work at Dhahran Marriott hotel has been completed, and the new Dhahran General hospital has been opened. The conversion of Khurais Marriott hotel in Riyadh into 120 beds hospital at a cost of just over 44 million Saudi Riyals is nearing completion (Ministry of Health, n.d.b). The Ministry of Health is the only organisation which has adopted this type of policy.

The rental of hospitals or converted hospitals is comparatively common. The owner of the hospital or converted hospital is usually asked to carry out all the modifications and alterations that health authorities want to be made. The contract with the owner may stipulate that maintenance is his responsibility. This type of arrangement frees health authorities from a number of problems associated with purpose-built facilities. However, its main

draw back is that the premises are not designed for the provision of hospital service, and even when modifications and alterations are made, they are often not converted into successful hospital facilities. Initially, the rental of premises for hospital services is resorted to as a temporary measure, but it usually continues until the premises become unsuitable.

The rising demand for hospital beds has made it impossible to give up rented facilities once permanent ones are built. Mostly, rented and permanent facilities are used to provide services, but despite this crowding in hospitals and public demands for hospital beds are increasing. Converted and rented hospitals are problematic especially in operation. The location of departments and support services is usually not suitable.

Although there is no data available concerning the cost of expanding, converting or renting facilities, it appears that health authorities are willing to pay generously to secure additional hospital beds quickly. In one region the regional General Director was encouraging local business men to build hospitals for the Ministry to rent at relatively high rents. Private investors who let facilities to the Ministry recover their capital cost in just few years because the rents are high. However, the significance of the policy of the Ministry is not only indicated by the level of rents involved, but also by the continued adoption of the policy itself. Despite the disadvantages and

limitations of the policy, the Ministry appears to be indifferent to them.

4. Technical Resources and Hospital Development

Since the 1970s a massive hospital construction programme has been maintained in the country (see appendix V). Recently the government has announced that the programme will continue over the period 1985-1990 to upgrade existing facilities and provide "hospitals required for the replacement of existing ones, and in areas where hospitalization services are currently needed most"(Ministry of Planning, 1985, p.330). In this section I shall examine some aspects of the construction of hospitals, and assess Saudi technology and expertise resources in the hospital service. The significance of the present situation and its implications for the hospital service will be considered.

4.1 Contractors

The construction of hospitals in Saudi Arabia is dominated by foreign contractors. Until the 1970s they were mainly western construction companies, mostly from France, Italy, Sweden, and Germany. Since the 1970s contracts have been given to contractors from south eastern Asian countries, particularly Korea. This development has increased competition between companies, and contributed to the reduction of costs of projects. However, more

significantly it encouraged the entry of the private sector into the hospital construction business.

The government is encouraging national contractors. Legislation has been enacted requiring foreign companies contracting government construction work to subcontract a minimum of 30% of the work to Saudi companies. Importing materials, equipments and other products directly by foreign companies has been restricted, so that all imports are made through registered Saudi agents and companies.

Initially, private companies formed joint venture companies with foreign leading construction companies and competed for projects. For example, Laing Wimpey Alireza company was awarded the contract to build two 100 beds hospitals in Al-Bukayriyah and Al-Midhnab at a cost of 301.5 million Saudi Riyals (Ministry of Health, n.d.b). Recently some national contractors have entered the business, but the shortage of local manpower in the country means that work is carried out by foreign labour. In addition the technical nature of hospital construction work means that national contractors are dependent on foreign technical expertise. The dependence on foreign construction contractors undermines efforts to encourage the development of a national base in hospital construction.

The emergence of some Saudi joint venture hospital construction companies indicates some success of the government policy aimed at encouraging national

involvement in hospital construction. It is probably the high cost factor in hospital construction, as reflected in the cost per bed calculations, which is attracting the private sector to the field. The government expects private involvement to increase gradually, and eventually in the long term becomes a source of expertise and technical ability in hospital construction in the country.

4.2 Design of hospitals

Public organizations including the Ministry of Health do not design their hospitals, though most of them have Design departments within their Projects departments. Such departments are usually not well staffed, and therefore they are not capable of handling works such as designing whole hospitals. There are no specialist firms for designing hospitals in the country, though recently agents for foreign firms, mostly from the west, have opened offices in the country.

Thus, Saudi hospitals are designed by foreign international firms. Although the process involves visits to the proposed site of the hospital and extensive discussions of what the customer wants to have, Saudi hospitals are usually based on designs for western hospitals. This has wide implication for the hospital service in the country, and can cause operational problems because of the social and cultural characteristics of

Saudis. This aspect of hospital development will be analysed in part IV.

In the 1960s the Ministry of Health adopted a standardised design policy. It commissioned a number of designs for general and specialist hospitals of varying sizes, and built hospitals in different parts of the country to the same design. For example, Al-Qatif General hospital, Wadi Dawasir hospital, and Safwa hospital were built to the same design.

Since the mid 1970s the Ministry of Health used a different policy to build hospitals quickly. The Ministry decides the main aspects of the project such as the number of beds and different support facilities and tenders the design and construction of the hospital together. Recently turnkey contracts were made. Thus, the contractor becomes responsible for designing the hospital, constructing it, furnishing and equipping it. The Ministry usually contracts a consultancy firm to supervise the work. A liaison officer from the General Department of Projects and Maintenance at the Ministry is usually appointed for each project.

The Ministry of Health is still building hospitals to the same design in different parts of the country through tendering the design stage and the construction of the hospital together. This policy aims at reducing the time taken to build hospitals by contracting the design stage rather than have it done first and then tender the

construction of the hospital. The policy has also given the Ministry the opportunity to change designs, though slightly, during the project completion period. Contracts specify that the design of the hospital must be approved by the Ministry before adopting it. Most contractors develop the details of the design as they go along, mainly because time is short and to allow for the Ministry's change of mind.

It is not uncommon for changes in the design to be asked for, and when it happens technical considerations and negotiation often result in delays. For example, in Al-Qatif New hospital project almost half way through the Ministry of Health decided that the out-patient clinics were too small, and must be expanded. At that stage the construction of the out-patient clinics has started, and so work has to be halted while the expansion request is discussed. It was not an easy situation because the change required additional land, and it was a question of which nearby facility would be moved or altered to provide the additional land required for the expansion of the out-patient clinics. After months of discussion and a number of draft proposals, a solution was agreed and the out-patient clinics were redesigned to the Ministry's request. The completion of the hospital, which is a 345 beds hospital costing 340.7 million Saudi Riyals, was delayed, partly because of the out-patient clinics affair. It was suppose to have been completed in August 1985, but has not been completed yet. In new hospitals it is possible to maintain design conformity when additions or alterations

are made. But in old hospitals additions of new and modern facilities have been designed and implemented without integrating them into the overall design of the hospital (Moustafa, 1982, p.79).

The dependence of Saudi health authorities on foreign firms for designing their hospitals is problematic. Apart from the questions relating to the suitability of the design which will be discussed in part IV, it does not encourage the development of national capability and may lead to serious waste of resources. For example, in the 1960s in some hospitals "portions have fallen soon not long after construction (Geizan and Qatif) and in some others a number of cracks have appeared. In Hofuf, Al-Khobar, Jubail and Tarout which were also built during the same period certain architectural defects were noticed - narrow passages, wards dark, dingy and without proper ventilation; latrines, dispensing rooms, etc. not placed at suitable places, etc." (Shamsuddin, n.d., p.42)

While it appears that dependence on foreign designers is unavoidable, there is scope for developing national design expertise. This would enhance national asset of technology and expertise, and provide greater flexibility in planning hospitals in the country. The trend towards turnkey hospital projects is alarming because it undermines the potential for developing national capability and can waste resources. For example, Al-Khaldi has found that the average lost years of life of selected hospital equipment

in a sample of military hospitals was more than 50% of the serviceable life of the equipment (1984, p.63). He reported that he:

"has witnessed an occasion in which new ventilators were taken out of service (even before using them), this was because the anaesthetist at Khamis hospital found that these ventilators did not conform to the specified requirements. This equipment was part of the turnkey project".
(Al-Khalidi, 1984, p.14)

4.3 Materials

Saudi Arabia is dependent on imports of hospital building materials from abroad. An architect who was involved in building a hospital in the country was reported saying "More than 96% percent of building materials required for the hospital were imported from Europe and the United States" (Taban, 1983, pp.20-27). The effect of this situation is lasting and crucial.

Importing building materials can be a long and complicated process, which unavoidably affect work schedules. In addition to its effect on the construction period, the process increases the cost. It requires careful planning and execution to secure the required quantities within target dates. In view of such circumstances delays

in the construction of hospitals because of lack of materials or their late delivery are not uncommon.

Since contractors are from many different countries, they import materials from their own countries and this introduces many variations in standards. This creates many problems, especially maintenance problems. For example, the director of one health facility told me that when a tile in the swimming pool in the recreation centre was broken, they could not get a replacement locally or nation-wide. They were forced to import it at very high cost from Germany.

In response to problems relating to materials and standards Saudi health authorities are increasingly stressing the need to use local materials wherever possible, and Saudi national standards are being developed. The insistence on using local materials by making it a condition of the contract can reduce costs considerably. One health official told me that the cost of constructing a health facility was reduced by more than 50% of its initial lowest tender when the condition to use some local materials was introduced and minor alterations were made to the original specifications.

The dependence on imports of hospital building materials reflects a lack of support services in hospital construction. While some materials are not available in the country, and therefore must be imported from abroad,

there is a wide range of materials which can be obtained locally. The hospital construction program should have stimulated the growth of local support services and industries which are necessary for the health services in the long term. The encouragement of local capability in hospital construction through utilization of local hospital building materials can reduce the cost of hospitals considerably. However, the "money-no-problem" attitude of health authorities is apparently overriding.

4.4 Maintenance of hospitals

In the 1960s little attention was paid to future maintenance requirements of hospitals at the planning stage. The result had been short life-spans of buildings, and inefficient utilization of equipments. Many expensive medical appliances had to be left to dust and rust simply because simple spare parts were not available in the country (Al-Gouhais, 1984).

Concern for the serious consequences of neglected maintenance requirements in hospitals has been growing, and a number of steps have already been taken to reduce maintenance difficulties. It has become government policy to include maintenance cost in projects' proposals (Ministry of Planning, 1984b, p.2), and to consider maintenance aspects as an important criterion when decisions are made. In the recent reorganization of the Ministry of Health a department of General Maintenance was created in

the General Department of Projects and Maintenance. The Ministry aims to develop its maintenance capability so that programmes of preventive maintenance are drawn up and implemented rather than providing, as at the present time, only a repair service (Al-Gouhais, 1984). The nature and scale of hospital development in the country dictates that a considerable attention is given to maintenance requirements, and that it should start very early when hospitals are planned.

The planning of hospitals since the 1970s has reflected an emphasis on the importance of maintenance, and provided certain measures to reduce future maintenance difficulties. Hospital designs with minimal maintenance requirements are preferred. Conditions requiring contractors to provide maintenance services for a number of years after the completion of the hospital, mostly three or five years, are now part of hospitals' contracts.

Some contracts require the contractor to use nationally available materials, and to instal equipments and furniture which are available in the country, or whose spare parts are available, or at least there is a recognised agent for them in the country. Proposals for the standardisation of hospital equipments and furniture are being discussed, and detailed specifications of such requirements in contracts is encouraged. It is generally hoped that such measures would reduce maintenance difficulties, and encourage the development of national maintenance capability. Signs of

growing participation by the private sector in hospitals' maintenance provision are increasing (Hassan, 1984, p.14).

The issue of maintenance of hospitals reflects the serious lack of technology and expertise resources in Saudi Arabia. The consequences to the Saudi health system are not only high costs of maintenance and unnecessary waste of resources, which are absorbed by present availability of financial resources, but the disruption of services because of delays and lack of reliable maintenance services. The high technology characteristic of Saudi hospitals affects the potential for generating local maintenance capability because of the involvement of advanced technology and knowledge which are not available locally. The high technology factor in Saudi hospitals should have led to appropriate policies to provide reliable and adequate maintenance services early in the present hospital construction programme. Efforts to achieve this aim have been late, and disproportionate to the scale of the potential problem posed by the rapid growth of hospitals since the 1980s.

The issue of maintenance in hospitals is crucial for future development of hospitals in the country. Present maintenance policies and Saudi technical ability are limited. Suggestions for creating regional maintenance centres, and local maintenance teams should be considered in the context of formulating a national policy and plan for hospitals' maintenance. Efforts need to be directed at

creating effective maintenance service at the hospital level. Experience in some hospitals support such a policy. For example, a number of private hospitals in Jeddah reported that more than 60% of their maintenance work of medical equipments is carried out in their maintenance departments (Jeddah Chamber of Commerce, 1982, p.112).

5. The Commissioning of New Hospitals

In this section I examine the process of commissioning new hospitals in Saudi Arabia with emphasis on the staffing arrangements and their significance to the operation of new hospitals. In the analysis I will consider the relevance of health manpower resources to the operation of new hospitals.

5.1 The administrative procedures

When a hospital project is completed, the contractor informs the health authority concerned officially. The supervising consultant submits a report to the health authority which then sets up a commissioning committee to take it over from the contractor officially. The committee visits the hospital, checks it against contractual specifications, and notes its observations relating to needed modifications or otherwise.

If there are shortcomings, the contractor is asked to rectify them. The committee revisits the hospital, and provided that things are all right, a preliminary hand-over is affected. Contractors retain some responsibilities even after the hospital becomes operational, depending on the terms of the contract. For example, the contract may include the maintenance of buildings and equipments for three years after the completion of the project.

The commissioning procedure is a lengthy process, which usually takes months to complete. The process makes it difficult to decide whether the delay is the contractor's fault or not. It is the commissioning committee which decides on delay and other shortcomings, and what financial penalties the contractor should pay. Recently, when a number of new Ministry of Health hospitals were completed, it took many months to get them operational. Some completed hospitals stood empty for months (Al-Riyadh, February 1985; Al-Yaum, December 1984; Al-Riyadh, May 1985b). The work of commissioning committees dragged on for months in some hospitals because sub-standard equipments that did not meet contracts' specifications have been installed (Al-Riyadh, May 1985b). While the equipments were replaced, the hospitals remained empty.

The Ministry of Health policy on commissioning new hospitals is inadequate. The commissioning committee is set up late, and its task is limited. The membership of the committee is inappropriate. As a result the commissioning

process in Saudi Arabia takes a different course in which it is split up into a number of stages, each is handled by different people.

While the hospital is constructed, the construction is supervised by a contracted consultancy firm or an engineer from the Ministry. At this stage there are no preparations for the eventual operation of the hospital. It is even true that when the hospital is completed, no one knows who is going to work in it. The failure to initiate preparations at an early stage means that many important decisions are postponed, and this reduces the time available for discussing them.

The commissioning committee, which is set up after the hospital has been completed, is usually made up of representatives from the Ministry, regional health authority, construction company, local hospital or health centre, and professional representatives. The committee meets when the hospital is visited and inspected and observations are noted. Members of the committee have their own duties which they abandon temporarily when they visit the hospital. It is rare for the committee to meet when there is no visit to the hospital. They are usually working in different places.

5.2 The staffing of new hospitals

The task of the commissioning committee is restricted to checking the hospital against the contract's specifications, including medical equipments. The committee is not involved in the arrangements for operating the hospital. That stage is the responsibility of the health authority which is going to run the hospital. The regional Director General decides how the hospital is to be used. The staff of an old hospital may be moved to the new hospital, or new staff are recruited for the new hospital. In either cases the number of staff is increased haphazardly, and the new hospital is operated into full capacity in a disorderly fashion. Although individual circumstances dictate some variations, the process generally follow the stages outlined above. The need for early planning and administrative procedures to order the process of commissioning new hospitals is urgent.

The delay in operating new hospitals is also caused by poor preparations and staffing difficulties. Staff requirements for new hospitals exceed those of old hospitals. New hospitals require a large number of staff, particularly para-medical staff. The Ministry of Health so far has operated few of its new hospitals, (Al-Riyadh, May 1985a) and because of staffing difficulties it is considering the use of contractors to run them. The Ministry prefers non-commercial arrangements provided by foreign government (Ryan, 1984, p.26). Whether the Ministry operates the hospitals directly or through contractors, delays in opening them will result if

arrangements for their operation are not prepared in advance and administered efficiently.

The underlying cause of delays and difficulties in operating new hospitals is the shortage of manpower. The shortcomings of the administrative procedures for commissioning new hospitals contribute to the delay in operating them and complicate the impact of health manpower shortage. The under-staffing of new hospitals persists because the rapid growth of hospitals has generated a large demand for health manpower. In addition, the hospitals are staffed by expatriates as Saudi health personnel are limited.

6. An Example: The Five Hospitals Project*

The five hospitals project was one of the first contracts to build new and modern hospitals awarded by the Ministry of Health in the 1970s. The project included the building of five large sophisticated hospitals with personnel residence complexes. The hospitals were located in major centres of population; Khobar, Hofuf, Medina, Jeddah, and Jizan. Table 5.3 shows some relevant general information about the five hospitals.

 * This section is based on the Ministry of Health's publication "The Five Hospitals are a Civilizational Indicator in Health Services Field", Ministry of Health (n.d.c) Riyadh; Saudi Arabia).

Table 5.3 Some General Information About the Five Hospitals Project, Ministry of Health, Saudi Arabia.

<u>Hospital</u>	<u>City</u>	<u>Beds</u>	<u>Opening</u> <u>Date</u>	<u>Site</u>
Hofuf King Fahd hospital	Hofuf	487	1980	south west of city
Jizan General hospital	Jizan	487	1981	north east of city
Medina King Fahd hospital	Medina	460	1980	suburb of city
Jeddah King Fahd hospital	Jeddah	460	1980	west of Jedd- ah-Medina road
Khobar King Fahd Teaching hospital	Khobar	381	1981	north east of city

6.1 Financial resources

6.1.1 Size of hospitals

The five hospitals are large (see table 5.3). Each hospital has, in addition to the main hospital and services' buildings, a large personnel residence complex, underground tanks for sewage disposal, electricity generators, and underground drinking water tanks. Some hospitals were provided with "water refineries to refine water before getting into hospital" (Ministry of Health, n.d.c, p.35).

6.1.2 Cost per bed

The five hospitals project was effected through two contracts. One contract was for the building and equipping of the hospitals, and the second contract was for building and furnishing personnel residence complexes. The total cost of the project, according to the annual reports of the Saudi Arabian Monetary Agency, was 2,789 million Saudi Riyals. The cost of building the hospitals being 1,589 millions, and the cost of building staff housing being 1,200 millions.

However, figures released by the Ministry of Health give a total cost of 3,085 million Saudi Riyals. According to the Ministry of Health it is broken down as follows;

"Costs of hospitals construction:	1,750,000,000
Costs of constructing personnel residence:	1,234,500,000
Costs of constructing supplements:	<u>100,000,000</u>
The overall costs:	S.R. 3,084,500,000"

(Ministry of Health, n.d.c, p.21)

The cost per bed is 1.23 million Saudi Riyals using the Saudi Arabian Monetary Agency figures, and 1.36 millions using the Ministry of Health figures.

Shirreff reported that "original price estimates were increased as work progressed" (1979, p.6). He quoted the example of Hofuf hospital whose cost, he said, has risen

from 150-160 millions Saudi Riyals to 314 million Saudi Riyals.

6.1.3 Construction period

The contract to build the hospitals was awarded first, and the contract to build staff residence complexes was awarded when work in the hospitals neared completion. It took 39 months to complete the hospitals, from April 1976 to June 1979. The hand over procedure caused delay of few months in handing over the hospitals to the Ministry of Health.

6.2 Technology and expertise resources

6.2.1 Contractors

The contract for the five hospitals project was awarded to Philipp Holzmann of Frankfurt, West Germany. The selection of contractor was done by the tender procedure, in which the lowest tender was taken.

6.2.2 Designing

The contract for the five hospitals project included their design, and the contractor has worked closely with the supervising consultant and the Ministry of Health in making the designs. When the designs were made, they were approved by the Ministry of Health before using them.

6.2.3 Materials

The five hospitals are located in large cities and towns, which are well connected to other parts of the country and the outside world. The contractor was able to import materials relatively easily and within reasonable periods of time. Some local materials were used when it was cheaper for the contractor to buy locally than to import.

6.2.4 Maintenance

The five hospitals are highly sophisticated, and were equipped with the most modern equipments available. The contract with Philipp Holzmann, who built and equipped the five hospitals, included one year maintenance of equipments and buildings. After the first year the Ministry of Health took responsibility for maintenance. It arranged for the maintenance of equipments and facilities by individual contracts with private contractors.

6.3 Manpower resources

6.3.1 Staffing

The five hospitals were opened in 1980/81, and were brought into full operation gradually. There was a period of two years or more between completion of hospitals in 1979 and their operation in 1980/81. The delay was mainly caused by the inability of the Ministry of Health to staff the hospitals when they were completed in 1979. The Ministry sought assistance from a number of foreign governments for staffing the hospitals. For example, the Taiwanese and

Danish governments helped to operate Hofuf King Fahd hospital and Jizan General hospital respectively. The relatively large number of staff required, and administrative difficulties such as the determination of salaries and allowances have delayed the opening of the hospitals. The hospitals are still short of staff, especially when a large number of present staff go on holiday during the summer.

The Khobar hospital was loaned to the Ministry of Higher Education to be used by King Faisal University as a teaching hospital for its college of Medicine and Medical Sciences. The Ministry of Health agreed to loan it because it could not staff it, and it was in the national interest to make it a teaching hospital. King Faisal University has also found difficulties in recruiting adequate staff for the hospital.

6.4 Discussion

The five hospitals project illustrates the resources situation in the hospital service. Financial resources are relatively plentiful and are used to reduce the consequences of the lack of non-financial resources. Non-financial resources present obstacles for the expansion and efficient use of the hospital service. Administrative difficulties, which were partly due to lack of skilled health managers, contribute to the shortcomings of non-financial resources as evident in the delay of more than 2 years in operating the hospitals.

However, there had been a number of beneficial spin offs arising from the project which are beneficial to the hospital service. The five hospitals project has helped the Ministry of Health in its subsequent construction programme because it was its first experience in building new and modern hospitals in the 1970s. The project, as well as other factors, has led to the emergence of the small hospitals policy as an alternative to the idea of building large hospitals.

The relatively short period of maintenance arrangement for the five hospitals has caused some rethinking in the Ministry. Subsequent contracts extended the period to three or five years, and sometimes longer. The involvement of financial factors in the determination of the maintenance responsibilities introduces significant limitations.

The relatively high cost per bed for the five hospitals is mainly caused by the novelty of this type of projects, and the limited number of tendering contractors. In subsequent projects many contractors competed for them, and the cost per bed was reduced. The participation of contractors from south eastern Asian countries is a major reason for the decrease in the cost per bed in subsequent projects.

The experience of the five hospitals project has benefited the Ministry of Health in a number of ways. For example, the design of out-patient clinics did not provide satisfactory separation of men and women, and this desirable arrangement was purposely incorporated into subsequent designs. There were other such design observations, and other benefits relating to organization, equipments, and processes.

7. Comment

The hospital sector in Saudi Arabia receives considerable attention, and substantial financial resources are provided to finance a rapid hospital construction programme. While there is a need for hospital beds in the country, it appears that the current hospital policy has not been well planned and executed. Financial resources are used lavishly, and without adequate consideration for the long term prospect. The strong financial position of the country compared to other developing countries provides a partial explanation for the high spending spur of Saudi health authorities on hospital development.

Although it has been suggested that the hospital service should be restricted in developing countries because it is expensive to provide (Abel-Smith, 1976, ch.7), developing countries including Saudi Arabia have given priority to hospital development. The quest for prestige is behind the move in most developing countries. Abel-Smith has suggested

that competitive prestige is contributory to the duplication of sophisticated hospital facilities in developing countries (1976, p.104). In Saudi Arabia, it is more than prestige or competitive prestige that has sustained its ambitious hospital programme. There is an underlying belief in the Saudi society in the need and ability of the country to achieve prominence in scientific fields including medicine. Hospital development in the country is seen as a step in the national quest for glory and prominence.

Financial wealth from oil revenues has provided the means for the achievements of Saudi aspirations. In other developing countries ruling elites and government technocrats provided resources for the hospital service at the expense of other health services. However, efforts to expand the hospital service on the basis of copying strategies and policies from western developed countries have met difficulties arising from the environment of health provision in developing countries. For example, reliable data for planning purposes are lacking, and there are no adequate procedures for routinely collecting vital health statistics. Hospital development in developing countries including Saudi Arabia has been constrained by this serious obstacle.

Present construction and maintenance policies are costly and inefficient. There is a lack of technology and expertise resources, and current policies are short term

measures and limited. The long term requirements of the hospital sector in terms of technical resources have not been adequately considered. The emphasis placed on advanced medical technology in new hospitals has serious implications for health support services and industries, particularly maintenance services. The increased sophistication of hospitals means that policies aimed at acquiring the required technology and expertise are going to take longer to come to fruition. This makes the need for a planned and urgent action a priority in the hospital sector.

The difficulties created by the lack of non-financial resources in the hospital service are exacerbated by administrative deficiencies. Administrative weaknesses undermine the improvements that available financial resources can provide to ease the impact of the lack of non-financial resources. In part III I shall analyse the significance of the public bureaucracy to health services development in the country in more details. Although administrative shortcomings are relevant to the problems of hospital development, it should not be confused with the underlying resource-related causes. Administrative deficiencies present a major obstacle to hospital development, and many organizational and management difficulties relating to hospitals' planning and operation need to be avoided. The administrative machinery of health authorities need to be made efficient. The scale and rate of hospital growth in the country demands high quality skills and expertise in organization and management.

The increasing involvement of the private sector in the various aspects of hospital development is promising. The opportunities for the private sector in the hospital service is fostering the emergence of a pluralistic approach for health provision in the country. The aim of the government should be to encourage private investment in setting up support services and industries in the country. The involvement of the private sector in facilitating the importation of health products and services from abroad is a limited action, and should be followed by real investment in the country' health industry.

8. Conclusion

The hospital service in Saudi Arabia is expanding rapidly. Financial resources for hospital construction are plentiful, and many new modern hospitals are being built. Most of the new hospitals are to replace old hospitals, and to meet an increasing demand for hospital services. This indicates a lack of continuity in hospital development in the country.

Saudi hospitals are amongst the most advanced hospitals in the world. Their contribution to the improvement of the health situation in the country could be significantly increased by the adoption of a national hospital plan. The aspirations of Saudi health authorities concerning the hospital service, as reflected in successive development plans, are very ambitious.

There are many difficulties which have constantly prevented the full realization of declared aspirations concerning the hospital service. Although the achievements have been short of the objectives, the progress made in the hospital service is astonishing. In a relatively short period of time, the country developed a substantial stock of high quality hospitals.

Most of the obstacles that hinder hospital development in Saudi Arabia are due to the lack of non-financial resources. The country is dependent on foreign technology and expertise for the planning, construction, and operation of its hospitals. The shortage of health manpower in the country is seriously affecting both the efficiency and effectiveness of the hospital service. Expensive and sophisticated hospital facilities are not properly utilized because of the lack of manpower, particularly skilled and professional staff. The success of the hospital service depends on the formulation and adoption of an effective strategy to resolve this problem.

PART THREE

POLITICAL INFLUENCES

Introduction

The way in which resources for health services are allocated in the health system is determined by the political institutions of the country. Health provision has become a responsibility for politicians at the national level, and consequently has sometimes resulted in its use for overtly political purposes. The process of allocating health resources is also subject to the dynamics of power in the Ministry of Health. The manner in which health resources are allocated to provide services directly affects the effectiveness and efficiency of the health system.

It is relevant to point out at this early stage to the limited scope for dealing with politics in Saudi Arabia. There is little written work about politics in Saudi Arabia, and most of it either descriptive or historical. As I shall explain later in chapter six, in Saudi Arabia political discussion and debate are limited, and it is therefore difficult to research into political activities. This has placed considerable constraints on the analysis in this part.

In this part I shall consider the influence of political forces on the development of the Saudi health system. There are two chapters in this part. In chapter six I describe the Saudi Arabian political system and examine how health policies are formulated, influenced, and implemented in Saudi Arabia. The role of relevant socio-political groups in health policy making is analysed.

In chapter seven I focus the analysis on the Ministry of Health to illustrate some of the conclusions reached in the previous chapter. I have chosen the Ministry of Health because it is the largest and oldest organization providing health services to more than 60% of the population. It is also responsible for introducing and enforcing health regulations which generally affect other organizations providing health services. In both chapters some descriptive material is given to set the scene for subsequent analysis. The analysis of the situation in developing countries presented in the first chapter provides the base line for comparison in this part.

CHAPTER 6: THE ALLOCATION OF HEALTH RESOURCES1. Introduction

The volume of public resources devoted to health services and the ways in which the resources are used to provide health services are political decisions (Heller and Elliott, 1977, p.2). The competition for scarce public resources in developing countries is strong, and the health sector is usually given a low priority in the allocation process (Myrdal, 1968, p.1577). This reflects the perception of politicians of the health issue in comparison with other public issues.

However, politicians are sensitive to the views of urban elites over the ways in which health resources are used (Walt and Vaughan, 1981, p.12). Urban areas where the ruling elites and urban middle classes usually live are provided with sophisticated medical services which absorb most of health resources and leave little for rural areas (Taylor, 1982, p.19). This has supported the elitist perspective for the explanation of health policies in developing countries (Doyal, 1979, p.257).

The success of socialist countries such as China, Cuba and Tanzania in the provision of basic primary health care services to their rural populations has stressed the importance of political factors in health services delivery. Studies of health delivery systems in other developing

countries has confirmed the influence of political ideologies on the pattern of health provision (Roemer, 1976, ch.8). The mass mobilization approach of socialist countries, however, is not suitable for all developing countries, and each country has to evolve its own system of health provision (Fry, 1972, p.326).

The political organization of Saudi Arabia is unique in comparison with both developed and developing countries. The King and the royal family maintain an exclusive hold on power and how it is exercised. The political arena is restricted, and most politicians acquire influence through delegation of power and traditional arrangements. Government bureaucracy has become both a means for carrying out the policies of the political masters and a forum for allowing others to participate in the formulation of policies. The Saudi politics of bureaucracy is increasingly becoming a reliable reflection of politics in the country.

In this chapter I shall consider the influence of political forces on the development of the Saudi health system. There are two sections and a comment in the chapter. In the first section I expand the brief description of the Saudi political system which I have given in the second chapter. The question of power and influence and how they are acquired and used in the context of the political decision making process are examined. I shall examine the role of the relevant modern and traditional elements of the

political system and emphasise their significance to the politics of health bureaucracy.

In the second section I examine health policy decision making within the context of the political decision making process described in the first section. I shall identify the sources of power and influence in health policy making, and provide illustrative examples by examining national health planning. I shall also analyse the impact of the political system on the allocation of health resources, and identify significant trends and influences in health policy decision making.

2. The Saudi Arabian Political System

2.1 An Overview of the Political System

Saudi Arabia has been described as "a non-constitutional monarchy in which the king's authority is subject to few limitations"(Kalfout, 1971, p.15) The royal family chooses the king who is usually the eldest living son of king Abdulaziz bin Saud, the founder of Saudi Arabia. The king, with the support of the royal family, rules the country. Rugh has summed up the political situation in the country:

"The political system in Saudi Arabia is still authoritarian, and power remains in the hands of the King. There is no public opposition to government policy, no system of parties or

independent interest groups, no elected representatives. Politics remain highly personalized and centralized, and individual Saudis still take their problems directly to the King if they can. In making major decisions, he consults with traditionally important groups such as the members of the royal family, the 'ulama' and tribal shaykhs: ... But alongside this traditional system, a complex and more formal bureaucracy has grown up and become a channel of political influence for the New Middle Class" (1973, p19).

The government is made up of the King, the Council of Ministers, the Ministries, and independent agencies. They operate within a complex organization which link them together and is characterised by strong central control. There are four institutions which form the backbone of government machinery, and are central to the process of political decision making. These are the Council of Ministers, Ministry of Finance and National Economy, Ministry of Planning, and the General Civil Service Bureau. Alongside the formal government organization there is a number of traditional sources of influence which remain important. Traditionally, the royal family, tribal leaders, religious leaders, notables and local Governors are politically powerful, and central to the maintenance of the government.

The Saudi political system is a traditional elitist system dominated by the royal family (Wener, 1975, ch.4). Although power is in the hands of the King and the royal family, extensive authority has been delegated to public officials. This gives the bureaucracy "an exceptionally high institutionalized position in the determination of public policy" (Al-Awaji, 1971, p.246). Any Saudi citizen can become a civil servant, though in recent years secular education has become a desirable entry requirement.

As there are no political parties and no public forum for political activities, politics in Saudi Arabia have become very much the politics of bureaucracy. For example, in the process of allocating public resources "the Saudi bureaucracy acts as the authoritative agent". (Abussuud, 1979, p.173)

Although the elitist perspective provides an explanation for the growing power of the bureaucracy and the middle class and their role in the Saudi political system, it tends to deemphasise the importance of traditional elements in the relationship between the king and his subjects. Traditional groups are part of the political system, though they are not formally incorporated into the existent institutional framework. Religious leaders (ulama) legitimize the authority of the monarchy, but are generally less involved in non-religious government affairs. They have a weekly audience with the king which contribute to the continuity of the legitimacy of the

government. Tribal and local leaders have relatively easy access to the king which offers them the opportunity to influence policies. The traditional social relationship between the king and tribal and local leaders contributes to the legitimacy of the government, and is significant to the maintenance of political stability in the country.

The access awarded to religious, tribal and local leaders to the King is significant, though it offers them only a limited degree of influence. It reflects the personalized and patriarchal character of the Saudi political system. Although the arrangement is becoming difficult to maintain because of the expanding functions of the government, its legitimization and traditional values will guarantee a symbolic if not an influential role for it.

The growth of the public bureaucracy has created a dual system while the country is going through a transition from traditional society to a modern state (Al-Said, 1982, ch.10). Traditional sources of authority are declining, and public bureaucracy is growing. However, the transitional process is made more difficult and prolonged by the persistence of personalized social relationships in the society. This has effectively led to a gap between proclaimed bureaucratic responsibility and actual bureaucratic behaviour.

Riggs (1964) argues that to understand the distribution of power and influence in developing countries it is necessary to take into account the related structures which affect them, whether traditional or modern. He classifies political systems into three categories; fused, prismatic and diffracted. Fused systems are found in primitive tribal societies where all political, social and economic functions are holistically performed by a single dominating institution, the tribal leadership. Diffracted systems are found in western industrialised countries where specific specialized institutions have been developed for rule-making, rule-application, and rule-adjudication. Prismatic systems are found in developing countries where mixtures of traditional arrangements and bureaucratic institutions give rise to difficulties and administrative problems. Riggs takes his terms from physics; light is made up of fused colours which when made to pass through a prism comes out as diffracted rays of the various constituent colours. The light passing through the prism is neither fused nor diffracted. It is in transition from the fused stage to the diffracted stage.

In prismatic systems bureaucrats assume relatively greater power than their counterparts in fused and diffracted systems. In the Saudi system, the Minister, for example, has many bureaucratic duties most of which are routine and can be handled by clerks. Al-Ghalayini described the duties of the Minister:

"The minister, in particular, formulates the policy of the ministry and oversees its execution. He lays down the general work procedure and issues rules for administrative organization on the basis of recommendations made by his deputy. He supervises the activities of his ministry and makes decisions concerning such draft regulations and rules for implementation as may be related to the ministry's functions and all ministerial affairs which are subject to royal decrees or decisions by the Council of Ministers. He also has the authority to issue ministerial decisions in the cases set forth in the Regulations, including the issuing of rules for implementation related to individual ministerial regulations and decisions". (1962, p.29)

This has made the role of Ministers more administrative than political, particularly when compared with the role of Ministers in developed countries (Al-Tawail, 1977, p.11).

2.2 The Process of Public Decision Making

Public decision making in Saudi Arabia is a complex process which may involve a number of public institutions. There is a number of key ministries that oversee and effectively coordinate the activities of other ministries.

These include Ministry of Planning, Ministry of Finance and National Economy, Council of Ministers, and General Civil Service Bureau. The formal government apparatus is influenced by informal activities of traditional social groups which lobby public officials extensively. The degree of influence which traditional groups can exercise depends on the participants and the circumstances. For example, the royal family is an influential group in all circumstances (Al-Awaji, 1971, p.117), and professionals are influential in the technical aspects of policies. Lackner has suggested that other pressure groups can only exercise influence when they are in alliance with a powerful segment of the ruling family (1978, p.92).

The Ministry of Planning collates information from public and private sources and formulate the country's development plans in cooperation with other public agencies. Development plans outline government policies and set targets and objectives for individual public agencies. The contribution of the public to the decision making process through the traditional channels of influence is made at this stage of the process. Tribal and local leaders lobby individual agencies and ministries to influence their policies which are incorporated into the development plans drawn up by the Ministry of Planning.

The Ministry of Finance and National Economy prepares the annual national budget, and is involved in all the activities of other public agencies as and when their

activities require finance. The Ministry plays an active role in formulating development plans because it must approve the financial cost of government policies included in development plans. The Ministry also negotiates with individual public institutions for the implementation of their targets and objectives set in development plans.

The General Civil Service Bureau acts as the personnel department of the government. Its function is to recruit civil servants for all ministries and government agencies. In collaboration with the Ministry of Finance and National Economy it determines salaries, allowances, and job descriptions for government posts. It is also involved in the promotion and allocation of civil servants.

The Council of Ministers approves the regulations which guide the formulation and implementation of public policies. It is the source of public authority. The council defines the nature and direction of public policies through regulations, and maintains control over national policy issues such as the annual budget.

Public decision making within an individual public agency is made by the Minister or high ranking officials after consultation and coordination with a number of other public agencies. Agreement must be reached with consulted institutions or the policy can not be adopted. For example, if the Ministry of Health wants to build a hospital or provide a service, it must get approval from the Ministry of

Planning and Ministry of Finance and National Economy which will provide the funds, and General Civil Service Bureau which will approve the new posts and recruit the staff.

Public decisions which involve relatively high expenditure are made by the Council of Ministers to which they are submitted by the sponsoring agency. The consultation and negotiation stages between sponsoring agencies and the Ministry of Planning, Ministry of Finance and National Economy, and General Civil Service Bureau are completed first, and after agreement has been reached proposals are put to the Council of Ministers for approval. The Council of Ministers usually asks for the proposed policies to be examined by the appropriate specialist committee of the council's committees, and after considering its report which may suggest minor changes, approves the proposed policies. The council can reject the policies and return them to the proposing agency for redrafting, but this does not happen often.

The centralization of the public decision making process is a significant feature of the Saudi political system. It increases the power of the public bureaucracy and strengthens its role in the resource allocation process. The central government exercises considerable control over regional and local public services, and this encourage tribal and local leaders to lobby public officials for services and projects for their communities. It is paradoxical that strong centralization of power which

increases government control is contributing to the persistence of traditional forces of influence which weaken the institutional bureaucratic machinery.

In recent years civil servants and professionals have acquired considerable political influence through their bureaucratic positions and secular education. Civil servants are influential because they deal with the detailed formation and execution of government policies. Although they are not formally organized in unions or societies, there are informal groupings based on tribal origin, nationality or profession. Professionals do individually exert considerable influence. They are considered the experts in their fields of knowledge, and are able to influence alternative options at the policy formation stage when they are requested to give advice.

3. The Process of Health Policy Decision Making

3.1 Introduction

The institutional framework for health policy decision making in Saudi Arabia is affected by the activities of traditional social groups in the Saudi society. The process of resources allocation has been affected, and the prospect for rational health planning and policy decision making has suffered. The difficulties arise from the relationship between the participants in the decision making process and the institutional framework established for the process.

The monarch and other health officials are subjected to considerable public lobbying through traditional avenues of influence. The distribution of power and influence in the country has led to the adoption of a compromised approach in the process of health policy decision making. In this section I shall analyse the process through the examination of the role of the main participants, and the analysis of national health planning in the country.

3.2 Participants in Health Policy Decision Making

3.2.1 The King

The King's power is often exercised in allocating funds and facilities in response to requests from notables, tribal leaders, local delegations or petitions. The King is accessible to the public, who take the opportunity to request hospitals or health centres for their towns or villages. Following the submission of a request to the King, which is usually in a written form, it is processed according to the King's wish.

Most requests are transferred to the Ministry of Health for consideration which may lead to inclusion in the Ministry's plans for the area concerned. Such requests may decide where and what is to be built, though the Ministry can decide differently such as to build a small hospital instead of a large one, and the Ministry is left to decide when to build the requested facility. The Ministry of

Health uses such requests in its planning for new facilities, but it is not bound by them. Many of such requests are incorporated in future plans, and some may be ignored if they are not justified. Most of present facilities were built following presentations or repeated requests from the locals.

Sometimes when the presentation of a request is strongly made to the King, the request is sent to the authority concerned, usually the Ministry of Health, with an instruction to comply with it in a specified time. This usually means including the requested facility in the next year budget. In some cases the King may order immediate action to be taken. For example, in 1980 the Islamic Welfare Society was established to build three hospitals in Riyadh, Mecca, and Medina. Donations to the society did not meet the cost of building the hospitals. When the chairman of the society, His Royal Highness Prince Sulaman, the Governor of Riyadh, informed the King and explained the situation to him, His Majesty King Fahd ordered the Ministry of Health to take over the three hospitals and operate them. (Al-Yaum, October 1984). He also ordered that all costs are to be paid by the government and the society's money, which was already spent, should be refunded.

Sometimes the King himself takes the initiative and gives orders to the health authority concerned to provide services or build facilities. Such cases represent the response of the King to the needs of the people and their

requirements as he sees them when he visits the people and reviews services. For example, in 1984 when His Majesty King Fahd visited the Al-Hasa region of the Eastern Province, and felt the need for hospitals for accidents and maternity, he instructed the Ministry of Health to provide them as soon as possible. In 1985 His Majesty King Fahd donated a new expansion comprising out-patients clinics and 150 beds to King Faisal Specialist hospital (Al-Jazeera, August 1985).

The King's role is central to health policy decision making though it may not be clearly apparent in public. Royal decisions and donations at the personal level contribute significant resources for health services in the country. Ryan noted that:

"Of the 52 hospitals to be built in the period 1980-85, 36 are in the plan and the other 16 the result of a royal decree or decision of a provincial governor". (1984, p.17)

The King's contribution depends on the personality of the King himself and how he views health provision and react to the public's demand. For example, His Majesty King Fahd is known for his personal interest in improving health provision for the public and his support for advancing the country's health system. The flying hospital service run by the Ministry of Defence and Aviation was "a gift from His Majesty King Fahd to Saudi citizens" (Al-Yaum, January 1985). Leading hospitals and centres of excellence in the country

are named after the Kings who donated the resources for building them or supported them at the project stage. Although names of hospitals are often changed, they still reflect royal participation in establishing them.

While royal decisions and donations have contributed generous resources for health services, they are unpredictable, and this creates a number of problems for health planners and managers. The contribution is often for the capital cost of projects leaving health authorities with large recurrent costs and operational problems for which they are not prepared. Most of the contribution is directed towards large and sophisticated medical facilities which are located in the capital or regional cities. This has created a serious imbalance in the distribution of health facilities in the country. The central Province where the capital Riyadh is located has more health facilities than other regions. Al-Baker noted that there were more physicians in the Riyadh region than the Qasim, the Eastern, the Northern, and the Mecca regions combined in 1972 (1972, p.48).

3.2.2 Local Governors and Notables

Governors influence decision making at central and local levels. At the central level Governors make presentations both formally and informally to the Minister of Health or the King to secure approval for health projects in their regions. However, Governors' strongest influence lies in their participation in the process of distribution

of facilities. Health authorities rely on the advice of Governors when they decide on the location of new health centres and hospitals. Thus, for example, when the General Directorate of Health Affairs in the Eastern Province wanted to distribute the 30 health centres which were approved for the region in 1984 budget, the deputy Governor and the General Director of the Directorate met to decide the distribution of the health centres. Generally, the views and wishes of Governors are considered along with other criteria when health authorities decide on the location of new facilities.

In addition to influencing the process of allocation, Governors interfere with the operational management of health facilities, especially when there are irregularities. The form and extent of such activity depends largely on the circumstances as well as the personality of the Governor. Thus, for example, His Royal Highness Prince Sulaman the Governor of Riyadh, is known to visit hospitals and health centres unexpectedly to inspect them and to talk with their staff. On such visits negligence and irregularities may be identified, and the efforts and achievements of the staff are praised. Other Governors are reported as doing the same (Al-Jazeera March 1985).

The notables of each town and village seek to secure what they consider necessary of health facilities for their town or village. They send telegrams to the authorities,

the Minister of Health, or the King. Sometimes they form delegations which go to the capital, Riyadh, to make presentations to the Minister or the King, and submit petitions on behalf of their communities. They also make representations to the local Governor. Health authorities, generally, receive them and listen to their demands and views. The advice of the notables is considered, and incorporated into government plans depending on other factors. The activities of the notables is common.

The relationship between health officials and local leaders and Governors is paradoxical. On one hand, health officials are easily accessible to local leaders and Governors to influence their plans and decisions. And on the other hand, the influence of local leaders and Governors is not directive and continually overriding. Thus, political pressure can be, and is mostly though tactifully, ignored by health authorities without any significant repercussions to the health system.

Local leaders and Governors make excessive and sometimes irrational demands which health officials can not accept. For example, many villages and small communities want hospitals even when they are provided with health centres (Al-Riyadh, March 1985; Al-Riyadh, May 1985c). However, health officials continue to allow access to local leaders and Governors because it is politically necessary to preserve the traditional character of politics in the country. This kind of political accommodation provides

health officials with the opportunity to keep contact with the views of the public at large.

3.3 The Process of National Health Planning

Since 1970 health services' planning was done on five year basis as part of planned national development. The process involves the Ministry of Health, Ministry of Planning, Ministry of Finance and National Economy, and other government institutions and informal traditional participation. Public health policies are effectively decided in general terms in the process which leave individual public agencies to devise their own strategies for implementing the policies. This institutional framework is the main process of health policy decision making in the country. I shall examine it under three headings; planning cycle, planning criteria, and implementation of health plans.

3.3.1 Planning cycle

It roughly lasts five years, the period of each development plan. The planning cycle starts at the beginning of the formulation process of the development plan, and ends when the plan is approved and adopted by the government. The Ministry of Planning is the focus of the planning process. Each Ministry or government agency including the Ministry of Health submits and discusses with the Ministry of planning at committee level their plans for their health

services. Prior to this stage each Ministry or agency would have had preliminary discussions with the Ministry of Finance and National Economy about the funding of their plans. Thus, the technical aspect of planning is separated from the financial aspect with the Ministry of Planning dealing only with the plans and Ministry of Finance and National Economy dealing only with the finance (Al-Tawail, 1977, p.18).

The Ministry of Planning considers the health situation in the whole country, and identifies needs in order of priorities. In the light of projected capability of the country, the Ministry decides the main goals of the government for the plan period. The private sector is included in the calculation and appropriate measures are included in the plan to facilitate the attainment of targets set for the private sector. Throughout the process of collation of information, estimation of needs, and calculation of targets, the Ministry of Planning maintains an exchange of views with ministries and agencies concerned. Usually such contact is conducted at committee level, and special committees may be formed to examine certain issues and programmes. The Ministry of Finance and National economy is closely involved in the process.

The drafting of the health plan is usually a lengthy process. When the Ministry of Planning finishes its draft of national goals after agreement with individual ministries and agencies, the health plan is presented, as part of the

five years national development plan, to the Council of Ministers. The Council of Ministers may require that the health plan is examined by special committees or sub-committees. This may result in recommending some alterations in the plan, usually minor additions or adjustments. Following the approval of the national development plan, which includes the health plan, by the Council of Ministers, it is adopted by the government.

During the period in which the health plan is formulated, intensive formal and informal pressure is expended by individuals and institutions concerned. Ministers are usually deeply involved in the process, each is arguing for his Ministry's programmes, and hoping to secure all the projects he asked for in the plan period. It is through the planning cycle that the government sanctions the provision of health services of the various institutions.

This process of health policy making has a number of inadequacies with far reaching consequences to health services development in the country. The role that the Ministry of Health should take in formulating public health policies is effectively taken over by the Ministry of Planning. Thus, the coordination and integration functions of the health planning process are weakened and consequently policy decisions lead to fragmentary health provision. The ability of ministries and agencies to secure finance from the Ministry of Finance and National

Economy, which was not often difficult in the oil boom period, became the main determinant of policies incorporated in national health plans. Competition between public institutions providing health services has developed leading to wasteful duplication of services and facilities, variation in quality of services provided, and the concentration of services in urban areas (Harastani and Mansoor, 1984, p.181).

3.3.2 Planning criteria

The participants in the planning process utilize a number of different techniques for assessing the health situation in the country, predicting future patterns of demands and needs, and deciding their own policies from which national goals and objectives are adopted. The success of the planning process depends to a large extent on the validity of the techniques used in the planning process. The involvement of many government institutions in the process combines different techniques.

The Ministry of Planning performs the most important part of the planning process. It collects data about the health situation, analyses them, and uses them to predict future patterns. It uses a number of ways to collect the necessary data. The Ministry of Planning employs consultancy firms, usually from the west, to carry out original research (Al-Farsy, 1978, p.74). The Ministry identifies the topics which are to be researched.

In the course of each planning cycle, the Ministry of Planning conducts studies and surveys. It also has access to all health statistics published by other ministries and agencies. Such statistics are collected routinely. The research activities of the Ministry of Planning do not only aim at studying health problems and issues, but they also include follow up studies and evaluation exercises.

In recent years civil servants from the Ministry of Planning went out to meet the people and to discuss their demands for health services with them. Planning teams from the Ministry were sent around the country to visit cities, towns, and villages, and to exchange views with the leaders of localities and public officials (Al-Riyadh, December 1984). The information gathered in this manner supplement the data obtained from commissioned studies and surveys.

Individual ministries and agencies draw up their own plans, and some of them have planning units or departments. In 1965 the Council of Ministers passed a resolution requiring all ministries and public agencies to set up planning units, but there are still few effective units (Al-Tawail, 1977, p.19). They depend on the assessments of their staff who interact closely with the consumers of health services. They also use their statistics, particularly through-put statistics. Some health authorities may carry out research on specific problem or issue prior to deciding on remedial policies.

Demographic considerations such as population size and make up and patterns of prevalent diseases are taken into account, by both the Ministry of Planning and other ministries and agencies whenever possible, but not on a systematic basis because of the difficulties outlined elsewhere (see chapter 3). The Ministry of Planning conducts some demographic studies and surveys of certain localities or diseases. However, generally the practical impressions of health officials of demographic factors are the means of their entry into the planning process.

Health authorities receive a constant feed back from the general public. They are sent petitions, letters of demands for services and facilities, letters of complaint, and they receive delegations of leaders from towns and villages. The exchange with the public has recently been extended by the use of mass media, especially local daily newspapers.

The relationship between local leaders and Governors and health officials has become effectively a substitute for rational bases of health planning. The absence of an effective procedure for systematic collection of vital statistics and relevant health data in the country is partially explained by the reliance of health officials on the contribution of local leaders and Governors. This state of affairs undoubtedly results in the ineffective use of resources.

3.3.3 Implementation of health plans

The health planning cycle produces a list of national goals which are to be realized over the five year period of the development plan. Sometimes the plan indicates the main projects through which some goals may be attained. For example, the Third Development Plan aimed at creating 10,700 new hospital beds over the plan period. The Plan indicated that; 36 new hospitals would be built to provide 7,550 beds, some existing hospitals would be expanded to add another 2,000 beds, and hospitals started in the Second Development Plan would be completed to add 1,150 beds (Ministry of Planning, 1980, p.350).

The cost of planned projects are estimated, but sometimes projects are not costed. In either cases funds are not reserved automatically, and each ministry and agency negotiates its budget annually with the Ministry of Finance and National Economy to secure funds for the projects it wants to execute in that year. Thus, generally national development plans indicate the type of services and facilities to be provided, and by when they are to be completed. All other particulars of execution of the plans are left for individual ministries and agencies concerned.

Each Ministry and agency implements its share of national goals independently. Through their own planning apparatus ministries and agencies decide where to locate planned services and facilities, and how to provide them.

In this aspect the leadership of the Minister and the competence of the administrative machinery of the ministry are crucial. The Minister decides, following advice from his civil servants, where to site facilities and how to construct them. The administration has to schedule its major projects over the plan period, and to secure funds annually for each year's projects.

The process of developing projects tests the competence of health authorities, and determines the degree of success of national health plans. The administrative efficiency of health authorities is not always satisfactory, and their performance often falls short of national targets. For example, the First Development Plan aimed at establishing a national health network to:

"ensure the availability of preventive and curative health services through the Kingdom and to effectively delegate responsibility for adequate services at different levels".

(Central Planning Organization, 1970, p.153)

The network was to consist of regional and local facilities. Each region was to have a central referral-only hospital and a number of specialist hospitals depending on the regions's requirements and characteristics. To each central hospital a health institute, a nursing school, and a research and studies unit are attached. Regions are divided into health units. Each health unit was to have a principal

hospital, a number of local hospitals depending on requirements of localities, health centres, and health sub-centres. At the end of the plan, and even now, a national health network such as that envisaged in the plan has not been established. It is difficult to assess the impact of the plan on the provision of services.

However, sometimes the reverse happens and national targets are exceeded. For example, the Second Development Plan aimed at achieving a doctor to population ratio of 5 per 10,000 by the end of the plan period. At the end of the plan period the doctor to population ratio was 6.7 per 10,000 (Ministry of Planning, 1980, p.345).

4. Comment

There are two significant consequences to the inclusion of traditional and modern elements in the Saudi political system. The public bureaucracy assumes greater power than usually the case in developed countries, and bureaucrats become a powerful group in the decision making process. The centralization of power in the system strengthens the position of the bureaucrats, and creates organizational inflexibility in the decision making process. In the next chapter I shall analyse the consequences of the increased power of bureaucrats to health policy decision making in the Ministry of Health in detail.

Loyalty to social groups and the wide opportunity for traditional groups to influence policy makers lead to serious administrative problems, corruption, nepotism, formalism and over-centralization of power. The impact on health resources allocation is profound because practices such as nepotism undermine the rationality of health planning and result in regional inequalities in the distribution of resources.

Health provision is not perceived as a political issue by both public officials and the general public. It appears that the issue is not given high priority by either sides. The general public consider health services as part of the welfare services of the government. The interaction between the representatives of the general public and policy makers is dominated by procedural matters which are significant to the overall political system but do not have lasting and significant impact on health provision.

There are no signs of conflicts between traditional and modern elements involved in the allocation of health resources. The availability of financial resources has enabled policy makers to reduce competition over health resources. The allocation of health resources is dominated by health bureaucrats. At the same time the demands and wishes of local leaders and Governors are accommodated in the allocation process. There is some contradiction in the allocation process. The demands of local leaders and Governors are often not met though they are accepted

verbally, and health authorities are often made to give way to the demands of local leaders and Governors even against technical advice. A balance is maintained between the two sides without losing the confidence of either sides. The ability of policy makers to allocate resources relatively easily to satisfy some of the demands of traditional social groups has preserved stability and good will in the allocation process. However, it has created a number of problems for the health system. Some duplication of services and regional inequalities in the distribution of services have resulted from the present allocation policy.

This inconsistency in the allocation of health resources is common in developing countries, and is mainly the result of their prismatic character. There is a wide range of political systems in developing countries, but there are similarities in the allocation of health resources which are mainly due to the transitional status of developing countries. The loyalty of individuals to their social groups lead to the merging of the political roles with personal and social roles (Dube, 1966, p.406), and this results in corruption and nepotism (Myrdal, 1969, Ch. 20). The socio-political organization in developing countries reinforces traditional loyalties, and fosters the absence of group consciousness and solidarity (Hauser, 1966, p.61). Like Saudi Arabia, in other developing countries public bureaucrats have an important role in the formation and implementation of public policies:

"bureaucratic positions carried vast powers which made them additionally attractive and important. The powers vested in a minor functionary gave him prestige, perquisites and privileges far beyond those justified by his emoluments and position in the hierarchy". (Dube, 1966, p.405)

In developing countries where some political activities are allowed, authoritarian or elitist governments dominate. Power is institutionally restricted to the members of the elite, who use "the social function of health services as an instrument for the preservation of the status quo" (Molina-Guzman, 1979, p.149). Their health policies are designed to provide for their demands, and result in the concentration of health facilities in urban areas. Like Saudi Arabia they acquire prestigious facilities and feel national pride about them (Ruderman, 1971, p.298).

5. Conclusion

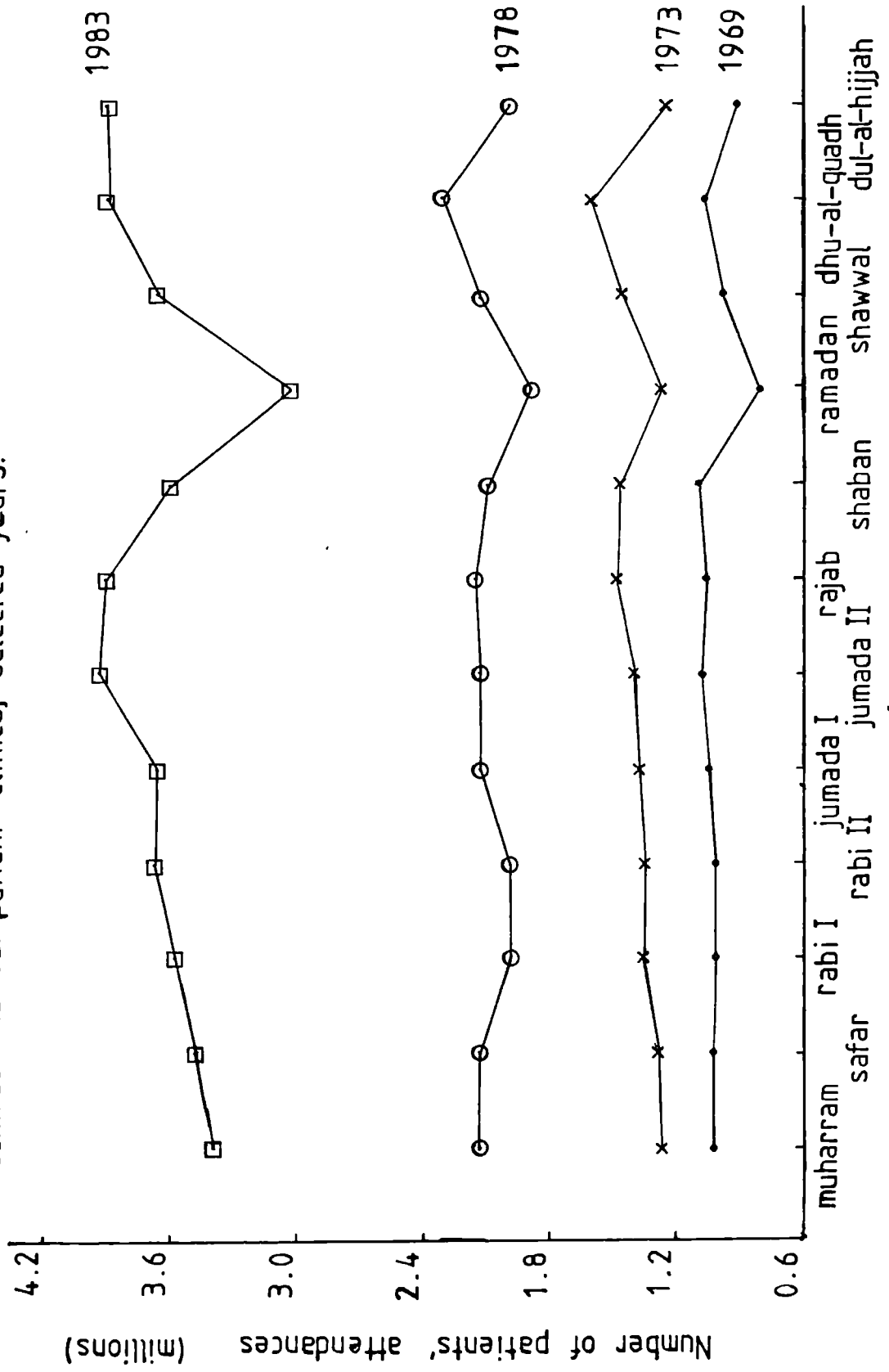
In the Saudi political system overt political activities are effectively replaced by bureaucratic politics. The Saudi bureaucracy enjoys an authoritative position in the political decision making process, and the functional positions of civil servants and health professionals have given them a relatively wide opportunity to influence health policy making. Consequently, internal politics is relatively significant in Saudi health institutions.

The relationship between the Saudi monarchy and health provision reflects the government concern for the welfare of the population. However, the increasing involvement of the monarchy in donating and securing substantial financial resources for health services is gradually serving to increase social cohesion in the country, and to foster efforts to meet national aspirations in the health field. The government and the public are brought closer together by the policies which provide more and better health services and contribute to improvement in living standards of the public. The provision of highly advanced medical services in the country is a prestigious achievement which is seen as a step in the country's quest for achieving comparable international standard of health provision.

The process of health policy decision making is open to political influences, and yet the impact of political pressure on the health system is not clear. It is accommodated by the system in such a way that its contribution is not prominent. Although traditional social groups can influence health policy making, no influence is persistent and strongly directive. The incorporation of the various traditional groups in the national health planning process has effectively curtailed their influence. However, the containment of their influence is fundamentally due to the type of political organization in the country.

The harmonious integration of the influences of traditional groups is made at the expense of the health

Figure 9.1 Monthly variations in the number of patients' attendances at health centres and out-patient clinics, selected years.



system. The opening of health policy decision making process to the influence of the various traditional groups directly has precipitated a lack of discipline in the process, which markedly affected its effectiveness. The various procedures which have evolved to regulate the interaction between traditional groups and health officials have prevented the development of rational planning and decision making processes. Health provision in the country became more fragmentary as public agencies choose to provide services. The maldistribution of health services in favour of urban areas and the lack of determined efforts to remedy the serious lack of health statistics have resulted from the present planning and decision making processes.

A number of developments in the health field in the country which are currently in the formulation stage are expected to have a significant effect on the development of the Saudi health system in the future. Mass media, particularly newspapers are increasingly placing pressure both on health authorities to improve standards and increase efficiency, and on the public to participate in developing health services.

The government is considering the adoption of new regulations to allow professional groups to organise themselves, and to emphasise the need to improve professional standards and maintain them. The government is also keen to improve the efficiency of the health system through organizational changes which stress discipline and

improve coordination between health providers. However, the effects of such developments are not likely to change the pattern of the relationship between politics and health provision a great deal.

CHAPTER 7: THE MINISTRY OF HEALTH

1. Introduction

While Ministries of Health are considered the main providers of health services in developing countries, they are frequently blamed for the shortcomings in health provision. They are relatively weak in comparison with other Ministries, and cannot compete successfully with other Ministries for resources (Walt and Vaughan, 1981, p.12). They have weak administrative structures, and are staffed by health care professionals who lack adequate managerial skills (Golladay and Leise, 1980, p.38). The relationship between the Ministry of Health and the government machinery in developing countries places organizational constraints on the Ministry:

"The capacity of ministries of health to provide fresh leadership for new programs is constrained by rigid civil service rules established by a public service commission"

(Golladay and Leise, 1980, p.39).

In Saudi Arabia the Ministry of Health is the largest and oldest organization providing health services in the country. The history of the Ministry reflects the pattern of change in the provision of health services in the country, and the politics of the Ministry is a microcosm of the politics of health in the country. The process of

decision making in the Ministry provides the medium for the interaction between bureaucratic and traditional forces, and the performance of the Ministry is a function of the dynamics of the interaction.

In this chapter I shall examine the politics of the Ministry of Health through an analysis of its organization and selected processes in the context of its relationship with the government and interest groups. There are three sections in this chapter. The first section provides a brief history of the evolution of the Ministry of Health. In the second section I analyse the relationship between the Ministry of Health and the rest of the government machinery. The third section deals with the relationship between interest groups and the Ministry of Health, and its implication for health provision.

2. The Establishment of the Ministry of Health

The nucleus that developed into the Ministry of Health was inherited by King Abdulaziz, the founder of Saudi Arabia, from the Shariafs, the rulers of Hejaz, when he conquered it in 1926 (see table 7.1). It was then a small health unit located in Mecca (Sadiq, 1965, p.87), whose main function was to control the health situation in Mecca during the pilgrimage season. Its activities were primarily preventive public health measures aimed at controlling communicable diseases. Resources for the health unit were

meager, and the few personnel who comprised it could only provide a limited service.

Table 7.1 Summary of the Evolution of the Ministry of Health, Saudi Arabia.

<u>Date</u>	<u>Event</u>
1926	Health unit in Mecca to provide preventive services to pilgrims.
1927	Health unit renamed Directorate of Health and Ambulance, and its services expanded.
1931	Directorate attached to Ministry of Interior.
1934	Directorate attached to the Presidency of the Council of Deputies.
1951	Ministry of Health was established, and its services were expanded to cover whole country.
1950s	Headquarter of the Ministry was moved to Riyadh, and the Ministry was reorganized, and its services expanded.
1960s	The Ministry was re-organized in 1961 and 1969, and its services were expanded.
1970s	The Ministry adopted Primary Health Care approach in 1979.
1980s	A massive hospital construction programme was started, and services were expanded. The Ministry was re-organized in 1983.

In the period between the conquering of Hejaz (now the Western Province) in 1926 and the declaration of the establishment of the Kingdom of Saudi Arabia in 1931 there were some improvements in health services in the Western Province. In 1927 the health unit became a Directorate of Health and Ambulance, and was attached to the Agent-Director in Hejaz (Sadiq, 1965, p.87). The Directorate of health and Ambulance ordonnance was also published, and a health council was formed in Mecca to run the Directorate.

Initially the services of the Directorate were restricted to the main cities in the pilgrimage region (Simmon et al, 1954, p.30). They included hospitals in Jeddah, Mecca, and Medina, and dispensaries in towns along the routes taken by pilgrims in their way to Mecca. The Directorate faced many difficulties because of lack of resources, especially in recruiting medical staff from abroad.

In 1931 the Directorate of Health and Ambulance was attached to the newly established Ministry of Interior. When the Ministry of Interior was linked to the Presidency of the Council of Deputies in 1934, the Directorate was attached directly to the Presidency of the Council of Deputies. The period 1931 to 1951 witnessed a gradual but a slow expansion in the services of the Directorate. It expanded its services to outside the pilgrimage region by opening dispensaries in Riyadh and Al-Hasa, and by 1946 its total bed capacity had reached about 300 beds.

In 1950 the Directorate was reorganized to provide the expanded services. The country was divided into seven health regions. Four of the seven health regions were in the pilgrimage region (see appendix VI). Although the reorganization implied an extensive health provision, in reality health provision was limited to the main cities. There was a shortage of all resources.

In 1951 the Ministry of Health was established as an autonomous government department, and His Royal Highness Prince Abdullah Al-Faisal was appointed as the first Minister of Health. Since then there had been eleven ministers and acting ministers. The Ministry has grown into a complex organization, and its services expanded enormously to reach all parts of the country. The oil wealth of the country allowed much needed resources to be made available for the expansion of the services. The establishment of the Ministry was followed by the transfer of its headquarter from Mecca to Riyadh. The transfer signalled a change in both the focus and scope of the Ministry's services from services to pilgrims in the main areas of the pilgrimage to health services to the public in all parts of the country.

The historical origin of the Ministry of Health indicates the root of many of the difficulties that currently confront health authorities in the country. The

Western Province*, where health provision originally started, has more hospitals and services than any other health region in the country (Ministry of Finance, 1984, p.114). The moving of the Ministry headquarter to the capital Riyadh was associated with increased provision of hospital and other health services in Riyadh. This regional inequality in health provision has become part of the system, and health policies in the 1970s and 1980s have enforced the variations by concentrating health provision in the urban areas.

In the 1950s the concern was with the establishment of an adequate organization to oversee the expansion of the services of the Ministry. In 1953 a technical office for planning health programmes and projects was established and attached to the Minister's office. The Ministry collaborated extensively with the World Health Organization, and many World Health Organization experts and consultants participated in the work of the Ministry in the 1950s and early 1960s. The World Health Organization carried out a number of major schemes in the country in that period. They included projects in environmental hygiene, water sources, health education and training, basic health and medicare services (Ministry of Information, n.d.a, p.12).

* The Western Province includes two health regions; the General Directorate of Health Affairs in the Western Province and the General Directorate of Health Affairs in Medina Province.

The World Health Organization provided and still provides technical assistance to Saudi health authorities as part of the technical cooperation provided by the United Nations and its specialized agencies to Saudi Arabia. A United Nation Development Programme with a permanent representative in Saudi Arabia has been established (United Nation Development Programme, n.d.) Its Saudi counterpart is the Agency for Technical Cooperation Administration, which is directly attached to the Council of Ministers (Agency for Technical Cooperation Administration, n.d., p.18). The agency is the link between the Saudi government and United Nations Development Programme, and all contacts between the Ministry of Health, for example, and the World Health Organization are made through the agency.

The Ministry of Health's requests for technical assistance are submitted to the agency which makes contacts with the World Health Organization or other specialized agencies of the United Nations, and arrange for experts and consultants to visit the country to assist the Ministry. Where cooperative projects are involved the agency is involved in the negotiation stage , and hands over to the Ministry when agreements are signed. In the Ministry of Health there is a department of International Health attached to the deputy Minister for executive affairs. The department coordinates the implementation of technical cooperation projects and assignments between the World Health Organization and the various departments of the Ministry. It also keeps the Ministry up-to-date with the

international health situation and arrange for officials to attend international and regional meetings and conferences.

In the 1960s more financial resources were made available to the Ministry of Health by the government, and there was a rapid expansion of hospitals and health posts. The expansion of services was mainly in the hospital sector, and most hospitals were built in urban areas. Rural and remote areas were provided with health posts and mobile clinics. The rapid expansion of the Ministry's services meant that its organization has to be improved. Many minor organizational changes were introduced to accommodate the provision of new services (Baterjee, 1980), and two major re-organizations took place in 1961 and 1969.

Everytime the Ministry is reorganized, provisions were made for evaluation and adjustment of its organization with time (Baterjee, 1980), but these often do not take place. This failure to adjust to changing circumstances is the source of many of the difficulties the Ministry faces now. The Ministry does not have the technical ability to plan and organize the provision and expansion of its services. Its shortcomings are directly the result of the deficiency of its administrative machinery. This has been recognised in the Ministry all the time, and efforts to remedy it are evident in the reorganization attempts in the Ministry's history. The Ministry sought help from the World Health Organization and other international agencies. The

relationship between the Ministry and the World Health Organization indicates some primary causes of the deficiency of the Ministry's administrative machinery. The World Health Organization provided extensive technical assistance in all health areas including health planning and administration. Many World Health Organization experts worked in Saudi Arabia to start health programmes, and a number of Saudis were given World Health Organization fellowships to train them abroad (Kabbaa, 1983, p.49).

However, World Health Organization-sponsored programmes have followed a characteristic pattern identical to the pattern of growth of the Ministry itself. They have often started with high promises and immediate improvements as World Health Organization experts are in control and running the programme. When they leave after a number of years, the programme starts to become deficient and eventually it becomes similar to the other parts of the health system. When the programme is specific and short-term such as malaria control, benefits tend to be lasting, but when the programme is an on-going one such as laboratory services and auxiliary training the benefits do not persist.

The failure of the Ministry to maintain the momentum for improvement in World Health Organization-sponsored programmes confirms the administrative problems of the Ministry. But since the World Health Organization usually trains Saudis to take over the project that it sponsors,

then the problem lies in the organizational aspects rather than the lack of organizational structures. In the remaining sections I shall deal with some of the factors which contribute to the deficiency of the administrative machinery of the Ministry.

The momentum of growth of the 1960s seemed to peter out in the early 1970s. However, in the late 1970s two major developments took place in the Ministry. In 1979 the Ministry adopted the World Health Organization-sponsored Primary Health Care approach, and subsequently started to implement a comprehensive Primary Health Care programme. At the same time the Ministry started a hospital construction programme to build more than 36 hospitals by 1985. In 1983 the Ministry was re-organized to improve the management of its rapidly expanding services. A summary of the main historical events in the evolution of the Ministry of Health is presented in table 7.1.

During the formative period of the Ministry of Health there was a considerable amount of disease in the country which needed medical intervention in a hospital setting. But while the Ministry's hospital policy in the 1950s was appropriate, it became a standard policy in the decades thereafter regulated only by the availability of financial resources. Most policies of the Ministry of Health had been adopted in the early years of the Ministry's history, and they are changed marginally since, mostly in response to changing economic circumstances. The growth of

oil revenues of the country corresponds to the pattern of growth of the services of the Ministry of Health.

The growth of the Ministry is characterised by alternate periods of service expansion and organizational consolidation. In the 1950s it was planned, but after that there were time lags between growth and organizational changes which makes the task more difficult. National oil revenues increased substantially since 1973, and public agencies started their projects for health services in the mid 1970s but the Ministry of Health started its own projects in the late 1970s. Now, the Ministry is trying to make up for the slow growth rate of the last two decades in a short period of time.

Since the 1980s the Ministry of Health has sought technical assistance through bilateral cooperation with friendly countries and more from the international health market. It is interesting to note that management arrangements with foreign countries and international companies have been used to run some hospitals. While this may solve the problem of administration on the short term, it does not deal with the planning aspect and the long term prospect. The high cost of such arrangements and the problems that they unavoidably create can not be ignored. This supports the need to develop appropriate policies to allow the Ministry to plan its role in providing health services to the public.

In other developing countries their ministries of health were established during their colonialization period. After independence, national governments retained previous organizations, and health ministries and departments developed along the same bases laid down by colonial powers. In socialist developing countries national governments reorganized their health services ^{in line with} their political ideologies. In both cases the country's circumstances, particularly the relationship between the Ministry of Health and the government apparatus, determine the particulars of the evolution of the country's Ministry of health. In the next section I shall consider the relationship in the Saudi case.

3. The Bureaucracy of the Ministry of Health

While it is incorrect to describe the Ministry of Health as totally independent in the running of its affairs, it is also misleading to think of it as totally dependent on other governmental agencies. The overlap and interdependence between the Ministry and some other Ministries and public agencies can not be easily defined. This uncertainty about the relationship between the Ministry and other public agencies is characteristic of the bureaucracy of the Ministry of Health. In this section I shall examine the bureaucratic procedures between the Ministry of Health and the Ministry of Finance and National Economy and the General Civil Service Bureau through the

analysis of the budgeting process and personnel system at the Ministry.

3.1 The budgeting process

Appropriations for the Ministry of Health, like other Ministries and government agencies, are divided into four major sections; salaries and allowances, general expenses, miscellaneous expenses, and projects. Each section is further divided into sub-sections. For example, salaries and allowances section includes fixed salaries, salaries of contract staff, indemnities etc. The Ministry of Finance, in consultation with the Ministry of Health, decides the annual budget of the Ministry of Health and approves health projects. Once the budget has been approved there is limited scope for changes in expenditure. To understand the extent of the power of the Ministry of Finance it is important to understand the budgeting process in some detail.

During the period in which the budget is prepared officials from the budget division of the Ministry of Health present the Ministry's requirements to their counterparts in the Ministry of Finance and National Economy who discuss the requirements with them. For each sub-section the requests of the Ministry are examined in relation to expenditure pattern in past years and any national decisions that have bearings on the sub-section. For example, for the sub-section dealing with fixed salaries the Ministry of Health would request salaries for the posts already in

existence and some additional posts that are required for expanding the services. Depending on the size of the request and its importance the additional posts may be approved, disapproved, or as mostly occurs only some are approved. Then the appropriation for the sub-section is decided. The cumulative total of the sub-sections gives the budgeted appropriation for the section, and so on.

This undermines the authority of the Ministry of Health to decide on expenditures, particularly in response to emergencies and unforeseen circumstances, and has serious implications for the development of health policies in the Ministry. The annual budgeting process increases the importance of the civil servants who conduct the negotiations. Thus, the personality of the top officials in the Ministry of Health becomes significant to the process of securing funds for projects in competition with other Ministries (Al-Ammari, 1976, p.29). The use of personal relations is a respected social behaviour common in developing countries (Myrdal, 1968).

The system reduces the flexibility of the Ministry of Health in deciding how to spend its budget and ties its policies to the pattern of appropriation approved in the budget negotiation. If the Ministry wants to overspend in one section, it must request the additional money from the Ministry of Finance through the Council of Ministers or the King. The Minister can transfer a limited amount of funds from one section to another, which provides some degree of

flexibility in the Ministry. The authority to transfer appropriations between sub-sections and sections is not defined permanently, but is usually stated when the national budget is announced. In most years the Minister of health is given the power to authorize some transfer between sub-sections within the same section. In many cases the Ministry overspends in some sub-sections and underspend in others. Transfers between certain sub-sections and exceeding certain sums of money, or between sections may require the approval of the Minister of Finance, and sometimes the consent of the King or the Council of Ministers.

Budgeting for projects is complex. Projects must be included in declared national development plans, which set targets and objectives for the health sector as well as other sectors. Consultations between the Ministry of Health, Ministry of Planning, and Ministry of Finance and National Economy precede budget negotiations, and provide the initial approval by both Ministry of Planning and Ministry of Finance and National Economy. The Ministry of Health can only request appropriations for projects already approved by the Ministry of Planning and Ministry of Finance and National Economy. During the budgeting process negotiation centres around whether the project should be in this year budget or next year, and the cost of the project. The Ministry of Finance and National Economy performs its own studies to evaluate the cost of projects proposed by Ministries.

The extensive deliberation over the budget and projects between the Ministry of Finance and the Ministry of Health calls for an effective organization on the part of the Ministry of Health, particularly in the fields of planning and budgeting, in order to enable the Ministry to secure the funds it requires. The lack of adequate numbers of qualified Saudi personnel has meant that most of the administrative work in the Ministry is done by expatriates*, which does not help the Ministry in its negotiations with the Ministry of Finance and National Economy. The negotiating position of the Ministry of Health is further weakened by the lack of accurate data to back up their arguments. In the absence of basic health data the case for health provision is weakened, and the allocation process shifts towards subjective personal initiatives rather than objective rational reasoning.

There is a general agreement among health officials that financial controls exercised by the Ministry of Finance and National Economy over the Ministry of Health are excessive and hinder the activities of the Ministry. Many health administrators whom I met have suggested that a radical change in the financial regulations is needed to

* Although a decision to employ only Saudis in administrative jobs has been made by the General Civil Service Bureau, in practice there are still some expatriates in almost every public agency doing administrative work.

give the Ministry the necessary flexibility to be able to improve its services. They argue that health provision is different from other government activities, and it involves unforeseen circumstances which require urgent action. The present financial controls do not allow the Ministry to cope satisfactorily. However, despite the increasing dissatisfaction with the financial controls, there is no indication that changes are being considered. The changing economic situation and the decline of national oil revenues are more likely to lead to more tightening of the financial controls.

3.2 The personnel system

The relationship between the General Civil Service Bureau and the Ministry of Health is also complex. In order to understand this relationship it is important to examine the process of staffing a newly built hospital with emphasis on the recruitment process.

Once the Ministry of Health has constructed a hospital, the Ministry will draw up a list of the staff it needs for running the hospital. The Ministry applies to the Ministry of Finance and National Economy for the posts it needs. Assuming that an agreement is reached and the number of posts needed are approved and budgeted for, it becomes the responsibility of the General Civil Service Bureau to recruit the required staff to fill up the posts. When the Ministry of Health draws up its list of required staff it is

bound by the categories of staff already compiled by the General Civil Service Bureau. If there is a need for a staff in a new category, then a request for the new category would need to be studied by a committee with representatives from the Bureau, Ministry of Finance and National Economy, and the Ministry of Health. If the request is approved and the new category is registered, then staff in that category can be recruited.

The Bureau receives lists of the names of graduates from colleges, universities, and sponsored students studying abroad just after their graduation. It also receives requests from ministries and government agencies for staff. The Bureau, after taking the wish of the graduate into account, appoints graduates to vacant posts. So in the case of a hospital, the Bureau appoints available Saudi graduates to some of the posts submitted by the Ministry of Health. And since not enough Saudi health personnel are available, expatriates are recruited. The Bureau has recruitment offices in a number of countries. It also sends teams to other countries to recruit.

There are two major variations in this procedure. Saudi health personnel seeking employment can approach the Ministry of Health directly, and provided there is an approved vacancy, the Ministry can ask the Bureau to recruit the applicant for that vacant post. With regard to expatriate recruitment of health personnel, the Ministry of Health now can send its own recruitment teams to recruit

staff to vacant approved posts after making arrangements with the Bureau. This was agreed because of the large number of expatriates employed by the Ministry.

The General Civil Service Bureau imposes restrictive controls on the Ministry of Health. The Ministry has no say in deciding remuneration for its employees, and has limited influence in recruiting them. The problem is exacerbated by the fact that salaries are comparatively low (Tawati, 1976, p.211). Abussuud noted that:

"There is lack of motivation on the part of public officials. For example, many ministries and government agencies continue to report large numbers of vacant posts. Moreover, there is a lack of flexibility in remunerating Saudi public servants of proven competence which is frequently reported as a major obstacle to building up a strong cadre of experienced staff". (1979, p.160)

The inability of the Ministry of Health to exercise full control over recruitment, and particularly selection, can be damaging to the provision of health services. Decisions such as which country to recruit from, and how to choose whom are made by the General Civil Service Bureau (Al-Neaim, 1980), with subsequent serious implications for the quality of health manpower (see chapter 4). The arrangement to allow the Ministry to send its own recruitment teams has not improved the situation markedly.

The lack of recruitment procedures and guide lines, and the absence of the participation of personnel departments of employing authorities make the arrangements deficient.

The involvement of the General Civil Service Bureau in recruiting staff for the Ministry of Health undermines the Ministry's role in industrial relations. The Ministry is the employer, and yet it is unable to influence the main factors affecting industrial relations in its hospitals and health centres. The outcome of this situation is reflected on the productivity and morale of the staff in hospitals and health centres. The Bureau has also been criticised for allowing nepotism and personal considerations to influence decisions (Al-Awaji, 1971), and for adopting selection and promotion policies which lead to overstaffing and inappropriate appointments (Kalfout, 1971, p.38). An example of the latter is noted by Al-Awaji:

"A classic example, though extreme, was the appointment in the early 1960s of one of the few Saudi Arabian geologists as director of a hospital in Riyadh".
(1971, p.216)

Kalfout reported that loyalty to kinship groups and followers has affected the Bureau's role:

"Many employees have entered the civil service without acquiring minimum scholastic qualifications. The scholastic standards are

often ignored. This allows non-qualified candidates to be appointed and promoted to higher posts which they would never occupy if ultimate efficiency were the goal" (1971, p.43).

After the required staff for a hospital have been recruited nationally or internationally, their names are submitted to the Ministry of Health which allocate them to their place of work. The Bureau decides the salaries and the allowances. The pay system used by the Bureau awards fixed annual increases automatically for Saudis, and percentage increase for expatriates which are determined by their immediate superior on the basis of their work performance. Promotion is available for Saudis based on the Civil Service Code. Promotion is either through length of service or through competitive examinations. Both forms of promotion depend on the availability of vacant posts. The written examinations are organized by the Bureau. Usually employees apply to the Bureau for promotion through the personnel department of the Ministry of Health when they are qualified for it rather than wait for the Bureau to initiate action.

The civil service system allows the individual to choose the post, provided he or she has the qualifications required for the post, rather than allowing the employer to select the best qualified candidate. Al-Awaji noted that the system "provides no measurement device for testing the ability of a person to perform his task either before or

after he is selected" (1971, p.139). Most civil servants are not given introductory briefings, but are asked to start work straight away and learn on the job.

The absence of formal procedures for introducing new staff to the work environment and specifying their responsibilities has given established members of staff the chance to develop local centres of power, because they know the routine of work and are familiar with its difficulties and problems. They become a reference for new staff and a source of advice for them. Many such civil servants take advantage of this situation and give advice and direction only to secure their positions and interests.

The development of such local centres of interest is strengthened by expatriates working in the health system. Many of them do not speak the official language, Arabic, and since all regulations and rules are written in Arabic, they need a translator. Expatriates come from different countries and speak different languages. This results in the formation of groups, each nationality or linguistic group form a focus of interest. Usually the English language is used for communication, and almost everyone in the health system seems to know enough of it to get by.

4. Pressure Groups and the Ministry of Health

In Saudi Arabia interest groups are not organized as openly and overtly as in other countries, and are not formally organized as independent forces in the society. There are no unions to represent health workers, and the government performs the functions of both employer and unions. This situation reflects the nature of the political system of the country which has its different traditional avenues of pressurising policy makers. The government policy on the representation of interest groups is not clear. Although the present situation indicates a restrictive policy, there are indications, such as the current debate concerning official representation of the medical profession, of a liberalising attitude.

However, there are certain groups which influence the policies of the Ministry of Health to make gains for themselves. Members of such groups are usually active as individuals and in some cases collaboration between members in some localities takes place. Civil servants, professionals, and local leaders and Governors affect the resource allocation policies of the Ministry, and are, therefore, politically influential (Heller and Elliott, 1977, p.5).

Although these groups which include traditional and modern elements are often influential, they lack the organization and attributes which are common to pressure groups. In the pluralist theory of pressure group politics

there is competition between groups to influence public policies in favour of their interests (Cawson, 1982, ch.5). The relationship between pressure groups and public agencies is usually mutually beneficial (Marmor, 1983, p.14). In the politics of the Ministry of Health interest groups are often participants in the decision making process, and their pressure activities do not benefit the Ministry.

The form of pressure group politics is a function of the structure of the decision making process (Eckstein, 1960, p.38). The power of health bureaucrats and the influence of local leaders and Governors give them the opportunity to affect health policies. They act as political agents in the health care arena (Gesler, 1984, p.58). In this section I shall examine the role played by the main interest groups which affect the policies of the Ministry of Health; civil servants, professionals, and notables and local Governors.

4.1 Civil servants

Civil servants in the Ministry of Health often tend to be more loyal to their families, tribes or nationals than to official policy. They put the interest of their social groups first, and consider it their responsibility to further them against competition from other groups. Such behaviour is socially acceptable and quite common in the Saudi society.

The centralization of power in the Ministry of Health has made civil servants, especially those working in the Ministry's headquarter, influential. They effectively formulate the policies of the Ministry, and allocate resources to regions and services. The activities of civil servants constantly affect the policies of the Ministry. Common decisions affected include the siting of hospitals and health centres and the appointment of middle and senior health managers. Civil servants often seek to win projects to build hospitals and health centres in their home villages or cities (Al-Awaji, 1971, p.240), and to appoint relatives and members of their families, tribes or nationals to middle and senior management positions in the Ministry. This behaviour results in conflicts between interest groups, though the conflicts are never officially acknowledged.

The bureaucracy of the government is the source of power of civil servants. The social acceptance of their behaviour has helped to strengthen their power, and can create obstacles for attempts to curb their influences. The power enjoyed by civil servants in the Ministry of Health has affected the distribution of health services. It also undermines the administrative efficiency of the Ministry. When decisions are made on the basis of personal allegiances, then regional inequalities in health provision are bound to emerge. The present concentration of health facilities in urban areas has been partly caused by civil servants' interference.

Examples of incidents which illustrate the influence of civil servants are numerous since there is hardly a decision behind which there is no interested civil servant. In one incident a general practitioner working in a health center was promoted to the position of assistant regional health Director General in just few months. It was made possible by the appointment of a member of his tribe to a senior position in the Ministry headquarter. That was followed by the appointment of one of his relatives as the regional health Director General. His relative promoted him to the post of assistant regional health Director General.

4.2 Professionals

The majority of professionals in the Ministry of Health are expatriates. They dominate the services and have a monopoly over technical decision making. They advise policy makers and participate in policy formulation. This arrangement gives them, especially the doctors, a powerful position in the Ministry. This has been often undermined by internal differences because expatriate professionals come from many countries. They tend to group themselves around nationalities, and each nationality is seldom powerful enough to dominate technical decision making by itself. The influence of expatriate professionals is further weakened by the increasing number of Saudi health professionals joining the Ministry.

The extent to which professionals can affect decisions and its individual character are evident in an incident which I witnessed during my field work. A hospital director was asked by the regional authorities to nominate some doctors for an assignment. The director, after consulting the doctors at the hospital, submitted several names, but did not include the name of one doctor who wanted to go on the assignment. The doctor contacted his friends, who were working at the regional office, and when the decision was made about who were to go on the assignment, his name was included.

There is no distinction between administrative and professional hierarchy in the Ministry and this increases the scope for professionals to influence policies. As the country suffers from an acute shortage of health professionals, and professionals are not adequately trained to manage the services, the common practice of appointing professionals, particularly doctors, to key administrative positions is inappropriate. In the early 1980s the Ministry came close to adopting a policy of appointing only doctors as hospital directors, which reflects the strong domination of the medical profession in the Ministry.

The power of the professionals, especially doctors, is increasing in the Ministry because of the increasing number of Saudi doctors joining the Ministry. Now, the country has three medical schools and the number of Saudi doctors returning home from abroad is increasing. Many

Saudi doctors are calling for the organization of the medical profession in the country. The issue is currently being debated in professional and governmental circles, and something is expected to emerge in the near future. Whatever the outcome would be, the power of the medical profession in the Ministry is going to increase, and this development will encourage other professionals in the country to follow suit.

The influence of professionals is more effective at the local level. Expatriate health professionals will continue to influence health policies in the country as long as the country continues to depend on a large number of them. The lack of an overall national health plan with a defined role for professionals is helping to strengthen the power of professionals. The move towards creating a professional medical organization in the country is unprecedented, and testing. Saudi doctors are trained in many different countries with different medical traditions. The emerging Saudi medical profession is going to be influenced by all these different medical traditions, in addition to the need to cater for a different recipient society in terms of social and cultural aspects.

An indication of the outcome of such development when it takes place is evident in the medical schools of the country. Over the last ten years an increasing number of Saudi doctors returned home to take up key positions in the newly established medical schools which are still dominated

by expatriate teaching staff. Conflicts between Saudis trained in different countries (mainly Britain, United States of America, and Germany) developed over what system should be used in the schools. Thus, in King Saud University medical training is similar to the British system, while in King Faisal University the American approach is favoured. However, this is not readily apparent because all universities in the country use the U.S. credit system.

The medical school of King Saud University was established with the cooperation of a British university, University of London, and the medical school of King Faisal University was established with the assistance of American universities. While this has affected the orientation of the schools, the training background of the majority of the schools' Saudi staff is the most influential factor because medical schools and the universities have considerable freedom in running their affairs. It is almost certain that when a medical representative body is established, the same type of conflict as in medical schools will take place. The special social and cultural features of the Saudi society are not considered relevant to the argument.

4.3 Notables and local Governors

Notables and local Governors are often engaged in lobbying the Minister of health and senior officials at the Ministry and regional health authorities on behalf of their

communities. They usually demand more hospitals, health centres, and improved services in their localities. The Minister and senior officials listen to them and promise to consider their demands. Generally, such demands are ignored, though the interaction is often informative for the Minister and his senior officials. Sometimes action is taken towards meeting the demands such as when the request is for a hospital and a health centre is provided. Al-Awaji reported that:

"Influential people in government or in the commercial sectors may cause the initiation of projects for their respective regions or localities". (1971, p.240)

Notables and local Governors are not often effective in influencing the policies of the Ministry of Health, though their potential is quite considerable in the Saudi society. They tend to be disregarded because their demands are often unrealistic. For example, leaders of a community of some 20,000 inhabitants served by a health centre have demanded that the Ministry build a hospital in their town so that they need not travel 30 kilometers (17.5 miles) to the nearest hospital in the nearby town (Al-Riyadh, May 1985c). However, some such demands may succeed if the local leaders have the right personality and connections and the demands are seen as reasonable.

Notables and local Governors also interact with health officials to make personal gains such as securing services for themselves or their relatives. Such individual interactions are significant at the local level and amount to interference with the authority of health managers. A common form of such interference is when individuals seek to admit a patient to the hospital. The hospital authority may have considered the patient's case and decided not to admit him or her. If the patient has not been seen at the hospital, the action of the interfering person would result in the hospital considering his or her case quickly and admitting him or her.

If the patient had been seen at the hospital and was not admitted because in the opinion of the doctor he or she need not to be admitted or there was no bed for him or her or another reason, he or she would be admitted. Such operational interference used to be a chronic problem in the health system, but it declined in recent years as more beds had been made available in general hospitals. The problem is often seen in specialist hospitals because the facilities are limited.

Interference relating to visiting in-patients is very common. The number of people allowed to visit in-patients is restricted. However, relatives and friends of in-patients want to visit more frequently than allowed, spend more time when visiting, and visit in numbers more than allowed. The number of of people wanting to visit an

in-patient can exceed 15 easily. And since regulations limit the number of people allowed to visit an in-patient, his relatives and friends use ways to obtain permission to have their way. Notables and local Governors are frequently asked to interfere with the hospital authority to obtain a permission.

The relationship between notables and local Governors and the Ministry of Health is paradoxical. Health officials welcome and receive notables and local Governors, and yet they tend to disregard their demands most of the time. It is part of the political tradition to receive local delegations, and it is of considerable importance to the political system. The handling of the requests is seen differently because it involves technical matters which, the public believe, may not be within the government capability, and it takes time for health authorities to overcome the difficulties involved.

5. Comment

The politics of the Ministry of Health is determined by three main factors; the powerful position of the bureaucracy, the influential position of traditional social groups, and the health resource situation in the country. The interaction between the factors is complex. It has created a vicious circle of strong central control, administrative deficiency, and informal traditional practices.

The power of civil servants and professionals in the Ministry is used to manipulate policies for their private interests. The expansion of the Ministry's services led to a substantial growth of its bureaucracy. The recognition given to local leaders and Governors in the political system re-inforces traditional loyalties and encourages nepotism. The centralization of power increases the potential power of bureaucrats, and encourages corruption and nepotism (Myrdal, 1968, Ch. 20). The budgeting process and personnel system of the Ministry of Health illustrate the kind of constraints that centralization of power causes.

The lack of adequate skilled health managers exacerbates administrative problems and increases the potential for civil servants, professionals, and traditional groups to influence policy decisions. The availability of financial resources has allowed the Ministry to expand its services and avoid open conflicts that could disrupt health services. In the present situation resources are not always used optimally as the pressure of traditional groups can not be ignored all the time, and health bureaucrats are more loyal to their social groupings than to the Ministry. The distribution of facilities and services inevitably leads to regional inequalities and some resources are wasted.

The relationship between the Ministry of Health and other public agencies generally imposes the practices of the public bureaucracy in the country on the Ministry without allowing for its special function. Hence, in the

Ministry of Health there is a centralization of authority, and "responsibilities of health officials are poorly defined" (Al-Baker, 1972, p.66). Other aspects of the public bureaucracy such as formalism, nepotism, favouritism, corruption, and the personality factor affect the performance of the Ministry as they do in other Ministries (Al-Awaji, 1971, p.222).

At the Ministry level loyalty to social groupings, nepotism, and formalism create administrative problems, which can hamper the institutional development of the Ministry (Riggs, 1966, p.74). The lack of procedures and guide lines in the personnel system, for example, reflects a neglect of organizational development which is caused by internal administrative difficulties. This creates organizational inflexibility in the Ministry. When financial resources become less readily available than at the present time, competition in the allocation process will develop, and internal conflicts may appear between interest groups. Although the intolerance of the political system for such development and the absence of formal organisation of interest groups may lessen the consequences, the potential for conflict can not be ignored.

The expected official recognition of the Saudi medical profession poses a number of significant consequences to the Ministry, and in particular the resources allocation process. An increase in the power of the medical profession is bound to increase the anomalies in the resource

allocation process. This will eventually re-inforce loyalties in the Ministry and the circle of central control, administrative deficiency and informal traditional practices will be maintained. The impact of a Saudi medical organization can be different if the profession becomes less affected by the loyalty factor and more devoted to the country's health problems. However, even such pattern of development will stimulate reactions and a period of difficulties may become unavoidable.

The process of resource allocation in the Ministry needs to be made more rational and less susceptible to influence by health bureaucrats and traditional social groupings. This requires a number of radical changes in the existing organizational arrangements in the Ministry, particularly in the financial and personnel systems. The role of the Ministry of Finance and General Civil Service Bureau needs to be re-considered so that while some controls over the Ministry are maintained they should not be made so inflexible that the provision of health services become affected. Improvements in the organization of the Ministry will allow the Ministry to utilize its resources more efficiently, and develop adequate manpower policies to meet its requirements in the long term.

The situation with respect to pressure group politics in other developing countries contrasts markedly with the Saudi situation. Most developing countries allow representation of pressure groups including professionals

and unions. This has emerged because political systems in most of these countries allow pressure groups to function independently and tolerate them most of the time. In some countries the process has been started during the colonization period and was passed on to post-independence governments. Thus, in some African countries, for example, the medical profession is organised and affiliated to the British Medical Association. Pressure groups play a significant role in health services development where they are allowed to function.

6. Conclusion

The history of the Ministry of Health indicates a lack of consistent concern for developing its health services. The shortage of technical staff especially in management and planning has created difficulties, and resulted in achievements short of the objectives hoped for. This reflects the low priority given to health provision. Health services are considered as part of the welfare services of the government.

The emphasis placed by the government on controlling the activities of the Ministry through strong centralization of the financial and personnel systems is excessive and damaging to the operations of the Ministry. The technical and operational dimensions of health provision are not allowed for sufficiently in the public bureaucracy which is imposed on the Ministry of Health, and

subsequently, resources and opportunities are wasted in the complicated bureaucratic dealings between the Ministry and other government agencies. The Ministry of Health operates in a political environment which tends to undermine its efficiency.

The centralization of decision making in the Ministry has given health bureaucrats and professionals a strong position to influence policies at the formation and implementation stages. Although the discouragement of organized interest groups' representation is easing, the weak institutional tradition in the country means that there will be little change for many years to come. The acceptability in the Saudi society of the principle of loyalty to the social groupings will maintain the informal practices of civil servants and professionals in the Ministry.

The political environment of the Ministry disguises a fundamental weakness in its administration, which is exacerbated by the shortage of skilled Saudi health personnel and the dependence on expatriate staff. The administrative deficiency of the Ministry is partly caused by the informal traditional practices in the Saudi society. The significance of local leaders to the legitimacy and stability of the political system preserves their potential to influence health policy decision making in the Ministry. In the next part I shall examine the social and cultural background of informal traditional practices, and explain

their interaction with political and economic factors in the provision of health services in the country.

PART FOUR

SOCIO-CULTURAL INFLUENCES

Introduction

In part 2 and part 3 I discussed the resources available for the Saudi health system and the process of allocating these resources to the various services and regions. In this part I shall examine the utilization of these resources by analysing the response of the general public, consumers of health services. The analysis will focus on the impact of socio-cultural factors on the patterns of utilization of health services in the country.

The analysis deals with socio-cultural factors which affect health provision, and how they influence its organization and development. A complex discussion of socio-cultural processes which operate in the Saudi society is beyond the scope of this study and would constitute a thesis in its own right. In this part I shall provide a short description of the main socio-cultural factors which affect health provision. I have chosen those aspects of Saudi society that are both distinctive and important for the utilization of health resources, especially these factors which affect patients' behaviour and health authorities' policies. The relevance of social organization, religious traditions, and modernization to health provision will be examined and trends and potentials identified through the analysis of three aspects of health provision; primary health care services, services provided during the annual pilgrimage to Mecca, and the health services of charitable societies.

There are three chapters in this part. In chapter eight I expand the brief description of the socio-cultural environment in Saudi Arabia presented in chapter two, and analyse the health implications of the main socio-cultural factors at the national level. In chapter nine I discuss the effects of social customs and relationships on the pattern of utilization of primary health care services, and analyse the impact on the health service of one unique Saudi religious event, the annual pilgrimage to Mecca. In chapter ten I examine a modernization theme by looking at the emerging role assumed by charitable societies in providing health services and assess its relevance and potential to health services development in the country.

CHAPTER 8: THE SOCIO-CULTURAL ENVIRONMENT OF HEALTH
PROVISION IN SAUDI ARABIA

1. Introduction

Health workers in developing countries have been concerned about the influence of the socio-cultural environment on health services (Paul, 1955). Anthropologists and social scientists investigating the relationship between socio-cultural factors and health provision have tended to concentrate on traditional systems of healing and the role of the sick person (Van Etten, 1972, p.336). The diversity of perception of illness and health beliefs in the cultures of developing countries has encouraged the production of voluminous literature on illness and health beliefs and customs (Gesler, 1984).

Kleinman suggested the adoption of a holistic view in the analysis of health care systems (1980, ch.2). This allows discussion of the impact of socio-cultural factors on health services, and reduces the dominance of ethnocentrism and professional bias associated with the individual-centred approach. In the holistic approach the emphasis is shifted from socio-cultural diversity to the identification of a conceptual framework for the relationship. This permits the use of socio-cultural analysis to build up a theoretical framework for the influence of socio-cultural factors on health services development. Socio-cultural factors in the

Saudi society have important consequences to the development of health services in the country. Social phenomena such as the kinship sub-system, marriage customs and attitudes towards the elderly are deeply rooted in the society.

In this chapter I shall deal with the theoretical aspect of the relationship between socio-cultural factors and health provision in the Saudi society. I shall examine three relevant areas of the social organization and culture of the Saudi society; kinship, religious beliefs and customs, and modernization. There are three sections in the chapter and a comment at the end of the chapter. In the first section I shall discuss the main aspects of social organization in the Saudi society which are relevant to health provision including kinship, customs relating to marriage and childbirth, and attitudes towards the elderly and handicapped. In the second section I shall focus on religious beliefs and customs which affect health provision. In particular I shall discuss gender relations. In the third section I study the process of modernization and its health consequences.

2. Social Organization in the Saudi Society

2.1 The family

The family is the basic unit of social organization in the Saudi society (Anthony, 1982, p.97). It is usually of the extended patrilineal type, and typically consists of "the parents, their children, grand children, uncles and

aunts and ascendant and collateral relatives to the third or the fourth degree or more" (Al-Awaji, 1971, p.71). The family culture tends to determine its members' behaviour, attitudes, and roles in the society, and "the individual is much more the product of his family and much less that of other socializing factors than is true in the West" (Pati, 1962, p.96).

Members of the family subordinate their interests to those of the family, and their loyalty to the head of the family overrides all other obligations. The head of the family makes all family decisions after consulting individual members of the family. The principles of loyalty and responsibility to the family and its members are ingrained in individual's behaviour, and "family and community considerations are uppermost in his mind when he is to make significant decisions" (Tannous, 1956, p.77).

Loyalty to the family has far-reaching consequences to the individual's health and the role that he or she may play in health provision in the country. Since the health of the individual is considered the responsibility of the whole family, the individual is not free to make his or her own decision about seeking treatment. The decision, like any other decision in the family, is seen as the prerogative of the household leader. When he decides then his decision is obeyed by all, even if not liked. It is rare for members of the family to disagree and insist on their point of view because it would mean that they will be rejected by the rest

of the family. For example, if a child in the family falls ill and the household leader decides to take him to the local indigenous healer while his father wants to take him to the local hospital, the child will be taken to the local indigenous healer.

For individuals, who work in the health system, loyalty to their kins' folk means that they give preferential treatment to members of their family even if it is against the regulations. This has become socially acceptable (Al-Riyadh, November 1984), though it made the official bureaucracy ineffective (see chapter 6). Thus, nepotism has become important in the resources allocation process in the health system (see chapter 7).

The family usually lives in one dwelling or a number of adjoining dwellings, and as a result living conditions can be bad. Crowding is increased in cases where the family keeps its livestock in the dwelling (Simmon et al, 1954, p.297), though now this happens only in few rural and remote communities. The close physical proximity of members of the family promotes collectivity and strengthens the bonds between the members. In the extended family, meals are usually shared, but men and women eat separately. For example, at lunch time all members of the family, men and women separated, sit around a large circular dish in which the food is placed. The main food is rice with meat which can be prepared in a number of different ways. When they finish eating, they have tea together.

Eating habits in the extended family can increase the chances of spreading communicable diseases because they involve eating from a common dish. They also inhibit changes in the basic diet which can lead to deficiency diseases (Simon, 1967, p.144). In the Eastern Province, for example, medical workers reported that malnutrition amongst children was "cultural, not due to economic deprivation nor to the unavailability of local foodstuffs of adequate nutrient quality" (Flynn, 1965, p.6).

The collective character encouraged by the kinship system is evident in most activities of individual members of the family (Van Nieuwenhuijze, 1971). Social visiting, for example, is very much part of life in the family. Members of the family and some of their neighbours usually gather daily in the house of the head of the family to drink tea. Visiting members of other families in the neighbourhood is common.

Social visiting and collective attitudes encouraged in the family can cause difficulties when members of the family interact with the health system. For example, when a member of the family is admitted to the hospital, almost the whole of the family go to visit him together. A hospital public relation officer once described to me how a whole bus of family members, relatives, and neighbours came to visit one patient. This has implications for the design of hospitals and particularly patients' rooms. This collective behaviour is also observed in out-patient clinics and health centres

where groups of family members are usually seen though only one or two individuals need treatment.

2.2 Customs relating to Marriage and Childbirth

In most communities in Saudi Arabia inter-family marriage is quite popular, and patrilateral parallel cousin marriage is the most common type. Marriages are usually arranged by the family which traditionally considers unmarried daughters in the extended family first before considering girls from other families. This practice is significant for the kinship system because it creates bondage between the parallel lines of the kin groups and increases the cohesion of the kins folk politically and economically (Goode, 1970, p.89). Goode noted that "under a system of arranged marriages, almost everyone gets married eventually" (1970, p.11). In the Saudi society men can marry up to four wives at the same time. However, very few individuals keep more than one wife. The average age of bridegrooms is relatively low, though there are no statistics to specify it.

Polygyny and marriage at young ages affect the demographic pattern of the population significantly with far-reaching consequences. The mother and her children are exposed to risks when women get married at an early age (Omran and Standley, 1976). Endogamy can lead to the spread of some genetic diseases. For example, in the Eastern Province the sickle cell disease, which is genetically

transmitted is relatively common because of marriage between relatives (Perrine et al, 1972, p.1163). A study of 482 deaf children in Riyadh has found that hereditary factors were the major cause for deafness in almost two thirds of the 300 cases which were diagnosed. The authors concluded that consanguineous marriage which was high amongst parents of deaf children should actively be discouraged to reduce the danger of continued propagation of hereditary deafness (Zakzouk, 1982, p.185).

Although an increasing number of Saudi women prefer hospital delivery, many women still deliver at home, often without any medical assistance. Customarily, old women, birth attendants, perform the duties of midwives (Bhatty et al, 1983). Women who prefer home delivery are aware of the risks involved as many of them have come to experience, but they prefer home delivery because it is psychologically and socially more acceptable for them (Cosminsky, 1983).

In the home environment, the woman is surrounded by members of her family who are eager to comfort her and do whatever possible to help her deliver a healthy baby comfortably. In some communities when the woman lives far from her parents' home, her husband takes her to her parents' home weeks before the delivery so that her mother, sisters, and relatives will be around her when she delivers her baby.

If the woman already has children, they are looked after by the relatives until she recovers. In some communities the woman's recovery ends 40 days after delivery, and she returns to her husband's home. This is not a rigid rule, and some woman may stay longer. Some women may not go to their parents' homes at all, while in some cases the mother and probably some sisters will go to the daughter's home when she delivers.

Handling the delivery is one aspect, and looking after the newborn baby is another important aspect. In some communities it may include some rituals such as applying kohol to the eye of the new born. The baby is usually breast-fed, and if the mother can not breast-feed the baby, another lactating woman will be found to do it. In recent years substitute breast-feeding has almost disappeared, especially in urban communities.

The circumcision of boys is another aspect of health which is affected by customs. In many communities it used to be postponed until the boy is over ten years old. Some tribes in the south western region of the country used to make a festival for the occasion, and circumcision is performed publicly as part of a ritual (Shoukari, 1983, p.136). For example, in some tribes the boy has to run quite a distance after the circumcision is done to prove that he is brave. The government felt that some customs associated with circumcision were so objectionable that it took action to forbid them.

Home childbirth has complex implications for the health system. When it takes place without medical supervision and is traditional, then serious health risks particularly from infection are posed both to the mother and her newborn baby. The extent of the family's knowledge of personal hygiene, nutrition, and baby care is crucial to home deliveries. In the home environment, the mother and her newborn baby can receive psychological encouragement and care respectively which can not be provided in the hospital environment. But if complications are involved, it is necessary to have the delivery in the hospital.

2.3 Attitudes towards the Elderly and the Handicapped

Old people in the Saudi society are usually looked after by their sons, daughters, or nearest relative. When the parents grow old they move to their son's house and live with him. They are served by the wife and the children of their son, with whom they usually spend most of their time. When the parents fall ill, the son sees that they get medical treatment and nursing is provided at his house.

Even when the parents are seriously ill and can not move, the son or relatives look after them willingly and passionately until they die. They are admitted to the hospital only when they must be hospitalized. Recently, the process of social change in the society has affected the traditional way of caring for the old, and the government

has taken some responsibility for the care for the elderly. I shall discuss this in section three.

The way in which the family treats the elderly is quite significant for the health system. It saves the need for providing geriatric hospitals and nursing homes, and reduces the need for nursing staff generally. There are no geriatric hospitals in the country, and geriatric wards in general hospitals are not common. The services provided to the elderly in the family are superior to what can be offered in health institutions because of its psychological and social advantages.

Many people in the Saudi society consider physically and mentally handicapped people as hopeless cases. Thus, some parents who have mentally retarded children do not seek treatment for them, but resort to locking them up in a secluded room in the house, or letting them loose in the neighbourhood. Their responsibility is seen to mean feeding them and ensuring that no one is harmed by them. Parents accept physical and mental handicapped children as their fate which they have to live with. They do not seek confirmation or treatment of the illness once they recognize it. It is a general practice in the society to keep such unfortunate happening unpublicised. The behaviour of parents is sanctioned by the society.

Some handicapped children may benefit from medical treatment and physically handicapped people can benefit from

rehabilitative services (Powell and Baasher, 1982). However, the attitude of some parents and the society as a whole has prevented help from reaching those who may benefit from it. Recently, the government provided some facilities for physically and mentally handicapped people, and encouraged parents to utilize them for the benefit of their handicapped children. I shall discuss this trend in section three.

The way in which handicapped people are treated by their families leads to the neglect of their needs and the deterioration of their health. It is responsible for the slow growth of facilities for handicapped people in the country. When handicapped children are not helped early in their lives, their conditions may worsen and make the task of serving them more difficult and more costly.

3. Religion and Health Provision

Islam pervades all aspects of life in the Saudi society, and consequently it affects the individual in every step in his or her interaction with the health system. Advances in science and technology have opened new areas previously unknown to religious people. This has given religious leaders, Ulama, an important role in society in so far as it has become their responsibility to decide how the faithful should react towards the new innovations that confront him. For the health system, the views expressed by religious leaders have considerable importance because they

affect individuals' behaviour and response to the health service.

Generally there are two aspects of the debate about religion and health in the Saudi society. The first concerns specific religious prohibitions and instructions such as the prohibition of alcohol. The second concerns issues about which there is no agreement amongst religious leaders such as contraception. I shall briefly describe selected issues from both aspects and consider their health implications.

3.1 The segregation of gender

Men and women are segregated in the Saudi society, and mixing of the two sexes in public is not tolerated. Islamic segregation of sexes only allows brothers and relatives to interact with their women folk. The kinship system and marriage institution regulate the relationship between the sexes. While religious authorities demand strict segregation, in practice some flexibility is allowed, for example when women go shopping. However, in these situations women should be accompanied by a male blood-relative.

Islam allows the relaxation of segregation when it is necessary, and necessity is defined as when there is harm to oneself. For example, patients would be harmed if they do not get treatment from health professionals of the opposite sex when there is no other alternative, so it is permitted.

The interpretation of necessity and harm is made by the individuals concerned, and different individuals have different definitions of them in different circumstances. There is no formal prohibition or rules imposed on health authorities to strictly segregate men and women, though the pressure on them to provide female personnel for women remains high.

The segregation of sexes creates serious problems for both health authorities and patients. For health authorities it means that facilities have to be duplicated to avoid mixing the sexes, and training facilities such as medical schools also need to be duplicated. This requirement has constrained the aspirations of health planners, and has made the task of providing health services problematic. The relative abundance of financial resources has helped to contain the difficulties for the time being.

In hospitals segregation means that female nurses can not attend male patients, and male doctors can not attend female patients. Even plentiful financial resources can not overcome this. In some medical specialties, there are just not enough qualified female specialists. Health authorities acknowledge the importance of segregation, but argue that they can not achieve full segregation and plead necessity. They seek to reassure female patients and their relatives by providing a female nurse as an attendant when a male doctor examines a female patient.

For patients, the decision to seek medical assistance can be affected by the arrangements provided by health authorities. The response of patients varies. The variations depend on the attitudes of the patients, of their relatives and possibly on the seriousness of the symptoms. Some patients hesitate in seeking medical assistance (Gallagher, 1985b, p.195).

The segregation of gender has more significance to the health system than is apparent. Health authorities do not have a definite policy on the issue, though their responses in practice indicate that strict segregation is an intended policy. Health authorities avoid adopting a clear and public policy on the issue because of the operational implications involved. Ironically, operational difficulties have risen because the official position on the issue is not clear to the general public. Members of the public already interpret the principle the way they want and criticise official arrangements (Al-Riyadh, May 1985b). The extent of difficulties that can arise from the lack of a declared official policy is indicated by the case of one man who wrote to his regional health authority through the daily paper to complain about the arrangement in his local health centre. The male and female doctors work in the same room which was partitioned to allow privacy. The arrangement, he said, allows men in the room to hear the voice of women patients when they talk to their female doctor (Al-Yaum, January 1985).

It is not possible for health authorities, even with generous financial resources, to comply with the principle of segregation. The cost would be prohibitive, and it would be very difficult to recruit the required staff. The majority of expatriate health personnel in the country are non-moslems and the issue can offend them if applied strictly.

In the Saudi society women live a restricted life compared to their western counterparts. They are required to veil themselves to prevent men from seeing any part of their body, though in the Western part of the country some women do not always comply. Some medical researchers have argued that the veiling of women may be a factor in some bone diseases such as rickets (Eldrissy and Taha, 1980, p.409). People usually obtain their requirement of vitamin D, which is necessary for bone formation, from the sun. Veiled girls are unable to get enough of vitamin D from the sun, and when enough supplements are not taken, bone diseases may develop.

Women do not go out to work, though some opportunities in women-only fields such as teaching girls have recently been created. Illiteracy rate among women is very high, Rayn reported that 88% of women were illiterate in 1980 (1984, p.5). In recent years many girls and women have enrolled in schools and literacy classes respectively. The major role for women is motherhood. The relatively high

birth rate in the country ensures that they have a lot of work all the time bringing up children.

The restriction of work opportunities for women affects the health system especially in occupations such as nursing which are traditionally dominated by women. This has meant that health authorities needed to recruit a large number of health personnel especially nurses because there is almost no Saudi female health personnel to recruit. The recent change in attitude which has allowed some women to take up careers in nursing has not changed the situation significantly. Traditional opposition to women's working in nursing need to be overcome to allow significant changes in the role of Saudi women in nursing in the country (Matheson, 1968). A general improvement in the standing of women in the society, particularly in literacy, would make them more suitably prepared to undertake the responsibility placed on them for looking after the health of their children.

The rising number of girls enrolled in nursing schools in recent years has encouraged those who see the exploitation of the position of women in the society as a solution to the health manpower shortage in the country. Although many women are restricted to their homes and there is a tremendous potential labour force untapped, there are relevant factors which need to be considered. The function of bringing up children is often overlooked. In the Saudi society mothers do not get much assistance as appropriate basic services are lacking and public services are generally

under developed. This makes the task time consuming. Until adequate services such as nurseries and public transport are made available, the contribution of women to the labour market including the health field will be limited.

3.2 Prohibitions and Restrictions

Alcohol is strictly prohibited and there are severe punishments for anyone convicted of drinking or dealing in alcohol. Narcotics and addictive drugs are also prohibited. Alcohol prohibition is beneficial to the health system. It means that a number of diseases related to alcohol consumption are not significant in the country. This reduces the need for specialised facilities for the treatment of alcohol-related diseases, and makes resources available for other aspects of health provision. In Bahrain, for example, where alcohol is not prohibited, special clinics were established to deal with the "escalating numbers of alcohol and drug addiction cases" at a considerable cost to the health service (Ryan, 1984, p.72).

Eating the meat of animals which have died spontaneously, or were not slaughtered in the prescribed Islamic way, is forbidden. This religious prohibition introduces "a controlling factor in the spreading of diseases" (Tarizzo, 1957, p.793). This can be significant in areas where public health measures are not well

developed, and the public's awareness of health hazards associated with animals is probably non-existent.

The use of contraceptive devices is controversial, and there is no clearly stated religious opinion on it. There is a number of different opinions. Some religious leaders forbid it, others allow it, and some allow it in certain circumstances such as its use for short periods. At the present time, contraceptive devices are available in the market, and many people use them (Farrag et al, 1983, pp.111-16). The contraception debate is important to health in the Saudi society because other factors are operating to increase the birth rate. A prohibition of contraception can mean increased risks to mothers and their children, and consequently places high demands on the health system.

The contraception issue has not been given its due consideration by health authorities. Health authorities do not have a definite policy on contraception and contraceptive drugs and devices are not supplied at health centres or hospitals except for in-patients in specific circumstances. Patients can get professional advice and are able to buy the devices and drugs from private pharmacies. The ambivalence about contraception and associated attitudes to fertility have led to the neglect of infertile patients. Infertility appears to be a problem in Saudi Arabia (Ledward, 1980, p.118), but it is treated like contraception by health authorities. There are no special facilities for

the treatment of infertile patients and fertility drugs are not supplied to patients.

It is unlikely that health authorities are avoiding the adoption of a definite policy on contraception because of lack of resources or technical difficulties. The failure of religious leaders to agree on one stand towards the use of contraceptive devices has made it difficult for health authorities to adopt a definite policy and put it across to the public. Therefore, they have compromised by avoiding the issue and allowing individuals to decide and seek help as they wish. This attitude has indirectly affected other health activities such as child and maternal health programmes and health planning.

Cigarette smoking is also controversial. A minority of religious people argue that it should be forbidden because of its effects on health. In the past it was forbidden in some parts of the country and smokers were killed by religious fanatics when caught (Dickson, 1959, p.216). However, attitudes have changed now and cigarettes are widely available in the country, and opposition to smoking is strong only in few communities in the central region.

Cigarette smoking affects the health of smokers, and this ultimately places demands on the health system. In recent years the number of cancer cases diagnosed in the country has increased (El-Akkad, 1983; Koriech and

Al-Kuhaymi, 1985), and cigarette smoking is one causative agent (Williams, 1984). It is significant that cigarettes are comparatively cheap in Saudi Arabia and taxes on tobacco are very small.

Religious prohibitions and restrictions can be exploited for health education. People's acceptance of advice and instruction can be enhanced by involving religious people and cooperating with them. The point is not to make the issue religious as happened with smoking in the past, but to utilize the religious apparatus in the community to support health education programmes. In a study of more than 200 developmental projects including public health projects in developing countries Niehoff and Niehoff (1966) found that projects which enlisted the support of religious leaders were all but one successfully completed, and projects which were opposed by religious leaders have failed.

3.3 Religious Duties

Moslems are required to pray five times a day, and each time they have to wash their hands, faces, and feet before praying. They are encouraged to bathe and wear clean cloths for Friday noon collective prayer. Moslems are also required to bathe on certain occasions such as women at the end of their bleeding periods.

The ritual washing and bathing associated with prayer and other religious duties are health-protecting actions which enhance personal hygiene and raise health awareness of individuals. It creates a positive attitude which contribute to the control of communicable diseases usually transmitted through human vectors. Five times a day at prayer times, all moslems turn towards Mecca to pray. This means that work has to stop. In health facilities in the country work stops at prayer time except in emergency cases and when an activity is in progress that can not be stopped without fatal consequences. This imposes operational constraints on health authorities, and creates problems in organizing working hours. Patients are also affected by the stoppages, and the pattern of their visiting of health facilities is related to prayer times.

The ritual washing and bathing associated with religious duties can provide a base for encouraging preventive and promotive measures in the context of health education programmes. Already religious leaders are pointing out such rituals as examples of the religion's concern for the health of individuals, and this can help to initiate cooperation between health and religious authorities.

Moslems are required to fast one month annually, the 9th lunar month or Ramadan. They refrain from eating, drinking, and other things from sunrise in the morning until sunset in the evening. Exceptions are allowed for

travellers, sick and old people, and there is some latitude for individual choice. Many people prefer to fast in Ramadan because even when they are excused they are required to make up for it later when they can. Those who can not do it any time are allowed to feed a number of poor people instead. Moslems are also required to perform hajj, the pilgrimage to Mecca, once in their life time. Hajj will be discussed in detail in the next chapter

Ramadan fasting affects individuals and health authorities. The daily fasting affects the physiology of the body, and this may cause serious consequences for old and sick people who despite the religious exemption may choose to fast. Health authorities are affected because the pattern of utilization changes drastically during Ramadan. During the day almost no one except children seek medical treatment because people fast and are tired, and many consider taking drugs, like taking food, breaks fasting. So patients seek medical treatment after sunset and throughout the night. Despite this re-orientation the number of patients visiting health facilities drops drastically. For example, attendances for Family and Community medicine at the hospitals and clinics of the Riyadh Al-Kharj hospital programme, Ministry of Defence and Aviation, dropped by 38% in June 1982 (Riyadh Al-Kharj hospital programme, 1984, p.1). The drop can be as high as 60% in some health facilities.

Moslems believe that everything in life, including health and illness, is from God (Allah). When God's will is that someone is to have a disease, then no one can stop it or cure him afterwards. And if God's will is that someone who is diseased is to be cured, then that will also happen. However, this belief in the causation of illness and health leave people free to look for means to prevent and cure illness. God's will is supreme, and is not contradictory to searching for knowledge about preventing and treating diseases.

Some people fail to grasp the religious instruction concerning the causation and treatment of diseases and acquire fatalistic attitudes. This can negatively affect the health system. It discourages sick people from seeking treatment for their illnesses, and hinders their recovery. Those who, under the pressure of illness and relatives and friends, change their attitudes and seek medical assistance late will cost health authorities more to treat and their chances of recovery may be reduced.

4. Modernization

Since the 1950s economic development, and particularly the discovery of oil, has increased the pace of modernization in Saudi Arabia. This modernization has tended to disrupt the traditional socio-cultural system and started a relatively slow process of adjustment and modification in the Saudi society. In this section I shall

focus on aspects of the process of adjustment that have special importance for the provision of health care. I shall examine attitudes towards modern western medicine and the changing pattern of disease. The government actively participates in the modernization process and an example of government activities relevant to health provision will be considered. I shall discuss the institutional social services of the Ministry of Labour and Social Affairs, and analyse their significance to health services development in the country. While the services are predominantly social services they include the provision of some health services and are relevant to the health status of their beneficiaries.

4.1 Attitudes towards Modern Medicine

The introduction of western medical practices into the country has had a profound effect on the health of the public. Modern drugs are potent and effective. They have helped to cure and control infectious diseases which used to kill many people. Saudis have become "quite receptive" to modern medicine (Saad-Edin and Donald, 1978, p.90), which many think has a cure for every illness. Many believe that a surgical operation or a colourful drug will result in a rapid remission of all symptoms, and many people developed attachments to particular forms of drugs such as injections, capsules or specific tablets.

Public acceptance of modern western medicine increases the demand for health services. The demand is for curative medicine and not for preventive and promotive medicine which tend to be neglected. It creates problems in patient-doctor relationship. When patients see treatment as the prescription of drugs by the doctor, they think they are not treated when they do not receive drugs. Such patients will even show the doctor or the pharmacist the drug that they want, and will insist on getting it. Obsession with a particular type of drugs can be wide spread as is the case with injections. Some patients believe in injections because of their immediate therapeutic effect, whereas drugs taken by other routes take time to be effective. However, injections should only be given in certain indicated situations because of the risks associated with their use. Many patients, especially old patients, believe strongly in injections as the right treatment for their illnesses. Some patients refuse to leave a clinic without getting an injection. The problem is national, and the Ministry of Health has issued circulars to try to control it. The problem represents a serious obstacle to health provision in other developing countries (Melrose, 1982).

There are life-supporting machines and other means of prolonging life now available in the country. Although at the present time there are only few patients who are kept going by medical technology, the potential is relatively high and this type of provision is likely to expand. Some aspects of modern western medicine such as life-supporting

machines and organ transplantation create ethical problems that have taken religious authorities by surprise. When the society has not considered the issues before hand, their rapid introduction can lead to controversy and problems for the health authorities.

In almost all health facilities patients have come to understand that doctors are the source of their treatment, and therefore they must see doctors to obtain treatment. As a result patients always insist on seeing doctors, even if a para-medical worker could completely administer the treatment. When a doctor works with para-medical staff, patients want the doctor to treat them even if the case can be handled by a nurse following instructions from the doctor. In other situations when there are general practitioners and specialists, patients insist on being seen by specialists even when the general practitioner decides that the case need not be seen by the specialist.

Patients' insistence on seeing a doctor irrespective of the circumstances is an obstacle to the provision of health services. Although the supply of doctors is limited, doctors often have to spend time dealing with minor cases which can be handled by para-medical staff. This creates problems as I have witnessed frequently in my field work experience. In one incident a child has cut his hand on some broken glass and needed dressing. His father took him to the accident and emergency department at the local hospital because it happened at night. The doctor on duty examined

the wound, ordered an X-ray, and found that no glass was left in the child's hand. He asked a nurse to dress the wound, and turned his attention to another patient. The father of the child protested and created disturbance. Next day, the father lodged a complaint of negligence and bad treatment against the doctor with the hospital authority.

The rise of modern western medicine has led to a general decline of traditional indigenous medicine in the country. However, some people, particularly in rural and remote areas where modern medicine is not easily available, resort to local healers. A study of local healers in the Qasim region has found that traditional medicine is still used by some people in urban areas (Moloney, 1982, pp.90-98).

4.2 Changing Pattern of Disease

Now that infectious diseases are under control in the country, modern life diseases have started to develop (Sebai, 1985, p.16). The list includes accidents, particularly road traffic accidents, heart diseases, hypertension, obesity, diabetes and cancer. The number of deaths resulting from road traffic accidents is relatively high. The accident:injury ratio for the country is approximately 1:1 compared to the international average figure of 8:1, and the fatality:injury ratio is approximately 1:7 which is in Britain, for example, 1:50 (see table 8.1) (Hamour, 1982).

Table 8.1 The Number of Road Traffic Accidents and Casualties in Saudi Arabia, selected years.

<u>Year</u>	<u>Number of</u>			<u>Fatality:</u>
	<u>Accidents</u>	<u>Deaths</u>	<u>Injuries</u>	<u>Injury Ratio</u>
1971	4,147	570	4,583	1:8.0
1975	13,475	1,594	10,532	1:7.0
1980	18,758	2,731	16,218	1:6.0
1981	17,897	2,427	15,872	1:7.0
1982	21,597	2,953	18,616	1:6.0
1983	24,594	3,199	21,475	1:7.0

Source: Ministry of Interior, Statistical Book, various issues, Riyadh Saudi Arabia.

Road traffic accidents have become a serious problem in the country. Many observers, particularly surgeons (Daouk et al, 1980, p.75), have noted that accidents mostly result in head and neck injuries with the possibility of death or permanent handicap being high. The problem is rapidly escalating. In 1980 there were just over 2 millions registered vehicles in the country. In 1982 the number increased to just over 3 millions registered vehicles (Ministry of Finance, 1982, p.244), an increase of almost one million in two years.

The changing pattern of disease in the country has reinforced the orientation of the health system towards curative and high technology facilities. This has serious resource implications especially in the long term. In 1980

the daily cost of road traffic accidents and the management of their victims to the country was approximately 4,776,836 Saudi Riyals (Saudi Medical Journal, 1980). In addition, with most of the new diseases improvements are generally marginal and slow.

Road traffic accidents represent one example of the changing pattern of disease in the country at the present time. Road traffic accidents are a world wide problem, but it is more serious in developing countries (World Health Organization, 1984). Present policies can not cope with the problem, and a radical change of policy is needed to bring about a fundamental change in the epidemiology of road traffic accidents. Preventive measures offer a good chance for reducing the number of accidents. However, such^a line of action lies outside the domain of health authorities, and the necessary coordination apparatus with other concerned public authorities is not available.

4.3 Westernization

Links with western countries and the training of many Saudis in the west have gradually led to the appearance of and acceptance of many western attitudes, particularly life style for the more mobile and educated members of the society (Pati, 1962, p.379). For example, an increasing number of mothers are following the example of their western counterparts in bottle-feeding their babies instead of

following the tradition of breast-feeding them (Lawson, 1981, p.26). Because the idea has come from the west some mothers believe that it is better for their babies.

Some western influences are more positive. The opening of the door to girls and women to be educated and trained in women-only fields such as teaching girls and nursing is partly due to western influence. The education of women in Saudi Arabia is a prominent aspect of the process of social change in the country. But despite the achievements that have been attained in the last two decades in educating women, only a small percentage of this valuable resource has been utilized.

Contact with western countries has encouraged social stratification in the Saudi society, which used to be considered classless. Al-Awaji identified three distinct social groupings; the royal family and wealthy families, bureaucrats and businessmen, and the masses (1971, p.63). Businessmen and bureaucrats constitute an emerging middle class in the country. It is based on secular education (Knuerhase, 1975, p.27), and is "the product of the transition to the modern age" (Halpern, 1963, p.59). Its role in the society, particularly in the government, is increasingly becoming important (Rugh, 1973, pp.7-20).

The implication of westernization to the health system is complex. Some aspects can be beneficial such as encouraging the education of women, while others can have

negative contribution such as encouraging the use of bottle-feeding. The impact of each aspect of westernization on the health system depends on a number of relevant variables such as its compatibility with traditional customs and beliefs, and with religious duties and beliefs, its potential benefits and the prevailing circumstances. The emergence of a middle class based on secular education has significant consequences to health provision because public bureaucrats are drawn from it. This affects the level and standard of health provision in urban areas where middle class people live.

The development of a middle class in the Saudi society has different connotations from those usually associated with middle class in western societies. The change is more apparent than real, and Saudi middle class people are still loyal to their families and adherent to traditional customs. They have acquired the material trappings of western middle class, but not its value system. The middle class enjoys good living conditions free from poverty diseases and has good health provision to meet its demands.

4.4 Public Institutions of Social Services

The Ministry of Labour and Social Affairs provides non-institutional and institutional social services. Non-institutional services include social security and assistance grants to disabled, orphans, handicapped people, deserted women, and other needy people. Institutional

services are provided for orphans, juvenile delinquents, handicapped and elderly people. The involvement of the government in the provision of social services, particularly institutional services, which were used to be provided by traditional social organizations such as the family, has developed slowly.

There are 11 different types of social institutions serving different client groups (see table 8.2). There are five main client groups; babies without parents, orphans, juvenile delinquents, elderly and handicapped people. The institutions are mostly short-stay whose aim is to prepare clients to go back to the society, or proceed to another institution. For example, even seriously handicapped people are given rehabilitative training and then returned to their families.

The number of residents in institutions is generally limited (see table 8.3). The number of beneficiaries of Vocational Rehabilitation Centres has increased slowly reflecting the gradual willingness of parents to allow their handicapped children to be helped. The total number of residents in all institutions indicates the limited scale of the services.

Table 8.2 Social Institutions Run by the Ministry of Labour and Social Affairs, Saudi Arabia, 1984.

<u>Institution</u>	<u>No.</u>	<u>Sex</u>	<u>Client</u>
Centres for Girls Welfare	4	F	girls and women under custody (less than 30 years old)
Centres for Paralyzed Children Welfare	2	M F	paralyzed children (3-15 years old)
Centres for Social Guidance	5	M	juvenile delinquents (7-18 years old)
Centres for Social Welfare	7	M F	elderly over 60 years old and handicapped over 20
Model Education Centre	1	M	orphans (12-20 years)
Moslems' Sons Welfare Centre	1	M	non-Saudi orphans
Social Education Centres	17	M F	orphans (6-12 years)
Social Nursery	3	M F	children without parents (up to 6)
Social Observation Centres	6	M	juveniles under custody (7-18 years)
Social Rehabilitation Centres	4	M F	handicapped people (15-45 years old)
Vocational Rehabilitation Centres for Serious Handicap	2	M F	mentally retarded handicapped and others not suitable for VRCs

Source: Ministry of Labour and Social Affairs (1984) Rules and Regulations, Deputy-Ministry for Social Welfare Affairs, Riyadh, Saudi Arabia.

Table 8.3 The Number of Residents in Social Institutions
Run by the Ministry of Labour and Social
Affairs, Saudi Arabia, 1981-83.

<u>Institution</u>	<u>Number of Residents</u>		
	<u>1981</u>	<u>1982</u>	<u>1983</u>
Centres for Girls Welfare	139	119	153
Centres for Paralyzed Children Welfare	77	90	84
Centres for Social Guidance	315	506	600
Centres for Social Welfare	295	301	423
Model Education Centre	56	55	78
Moslems' Sons Welfare Centre	62	52	45
Social Education Centres	860	816	781
Social Nursery	225	221	189
Social Observation Centres	1,572	1,890	2,548
Social Rehabilitation Centres	138	270	335
Vocational Rehabilitation Centres	177	238	315
Total	3,916	4,558	5,551

Source: Ministry of Labour and Social Affairs, Statistical Cards 1981-83, Deputy-Ministry for Social Welfare Affairs, Riyadh, Saudi Arabia.

Arrangements for providing health care varies from one institution to another depending on clients' needs, their number and local circumstances. Health services are provided in all institutions. Some institutions are provided with at least one doctor, a clinic, a pharmacy or a

supply of essential drugs, and sometimes diagnostic facilities such as X-ray and laboratory. All institutions are provided with nursing staff and specialized staff as appropriate. Regulations for the institutions detail the duties and responsibilities of the doctor and his staff. They include the inspection of buildings, kitchen, and sleeping quarters. Food supplies are also inspected to ensure that the food provided to the residents is hygienic and nutrient. The doctor examines residents when they are first admitted to the institution, and then on regular basis. He is also responsible for their personal hygiene.

The number of health personnel employed in the institutions is relatively small (see table 8.4). The low number of doctors is mainly due to the difficulty of recruiting doctors to vacant posts already approved and budgeted for. The relatively large number of social workers reflects the emphasis placed on the social character of the institutions.

Table 8.4 The Number of Some Staff Employed in Social Institutions of the Deputy-Ministry for Social Welfare Affairs, Saudi Arabia, 1981-83.

<u>Staff</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
Doctors and pharmacists	14	14	20
Nurses	107	109	121
Physiotherapists	7	7	11
Psychology analysts	8	8	8
Social workers	347	352	395

Source : Ministry of Labour and Social Affairs, Statistical Cards 1981-83, Deputy-Ministry for Social Welfare Affairs, Riyadh, Saudi Arabia.

There are two main aspects of institutional social services which make them relevant to health provision. The services cater for selected vulnerable groups in the society. If groups such as handicapped people, the elderly and orphans are left to obtain their health needs from the usual outlets of health services in the society, they are bound to suffer as they could not compete with other groups.

The other main aspect is related to the organization of health services in the country. There are no hospitals or wards in hospitals for the elderly or handicapped. Some patients, mainly mentally handicapped patients, were sent to Taif Mental Hospital which grew into a large institution with over 1,500 patients at one time. The void created by

the absence of facilities such as geriatric hospitals and nursing homes for the elderly and handicapped has been filled by social services institutions. In effect, such institutions perform the functions of hospitals and nursing homes designed for handicapped and the elderly.

Recently the Ministry of Health started opening physiotherapy departments in general hospitals and regional psychiatric hospitals. This marks the recognition of the special health needs of some client groups. Meanwhile, institutional social services remain as a significant part of the health services in the country. Its separation, organizationally, from health services is due to social and traditional factors. When concepts about client groups such as handicapped and elderly people change in the course of the process of social change then their needs will be considered together with the health needs of the population.

While the involvement of the government in the provision of institutional health services is significant from a social perspective, it is aimed at complementing traditional social provisions rather than undermining or replacing them. The services are primarily for those who are socially unfortunate, and whose positions have been harmed in the process of social change. The government action is hampered by lack of non-financial resources, particularly trained personnel (Nader, 1980, p.30).

5. Comment

The socio-cultural environment in the Saudi society is determined by a dynamic interaction between traditional (social and religious) and modern forces in the country. The relationship is not one of conflict (Niblock, 1982, ch.5). In the health field the friction between modern and traditional forces is comparatively minimal. The strain in the relationship appears to result from differences in the rate of change. The modernization drive demands relatively rapid rate of change, while religious and social institutions are not prepared to cope with rapid change. Loyalty to the family, for example, is ingrained in individuals' behaviour, and this makes it difficult for health authorities to provide services equitably and efficiently.

The absence of conflict in the health system because of loyalty to the family is primarily due to the resource factor. The availability of financial resources to satisfy some of the demands of influential groups has kept the effect of loyalty under control. The influence of social factors is dominant in the Saudi society because they are supported by religious leaders. The separation of religious beliefs and customs from other socio-cultural aspects of the Saudi Society in the sections is artificial because the Saudi society is deeply religious. Islam, the state religion of the country, permeates all aspects of the lives of its followers. All activities whether individual or collective need the sanction of Islam, or at least should

not be contradictory to it. Many developments in the health field are in between these two stringent criteria. This presents the real dilemma of health provision in Saudi Arabia from a socio-cultural perspective.

Religious elements constitute the cornerstone of the influential socio-cultural factors in the society. The position of religious authorities on many health issues places constraints on the activities of health authorities, and health authorities need to allow for them in their health plans if such plans are to be acceptable and successful. Religious leaders set the boundaries within which the health service operates.

The modernization process underway in the country has broadened the boundaries within which health authorities can operate, and inadvertently created tension between its supporters and religious leaders. The tension constrains health authorities which aim to avoid conflicts with either side. Meleis (1979) found that in Kuwait such tension creates difficulties for both patients and health authorities and affects the quality of health care.

It is paradoxical that modernization is inevitable and yet it creates changes that few Saudis are prepared to face. The consequences of new medical techniques are not thought through before making them available in the country. The main issue has been the resource one. As the country

has sufficient funds to purchase the most advance medical technology, it has done so with little discussion of its social and religious acceptability and its long term resource implications. While the rapid pace of modernization has effectively by-passed social and religious issues, the long term resource implications are difficult to ignore.

Current policies are based on the assumption that medical technology can and should be used to improve the social welfare of the people as quickly as possible. This approach under-estimates the importance of socio-cultural factors, and its effects are not likely to be lasting unless the society's value system is changed and made consistent with it (Amin, 1983, p.57). The prospect for changing the Saudi society's value system is remote, which means that explicit and implicit compromises are made. This increases the significance of the interaction between traditionalists and modernists in the development of health services in the country.

The government plays a crucial role in maintaining the balance between traditional and modern forces in the society as illustrated by the involvement of the Ministry of Labour and Social Affairs. The social acceptability of the services and the attitudes of religious leaders towards them are given priority over the needs of the beneficiaries from the services. It is significant that the government policy concerning the scope and rate of growth of the

services is largely determined by socio-cultural considerations. This limits the freedom of the government to develop the services at its own initiative.

6. Conclusion

Socio-cultural factors are potentially influential in the Saudi society. It is contradictory that their resource implications and their importance for resource allocation are over-looked by health authorities, while considerable resources are allocated in response to socio-cultural pressure leading to maldistribution of services. Socio-cultural factors affect individual patients' behaviour, and have consequences for health policies and procedures. They are, therefore, significant for the development of the health system because they influence the pattern of utilization of services. Health authorities can not ignore the constraints generated in the socio-cultural environment in which they operate. They are required to adapt their organization and operational policies to establish and maintain a harmonious relationship with their socio-cultural environment.

This entails a recognition by health authorities of some aspects of the socio-cultural environment, and the development of novel means of health provision which incorporate them. This is an alternative to the conventional option of adopting health delivery systems used in other countries. While the conventional

approach is based on the assumption that patients will adapt themselves to the way in which the services are provided, the socio-cultural approach means that the system of delivery is adapted to the socio-cultural environment of the patients. The two options are intrinsically difficult, and often in practice a compromise is chosen.

In the next chapter I shall examine the practical aspect of health provision, and ascertain what approach health authorities have chosen in their operations. The extent of influence exerted by socio-cultural factors will be assessed, and their overall impact on health provision evaluated. The analysis will be concentrated on two services; primary health care and health provision during the annual pilgrimage to Mecca.

CHAPTER 9: THE IMPACT OF SOCIO-CULTURAL FACTORS UPON
HEALTH PROVISION

1. Introduction

In the 1960s the limitations of conventional health delivery systems in developing countries have led to the emergence of the primary health care approach as a solution to the health problems of developing nations. The World Health Organization sponsored the new approach, and worked to spread it in developing countries (Newell, 1975; Djukanoric and Mach, 1975). In 1978 a joint conference organized by the World Health Organization and UNICEF produced the much publicised Alma-Ata Declaration which outlined the main features of primary health care approach (World Health Organization, 1978). Subsequently most developing countries have accepted the recommendations of the conference, and adopted the primary health care approach. In different developing countries attempts to provide primary health care services comprehensively have had different degrees of success (Benyoussef, 1977, pp.393-418). Most developing countries rely on community health workers and auxiliaries who work to provide cheap preventive-oriented services (Streeten et al, 1981). The World Health Organization-sponsored campaign "Health for All by the Year 2000" has contributed to the spread of the popularity of the primary health care approach.

Although many commentators have considered primary health care as the wave of the future in developing countries and the only practical solution to their health problems (Bennett, 1979), there are serious doubts about its suitability and feasibility in many developing countries (Navarro, 1984; Gish, 1979). There are significant variations between countries and even projects in the organization and operation of primary health care services. Sidel and Sidel (1977) argued that the structure of the society determines its form of primary health care services.

In this chapter I shall examine the interaction between patients and the health system in primary health care and health provision during the annual pilgrimage to Mecca. In both cases I shall describe the process of health provision briefly, and then discuss the effect of socio-cultural factors identified in the previous chapter on the pattern of utilization and patients behaviour.

There are three sections and a comment at the end of the chapter. In section one I provide a brief account of the development of primary health care services, and outline their organization and the pattern of their utilization. In section two I examine the interaction between patients and health provision by using the case of a patient visiting a health centre. This discussion is based on the notes which I recorded during my observation of patients at Al-Oujam health centre. The third section is devoted to the

analysis of the annual pilgrimage to Mecca and its significance for health provision in the country.

2. Primary Health Care in Saudi Arabia

Primary health care should include simple curative, preventive, and promotive measures provided through small health units, which are integrated into the health system. Support and supervision for the health units are provided through referral arrangements. However, in Saudi Arabia, as in other developing countries, primary health care services tend to be curative-oriented and loosely integrated into the health system. In this section I shall provide a background to the development, organization, and pattern of utilization of primary health care services in the country before analysing the underlying causes for their neglect in the next section.

2.1 Definitions

The names of health units through which primary health care services are provided have changed through the years. I shall list below the main terms in chronological order of their use with a brief explanation of their functions and scope of service.

Clinic. This type of health unit is usually located in cities and towns, and usually run by one doctor assisted by a few paramedical staff.

Mobile clinic. This is an ambulance or a purpose designed vehicle which is used to serve remote and nomadic communities. It is usually operated by a doctor and a nurse, and is equipped with a limited supply of drugs.

Health post. Health posts are located in rural and remote areas, and run by male nurses. Some may have a female nurse or a midwife. An ambulance may not be provided, and supplies especially drugs are often irregular.

Health point. Another name for health posts.

Out-patient clinic. It is part of out-patient departments of hospitals, and run by a general practitioner or a specialist. Diagnostic services such as X-ray and laboratory are provided. Generally, support services available at the hospital are accessible to the doctor.

Dispensary. This type of health unit is an expanded form of the clinic. It has a number of doctors, paramedical staff, some diagnostic facilities, and an ambulance. There were three different grades of dispensaries, which will be explained later.

Health centre or primary health care centre. This is another name for dispensaries. There are four different grades of such centres, which will be explained later.

2.2 The Development of Primary Health Care Services.

Until the establishment of the Ministry of Health in 1951, primary health care was provided through out-patient clinics of hospitals and in a few clinics located in cities and towns. In the 1950s more primary health care services were provided through an increasing number of out-patient clinics, clinics, mobile clinics, and health posts. The notion that hospitals were the only place in which medical treatment could be provided has encouraged both health authorities and patients to consider out-patient clinics as acceptable primary health care outlets, and to view them as the best source of primary health care. In response to increased demand for health services from the public, the Ministry started opening health posts. Thus, primary health care has come to be delivered through three types of units; clinics, out-patient clinics of hospitals and health posts.

In the 1960s the number of health posts increased substantially, from 82 in 1961 to 332 in 1970 (Ministry of Health, 1981, p.63). Health posts, or health points as they were sometimes called, were mainly manned by male nurses, though some may be visited by a doctor a number of times during the week. Health posts provided mainly curative services and where there was a female nurse or a midwife some maternity services were also provided. Patients who could not be treated at health posts were not usually referred to nearby hospitals because of transport difficulties. Health posts were located in inaccessible

areas, and very few of them were provided with an ambulance. Supplies to health posts, especially drugs, were irregular and insufficient.

The number of dispensaries, which were previously called clinics, has also increased considerably in the 1960s, from 59 in 1961 to 187 in 1970 (Ministry of Health, 1981, p.63). In the late 1960s dispensaries were organised into three types; community grade, grade A, and grade B dispensaries. The differentiation was based on the size of population served by the dispensary and its staffing level (see table 9.1).

Table 9.1 Staffing Levels in the Dispensaries in the Late 1960s, Ministry of Health, Saudi Arabia.

<u>Staff Category</u>	<u>Community Grade</u>	<u>Grade A</u>	<u>Grade B</u>
Population served	40,000	10-20,000	5,000

General practitioner	4	2	1
Nurses	12	3	2
Para-medical	7	4	2
Administrative staff	7	2	1
Ancillary	13	4	3
Total	45	16	10

Source: Ministry of Health (n.d) Organization of Dispensaries and Job Descriptions of their Staff, Riyadh, Ministry of Health. (in Arabic)

Dispensaries provided some preventive services in addition to their curative services which were improved by the availability of diagnostic facilities such as laboratory and X-ray. Dispensaries were provided with ambulances for transporting urgent and emergency cases to hospitals. Supplies to dispensaries were irregular and insufficient, though better than health posts.

The provision of primary health care through out-patient clinics of hospitals remained the main source of primary health care, and many patients ignored their local health post or dispensary and travelled to town to be treated in the out-patient clinic. The growth of health posts and dispensaries continued in the early 1970s, and the First Development Plan 1970-75 envisaged a hierarchial arrangements linking health posts, dispensaries, local hospitals, and regional hospitals to form a national network of health services. Although some of the targets of the plan were achieved by 1975, the envisaged referral pattern was not established.

In the mid 1970s the Ministry of Health stopped opening new health posts, and started converting them into dispensaries. The number of dispensaries increased substantially from 187 in 1970 to 675 in 1980, while the number of health posts fell from 332 in 1970 to 214 in 1980 (Ministry of Health, 1981, p.63). The Third Development Plan 1980-85 made comprehensive primary health care provision a major objective for the Ministry of Health. Primary health

care was to be provided through primary health care centres which were classified into four types (see table 9.2). The classification was based on the size of population served by the centre and staffing levels. The Third Development Plan called for the conversion of all dispensaries and other health units to health centres. The Ministry of Health is at present establishing model primary health care centres in the health regions as a first step towards providing comprehensive primary health care through primary health care centres (Ministry of Health, 1985, p.48).

Table 9.2 Staffing Levels of Primary Health Care Centres.

<u>Staff Category</u>	<u>Grade IV</u>	<u>Grade III</u>	<u>Grade II</u>	<u>Grade I</u>
Population served	Districts	10-20,000	5-10,000	1-5,000
	of cities			
General practitioner	10	3	2	1
Dentist	1	1	-	-
Nurses	19	7	3	2
Paramedical	16	7	4	2
Administrative staff	8	6	4	1
Ancillary	15	6	4	3
Total	69	30	17	9

Source: Al-Qahtani, M. R. (1984) "A case study of rural health services in Abha Province", unpublished Master thesis, King Saud University, Riyadh, Saudi Arabia, p.10.

The history of primary health care provides an insight into the relationship between the use of auxiliaries and the availability of financial resources for health services. When resources in the country were meagre health posts operated by auxiliaries provided the main form of primary health care. When resources became plentiful, health authorities reduced their dependence on auxiliaries. The demand for services and local beliefs in modern medicine have influenced the policy of health authorities.

In comparison, in other developing countries including oil-rich countries such as Iran and Venezuela (Barzegar and Djazayery, 1981, pp.739-42; Djukanovic and Mach, 1975, p.62) auxiliaries play a significant role in health provision, particularly primary health care. This suggests that policies concerning the use of auxiliaries are not always determined by their cheapness or the argument that there are no alternatives to them. The Saudi experience indicates that patients' perception is also relevant.

2.3 The organization of Primary Health Care Services.

At the national level, the Directorate General for Health Centres at the Ministry of Health has an overall responsibility for primary health care services in the country. The Directorate formulates policies and issues regulations in ministerial circulars which are sent to the health regions, and subsequently to primary health care centres. It also supervises the centres through monthly

reports submitted by the centres, and field visits which are random and infrequent. Staffing levels and equipment in primary health care centres are determined by the Directorate. The Directorate is attached to the assistant deputy minister for curative services, who is also responsible for medical supplies, laboratory services, medical social services and hospital services.

Communication between the Ministry and the regions affecting primary health care centres is always between the assistant deputy minister for curative services and regional Directors General. At the regional level, there is a Health Centres Department which is linked to the assistant Director General for curative services. The department receives ministerial circulars and circulates them to health centres in the region. It also receives monthly reports from the health centres, and passes them to the Directorate General for Health Centres at the Ministry. The department can issue directives to health centres within the authority of the regional Director General. Thus, supplies and staff appointments are areas where the department can interfere. The department also supervises the centres through field visits, which are carried out regularly, and on the order of the Director General or his assistant for curative services.

At the local level there are two patterns of administration. Some health centres are attached directly to the regional health authority and the health centre's

manager reports directly to the regional Director General. Requests for supplies and routine reports are also sent to the regional Director General. This means that regional health officers have to spend considerable amount of their time dealing with routine requests and the problems of health centres when this task could be delegated to local health personnel who are more suited to deal with them. The number of such health centres is small. They are usually centres which are a long distance from the nearest hospital to them.

Most centres are attached to local hospitals. Each hospital may have up to 20 health centres attached to it depending on the location of the hospital in relation to health centres. The hospital director is responsible for all the centres attached to his hospital. Supplies for the health centres are requested from the hospital, and the monthly reports are submitted to the hospital director, who passes them to the regional authority.

At the health centre level, the manager of the health centre is responsible for the day-to-day running of the centre. In Grade I health centres the doctor is also the manager. The manager has limited authority, and is the link between the operational level at the health centre and management at the hospital and regional levels.

2.4 Pattern of utilization of Primary Health Care Services

The number of visits made to out-patient clinics and health centres has increased consistently over the last fifteen years (see table 9.3). The rate of increase was small in the late 1960s and early 1970s, and was relatively higher in the early 1980s. In the late 1960s the number of visits made to health centres was larger than those made to out-patient clinics. It seems that the large number of health posts, which were then the main outlet of primary health care compared to the number of hospitals, is the main reason for this trend which was reversed in the 1970s in favour of out-patient clinics. And since 1979 the number of visits made to health centres has been larger than those made to out-patient clinics

Table 9.3 The Number of Patients Visiting Out-patient Clinics and Health Centres, Ministry of Health, Saudi Arabia, 1967-83. (in millions)

<u>Year</u>	<u>Clinics</u>	<u>Health Centres</u>	<u>Total</u>
1967	3.54	5.42	8.96
1970	5.69	6.20	11.89
1973	8.70	8.01	16.71
1976	11.46	11.09	22.55
1979	13.48	14.06	27.54
1982	16.91	21.21	38.12
1983	18.99	24.60	43.59

Source: Ministry of Finance and National Economy, Statistical Yearbook, various issues, (Ministry of Finance and National Economy, Riyadh, Saudi Arabia)

The provision of primary health care services through out-patient clinics on such a large scale reflects the importance of hospitals in the Saudi health system. The arrangement undermines the chance to develop an effective referral system between hospitals and health centres. It appears that the problem is caused by the failure of health authorities to adopt clear policies and enforce them so that a referral system is established to allow only those who need hospital care to use out-patient clinics.

Utilization statistics indicate a rising average number of visits per head per year in the country. Using estimated population figures, the data shown in table 9.4 indicate that the national average number of visits per head per year to health centres run by the Ministry of Health has increased from just above 1 in the 1960s to over 4 in the 1980s. At the same time researchers have found that many health centres are under-used. For example, some health centres are visited by only 36 and 48 patients a day (Sebai et al, 1980, p.199). This indicates serious local variations in the use of health centres. The use of hospital out-patient clinics contributes to this pattern of utilization which wastes resources and affects the quality of services provided at health centres.

The increasing use of health centres has been associated with an increasing availability of diagnostic services in health centres. In the 1960s laboratory and X-ray

facilities were only available at hospitals. In 1973 there were only three health centres with laboratory facilities, and only one health centre with X-ray facility (Ministry of Finance, 1976, pp.110 and 131). In 1982 there were 211 health centres with laboratory facilities, and 75 health centres with X-ray facilities (see table 9.4) (Ministry of Health, 1983, p.205).

Table 9.4 Utilization Statistics for Laboratory and X-ray Facilities at Health Centres, Ministry of Health, Saudi Arabia, Selected Years.

<u>Year</u>	<u>Laboratory</u>		<u>X-ray</u>		
	<u>Centres</u>	<u>Tests</u>	<u>Centres</u>	<u>Patients</u>	<u>Films</u>
1973	3	7,002	1	7,530	7,530
1975	19	35,518	3	8,174	8,259
1978	36	106,789	8	16,343	18,082
1981	176	525,309	44	65,961	76,885
1983	211	799,509	75	108,114	130,216

Source: Ministry of Finance and National Economy, Statistical Yearbook, various issues, (Ministry of Finance and National Economy, Riyadh, Saudi Arabia).

The rise in the number of patients visiting health centres where diagnostic facilities have been made available reflects patients' attitudes towards modern medicine. The emphasis placed on medical technology is quite evident from the increasing availability of diagnostic facilities in health centres. According to the plans of the Ministry of Health Grade II, III, and IV health centres should all have laboratory and X-ray facilities (see table 9.2). This means that their present level of provision is well short of planned targets. For example, 211 health centres had laboratory facilities in 1982 whereas the total number of grade II, III, and IV health centres was 327. Saudi Arabia with its oil revenues has been able to introduce high technology into the primary health care field. Problems arise when spending on medical technology means that insufficient resources are left for other services. Saudi Arabia is gradually finding itself in such^a position.

The number of patients visiting health centres and out-patient clinics falls during the month of Ramadan, and to a certain extent during the month of Dhu-al-hijjah. Figure 9.1 shows these seasonal variations for a number of selected years. During both months there are great religious festivals. This pattern of utilization creates operational problems and has resource implications. The fluctuation in the number of patients using health centres makes it difficult for health authorities to use their resources efficiently.

Table 9.5 shows the number of patients who visited health centres and out-patient clinics in 1981 to 1983 by sex. Men constitute the largest group, and women and children account for approximately two thirds of the number of patients. This means that the pressure on health authorities to observe the segregation of sexes is high, and the need for female doctors is increased. The organization of segregation leads to problems between patients and health authorities and affects industrial relations in health facilities.

visits by
Table 9.5 The Number of Patients Using Primary Health Care Services by Sex, Ministry of Health, Saudi Arabia, 1981-83. (in millions)

<u>Year</u>	<u>Men</u>	<u>%</u>	<u>Women</u>	<u>%</u>	<u>Children</u>	<u>%</u>	<u>Total</u>
1981	16.64	38	14.01	32	12.94	30	43.59
1982	14.55	38	12.94	34	10.63	28	38.12
1983	13.39	37	12.00	34	10.43	29	35.82

Source: Ministry of Finance and National Economy, Statistical Yearbook, various issues, (Ministry of Finance and National Economy, Riyadh, Saudi Arabia)

There are two points relevant to the statistics discussed here which must be mentioned. Visits made to out-patient clinics are not entirely for primary health care since some specialist services are also available at

hospitals. Primary health care and specialist services are provided at out-patient clinics. It is not possible to disaggregate the figures. It therefore follows that the actual total number of visits made for primary health care is lower than that shown in table 9.5.

Data presented here concern only the services of the Ministry of Health, and there are many other providers of primary health care services in the country (see chapter four). The number of visits made to their facilities runs into millions. For example, 2,929,534 patients used the facilities of the Ministry of Defence and Aviation, 1,780,316 patients used School Health Centres provided by the Ministry of Education, and 1,177,084 patients used the facilities of the National Guard in 1983 (Ministry of Health, 1984a, p.333).

3. The Patient and the Health Centre

In this section I shall examine how patients go through the process of visiting the health centre at Al-Oujam. Patients in other parts of the country use their local health centres in a similar way. I shall examine difficulties and shortcomings, and discuss the socio-cultural reasons for them. I divide my discussion into parts related to the typical progress of patients through the centre.

3.1 Access to the Health Centre.

The health centre in Al-Oujam is situated in the eastern part of the village on the only road into the village. The village is small, its population is estimated to be 3-5,000. The centre is accessible to all residents in the village, as it is within walking distance of all houses in the village.

The majority of health centres in the country are also located in small villages and settlements. However, there are also many scattered villages and settlements in which nomadic or semi-nomadic bedouins have settled, and it is both impossible and impractical to provide each with a health centre. For these patients health centres are relatively inaccessible. The lack of roads, and where they are provided, the absence of public transport means that patients especially women and children are not likely to have easy access to nearby health centres (Al-Qahtani, 1985, p.169).

In urban areas some patients may have difficulties in getting to health centres. Patients who live at a distance from the health centre would find it difficult to visit it if they do not have their own transport. Public transport is limited and not widely used by Saudis especially women. The custom of men accompanying their wives and children in their visit to the health centre can lead to problems, especially in urban areas where men have work obligations to

keep. Some men insist on being present when the doctor sees their families, and some men will not accept having to wait for long, and this has often resulted in disturbances at health centres.

3.2 The Design of the Health Centre

The Al-Oujam health centre is located in a rented house which has been adapted. It is a two-storey building. In the ground floor there is a doctor's room, a male injection room, a female injection room, separate male and female waiting areas, a pharmacy room, toilets, a vaccination room, a delivery room, and a store. On the first floor there is a general store and living quarters for the nurses and the midwife who work in the centre. The accommodation is also used for female staff working in the hospital to which the centre is attached.

The majority of health centres in the country are located in rented houses which are adapted for use as health centres. The Ministry of Health has recently started building purpose designed health centres, but their number is still small. No statistics have been published, but probably more than 90% of health centres are rented houses. Purpose designed health centres are spacious and each has a dental unit, a laboratory, an X-ray facility, and accommodation quarters for the guard, the doctor and his family, nurses and the midwife. They also have facilities

for minor operations and an emergency electricity generator.

Health centres located in adapted houses have many disadvantages. The rooms are often not big enough and the flow of patients in the building is not smooth, with subsequent crowding and inconvenience to patients. In most health centres the doors are not wide enough to allow a stretcher through, and many health centres are not adapted for wheelchairs and trolleys. Renting houses for health centres makes it possible for health authorities to locate the centre in the part of the village most easily accessible to the majority of the inhabitants. However, availability of houses for rent sometimes cancels this advantage. In some villages the only built-up house, or only available house for rent is used as a health centre.

Although renting houses for health centres has been accepted by the general public, it appears that it affects the morale of staff and the attitudes of patients. No systematic research has been done in this area, but dissatisfaction is quite evident to the casual observer. Staff prefer to work in purpose built health centres because it makes their work easier. Notables and local people want purpose built facilities because it is considered a sign of the development of the village, and seen as a mean for better quality health provision. In 1983 when the Ministry of Health announced its plans to build 100 purpose designed health centres (Ministry of Health,

1984a, p.76) many villages and communities made requests for them and sent representations to regional and central health authorities.

However, some of the technical aspects of the decision to build the purposely-designed health centres were not considered adequately. The centres were planned to provide fairly extensive services which go beyond the traditional limits of primary health care. The level of provision of diagnostic facilities in these centres and the supply of an emergency generator are good examples of over emphasis on technology in the centres. And when such centres are located within five to fifteen kilometers from each other, as some are, it becomes quite clear that the technical aspects were not adequately considered.

3.3 Registration at the Health Centre

When the patient arrives at the health center, he or she enters through either the male or female entrance. In Al-Oujam health centre the doctor is responsible for registration, so the patient goes directly to the doctor's room and if the doctor is busy, the patient waits in the waiting area. When the patient sees the doctor, the doctor enters the patient's name, age, and address (which is just the name of the village) in the Register of attendancies, and copies the same information onto a prescription form in which he prescribes the treatment for the patient after examining him.

In some health centres there are clerks responsible for registration. In these centres the registration desk is placed in the waiting area. The patient reports to the registration desk where the clerk does exactly the same as the doctor; he makes an entry in the register and copies the information onto a prescription form and gives it to the patient. The patient then goes to the doctor's room, and if the doctor is busy, the patient waits in the waiting area.

The system of registration in health centres is inadequate, and this was recognised in the 1960s. The First Development Plan 1970-75 aimed at the establishment of medical records in all health units, so that each patient has a file which is referred to every time the patient visits the health unit. This objective has not been achieved. Recently an experiment has been started in selected model health centres to set up medical records using micro computers. The issue of setting up medical records in health centres has not been studied and evaluated adequately. In view of this and the absence of any form of medical records in health centres prior to the introduction of computerized medical record systems, it appears that the policy is ill-conceived.

Health centres are often staffed by expatriates who may not speak and write Arabic, and are therefore unable to organize medical records. Technical assistance and resources are not made readily available for health centres to allow them to start keeping records and continue doing

it. On the other hand, patients are reluctant to cooperate because they think it may cause delay when they want to see the doctor.

3.4 Treatment at the Health Centre

In Al-Oujam health centre a servant is stationed outside the doctor's room to organize patients on the basis of first come first served. He allows patients in one by one. The doctor deals with both male and female patients, and the servant at his door gives women priority over men. When the doctor sees a female patient, a female nurse must be present. The priority given to female patients reflects a traditional attitude towards women and children in the Saudi society. The insistence on the presence of a female nurse when a male doctor treats a female patient is the response of health authorities to the traditional custom of segregating men from women.

When the patient sees the doctor, he or she helps him to make the registration. The doctor then asks the patient about his or her complaint and examines him or her if necessary. Exchanges between the patient and the doctor are brief and minimal, especially if the doctor does not speak Arabic, or if he speaks Arabic but is not accustomed to the local dialect (Ghasib, 1984, p.19). The doctor may send the patient to the nearby hospital at Safwa for a laboratory test or an X-ray film, and asks him or her to see him when the results are known, or he may send the patient to the

injection room for dressing wounds. In any case, the doctor prescribes some drugs and sends the patient with the prescription to the pharmacy.

The exchange between the male doctor and the female patient often excludes physical examination (Banoub, 1982, p.65). Depending on the circumstances, very few doctors would dare to perform superficial examinations for fear that their intentions would be misunderstood, and subsequently they could be assaulted by the patients' male relatives. This has effectively made the exercise useless and a waste of resources.

The doctor-patient relationship in health centres has been examined by a number of community health researchers from Saudi medical schools (Sebai et al, 1980, pp.197-202), and the pattern which has been observed is unsatisfactory. Doctors spend about 3 minutes with each patient (Sebai et al, 1981), and in Turaba village Sebai found that the average time spent by the doctor with each patient was just over one minute (1981, p.119). Some doctors even prescribe treatment without looking up at the patient (Al-Riyadh, February 1983). It has been suggested that doctors act in this way because they want to please patients and avoid conflicts with them (Al-Rabbiah, 1976,p.16). The role of social forces in this process has been described by Sebai in the following way:

"The expectation of the authorities from the physician and his staff is to meet the demands of the people. Saudi Arabia is a democratic country, where people can have direct access to the press, the Ministry of Health, the Crown Prince, or even the King. If a man or a woman feels that his demands are not justifiably met, he can take his complaints to the highest authority and ask for justice. So, satisfying the people and avoiding unnecessary complaints is in itself an important aim". (1981, p.127)

3.5 Pharmacy Service at the Health Centre

The pharmacy serves both male and female patients through separate dispensing windows located in different parts of the pharmacy room so that patients are physically separated. Patients take their prescriptions to the pharmacy, which is manned by an assistant pharmacist.

The assistant pharmacist explains to the patient how to use the drugs prescribed, and retains the prescription form. If injections have been prescribed, the patient takes them to the injection room where they are administered by a nurse. If the treatment is for several days, the patient is asked to come back to the injection room as necessary. After the patient has collected the drugs, he or she leaves the health centre, and can walk into another health centre in one of the nearby villages, or into an out-patient clinic

of one of the nearby towns' hospitals, and obtain treatment in the same way.

Drugs dispensed at health centres are often wasted. Drugs are usually over-prescribed, and the number of items per prescription is always more than four (Fatani and Gatus, 1980, p.189). Vitamins, tonics and antibiotics are excessively prescribed, and injections are favoured by most patients (Al-Jazeera, May 1982). Some doctors prescribe the same drugs for most of their patients, and during my field work experience I found one doctor who prescribed the same drugs to 14 different patients. Patients often insist on having the "red tablets" or the "small ampules", and if the assistant pharmacist does not give them what they want, they go back to the doctor and insist that he prescribes what they want. Expatriate doctors usually agree to avoid the trouble that patients may stir up for them.

3.6 Management of Health Centres

In Al-Oujam the doctor is in charge of the health centre. He is responsible for the day-to-day running of the centre, and he submits weekly and monthly reports about the activities of the centre to the hospital to which the centre is attached. In other health centres doctors are in charge, except in urban grade IV centres which are run by full-time managers.

The management of health centres by expatriate staff creates difficulties and problems in the staff/patient interaction because of the difference in languages. The interaction, even between Arabic speaking staff and patients, tends to be kept to a functional minimal, and there is little understanding of mutual problems and no effective collaboration. Health authorities which try to implement management structures and improve performance often have to compromise because of local pressure and expatriates' influence. For example, if an assistant pharmacist refuses to give a patient tablets without a prescription, the patient complains, and some even make false allegations, to have the assistant pharmacist punished. Most expatriates are keen to keep their jobs by staying away from trouble, and health authorities usually opt for the easy option of giving way to local pressure.

4. The Pilgrimage to Mecca - The Hajj

All fit and able moslems travel to Mecca in Saudi Arabia once in their life time to perform Hajj. Hajj is the performance of rites in the holy places at specified time of the year. Moslems are also required to perform Omra which they can either perform at the same time when doing Hajj or can do separately. The Hajj is a collective act which is performed by all pilgrims at the same time, while Omra is an individual act which can be performed at any time of the year. Many moslems also go to Medina to visit the mosque of the prophet Mohammed, peace be upon him.

The convergence of millions of moslems annually on Mecca and Medina has many implications for the development of health services in Saudi Arabia. In this section I shall briefly describe the process of Hajj and highlight the main features which are relevant to health provision. Then I shall discuss the efforts made by Saudi health authorities to provide health care to the pilgrims, and assess the significance of this collective religious act to the Saudi health system.

4.1 The Process of Hajj

Although most moslems take several weeks to perform Hajj, the actual Hajj takes 4 days. The rites start on the 9th day of the 12th month of the moslem calender, the month of Dhu Al-hijjah, and is over on the 13th day. Because there is a difference of 11 days between the moslem lunar calender and the Gregorian calender, Hajj occurs on different Gregorian dates each year. "This means that pilgrims are subjected to climatic conditions ranging, according to the date of the Pilgrimage, from the merciless winds of a desert winter to the fiercest heat of summer" (Omar, 1957, p.338). This has serious implications for the health of pilgrims.

Hajj brings together a very large number of moslems from many countries, 98 different countries in 1983 (Ministry of Pilgrimage, 1984, p.197). They live together in a relatively confined space for a period of time. Different countries

have different standards of health, and in some countries communicable diseases are endemic. When pilgrims from such countries go to Mecca the environment of the Hajj facilitates the spread of diseases among pilgrims who then take the diseases back to their countries. One World Health Organization consultant commented that "the dimensions of the problems are quite beyond belief" (Oseasohn, 1967, p.1).

Most moslems, especially those who come from far away countries and who may not be able to return to Mecca in their life again, take the opportunity to stay in the holy city for few weeks visiting religious shrines including the holy grand mosque in Mecca. As a result some moslems spend about two months in the pilgrimage region, though in recent years the increase of air travel has tended to shorten the length of stay.

The number of pilgrims has been growing steadily, but in 1984 there was a substantial drop (see table 9.6). Although the number is still large, it represents less than 1% of the total number of moslems in the world. This indicates a potential for substantial increase as transport to Saudi Arabia becomes relatively easier and cheaper. 20 years ago most pilgrims travelled by sea, now most travel by air. Overland travel has remained popular. The main advantage of air travel, and to some extent land travel, is that it enables pilgrims to perform Hajj in a short period. Most pilgrims enter the country in the Western Province.

Jeddah, which is 72 kilometers from Mecca, has the major sea and air ports. In both, the sea and air ports, special facilities are provided for the pilgrims.

Table 9.6 The Number of Pilgrims Performing Hajj by Mode of Travel, selected years (in thousands)

<u>Year</u>	<u>Number of Pilgrims from</u>			<u>Sub-</u>	<u>Grand</u>	
	<u>Saudi Arabia</u>	<u>Abroad</u>				<u>total</u>
		<u>Air</u>	<u>Land</u>	<u>Sea</u>		
1960	n.a.	50.4	69.0	138.0	294.1	
1965	n.a.	90.9	101.7	101.4	188.4	
1970	648.5	208.7	138.1	84.6	431.3	1,079.8
1975	663.3	496.2	285.0	113.4	894.6	1,557.9
1980	1,136.7	572.3	190.1	50.6	812.9	1,949.6
1981	1,063.8	649.2	173.5	56.7	879.4	1,943.2
1982	1,158.0	623.4	174.4	55.7	853.6	2,011.6
1983	1,497.8	724.0	219.0	61.0	1,003.9	2,501.7
1984	864.8	n.a.	n.a.	n.a.	919.7	1,664.5

n.a.: figures are not available.

Source: Compiled from different official sources.

Although moslems are required to do Hajj only once in their life time, if they are capable, many perform as many as they can. Thus, some moslems go yearly to Mecca, and many others go many times in their lives. Expatriate moslems working in the country as well as Saudi nationals

tend to go more than once. Recently the government has considered discouraging expatriate moslems who have already performed Hajj in an attempt to reduce the number of pilgrims and subsequently facilitate the task of serving them. This has contributed to the drop in the number of pilgrims in 1984 (see table 9.7).

All moslems performing Hajj have to wear a special dress and perform certain rituals. This uniformity in dress and action of millions of pilgrims irrespective of race, colour, or status is a major feature of Hajj. There are certain places around Mecca from which pilgrims start their pilgrimage by putting on their special dress and start observing the rules of Hajj.

Pilgrims start arriving in the country several weeks before the pilgrimage day. Some pilgrims go to Medina for few days to visit the prophet's mosque and other religious shrines in Medina, and then go to Mecca. In Mecca pilgrims visit the grand holy mosque, and worship God (Allah). On the 9th of Dhu-al-hijjah they go to Arafat, a mountainous area near Mecca, where they spend the day until sunset praying and worshipping in the open. Most pilgrims make the journey the day before and sleep the night in Arafat.

The weather can create problems for pilgrims, especially elderly pilgrims. When Hajj occurs in the summer, the heat and over-crowding present a serious problem for the pilgrims standing in the open in Arafat. Some pilgrims "keep their

heads uncovered and unshaded in accordance with their special religious belief" (El-Halawani, 1964, p.285). In such conditions pilgrims may die of heat stroke. In ^{the} 1984 pilgrimage, which occurred in the middle of the summer, 340 pilgrims died of heat stroke (Ministry of Health, 1985, p.245).

In response to the problem of heat illness extensive research was initiated by the Ministry of Health in collaboration with the London School of Tropical Medicine. As a result a special apparatus has been developed for the treatment of heat stricken pilgrims. When it was put into service in 1980 pilgrimage a considerable success was achieved, of 174 case of heat stroke for which the apparatus was used only 26 died (Khogali and Al-Khawashki, 1981, pp.85-93).

Pilgrims move from Arafat at sunset to a nearby narrow plain called Muzdalafah, where they spend the night, and then move on to a nearby valley called Mena. At Mena they spend three days, and in each day they perform certain rituals. Sacrificial animals, mainly sheep, are slaughtered in Mena the day after the attendance of Arafat. Almost every pilgrim is required to sacrifice a sheep if he or she can afford it, and some pilgrims sacrifice several animals. In 1983 it was estimated that over one million sheep were slaughtered, 50% within a few hours and 70% in one day (Iqraa, September 1983). Pilgrims take only a small part of each animal and leave the rest to decay. Animal carcasses

become breeding foci for insects, and difficulties of space and lack of hygiene in the area where slaughtering takes place increase the risks. Authorities resort to burying the animals in the sand after they have been slaughtered, but this solution is ineffective (Shamsuddin, 1964). Suggestions to package the meat and send it to needy people in other countries have been debated and studied for many years. In 1983 10% of the sacrificed animals was processed and sent to poor African and Asian countries (Iqraa, 1983).

The large number of animals sacrificed each year means that many animals are imported from a variety of countries, and this creates an additional health hazard (Al-Bauook, 1982, p.123). The slaughtering of animals in Mena presents a serious public health problem as the slaughter house is not adequate for the large number of animals slaughtered (Foda, 1965). It is impossible for veterinary officers to examine all the animals which are slaughtered.

Finally pilgrims return to Mecca from Mena to visit the grand holy mosque and do some rituals after which they can change out of their special dress, which completes their Hajj. The majority of pilgrims are adults, and a large proportion of them are old people. Since most pilgrims come from poor countries, their health status is low and the physical demands of the rituals of the pilgrimage can be more than what many of them can stand. A combination of these factors and environmental factors such as over-crowding and inadequate provision of drinking water and

sanitary facilities make the task of providing services to the pilgrims challenging.

The most pressing health problem of Hajj is that of public health. The provision of drinking water, drainage and sewage treatment facilities to cope with the requirements of so large a number of pilgrims is a major undertaking. Public health hazards are increased by the inevitable consequences of Hajj such as over-crowding, poor housing conditions, logistic difficulties of food supplies, and animal sacrifices.

A number of government ministries and agencies are involved in supervising and helping pilgrims. The Ministry of Pilgrimage and Endowment is responsible for organizing the arrival, accommodation, transport, worship, and departure of pilgrims. The Ministry of Interior is responsible for public order, traffic, and emergency services. The government has established a Central Hajj committee headed by the Governor of Mecca, and a Higher Hajj committee headed by the Minister of Interior to coordinate and supervise the activities, including projects, of ministries and agencies relating to the Hajj. The committees are supported by a permanent administration which include a number of technical committees.

Although the pre-occupation of the Higher Hajj committee with matters such as transport, water supplies, and sanitary provision has helped considerably to improve the health

situation during the pilgrimage, it has meant that the health aspect of the Hajj is made the responsibility of the Ministry of Health. The resources of the Ministry are limited, while the Higher Hajj Committee can get as much resources as it needs and quickly. Effectively this has inhibited the adoption of a planned approach to the provision of health services to the pilgrims. For example, attention to demographic data about pilgrims such as sex and age, and the development of standards has not been adequate. The Ministry of Health is probably not in a position to do this.

4.2 Health Management of Hajj

The annual pilgrimage to Mecca of millions of moslems from all over the world presents a challenge to health authorities in Saudi Arabia. Its implications are not restricted to the national boundaries. It is a significant achievement for Saudi health authorities that in recent years there have been few serious epidemics and health authorities have the situation under control through the development of measures such as quarantine, sanitary provision, and medical back up. The Hajj is a unique event in many ways for the Saudi health system. Its logistics are formidable and require persistent efforts and extensive resources.

The provision of health service to pilgrims is given a high priority by the government and health authorities.

Saudi health authorities are assisted by the World Health Organization and other moslem countries. This assistance is limited but is quite significant in the face of the magnitude of the task.

4.2.1 International Health Assistance

At the invitation of the government, the World Health Organization has provided advice and technical assistance to Saudi health authorities (Simon, 1967, p.200). Cooperation between the World Health Organization and Saudi health authorities to control communicable diseases during the pilgrimage season goes back to the inception of the World Health Organization (Omar, 1957, pp.337-42).

In the 1950s and early 1960s the World Health Organization worked closely with Saudi health authorities to control communicable diseases and to alleviate the health hazards of poor sanitary provisions in Mecca (Zaghloul, 1969, p.15). Quarantine services were developed to control the situation, and the international certificate of vaccination was used to screen pilgrims in the fight against communicable diseases. These measures have met with some success and now generally the Hajj does not result in epidemics of infectious diseases. However, outbreaks still occasionally occur. For example, in 1394 (1974) season Nigerian pilgrims brought cholera to Mecca and 130 pilgrims died before the situation was controlled (Al-Dabbag, 1976, p.52).

One example of the contribution of the World Health Organization is the construction of the quarantine area in Jeddah port. It was designed and operated initially under the supervision of the World Health Organization (Ministry of Information, n.d.d). It consisted of 150 buildings built on an area of 228,000 square meters accommodating isolation quarters, administrative offices, laboratory services, X-ray facilities, pharmacy, a pathological laboratory, a health training school, operating theatres, and other support facilities. When it was opened in April 1957, it had a capacity for isolating 2,408 persons. The World Health Organization constantly monitor the health situation during the pilgrimage season because of its consequences to the international health situation.

Another source of international assistance is Islamic countries from which pilgrims come from. In the 1950s reports from the World Health Organization experts and health authorities indicated the need to initiate preventive measures in the home countries of pilgrims to reduce the burden on Saudi health authorities. The Saudi government reached agreements with many Islamic countries which offered to assist (Mecci, 1979, p.31). Such cooperation resulted in the implementation of compulsory vaccination of pilgrims against some communicable diseases in their countries before they leave for Mecca. The introduction of the international certificate of vaccination has helped to organize the process. Some countries send medical missions with their pilgrims to provide health care to them. The missions are

small, and are a symbol of cooperation. However, such contribution though small is helpful in meeting the difficult task of looking after millions of pilgrims.

4.2.2 Ministry of Health Services

The Ministry of Health is the main provider of health services to the pilgrims, and the task absorbs a significant proportion of the Ministry's resources. Preparations for the next pilgrimage season begins as soon as one season is over, and for two months, Dhu-al-quadh and Dhu-al-hijjah, the pilgrimage occupies the whole attention of top officials in the Ministry who go to Mecca at the peak of the Hajj to supervise health activities. There are two aspects to the Ministry's provision of services to the pilgrims; the permanent services of the Ministry in the pilgrimage region and its mobilization services during the annual pilgrimage season.

The pilgrimage region is divided into two health regions; the General Directorate of Health Affairs in Western Province and the General Directorate of Health Affairs in Medina Province. The pilgrimage region, which is the most populated region in the country, has the largest share of the Ministry's hospitals and health manpower (Ministry of Health, 1985). Health regions in the pilgrimage region are given priority over other health regions. The health service has a distinctive

administrative structure in the pilgrimage area. The General Directorate of Health Affairs in Western Province is divided into 3 sub-directorates. These are Mecca, Jeddah, and Taif health authorities. Each health authority is run by a director who is given extensive authority. This decentralization is not found in any other health region, and it allows health authorities to respond rapidly to the health needs of the pilgrims.

During the Hajj period the Ministry redeploys its resources to meet the health needs of the pilgrims. Health posts and quarantine centres at points of entry into the country are staffed adequately, and some are open 24 hours per day. The staff of health facilities in the pilgrimage region are increased substantially. The staff of hospitals in Mecca, Medina, and Jeddah are increased by 30-50% for the duration of the Hajj (El-Hamdan, 1976). Staff are transferred from other regions in which the services are reduced during the pilgrimage season. The Ministry's flexibility in redeploying manpower is limited because only moslems are allowed into the holy places. The majority of expatriates employed by the Ministry are not moslems.

The Ministry mobilizes two types of service; preventive and curative. Preventive services include health education, environmental measures, quarantine, communicable diseases' reporting, and vaccination campaigns. For each service small teams are formed to cover all the places which the

pilgrims visit, and the teams' work is coordinated with other activities of the Ministry. For example, when an outbreak of infectious disease is first identified, quarantine and medical teams are called in immediately to isolate suspected cases and treat them.

Curative services are provided through temporary hospitals and health centres which are established in Arafat, Muzdalafah, and Mena to supplement the permanent facilities in Mecca. For example in 1984 a total of 2,568 hospital beds and 86 health centres were provided in Mecca (Ministry of Health, 1985, p.243). Heatstroke treatment centres are also established to treat pilgrims suffering from heat illnesses.

4.2.3 Saudi Red Crescent Society Services

The provision of ambulance service to the pilgrims is one of the main responsibilities of the Saudi Red Crescent Society. The society was originally established to serve the pilgrims. In 1934 some citizens from the Western Province, with the approval of the government, formed the Charitable Ambulance Society to provide health services to the pilgrims in the Western Province. The society was financed by donations from pilgrims and was run by volunteers. The citizens who established the society formed a board to supervise the society's activities.

In 1963 the society was re-named the Saudi Red Crescent Society and its services were expanded to the whole country. The government issued regulations which defined the responsibilities, the organization, and the operation of the society, which effectively became a semi-independent government agency. While the society has expanded its range of activities, the services which the society provides for the pilgrims remain as the main function of the society.

The society provides ambulance and first aid services at points of entry into the country, along pilgrim routes, and in the pilgrimage region. It establishes many mobile first aid posts and ambulance centres in the pilgrimage region, and they serve pilgrims as they move between holy places. In 1983 the society established 49 such facilities in Mecca. El-Hamdan (1976) has estimated that during the pilgrimage season 90% of the activities of the society are related to the pilgrimage.

Like the Ministry of Health the Society deals with the increased demands for its services during the pilgrimage period by redeploying its staff and ambulance vehicles. It also accepts volunteers who help to provide the services. Scouts from schools, colleges, and universities are recruited to work with the society in serving the pilgrims. Preparations for the pilgrimage season start several months in advance, and during the

pilgrimage the headquarters of the Society is moved from Riyadh to Mecca to supervise its operations.

4.2.4 Services of other Government Agencies

Although the Ministry of Health and the Saudi Red Crescent Society are the main providers of health services to the pilgrims, there is a number of ministries and agencies which participate in providing health services to the pilgrims. They include the Ministry of Defence and Aviation, Ministry of Interior and the National Guards. They supply medical missions during the pilgrimage season as well as their participation through their health facilities in the Western Province. Their participation helps to reduce pressure on the Ministry of Health.

Each agency provides services directly to the pilgrims through mobile clinics and temporary health posts and first aid posts. They also deploy many ambulances which help in transporting ill pilgrims as well as acting as first aid posts. They maximise their efforts during the climax of the pilgrimage when all the pilgrims gather and perform Hajj. The contribution of these agencies has noticeably increased in the last few years.

5. Comment

In the utilization of primary health care services patients are influenced by their social and religious customs and beliefs. When patients visit health centres they usually have negative and passive attitudes. Patients go through the experience without really interacting with health personnel and the environment of the health centre. They seem to go into health centres with particular pre-set views regarding their illnesses, and health and illness in general, and particular line of action for their solution, and they come out without much changes in these views. Patients see coloured tablets and injections as effective means for treating their conditions, so they insist on having them, and almost in all cases they get them.

The interaction between patients and health centres does not benefit either side significantly and contribute to the improvement of services. Patients are not being educated in the process as their attitudes are not affected, and subsequently their behaviour is not modified. It may even be that the passivity of the experience for some patients is contributory to their beliefs concerning modern drugs and practices. The large number of patients preferring out-patient clinics over health centres is a reflection of the increasing hold modern hospital-based medical care is having on Saudi patients.

The inability of health authorities to effectively and efficiently manage primary health care services is largely

due to the same socio-cultural factors which shape patients' behaviour. Health authorities need the cooperation, and if desirable the participation, of patients to be able to plan and manage the services successfully. In such circumstances health education is often advocated as the solution to the problem. However, patients do not see the need for or benefits of health education. The influence of the socio-cultural environment on patients is strong, and this indicates the need to consider the influence of socio-cultural factors on health provision more seriously.

Health authorities make some effort to adapt their provision of services to the socio-cultural environment. The segregation of sexes, for example, in health centres indicates the intention of health authorities, though they are unable to completely satisfy the demand for strict segregation. There are obstacles in the health system which make it difficult for health authorities to achieve their objectives. For example the centralization of decision making in the organization of primary health care services restrict the scope for local initiatives to deal with local health problems because permission is needed from the top, and it takes long time for permission to be granted.

The impact of health provision to the pilgrims on the health system represents another level through which socio-cultural factors influence health authorities. The resource implication is quite significant, and one which may lead to serious consequences when financial resources become

less readily available. The Hajj highlights the importance of simple preventive health measures such as vaccination, sanitary provision and the provision of drinking water supplies. Annually it provides a demonstration of some of the consequences of the lack of basic measures of public health. At the same time it provides the opportunity to experience directly and promptly the results of public health provision.

It also highlights the importance of coordination between the various health agencies caring for the pilgrims. Coordination is necessary to achieve effectiveness and improve efficiency. The health needs of pilgrims are difficult to meet, and therefore efforts need to be coordinated to obtain maximum benefits from available limited resources. The Hajj can be a valuable source of experience in the organization and operation of health facilities. It provides unique training conditions for health administrators, planners and even policy-makers.

The health risks associated with the pilgrimage to Saudi Arabia and the whole world should not be underestimated. Despite the excellent achievements of controlling the health situation during the Hajj in the past years, there is still a lot that need to be done to reduce health risks and make the Hajj environment healthy. The effort to bring the situation under control at any cost has apparently overrun all other considerations. The cost element of managing health services for the pilgrims has been, and is still

being, ignored because the government has plentiful resources. The government is dedicated to serving the pilgrims and the cost factor is not yet a cause for concern.

6. Conclusion

Socio-cultural factors are evidently dominant in the Saudi society. The interaction between patients and the health system is influenced by these factors. Health authorities recognize the importance of social and religious customs and beliefs, and make allowance for them in the organization and operation of health services. However, present arrangements for health provision are still conventional, mostly modelled along western medical practices.

The allowances made by health authorities to satisfy socio-cultural pressures were not adequately planned. Authorities, for example, could not control the slaughtering of animals during the pilgrimage to prevent public health hazards, though it is a high priority issue. Religious leaders, whose consent is needed for any solution proposed to deal with the problem, are more important for dealing with the issue than resource and technical considerations.

Health services provision need to be adapted to the socio-cultural environment of the country, and efforts should be directed at finding the most appropriate way of

achieving this. Socio-cultural factors should be considered early in the planning stage of health provision. The involvement of religious leaders, for example, can contribute to the realization of this goal. Religious leaders should be seen as a source of input into the decision making process which generate alternative policy options.

The practical recognition of the influence of socio-cultural factors does not mean the subordination of the health system to the social and religious customs and beliefs of the people. Some socio-cultural factors may not be compatible with economic considerations, for example, and will therefore be ignored. Emerging social trends may contribute positively more than century-old customs. In the next chapter I shall examine the role of charitable societies in health provision in Saudi Arabia to illustrate the potential of socio-cultural factors to health services provision.

CHAPTER 10: HEALTH SERVICES OF CHARITABLE SOCIETIES1. Introduction

Despite the social changes that the modernization process has introduced into the Saudi society, traditional forces remain strong. Traditionally, Saudis have been taught from early childhood to help other people, especially the poor. This moral sentiment is sanctioned by Islam which calls on its followers to give whatever they can afford to those who need it at all times. Helping other people is seen as a religious imperative.

This traditional custom has been organized into and used as the basis of local charitable societies. These are established locally to organize the process of helping the poor and needy and to undertake work to improve local conditions and services. In recent years the number of societies has increased, and many of them have taken an active role in providing health services in their communities. They offer an opportunity to study the potential contribution of socio-cultural influence to health provision in the country. In this chapter I shall assess the role played by charitable societies in providing health services, and consider their potential and future prospect.

There are three sections in this chapter. In section one I briefly describe the context within which societies are formed and operate, and the different types of societies

and their functions. In the second section I examine health-related services of the societies including their future plans. In the third section I consider the health activities of one specific society and discuss the impact of the societies' health provision on the health situation in the country.

2. Charitable Societies in the Saudi Society

Although registration of charitable societies started in 1963, societies were common in Saudi communities well before that. For example, the Saudi Red Crescent Society was started in 1934 in Mecca as the Charitable Ambulance Society (see chapter 9). However, the introduction of registration in 1963 formalized the role of societies and was followed by a rapid expansion of their activities and roles. The number of societies has increased substantially in the late 1970s and early 1980s (see table 10.1). The societies are mainly concentrated in the east, centre, and the west of the country.

The societies in terms of membership, revenues, and spendings are relatively small (see table 10.2). Membership of societies include local Governors, Ministers, religious people, and lay people. Societies are more significant at the local level. However, as membership, revenues, and spendings continue to rise so the scope of societies may increase. In this section I shall give an account of the formation, differentiation, relationship with government,

and functions of the societies to set the scene for the discussion in the subsequent sections.

Table 10.1 The growth of the Number of Charitable Societies in Saudi Arabia.

<u>Period</u>	<u>New Societies</u>	<u>Cummulative Total</u>
1963 - 1965	8	8
1966 - 1970	6	14
1971 - 1975	7	21
1976 - 1980	23	44
1981 - 1984	38	82

Source: Charitable Societies Department, Ministry of Labour and Social Affairs, Riyadh, Saudi Arabia.

Table 10.2 General Information about Charitable Societies in Saudi Arabia, 1981-84.

<u>Year</u>	<u>Number of Societies</u>			<u>Member-</u>	<u>Revenues</u>	<u>Spendings</u>
	<u>General</u>	<u>Female</u>	<u>Total</u>	<u>ship</u>	<u>(in millions)</u>	
1981	27	10	37	12,395	148.9	86.1
1982	33	12	45	15,110	214.1	139.9
1983	37	13	50	18,406	283.3	151.5
1984	48	14	62	20,720	343.2	201.9

Source: Charitable Societies Department, Ministry of Labour and Social Affairs, Riyadh, Saudi Arabia.

2.1 Formation of Societies

The establishment and running of societies is supervised by the Charitable Societies Department of the Ministry of Labour and Social Affairs. Members of the general public who organise themselves and decide to establish a society in their locality are required to register the society with the department. The founder members of the society draw up its charter in which they outline the society's by-laws, objectives, and other technical details.

Registration is granted when the Charitable Societies Department is satisfied with the need for and viability of a proposed society. Registered societies are eligible for government subsidies, the most important of which are annual and project subsidies (Ministry of Labour, 1984). Charitable societies are run by elected boards of directors whose members are elected from the membership at the annual general assembly. The board of directors meets regularly and can, as often the case, form committees to deal with the activities of the society. The societies employ permanent staff to provide their day-to-day services under the supervision of the board of directors whose members volunteer their time and effort. The societies are required to inform the Charitable Societies' Department of their board and assembly meetings in advance, and the department can send representatives to attend the meetings.

Societies get their income from a variety of sources. These include members' subscriptions, government subsidies, public donations, services' income, and sometimes returns from investments. In recent years some societies have started collecting Zakat. Zakat is one of the five pillars of Islam, and it means to give alms to the poor. It is an annual duty on cattle, agriculture produce and money. Every moslem should give it out when it is due to specified categories of the poor and needy.

2.2 Types of Societies

In terms of membership there are two types of societies; General societies which are male-run societies, and female societies run by women. In recent years more female societies were formed to participate in providing services aimed mainly at women and children in need.

The societies can be divided into two types in terms of their objectives; general and specific. The majority of societies are set up to provide general social services which means providing a range of services to a number of client groups. Examples include the Islamic Charitable Society and village societies. Specific societies concentrate on specific services or cater for the needs of specific client groups. Examples include Friends of Heart Patients Society, the Society of Dar Al-saada for the Elderly and Handicapped Children Association. Specialist

societies tend to concentrate on medical and health activities.

Traditionally, societies have been local, but as some have expanded so they have opened branches in different parts of the country. For example, the Smoking Prevention Society has opened smoking prevention clinics in three major cities; Dammam, Riyadh, and Jeddah, and the Handicapped Children Association has its head office in Riyadh and it plans to open centres in regional cities.

2.3 Activities of Societies

The societies are bound by their charters in which they outline their objectives. Generally, the objectives are worded in general terms whose interpretations are left to the boards of directors. For example an objective of the Mudhar Charitable Society for Social Services is "promoting the hygienic awareness among the people through the provision of sanitary care projects" (Mudhar Society, 1984), and one of the main objectives of Sayhat Charitable Society for Social Services is to "assist in improving the town's health standard" (Sayhat Society, 1981). Some societies specify their concern with health issues. For example, one of the objectives of the Al-Ber Society in the Southern Province is "the establishment of welfare institutions such as hospitals, schools and mosques" (Al-Ber Society, 1984). An important part of the activities of the societies is the provision of health services.

The commitment of societies to the provision of health services depends both on their overall objectives and the particular locality in which they operate. Many of the activities of the societies are related to health provision (see table 10.3). Activities such as child care programmes, public education programmes, medical services and programmes for the care of the handicapped and the disabled

Table 10.3 A Summary of the Main Categories of Activities and Services of Charitable Societies in Saudi Arabia.

<u>Category</u>	<u>Services and Activities</u>
Assistance programmes	Financial assistance to families for food, housing, rent payment, debt payment and other forms.
Child care programmes	Child day-care centres, nurseries, boarding nurseries and children clubs.
General education and vocational training programmes	Training courses in typing, dress-making, and embroidery, courses to train nursemaids and revision courses for students.
Housing programmes	Grants for improving houses and housing schemes.
Medical programmes	Dispensaries, and ambulance service.
Programmes for the care for the handicapped and the disabled	Residential homes, training centres, providing financial assistance to clients.
Programmes for the provision and maintenance of public utilities	Include fencing cemeteries and providing drinking water in public areas.
Public education programmes	Arranging public meetings and lectures to discuss public issues, opening public libraries, and centres for teaching Koran.

Source: Charitable Societies Department, Ministry of Labour and Social Affairs, Riyadh, Saudi Arabia.

are directly related to health provision. Activities such as housing programmes, assistance programmes and programmes for the provision and maintenance of public utilities can be contributory to the improvement of health. The activities and services of the societies are summarised in table 10.3.

In response to my questionnaire societies justified their provision of health services either in terms of their charter or in terms of their local situations. A number of societies stated that locally available services were not adequate and are not available at suitable times for patients. Other societies claimed that the services they provide are not available locally, or that local services are not catering for the needs of specific groups. One society, Al-Ber Society for Social Services at Yanbua, decided not to provide health services except financial assistance for individual patients because it considered the services of the Ministry of Health and the Saudi Red Crescent Society in the town adequate.

2.4 Relationship with the Government

The societies interact with a number of public bodies particularly at the local level. The Ministry of Labour and Social Affairs influences the societies considerably through the registration process. The Ministry participates in the formulation of the societies' plans, especially at the early stages. The system of subsidies operated by the Ministry extends its influence because the societies need help with

large capital projects. The societies also benefit from the technical assistance offered by the Ministry.

The registration of societies gives them a status which enable them to gain priority for their clients from public bodies. The Ministry of Health licenses health facilities operated by the societies, and provides resources and technical assistance to the societies through its regional authorities and local hospitals and health centres. Some societies have arrangements with the Ministry of Health to supply them with drugs. Five of the societies which run dispensaries get their drugs from the Ministry, and the remaining three buy their drugs on the open market.

Some societies have made arrangements with the Ministry of Health through which staff including doctors and nurses are provided by the Ministry. Such societies include Al-Nahdah Female Charitable Society in Riyadh, Smoking Prevention Society, and King Khalid Female Charitable Society in Tabouk. In the case of the Smoking Prevention Society the Ministry provides the buildings for the clinics of the society. The societies cooperate closely with the social work departments at local hospitals. For example, the Female Charitable Society for Social Services in Dammam reported accepting referred cases from the local hospital, and it refers clients to the local hospital.

The societies cooperate with other government institutions. For example, Mudhr Society for Social Services

has reported having discussions with the medical college at King Faisal University in Dammam regarding the operation of its purposely-designed dispensary which is expected to be opened shortly. The university wants a rural health centre to train medical students in community medicine, and the society is keen to secure resources for its dispensary and to provide services of high quality.

3. The Contribution of Societies to Health Provision

In this section I focus on the health services provided by the societies. The services are provided either at an individual level such as helping patients with the cost of treatment or at local level such as providing a dispensary service.

3.1 Assistance to individual Patients

Societies respond to requests for financial aid to go abroad for medical treatment from sick people who do not find satisfactory treatment for their illnesses in the country. It is the policy of most of the societies to assist patients who need this type of help. Each society has its own procedure for processing the requests of such patients. The board of directors usually appoints a health committee which study requests, and either ask the patient to produce a medical report or sends him or her to a hospital or its own dispensary for examination. In both cases the medical report should confirm the illness, the lack of suitable treatment locally, and recommend

specialized centres for treatment. The committee then decides whether to sponsor the patient or not, and how much financial assistance is to be given to the patient to cover travel and treatment costs.

In the past patients were usually sent abroad to India, Egypt or England for treatment. However, since the mid 1970s specialized hospital services have increasingly become available in the country and societies give priority to these facilities because of cost, communication, and social considerations. 23 of the 26 societies which responded to this question in my survey reported that they give financial assistance to patients.

The number of patients who are assisted financially by the societies is relatively small, perhaps less than ten patients per society per year. The cost of this service to the societies is small, perhaps less than 1% of their spendings. But despite this one society, Al-Safa Society for Social Services, has decided to open its own dispensary in order to reduce its spending on financial assistance to patients.

3.2 Ambulance Service

Some societies have ambulances which they use either in connection with their medical services, or to provide ambulance service (see table 10.4). All the societies which have ambulances have reported using them to transport

patients from their homes to hospitals. Patients who have appointments at the hospital but do not have transport are also helped. One society, Al-Ber Society for Social Services at Berharha, uses its ambulance to take patients who do not have transport to out-patient clinics if they have appointment cards. Three societies reported using their ambulances to transport dead patients.

Table 10.4 Ambulance Service of Charitable Societies.

<u>No. of Vehicles</u>	<u>No. of Societies</u>
One ambulance	12
Two ambulances	<u>3</u>
Total	<u>15</u>

Number of responses to the question	36

Six societies reported using their ambulances to transport accidents' victims from the scenes of accidents to Accidents and Emergency departments. Al-Ber Society for Social Services at Berharha installed a telephone in its ambulance so that it can be called to the scene of accidents more quickly. The society is carrying out the duties of the Saudi Red Crescent Society because there is no branch for the Saudi Red Crescent Society in its area. This arrangement has been organized officially, and is to last until a branch for the Saudi Red Crescent Society is opened in the area.

3.3 Medical Services

There are 11 societies in the country which are actively involved in providing medical care through dispensaries, nursing homes for the elderly, mother and child care centres or nurseries. Each society usually concentrates on one type of service or client, and two societies provide more than one type of service. King Khalid Female Charitable Society in Tabouk and Takaif Girl Society in Taif run a mother and child care centre and a nursery respectively. The societies employ doctors and nurses to provide treatment and regular medical check ups.

Sayhat Society for Social Services is the only society which runs a nursing home for the elderly. It was established in 1965 to cater for the elderly and later extended its services to mentally handicapped people. Two years ago the home was moved to a purposely-designed health complex which was designed to provide 24 beds for elderly men, 24 beds for elderly women, 48 beds for orphans, 60 beds for paralyzed persons, and 24 beds for mentally handicapped people. In 1984, 104 elderly and handicapped people used the nursing home.

Dispensary services are provided by 8 societies (see table 10.5). Dispensaries are staffed by expatriate doctors and technicians, and some dispensaries have diagnostic facilities such as laboratory and X-ray. Most of the dispensaries keep medical files for the patients. A pharmacy service is not provided in the dispensaries, though

some drugs are stocked in some dispensaries to supply to patients in urgent cases and for patients who can not afford to buy the drugs.

Table 10.5 Manpower and Utilization Statistics of the Medical Services of Charitable Societies, Saudi Arabia, 1985

<u>Society</u>	<u>Service</u>	<u>Number of</u>		
		<u>Drs</u>	<u>Pats</u>	<u>Techs</u>
Al-Badiaah Charitable Society in Qasim	Dispensary	2	9	800
Al-Ber Society in Southern Province	Dental clinic nursery (orphans)	3	5	662
Al-Nahdah Female Society Charitable in Riyadh	Dispensary	3	3	na
King Abdulaziz Female Charitable Society in Qasim	Dispensary	3	2	na
King Khalid Female Charitable Society in Tabouk centre	Child care	2	6	250
Radwa Female Charitable Society in Yanbua	Dispensary	1	1	na
Safwa Charitable Society for Social Services	Dispensary	2	9	1,500
Sayhat Society for Social Services	Dispensary nursing home	2	6	1,500
Smoking Prevention Society	Clinics	na	na	na
Um Al-Hamam Charitable Society for Social Services	Dispensary	3	3	1,287

* Societies were asked to give the number of patients who used their dispensaries in the last month (the questionnaire was sent out in February 1985).

Source: Compiled from returned questionnaires.

The dispensaries are usually housed in rented residential building adapted for the purpose. Three societies have built purpose designed facilities to house their medical services, and most societies plan to do the same. The dispensaries are run on the basis of fee-for-service, but as the fees are nominal, they are lower than the private sector fees. Poor people are treated free

and some societies keep a register of eligible people. The dispensaries are not intended to make profits.

Most dispensaries are managed by a member of the staff, usually the most senior doctor, and sometimes the society appoints a volunteer to manage the dispensary in cooperation with the staff. Some dispensaries are open for one or two periods during the day which are designed to make the services available to people at times when other health facilities in the area are not usually open. Four societies reported that their dispensaries open 24 hours a day.

The total number of doctors and technicians employed by the societies is small (see table 10.5), and the number of patients benefiting from the societies' dispensaries is also small. However, the societies operate at the local level which makes their services significant to the people in their localities. Most societies plan to expand their existing services and improve them when the resources required become available. For example, Takaif Girl Female Charitable Society in Taif hopes to open a pharmacy in the future.

3.4 Other Health-related Services

It has become customary for charitable societies to participate in national campaigns each year particularly those relating to health. Now many societies are involved at the local level in traffic campaign week, public health

campaign week, mosques week, blood donation week, and other occasions. The societies publish and distribute posters and information leaflets, and organise meetings and seminars to which they invite local officials and experts to give short talks.

Female societies are increasingly becoming involved with in-patients at hospitals. Four societies reported that their members visit patients at hospitals and distribute gifts and toys to children. They help patients who have social problems. They organize activities for the patients to occupy their time, such as arranging showing video films. Such visits and activities are arranged with the cooperation of hospital authorities, and have become regular features in some hospitals. Patients who come to regional hospitals from rural areas are helped to see their relatives and families regularly by providing accommodation for the families and relatives while the patient is at hospital in town. Al-Ber Society in the Eastern Province assists the families of patients hospitalized in Dammam, and Al-Wafa Female Society in Riyadh runs a residential home for such people in Riyadh.

Another important activity of societies is their increasing attention and services for handicapped and disabled people. Many societies act as intermediaries between the Ministry of Labour and Social Affairs and handicapped and disabled people. They refer such people to the appropriate social institution which can help them.

For example, Al-Battalia Charitable Society for Social Services organised a search in its area for handicapped and disabled people, and arranged for medical examination of all individuals identified.

An increasing number of societies are inviting medical specialists from abroad to come to their areas to treat patients, and sometimes to give lectures and seminars in their areas of specialization. For example, King Khalid Female Charitable Society in Tabouk reported inviting four specialists in different medical specialities to treat local patients. Female societies have also reported organizing first aid training courses for women, and one society provided physiotherapy service for women. Dareen Charitable Society for Social Services has reported distributing first aid kits to households in the village. Such activities increase public's awareness of preventive measures, and create a better environment for health provision.

3.5 Future Plans of Societies

In addition to the 8 societies which already have dispensaries, there are 14 other societies which plan to open dispensaries (see table 10.6). Four societies have dispensaries at very advanced stage of planning, and two just awaiting the arrival of their staff. The remaining 10 societies are at different stages of planning. Five societies have reported their intentions to open hospitals. Al-Ber Charitable society in Uniazah and King Khalid Female

Charitable Society in Tabouk are hoping to open specialist hospitals for eye diseases and maternity care respectively.

Table 10.6 A Summary of Future plans of Charitable Societies for Medical Facilities.

<u>Facility</u>	<u>No. of Societies</u>
Dispensary	14
Hospital	5
Nursing home	7

Source: Compiled form returned questionnaires.

Seven societies are planning to open nursing homes for the elderly and the handicapped. Two of them, Al-Ber Society in the Eastern Province and Al-Qatif Charitable Society for Social Services, are planning to build health complexes which will include many facilities; nursing home, out-patient clinics, nurseries, mother and child care centre, probably some hospital beds, administration and buildings for other services of the societies. The health complex of Al-Ber society is under construction at present (Al-Yaum, December 1984).

Besides plans for dispensaries, hospitals, and nursing homes, some societies want to open mother and child care centres, nurseries and day-care centres for the handicapped. For example, the Female Charitable Society for Social

Services in Dammam has plans to open a mother and child care centre in the future.

4. The Impact of Societies' Health Provision

In this section I analyse the contribution of societies to health provision in the country, and assess its significance. I shall consider first the activities of Um Al-Hamam Society for Social Services in detail to illustrate the trends and generalizations identified in the previous section.

4.1 An example: Um Al-Hamam Society for Social Services

The society was established in 1973 in the village of Um Al-Hamam which is one of many villages forming Al-Qatif oasis. Population figures are not available, and I estimate that its population is about 3-4,000 inhabitants. The society adopts a policy of financially assisting patients to get treatment abroad or in national specialist hospitals.

In 1983 the society opened a dispensary in a converted house which it has bought. It was initially staffed by two doctors and one technician, and is now staffed by three doctors and three technicians. All the staff are expatriates. The dispensary opens from 8 a.m. until midnight. The board of directors of the society supervises the day-to-day management of the dispensary. The society charges nominal fees for the services to patients who can

afford to pay. It does not charge patients registered with the society who are poor and are supported by the society.

The society claims that it has opened the dispensary because the village needs it, and villagers have asked for it. The number of patients who used the dispensary in February 1984 was 1,287 and the number for the whole previous year (February 1983 to February 1984) was 9,364. The society plans to build a purpose designed building to house the dispensary, and hopes to build a nursing home for the elderly. The society has one ambulance which provides ambulance service to the villagers at all times. It is also used to transport patients to nearby hospitals. Patients who can not get to the dispensary are transported by the ambulance from their homes to the dispensary and back.

The society enjoys good relations with Al-Qatif general hospital. The hospital provides technical assistance to the society, and supplies it with drugs on regular basis. The society supplies patients with drugs free. Patients attending the dispensary and who require hospitalization are referred to local Ministry of Health hospitals.

4.2 Discussion

In Saudi Arabia the driving force behind the societies is strengthened by religious ideas. In this context the societies represent an emerging social force in the Saudi society. It is an emerging force because the recent flood of wealth into the country has created the resources for a rapid expansion of activities. The revenues of the societies are rapidly increasing, and the prospect for further development is promising.

The involvement of the societies in the provision of health services signals additional resources for the development of health services in the country. The strong socio-cultural elements involved provide a large potential. Currently the societies collect public donations and some of them collect some Zakat. The government collects Zakat from companies only and leaves it for the individuals themselves to decide how to pay their Zakat. The revenues of the societies could expand very rapidly if more people decide to give their Zakat to their local society.

The societies are usually established and managed by local people to provide local services. This is quite significant and advantageous. The success of Al-Batalia Charitable Society for Social Services in tracing handicapped and disabled people in its area and helping them to get technical and moral support provides a good illustration of the importance of local knowledge in dealing with health issues at the local level. In the case of rural

patients admitted to hospitals in towns, the assistance offered to their families and relatives to enable them to be near the patients reflects the appreciation of those responsible for the traditional relations in families and their effects on the patient and his or her well-being. The success of local management depends greatly on the quality of the membership.

The dynamics of the interaction between the societies and the government determine the level of activity of the societies, including their contribution to health provision. The process of registration operated by the Ministry of Labour and Social Affairs extends considerable control to the Ministry over the societies. This control can be useful for planning purposes. The licencing process operated by the Ministry of Health provides health authorities with effective power to ensure constructive arrangements for providing health services. Both the Ministry of Labour and Social Affairs and the Ministry of Health have power to coordinate the services of the societies with their own plans. It appears that neither of them have a clear place for the societies in their plans, and this has led to the ineffective operation of controls extended by the registration and licencing processes.

When a charitable society proposes to open a dispensary or a hospital, the Ministry of Labour and Social Affairs and the Ministry of Health do not seem to be concerned with relating such a suggestion to the state of health provision

in the area, or the plans of health authorities. This leads to a loose enforcement of control mechanisms, and can result in chaos. This can be illustrated by the situation which is developing in the Al-Qatif oasis. The oasis consists of a number of villages scattered around the town of Al-Qatif. Population figures are not available, and its population is estimated to be 250-350,000 inhabitants. The villages are connected by a network of roads, and distances between the villages vary from 1 to 8 kilometers. Almost all the villages have primary health care centres provided by the Ministry of Health, and there is a local hospital in Al-Qatif (see figure 10.1). There are 18 health centres (they are listed in appendix VII). Private dispensaries and one-doctor clinics are available in Sayhat, Anik, Safwa, Tarout, and Al-Qatif. There are 11 charitable societies in the area, and three of them already run dispensaries. Another 7 societies have plans for dispensaries, and three of them are in a very advanced stage of planning and may have opened their dispensaries by now (they were surveyed in February 1984).

As almost all the villages have health centres, and as it takes only 5 to 10 minutes to get to the local hospital from most of the villages, it becomes obvious that the situation is out of control. Planning is missing. The failure to prevent this chaotic situation is largely the responsibility of the Ministry of Labour and Social Affairs and the Ministry of Health. The societies are also to be blamed. They have opened dispensaries because of the

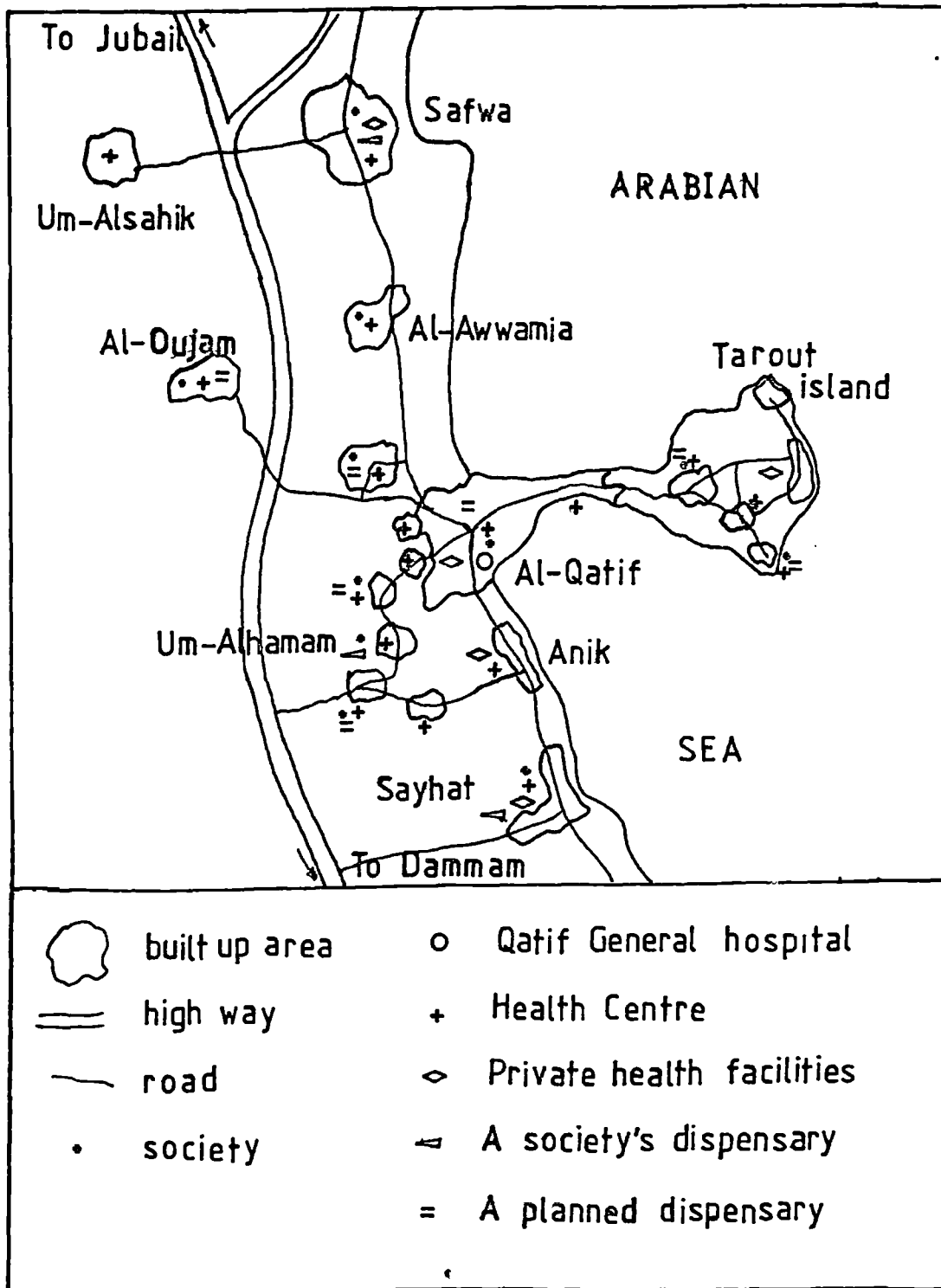


Figure 10.1 Medical services in the Al-Qatif area, Eastern Province, Saudi Arabia.

pressure of local people, the prestige it gives to their villages, and the relatively low cost to them of providing the service.

The attitudes of local people reflect their dissatisfaction with public services, especially the standard of services. But the quality of service provided by the societies do not seem to be much better than public services. The prestige factor is rapidly melting away in the face of social changes invading the villages. The question of cost relates to the quality of manpower employed which will be discussed later in the discussion. The registration and licencing processes provide officials in the Ministry of Labour and Social Affairs and the Ministry of Health with the opportunity to coordinate health provision in the area, to reduce duplication, but evidently the opportunity is missed and resources are allowed to be wasted.

The cooperation between the societies and the government at the local level is quite significant. The Ministry of Labour and Social Affairs through its subsidies encourage the societies to play an active role in their communities, which can lead to less direct involvement of the government. The role assumed by the societies in serving handicapped and disabled people illustrates this point. The societies seek the clients, assist them financially within the community or cater for them within boarding centres under the close supervision of the Ministry. When the number of clients is more than can be

handled by the societies, the Ministry steps in and establishes a social institution to cater for the clients under its authority. In this way the government can expand its activities in response to defined need and without incurring charges of unnecessary interfering

The societies cooperate with health authorities which provide them with free drugs and sometimes staff and buildings. In this way health authorities are encouraging local people to participate in the provision of services, but without adequate planning. Such relationship is often not useful. The referral arrangement between societies and local hospitals as illustrated by the example of the Female Charitable Society for Social Services in Dammam is a more useful form of cooperation. It would eventually strengthen social work activities in the hospitals and provide coordinated health and social services to the public

The relative success of the societies in running their health facilities is largely due to their style of management though they are not without shortcomings. Collective decision-making by boards of directors, and participation by the membership through committees are the hall mark of the societies. In this way the societies draw on the experience of its membership freely and selectively. However, it seems that the societies are not interested in cost analysis or the longer term implications of their decisions. For example, when a society decides to open a dispensary, it tries to secure drugs and staff and even the

building through donations or subsidies from public bodies, so as to reduce the cost of the project to itself. The total cost of projects and their relation to their expected benefits are not considered.

This approach of the societies explains their dependence on expatriate manpower for their health services. It is alarming that no Saudi health personnel is employed by the societies, and none have plans to do so. Recruitment decisions are made solely on cost grounds to reduce the cost of the services to the societies as much as possible. In this way societies opt for cheap expatriate manpower and in the process bring most of the problems associated with expatriates in public services to their own services. The difference in standards between the health services of the societies and public services are superficial, and due entirely to the style of management of the societies.

Female societies contribute to health provision in their communities in three main ways; by providing new ideas, caring for specific clients, and through health education. The establishment in a short time of regular patients' visiting by some female societies is one of their innovations in the health care scene in the country. The warmth of interaction between local visiting women and patients contrasts sharply with the interaction between patients and expatriate health personnel who look after them. The organization of first aid training courses by some female societies is an indication of their

determination to contribute to the process of providing services to meet women's needs in their communities.

Female societies are more concerned with children and elderly women. They reported plans for opening nurseries (with full medical cover for children), mother and child care centres and nursing homes for elderly women. The contribution of female societies to health provision through health education is far reaching. The activities of the societies, especially their health education programmes, are positively influencing mothers and women generally. The role of women in the family and their traditional caring duties towards the sick, the children and the elderly at home make the exercise more beneficial and rewarding.

The involvement of national leaders, ministers and top officials in the societies, particularly national and specialist societies, is significant. A number of societies' boards of directors are chaired by the local or regional Governor, and religious people are prominent in the boards of directors. For example, the Smoking Prevention Society is chaired by a minister, and its membership includes ministers and professional people. In the absence of studies focusing on membership of the societies in the country, it is only possible to speculate on the possible consequences of this make up of membership. It brings societies nearer to traditional sources of power at their level of operation and facilitates their acquisition of public support for their programmes and activities.

There are some societies which are not registered. Such societies are not recognized legally, but can and do function in the same way as other societies do. They rely solely on public donations and their sources of income. They are not eligible for government subsidies. Many charitable activities at the local level are traditionally carried out and inherited within families and clans. Caring for the elderly, the handicapped and the disabled are the main activities related to health provision.

Abdul Rahman Al-Sudary Foundation in Al-Jouf is one such charity. The Foundation plans to open a hospital in the area and a centre for treating patients suffering from vitiligo which is a common skin disease in the area. The Foundation has brought an expert in the disease from Yale university, United States of America, to examine patients and study the disease pattern in the area. The Foundation is cooperating with the Ministry of Health, and hopes to open the centre in collaboration with the Ministry.

4.3 The Potential of Societies

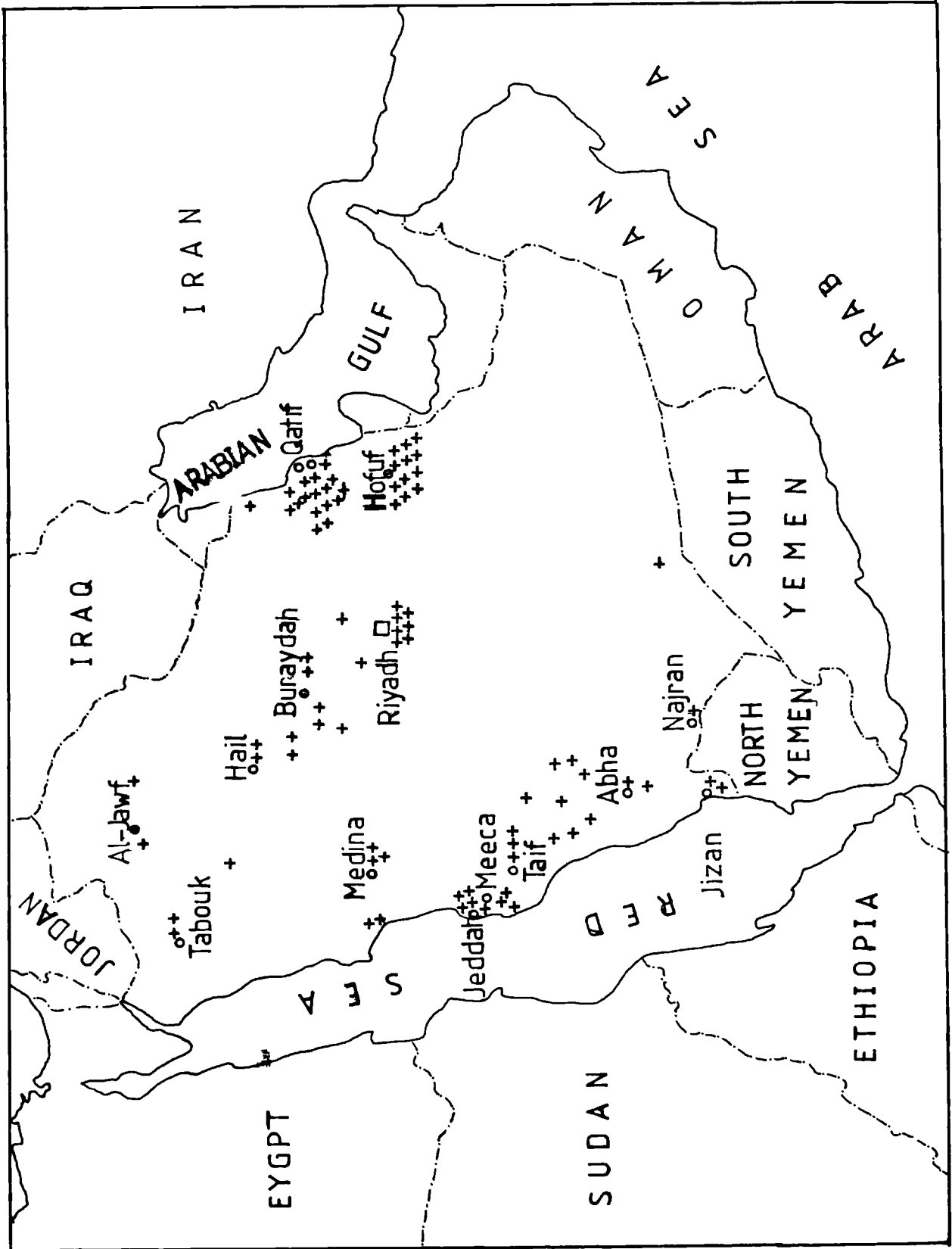
Data concerning revenues, manpower and facilities of the societies at the present time indicate a relatively small contribution in terms of resources. But since primary health care provision is not capital intensive, and is an important aspect of health provision, then it can be argued that the societies are providing valuable services. It is

difficult at the present time to assess fully the health services of the societies because the majority of the societies are still at an early stage of development, especially in terms of health services.

Data concerning the growth of societies, their membership, and their future plans for health facilities indicate a promising prospect. The growth of the societies is influenced by the process of development in the country, and the wealth that has accompanied it. When the situation settles down and stability prevails more societies can be expected to be formed. The scope for growth in the Northern, south western and north western regions is wide (see figure 10.2).

Future plans of the societies for health facilities are ambitious, and represent a substantial resource contribution to health services in the country. The case of the Islamic Charitable Society in Riyadh which has built three hospitals in Riyadh, Mecca, and Medina that were later taken over by the Ministry of Health (see chapter 6) illustrates the ability of societies to see their plans through. However, the lack of coordination with health authorities can lead to the misuse of resources that can be gained from the societies' plans for health facilities. It is necessary to improve the planning and coordination of health provision in the country in order to protect the societies resource potential for health provision.

Figure 10.2 The distribution of charitable societies in Saudi Arabia, 1985.



Some of the services provided by the societies complement public services at the local level. For example, societies which have ambulances provide ambulance service. The assistance offered by societies to transport patients to hospitals and health centres reduces access problems. The function of the societies ambulance service is probably temporary until an effective public ambulance service is provided, but is important to patients at the local level. In emergency cases the transport of patients to hospitals by the societies can make the difference between life and death for some patients.

The involvement of women in the societies is a constructive development in the country from a health perspective. In 1985 there were 19 female societies out of a total of 82 societies in the country. Women make up 10-20% of total membership of the societies. The participation of women in the provision of the societies services is increasing. The social position of women in the Saudi society means that the services they provide can not be easily provided otherwise. Thus, the involvement of women in the societies is effectively a release of ^{an} important latent resource into communities.

5. Conclusion

The involvement of societies in health provision has a number of spin-offs, most of which are generally desirable. The societies provide a number of health services, some of which complement public health services, though duplication sometimes occurs. They effectively increase the number of alternative sources of medical care available for the general public, and cater for members of the public who can not afford to pay for health care. The entry of the societies into the health market can lead to increased competition in the sector and can result in improvements in the standards of services to the benefit of patients.

The significance of the involvement of the societies in health provision lies in their resource potential for health services. There is a number of ways through which the societies can generate resources for health services. This is important to the health system because it concerns untapped resources, and the process for securing them is in harmony with the social fabric of the Saudi society. Thus, the societies can make more resources available for health services without competing with other sectors, and without incurring social opposition. In the long term when public financial resources may become less readily available for health services, such socio-cultural wealth may prove to be more reliable for health provision, particularly at the local level.

Although the contribution of charitable societies to health provision is marginal, it is significant because it indicates that socio-cultural forces can contribute to health provision in a modern way. It provides an opportunity to use the societies to find new ways of delivering health services depending on local conditions and other constraints. The government can make the role of the societies in health provision more effective through the control mechanisms of registration and licencing processes. The position of societies in their localities makes them ideal for the delivery of some services such as health education.

The impetus for the societies in the Saudi society is largely religious. This indicates the need to recognize the importance of socio-cultural forces in health provision, and should lead to their incorporation in the health policy making process. Socio-cultural influences need to be considered with other economic and political constraints before policy options are formulated so that they exert an impact on policy decisions. This contribution of societies to the debate concerning the importance of the socio-cultural dimension in health provision is re-inforced by the spin offs that are generated by the societies' health activities.

CHAPTER 11: CONCLUSION

1. Introduction

In this chapter I shall draw together the main economic, political and socio-cultural themes that underlay my analysis of the development of the Saudi health system, and consider the significance of the Saudi case to the wider issue of health services development in developing countries. This chapter is divided into two sections. In the first section I consider the theoretical implications of the Saudi case, and in the second section I shall briefly consider the policy implications of the study to the Saudi health system.

2. Towards a Socio-cultural Oriented Approach

In this section I analyse the theoretical implications of the study and argue for the formal recognition of the influence of socio-cultural factors on health provision. I shall consider the contribution of the Saudi case to the theoretical debate about the relative importance of economic, political and socio-cultural factors to health services development in developing countries.

2.1 The Theoretical Debate

As I have shown in the first chapter the provision of health services in developing countries is determined by the interaction between economic, political and socio-cultural

factors. Since most developing countries are economically underdeveloped, many commentators have argued that lack of resources is the main reason for most of the problems associated with the provision of health services in developing countries. The low priority given to the health sector in the allocation of resources has meant that services available in urban areas could not be extended to rural areas. Implicit in this argument is the assumption that when the economic situation improves more resources would be allocated to the health sector, and subsequently the provision of health services will improve.

However, the experience of countries which achieved relatively high economic growth rates such as Brazil did not bear out the assumption, and the success of socialist countries such as Cuba and Tanzania prompted comments for a political perspective. As I have shown in the first chapter some commentators have argued that political forces are the main determinants of the development of health services in developing countries. But the initial enthusiasm for the political approach did not gain wide support as it was realized that most developing countries can not adopt the Cuban and Chinese revolutionary approach.

The debate about the development of health services in developing countries was characterised by a neglect of socio-cultural factors and their influence on health provision. As I have shown in the first chapter socio-cultural factors are potentially influential because

of their significance to the behaviour of individuals. They were neglected because the debate was conducted within the context of economic development and international health concepts. This has meant that it was possible to provide theoretical explanations for the influence of economic and political factors from the theories of economic development and political ideologies respectively.

From a theoretical point of view there is a need for a theoretical explanation of the role of socio-cultural factors in the development of health services in developing countries. This can be developed if the issue is considered separately, and not within the confined contexts of economic development and international health. The interaction between economic, political and socio-cultural factors in developing countries is complex, and the impact of any single category of factors is relative to the others. My study of the Saudi health system contributes to our understanding of the relative influence of the factors in their interaction, particularly the socio-cultural factors.

2.2 The Saudi Case

The characteristics of Saudi Arabia which I outlined in chapter two, especially its economic and socio-cultural features, make its contribution to our understanding of the interaction between the factors marginally significant. Saudi Arabia is economically prosperous because of its oil resources. It has plentiful financial resources, and the

Saudi government provides generous funds for the development and expansion of health services. This reduces the constraining influence of economic factors on the development of its health services.

The Saudi society is deeply religious, and the legitimacy of the government is based on its adherence to the religion of the land, Islam. The country is the focus for moslems all over the world because the holy cities of Mecca and Medina are under its guardianship. Each year large numbers of pilgrims visit the country to perform Hajj. This poses serious health risks to the country, and strengthens the influence of socio-religious groups in the country. The strong socio-cultural identity of Saudi Arabia provides a contrasting situation for understanding the influence of socio-cultural factors on the provision of health services in a developing country.

The health situation in Saudi Arabia is similar to that in other developing countries. The demographic and epidemiological features are typical of developing countries. There is an emphasis on curative high-technology hospital-based services which are usually located in urban areas. Disparities between urban and rural areas are wide, and successive health plans to establish an equitable and comprehensive health provision with a referral arrangement have not succeeded yet. The recent economic wealth of the country has stimulated growth in the health service, and has improved the situation considerably.

Although Saudi Arabia has plentiful financial resources at the moment, these resources may not be sufficient to maintain the long-term development of the health service and only serve to mask other resource limitations. The hospital service, for example, has expanded substantially as I have shown in chapter five because generous financial resources were available for constructing modern high-technology hospitals. But non-financial resources are problematic, and the high cost of obtaining the necessary health manpower and expertise from the international health market can not be met for long.

The pattern of resource availability has played an important role in directing Saudi health policies. For example, as I showed in chapter nine the use of auxiliaries has not been developed as in other developing countries, and more emphasis was placed on curative hospital services. As in other developing countries economic factors have an important impact on Saudi health services, but the economic prosperity of the country has meant that the influence is not as obvious and constraining as in other developing countries. Saudi health authorities, for example, decide what level of medical technology to provide in health centres and hospitals instead of deciding limited provision of it as in most developing countries because of resource constraints.

As I showed in Part Two the shortage of health personnel presents a serious obstacle to the expansion of

the Saudi health service. Although substantial financial resources are spent on building training facilities, the number of graduates of health personnel is relatively small. The attitude of the public towards women's working in the health service and the segregation of sexes in health facilities, which I analysed in chapter eight, create serious difficulties to the Saudization solution to the health manpower problem.

The dynamics of the interaction between economic factors and health provision in Saudi Arabia indicate that the solution of the health problems of developing countries is not entirely economic as often argued. It suggests that when underdeveloped countries become relatively more prosperous economically, their health services will improve but the problems will not disappear. The extent of improvement and the type and scale of persistent problems will depend on the country's circumstances and its political and socio-cultural environments.

The influence of economic factors on Saudi health services was mediated by the Saudi political system. As I have shown in chapter six although health provision is not considered a contentious political issue, the health resource allocation process is subject to considerable political influences. Public bureaucrats and traditional social groups influence the decisions of health policy makers, and this reduces the effectiveness of national health planning. As I explained in chapter seven the Saudi

political system does not allow public representation and participation through elections or pressure groups politics, but health provision is still affected by the political process as in other developing countries. The nature of the Saudi political system tends to emphasise those political aspects which are economically and socio-culturally acceptable. The relative plentiful financial resources have meant that decisions about the allocation of facilities are modified to satisfy local leaders without considering the cost factor or the resultant maldistribution of facilities. This has made health provision an important aspect of the welfare services of the government, and increased social cohesion between the public and the government.

As I showed in part three there are apparently no conflicts between interest groups, socio-political groups and politicians in the resource allocation process. The availability of financial resources has enabled decision makers to "buy off" the demands of influential groups skillfully. This policy has also precipitated many administrative problems. For example, in my analysis of the politics of the Ministry of Health in chapter seven I showed the disruptive impact of interest groups on the distribution of health facilities.

The pattern of relations between political factors and health provision in Saudi Arabia is largely due to the influence of socio-cultural factors. Loyalty to the family

and the tribe has meant that health policy decisions are often subservient to the interest of social groups without consideration to the effect on national planning. As I have shown in chapter nine the influence of socio-cultural factors on the behaviour of individuals in their interaction with the health system has significant implications for health provision. The segregation of sexes and the annual pilgrimage to Mecca, for example, place considerable constraints on the operation and the efficiency of health services.

The impact of religious factors on health provision is profound as I illustrated in chapter eight. Religious prohibitions and restrictions have significant resource implications, and some religious instructions encourage a positive attitude towards personal hygiene and health generally. The position of religious authorities in the Saudi society can be utilized to support health education programmes through cooperation with health authorities. Health authorities can also benefit from cooperation with socio-religious groups in reducing operational religiously-based difficulties.

The interaction between socio-cultural factors and health provision in the Saudi case is significantly different from other developing countries. Saudi health authorities recognise their influence, but they do not completely adapt their operations to them. Some allowances are made for socio-cultural factors, such as the segregation

of sexes for example, but it is done within the conventional arrangements for the delivery of health services. Health authorities are effectively accommodating socio-cultural factors using available financial resources. The strong influence of socio-cultural factors in the Saudi society on both individuals and collective health provision means that they have greater contribution to make to health provision in the country.

2.3 A Complementary Option

The case of the Saudi health system represents a substantial addition to the growing recognition of the importance of socio-cultural factors to health policy decision making in developing countries. The relevance of socio-cultural factors to health provision was identified when modern health programmes were first introduced into developing countries (Paul, 1955; Read, 1966), but they were "often singled out as obstacles to solving health problems" and "action going beyond the admission of their importance" was rare (Djukanovich and Mach, 1975). Cultural diversity in developing countries has encouraged health workers to concentrate on individual socio-cultural factors and their impact on health services. For example, traditional medical practices and their relationship with modern health delivery systems have often attracted researchers (Maclean, 1965; Taylor, 1976). Kleinmann summarised the case for socio-cultural factors in the following way:

"Cultural settings provide much of the specific content that characterise health care systems and, therefore, are major determinants of the peculiar profiles of given systems" (1980, p.33).

The Saudi case indicates the need for the development of a socio-cultural perspective which permits the consideration of the impact of socio-cultural factors on health policy decision making. This is a major shift in attitude towards socio-cultural factors. It is a crucial step in the growing recognition of the importance of socio-cultural factors to health provision in developing countries. Socio-cultural factors do not hinder the development of health services (Banerji, 1974), but can play a significant role in resolving health problems (Baasher, 1983). The success of remedies for the health problems of developing countries depends on the social context within which health services are provided (Tsalikis, 1980).

Socio-cultural factors contribute to health services development because they assist in adapting health programmes to the culture and social structure of local communities so that the programmes are made more effective. Achermann described the process through which they operate:

"It is important to realize that cultural values and beliefs have an historically acquired force to some extent independent of the current social structure. As a result, they will be embodied in

the projects of individuals and groups, contribute to the ordering of their priorities, and affect their strategies to achieve whatever goals they have set themselves, without being explicit preferences over alternatives" (1981, p.551).

It is therefore essential to recognize the influence of socio-cultural factors on health provision formally, and to channel their contribution into the health policy decision making process. The economic and political environments in developing countries do not provide support for concern for health problems, and a socio-cultural approach can provide substantial improvements on the present situation.

The socio-cultural approach can contribute to the development of health services in a number of ways. It makes the services more acceptable to patients because it involves adapting the services to the cultural and social structure of communities. This can also reduce the problems that arise in the health service because of cultural and social tensions between providers and recipients of services. For example, a number of disagreements between health workers and pregnant mothers who prefer to deliver at home can be eliminated if the maternity service is adapted to home deliveries without compromising health considerations (Cosminsky, 1983).

The socio-cultural approach has significant resource implications. It can lead to improvements in the use of

resources because it reduces waste by making the services more acceptable to patients. It can also lead to the generation of additional resources for the health service as illustrated by the example of the role of charitable societies in Saudi Arabia. The resource potential of the socio-cultural approach depends largely on the circumstances of the health system.

The relative prominence of the influence of socio-cultural factors in the Saudi Case compared to the relative neglect of socio-cultural factors in most developing countries provides support for the socio-cultural approach. However, the approach is intrinsically innovative and considerable research is needed to explore it, evaluate it and exploit its potential. There is an extensive cultural diversity in developing countries, and this means that the application of the approach will take different forms in different countries.

In this study I have shown that the approach can contribute resources to the health system because Saudi Arabia is economically prosperous and its socio-cultural dimension is dominated by socio-religious factors. In India, for example indigenous medical systems are prominent in its socio-cultural dimension, and the application of the socio-cultural approach there will probably lead to more utilization of indigenous medical practitioners. In countries with traditions in enterprise and competition the approach may lead to greater participation of local people

in the provision of health services. The socio-cultural circumstances of the individual country will determine the details of the contribution of the socio-cultural approach.

The theoretical base of the socio-cultural approach to health provision in developing countries provides for the utilization of local potentials through the development of culturally acceptable arrangements for health services delivery. This excludes the use of arrangements imported from other countries (developed and developing), which have tried them, without adapting them to the local socio-cultural environment. The socio-cultural approach, thus, generates alternative options which can be considered with other available options before decisions are made. Socio-cultural options may involve an increase in the cost of the service, and this and other relevant aspects need to be considered and evaluated when the options are considered in the decision making process.

3. Health Services in Saudi Arabia: The Way Forward

The unique economic and socio-cultural features of Saudi Arabia give prominence to the economic and socio-cultural dimensions. Thus, the course of interaction between the economic, political and socio-cultural factors has effectively determined the pattern of health services development in the country over the last 20 years. Health services have improved considerably, particularly curative services. The achievements of the hospital service have

matched those of advanced western countries, and have become the pride of the Saudi health system. The same pattern of interaction has encouraged policies which neglect long term considerations, and led to the inefficient use of resources.

The recent fall in oil prices is likely to disrupt the balance between the factors, and increases the need for changes in the health system. Some aspects of the present health system need substantial changes, and the socio-cultural potential of the Saudi society need to be explored. Some action is urgently needed to contain the consequences of the current policies, particularly recurrent expenditure on major hospital projects initiated in the last few years. These policies can lead to a crisis in the health service if they are not dealt with effectively in the coming few years. In this section I shall provide some policy suggestions that can contribute to the avoidance of the coming crisis in the Saudi health service.

3.1 Health Resources

The high spending era of the 1970s is apparently over, and health authorities are going to face difficulties in securing funds for the services. The reduction of the country's oil revenues is creating new economic circumstances. This reduction in the availability of financial resources comes at a time when many capital projects are expected to be completed, and substantial

resources are needed to operate them. The situation requires urgent action.

The fragmentation of health provision and its consequences of duplication of expensive high technology facilities can not be financed in the new economic circumstances of the country. The fragmentation could be reduced by integrating the services of some agencies with those of the Ministry of Health, and coordinating the services of agencies that need independent medical services with other health services in the country. For example, School Health Service can be integrated with the services of the Ministry of Health leading to more effective use of resources and improved quality of services, and the Ministry of Higher Education can coordinate the running of its teaching hospitals with the Ministry of Health to the advantage of medical students and medical research in the country generally. This need to be made within a national recognized framework which fulfill national aspirations.

There is a suggestion in the Second Development Plan which to establish a National Health Council can provide the institutional base for the formulation of a national health plan, and the adoption of specific policies to deal with the health problems of the country.

The economic prosperity of the country in the 1970s has effectively reduced the concern of decision makers with economic costs. Cost considerations and long term consequences were seldom considered, and now the high cost

of providing the services creates a dilemma for health authorities. The commitment of the government to the free market ideology indicates that the thrust of policy will be on transferring some of the cost of the services to the public. There have already been suggestions for charging fees for the services, and operating an insurance scheme. Such policies will create economic barriers for many people who need the services, and there are many problems associated with this approach.

The majority of the public can not pay for their health care especially if they live in remote rural areas. As I showed in chapter four the services of the private sector are used by expatriates and urban populations which indicates the limited scope for a free-market approach to health provision in the country. The problem of financing the services can be tackled by operating the services more efficiently using economic concepts such as cost analysis and cost benefit analysis. Public resources would be sufficient to finance the services without the need to charge patients for the services. This approach can be supplemented by innovative policies, for example, using the services of charitable societies, and possibly by charging nominal fees for selected services.

An alternative policy option to reduce the cost of the services is to reduce the services available to the public by closing facilities and reducing services. However, this option is not under discussion because there is a general

consensus in the country that available facilities and services are needed. Therefore, policy options dealing with the finance of the services need to be studied thoroughly before a decision is made.

3.2 The Allocation of Resources

The changing economic circumstances in the country mean that there is likely to be fewer financial resources for health policy makers to use to satisfy the demands of socio-political groups. This increases the need for organizational reforms to make the resource allocation process less susceptible to the influence of socio-political groups. The reforms need to aim at improving the efficiency of the administration of the health service, particularly the Ministry of Health.

In the past the availability of financial resources has meant that decision makers did not insist on value for money in the decision making process. The competition for resources between agencies was more apparant than real, and decision makers (politicians and bureaucrats) were influenced by their loyalty to their social groupings. This needs to be changed to make the resource allocation process more responsive to the health needs of the public. The Ministry of Health should be given an independent public agency status like other special public agencies such as the Saudi Airlines. This would give the Ministry organizational flexibility to deal with its problems, particularly those

relating to the recruitment and pay systems. While the separation of the Ministry of Health from the government machinery can improve its administration, nepotism and other social practices that affect policy decisions in the Ministry can not be eliminated immediately. The change can reduce their influence, but their decline and disappearance from the public bureaucracy needs a fundamental change in the political system.

3.3 The Socio-cultural Dimension

Although socio-political groups in the Saudi society affect decision making in the political system, their consequences to health services have been limited. Health authorities recognise the influence of socio-cultural factors on health provision, whether through the behaviour of patients or through the pilgrimage to Mecca, but their response has been limited. The implications of socio-cultural factors to health services should be seriously considered and incorporated into the decision making process. They should not be dismissed because they do not conform to conventional health delivery systems.

Health authorities should give the socio-cultural dimension a role in the health system through the adoption of a socio-cultural approach to health provision to generate alternative policy options which can complement other options based on economic and political considerations. As I have shown in chapter ten this can

generate additional financial resources for the health service, and can lead to local participation through charitable societies. The approach will improve the acceptability of services to the patients and make their interaction with the health system more positive. Health authorities should start research to explore the socio-cultural approach, and make use of its potential if suitable.

For example, the problems associated with the visiting of in-patients in hospitals can be approached differently if the socio-religious elements underlying the behaviour of the people involved are recognized and respected. This means that alternative options which allow more people to visit in-patients need to be developed after studying the problem. The development of alternative policy options accommodating socio-cultural factors can carry significant implications to conventional health delivery systems. For example an option to allow more people to visit in-patients can require changes in the design of wards so that enough space is provided for visitors in a way which minimally affect the work process in the ward.

The socio-cultural approach can improve the contribution of women to the Saudi health service. As I have shown in the study the number of women working in the health service is limited, and their social role in the society means that most of those who are trained do not stay in work for long. A possible solution to the problem,

for example, can be based on training women purposely to work in their homes and within their families. This option, which allows for the socio-cultural constraints affecting women, can be explored to determine the details, and then tried on pilot project basis to ascertain its potential. If it succeeds in increasing the number of women working in the health service, then it can be considered as an alternative policy option besides conventional options.

In Saudi Arabia the changing economic situation provides the setting for the re-orientation of the health system towards a recognition and an acceptance of the significance of socio-cultural factors. The socio-cultural wealth of the Saudi society can contribute to the adjustment of the health system and its continued development to meet the needs of the public.

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The Names of Institutions and Positions of Interviewees

- Agency for technical Cooperation Administration, Riyadh.
manager of the Director General office.
- Arabian American Oil Company, Medical Organization, Dhahran.
Director of Planning and Fiscal Affairs Department.
- General Civil Service Bureau, Riyadh.
Public Relation Department.
- General Organization for Social Insurance, Riyadh.
Director of Insurance Affairs.
- General Presidency of Youth Welfare, Riyadh.
Director of Medical Department.
- Institute of Public Administration, Riyadh.
Director of Document Centre.
- King Faisal Specialist Hospital, Riyadh.
Public Relation Department.
- Ministry of Defence and Aviation, Medical Services
Department, Riyadh.
- Director General of Medical Services Department.
Medical Exucative Officer.
Head of Public Relation Department.
Head of Planning Department.
Head of Supplies Department.
Head of Contract Operation Department.
Statistician, Planning Department.
- Ministry of Finance and National Economy, General Statistics
Department, Riyadh.
Deputy-Director, General Statistics Department.
- Ministry of Health, Riyadh.
Statistician, Statistics Department.
Director of Health Institute Department.
Director of Licencing Department.
Director of Hospitals Department.
Public health specialist, Curative Medicine Division.
Engineer, Project and Manitenance Directorate.
- Ministry of Higher Education, Riyadh.
Directorate for Educational Missions and Universities
Affairs abroad.
- Ministry of Interior, Medical Services Department, Riyadh.
Director General, Medical Services Department.
Manpower Development Department.

Ministry of Labour and Social Affairs, Deputy-Ministry for
Social Affairs, Riyadh.
Follow up Department.
Charitable Societies Department.

Ministry of Municipal and Rural Affairs, Riyadh.
Director of Environmental Health Department.
Statistics Department.

Ministry of Planning, Riyadh.
Public Relation Department.

Ministry of Pilgrimage and Endowment, Riyadh.
Public relation officer, Minister Office.

National Guards, Medical Services Department, Riyadh.
Director General, Medical Services Department.
Senior official, Medical Services Department.

Royal Commission of Yanbua and Jubail, Riyadh.
Deputy Director General for Technical Affairs.

Saudi Arabian National Centre for Science and Technology,
Riyadh.

Official from Social Sciences Division, Directorate
for Science and Research Institutes.

Head of Library and Information Centre, Directorate for
Information Systems and Technical Services.

Saudi Company for Pharmaceutical Manufacturing, Riyadh.
Managing Director.

Saudi Red Crescent Society, Riyadh.
Head of Planning and Follow up Department.
Statistician, Planning and Follow up Department.

Appendix IIA List of Topics for Interviews

For each interview a selected list of topics is drawn from the following list of topics, and used to structure the interview. The selected list of topics is determined by the position of the interviewee and the institution to which he belongs:

1. The beginning of the provision of health services by the institution.
2. Important historical changes.
3. Present scope of provision. (statistics if available)
4. Present organization of health services. (chart if available)
5. Resources in terms of facilities and manpower. (expenditure figures if available)
6. Manpower situation. (statistics if available)
7. Saudization policies and prospects.
8. Relation between central and regional units.
9. Major difficulties and problems. (e.g. drug supplies)
10. Maintenance policies and arrangements.
11. Coordination with other public health providers.
12. Future plans of the institution.
13. Specific relevant issues. (e.g. patients requiring specialised treatment)
14. Publications of the institution. (annual report if available)

Appendix IIINames and Addresses of Charitable Societies in Saudi Arabia

Al-Awamia Charitable Society for Social Services, Al-Awamia,
Al-Qatif, Eastern Province.

Al-Badiyah Charitable Society, Middle Al-Badiyah, Qasim.

Al-Battalia Charitable Society for Social Services, Al-Hasa,
Eastern Province.

Al-Ber Charitable Society, Unaizah, Qasim.

Al-Ber Charitable Society for Social Services, Yanbua,
Western Province.

Al-Ber Charitable Society in Al-Baha, Al-Baha, Asir.

Al-Ber Charitable Society in Burayda, Burayda, Qasim.

Al-Ber Charitable Society in Sharourah, Sharourah, Asir.

Al-Ber Charitable Society in Taif, Taif, Western Province.

Al-Ber Society, Al-Medina, Western Province.

Al-Ber Society, Riyadh, Central Province.

Al-Ber Society for Social Services in Amlaj, Amlaj.

Al-Ber Society for Social Services in Berharrah, Berharrah,
Asir.

Al-Ber Society in Al-Hasa, Hofuf, Al-Hasa, Eastern Province.

Al-Ber Society in Bisha, Bisha, Asir.

Al-Ber Society in Jeddah, Jeddah, Western Province.

Al-Ber Society in Mecca, Mecca, Western Province.

Al-Ber Society in Eastern Province, Dammam, Eastern
Province.

Al-Ber Society in Southern Province, Abha, Asir.

Al-Ghaet Charitable Society, New Al-Ghaet, Central
Province.

Al-Hailwah Charitable Society, Al-Hailwah, Al-Hasa, Eastern
Province.

Al-Halialah Charitable Society for Social Services,
Al-Halialah, Al-Hasa, Eastern Province.

Al-Hasa Girl Society for Social Services, Hofuf, Al-Hasa,
Eastern Province.

- Al-Imman Charitable Society, Riyadh, Central Province.
- Al-Jaeffer Charitable Society for Social Services,
Al-Jaeffer, Al-Hasa, Eastern Province.
- Al-Jaroodia Charitable Society, Al-Jaroodia, Al-Qatif,
Eastern Province.
- Al-Jisha Charitable Society for Social Services, Al-Jisha,
Al-Hasa, Eastern Province.
- Al-Jish Charitable Society for Social Services, Al-Jish,
Al-Qatif, Eastern Province.
- Al-Jubail Charitable Society for Social Services, Al-Jubail,
Eastern Province.
- Al-Mansoorah Society for Social Services, Al-Mansoorah,
Al-Hasa, Eastern Province.
- Al-Moasha Charitable Society for Social Services, Al-Moasha,
Al-Hasa, Eastern Province.
- Al-Murah Charitable Society for Social Services, Al-Hasa,
Eastern Province.
- Al-Naahdah Female Charitable Society, Riyadh. Central
Province.
- Al-Omaran Charitable Society for Social Services, Al-Hoatah,
Al-Hasa, Eastern Province.
- Al-Oujam Charitable Society for Social Services, Al-Oujam,
Al-Qatif, Eastern Province.
- Al-Qatif Charitable Society for Social Services, Al-Qatif,
Eastern Province.
- Al-Quarryhat Charitable Society, Al-Quarryhat, Northern
Province.
- Al-Sahanah Charitable Society for Social Services,
Al-Sahanah.
- Al-Saliehia Charitable Society, Unaizah, Qasim.
- Al-Tarief Charitable Society for Social Services, Al-Tarief,
Al-Hasa, Eastern Province.
- Al-Wafa Female Charitable Society, Riyadh, Central
Province.
- Al-Yakhadh Female Charitable Society, Taif, Western
Province.

Charitable Society, Khamis Mushayt, Asir.

Charitable Society, Mecca, Western Province.

Charitable Society for Social Services, Najran, Asir.

Charitable Society in Al-Jawf, Al-Jawf, Northern Province.

Charitable Society in Al-Rass, Al-Rass, Qasim.

Charitable Society in Bader, Bader, Western Province.

Charitable Society in Bukayriah, Bukayriah, Qasim.

Charitable Society in Jizan, Jizan, Asir.

Charitable Society in Hail, Hail.

Charitable Society in Taimah, Taimah, Western Province.

Charitable Society in Tanooma bani Saahiar, Tanooma bani Saahiar, Asir.

Charitable Society in Tuarba, Tuarba, Western Province.

Dar Al-Saada Society for the Elderly, Jeddah, Western Province.

Dareen Charitable Society for Social Services, Dareen, Al-Qatif, Eastern Province.

Doraat Al-Jubail Female Charitable Society, Al-Jubail, Eastern Province.

Fasial Female Charitable Society, Jeddah, Western Province.

Female Charitable Society, Jeddah, Western Province.

Female Charitable Society for Social Services, Al-Jubail Al-Sanayiah, Eastern Province.

Female Charitable Society for Social Services, Dammam, Eastern Province.

Female Charitable Society in Al-Khafji, Eastern Province.

Friends of Heart Patients Society, Jeddah, Western Province.

Gulf Girl Society, Al-Khobar, Eastern Province.

Handicapped Children Association, Riyadh, Central Province.

Islamic Charitable Society, Riyadh, Central Province.

Karein Dabie Charitable Society for Social Services, Karein Dabie, Asir.

King Abdulaziz Charitable Society, Tabouk, Western Province.

King Abdulaziz Female Charitable Society, Burayda, Qasim.

King Fahd Female Charitable Society, Jizan, Asir.

King Khalid Female Charitable Society, Tabouk, Western Province.

Mudhar Charitable Society for Social Services, Al-Qudiah, Al-Qatif, Eastern Province.

Radwah Female Charitable Society, Yanbua, Western Province.

Safa Charitable Society for Social Services, Safwa, Al-Qatif, Eastern Province.

Sayhat Society for Social Services, Sayhat, Al-Qatif, Eastern Province.

Smoking Prevention Society, Riyadh, Central Province.

Southern Female Charitable Society, Abha, Asir.

Taibah Female Charitable Society, Al-Medina, Western Province.

Takhaif Girl Female Charitable Society, Taif, Western Province.

Tarout Charitable Society for Social Services, Tarout, Al-Qatif, Eastern Province.

Um Al-Hamam Charitable Society for Social Services, Um Al-Hamam, Al-Qatif, Eastern Province.

Um Al-Khora Female Charitable Society, Mecca, Western Province.

Appendix IVQuestionnaire Covering Letter, Questionnaire and Reminder
(original is in Arabic)

1. Questionnaire covering letter

P.O.Box 474,
Al-Qatif,
Eastern Province.
5th February 1985.

Dear Sir,

I enclose a copy of a questionnaire for the collection of data about the health services provided by charitable societies in the country. I need the data for my research on the development of health services in the country which I am undertaking as part of my studies at the university. I would be grateful if you can fill in the questionnaire and return it to me on the above address. I would like to stress the importance of your cooperation for the success of my investigation of the health services of charitable societies. It would be helpful if you can send me a copy of the last annual report of the society.

Yours sincerely,

A. Alshammasi

2. Questionnaire for the collection of data about the health services of charitable societies

Note. Answer the questions by circling the appropriate response, or writing the answer in the space provided. Some questions may require more than one response.

- Q. Name of society;
city, town, village;
date of establishment of society;
- Q. When the society started to provide health services?
- Q. What is the type of the society's health services?
1. curative 2. preventive 3. health education
- Q. What are the health facilities of the society?
1. dispensary 2. nursing home
3. specialist facility (specify) 4. others (specify)

- Q. Does the society charge patients for its health services?
1. yes
 2. only those who can afford to pay
 3. no
- Q. Does the society make profit from its health services?
1. yes
 2. no
- Q. How many patients visited the society's health facility:
1. last month?
 2. last year?
- Q. Why the society decided to provide health services?
- Q. Are there any future plans for expanding the society's health services?
1. yes
 2. no
- Q. If the answer to the previous question is yes, give details
- Q. Please, give any data relating to the health services of the society which are not dealt with in the questions.

3. Reminder

P.O.Box 474,
Al-Qatif,
Eastern Province.
6th April 1985.

Dear Sir,

I have posted to you a copy of a questionnaire for the collection of data about the health services provided by charitable societies in the country two months ago, but till now I have not had a reply yet. This can delay my studies and affect my research. I would be grateful if you can fill in the questionnaire and return it to me as soon as you can. If you have already sent it to me, it may be in the post. In that case please ignore this letter.

Thank you in anticipation for your cooperation.

Yours sincerely,

A. Alshammasi

المحترم ،

المكرم / رئيس جمعية

السلام عليكم ورحمة الله وبركاته ،

تشهد بلادنا العزيزة نهضة حضارية تشمل جميع قطاعات الحياة . و من هذه القطاعات قطاع الخدمة الصحية . و تساهم الجمعيات الخيرية كل حسب المجتمع الذى تخدمه و ظروف بيئتها و في تقديم بعض الخدمات الصحية للمواطنين مساهمة منها في مقابلة المتطلبات الصحية المحلية . و لما كانت هذه المساهمة على جانب غير بسيط من الاهمية فان الحاجة الى دراستها و التعرف على معطياتها و مشاكلها لهو مما يعود بالنفع عليها و يساهم في خدمة المصلحة العامة .

لما تقدم فاني أخترت أن أتطرق بالحد يث للخدمات الصحية المقدمة من قبل الجمعيات الخيرية في المملكة العربية السعودية في الاطروحة التي أقوم بكتابتها عن تطور الخدمات الصحية في المملكة العربية السعودية لنيل درجة الدكتوراه في الدراسات / الادارة الصحية .

و لقد أعددت استمارة لجمع المعلومات اللازمة عن خدمات الجمعيات الخيرية الصحية و مرفق طيه نسخة منها . أرجو أن تقوم جمعيتكم بتعبئة هذه الاستمارة و اعادتها لى على العنوان التالي :

صندوق بريد ٧٤٧

القطيف

الرمز البريدى ٣١٩١١

المنطقة الشرقية

و أود الاشارة الى أهمية تعاونكم معي بتعبئة الاستمارة و اعادتها لي في انجاح بحثي عن خدمات الجمعيات الخيرية الصحية . كما أرحب بالحصول على نسخة من تقرير الجمعية السنوى الاخير . هذا و الله الموفق ،،،

التوقيع

عبد رب الامير عباس الشماسي

حرر في

ملاحظة : تتم الاجابة على الاسئلة بوضع دائرة حول رقم الاختيار المناسب أو كتابة الاجابات في الاماكن المخصصة لها . بعض الاسئلة قد تتضمن أجوبتها أكثر من اختيار

• واحد •

– اسم الجمعية :

مقرها :

تاريخ تأسيسها :

تاريخ البدء في تقديم خدماتها الصحية :

– ما هو نوع الخدمات التي تقدمها الجمعية ؟

1- علاجية 2- وقائية 3- تشخيص صحي

– ما نوع المرافق الصحية التي تديرها الجمعية ؟

1- مستوصف 2- بيت للعجزة 3- دور متخصصة (انكرها)

4- أخرى (انكرها) :

– هل تقوم الجمعية بعلاج المرضى المحتاجين على حسابها بالداخل / الخارج ؟

1- نعم 2- لا

– مقر تقديم الخدمات الصحية : 1- مبنى مخطط لتقديم الخدمات

2- بيت معدل لتقديم الخدمات

– هل المقر : 1- ملك للجمعية 2- مستأجر

– مواعيد تقديم الخدمات الصحية : 1- 24 ساعة 2- دوام يومي (انكره)

– هل تشمل الخدمة تقديم الدواء للمريض ؟ 1- نعم بدون مقابل 2- نعم مقابل ثمنها 3- لا

– كيف تحصل الجمعية على الادوية التي تحتاجها ؟ 1- بالشراء من السوق 2- مساعدة من وزارة الصحة

3- غير ذلك •

– عندما بدأت الجمعية في تقديم خدماتها الصحية كم كان عدد :

* الاطباء 000 * جملة الفنيين 000 * الاداريين

– كم يبلغ عدد هم حاليا (أو في آخر احصاء متوفر مع بيان تاريخه) :

* الاطباء 000 * جملة الفنيين 000 * الاداريين 000

– هل توجد لدى الجمعية سيارات اسعاف ؟

1- نعم وعددها 000 سيارة 2- لا

- الاغراض التي تستعمل لاجلها سيارات الاسعاف :

١-

٢-

٣-

٤-

- هل يوجد هناك تعاون بين الجمعية و الجهات الاخرى المختصة بتقديم الخدمات الصحية
مثل وزارة الصحة ؟

٢- لا

١- نعم

- اذا كان الجواب بنعم اذكر هذه الجهات ومجال التعاون معها :

١-

٢-

٣-

- ماهي مهنة و مؤهلات المسئول عن ادارة خدمات الجمعية الصحية حاليا ؟

-

- هل تتقاضى الجمعية رسوم مقابل علاج المرضى ؟

٣- لا

٢- من القادرين فقط

١- نعم

- هل تحقق الجمعية أرباح سنوية من خدماتها الصحية ؟

٢- لا

١- نعم

- كم يبلغ عدد المراجعين لمرافق الجمعية الصحية ؟

١- في الشهر الماضي ٠٠٠

٢- في السنة الماضية ٠٠٠٠

- لماذا قررت الجمعية افتتاح مرافق لتقديم الخدمات الصحية ؟

-

-

-

- هل هناك خطط مستقبلية لدى الجمعية بخصوص تطوير وزيادة خدماتها الصحية ؟

٢- لا

١- نعم

- اذا كان الجواب بنعم اذكرها باختصار :

-

-

-

- بيانات تتعلق بخدمات الجمعية الصحية لم تتطرق لها الاسئلة :

بسم الله الرحمن الرحيم

المحترم ،

المكرم / رئيس جمعية

السلام عليكم ورحمة الله وبركاته ،

لقد سبق وأن أرسلت لسعادتكم خطاب مرفق معه استمارة استقصاء لجمع معلومات عن الخدمات الصحية التي تقدمها جمعيتكم . وكما شرحت في خطابي فان الغرض من جمع المعلومات هو غرضا علميا . حيث لكون ذلك جزءا من البحث الذي أعده عن تطور الخدمات الصحية في المملكة العربية السعودية لنيل درجة الدكتوراه في الدراسات الادارة الصحية .

هذا وحتى الان فانه لم تصلني منكم الاستمارة أو جواب على خطابي وهذا من شأنه التأثير على نجاح البحث وتأخيرته . لهذا فاني أرجو أن تقوم جمعيتكم بتعبئة الاستمارة واعادتها لي أو التكرم بالاجابة على خطابي لايضاح الامر . أما اذا كانت الجمعية قد قامت بتعبئة الاستمارة وارسالها لي فانه يحتمل أن تكون في البريد في طريقها لي وفي هذه الحالة أرجو من سعادتكم اهمال هذا الاشعار لعدم انطباقه .
هذا والله الموفق ،،،

التوقيع

عبد رب الامير عباس الشماسي

Hospitals in Saudi Arabia

It is difficult to find authoritative data on the number of hospitals and hospital beds in the country. The fragmentation of health provision in the country has made it difficult for a single agency to compile the relevant statistics regularly. There are many providers of health services, and many of them do not collect and publish statistics relating to hospitals and their use. Those providers who collect and publish hospital statistics such as the Ministry of Health do not produce reliable data. However, to assess the development of health services in Saudi Arabia it is important to have sufficient reliable data. The Ministry of Health is currently establishing a computerised data collection system which may, in the future, provide this type of data, but for the purposes of my research I had to collect my own data.

The estimates of hospitals and hospital beds provided by official sources (Ministry of Health, 1985) and private sources (Cunnington and Associates, 1985) differ. To ascertain the number of hospitals and hospital beds I compiled a list of them, presented below, from the most recent available publications and my field records. I have estimated that the number of hospitals and hospital beds exceeds the number recorded in both public and private sources. There are 172 hospitals with 33,593 beds in service, and 23 hospitals with 5,369 beds under construction. There are also plans for more than 15 hospitals with 3,580 beds.

There are some points which affect the data presented in the list below, and are significant to their reliability. Some existing hospitals which are new and have just been commissioned and many hospitals under construction are intended to replace old existing hospitals. A hospital may be included twice in the list, the old and the new hospitals, both being called the same name. In practice only run down hospitals are closed, and some are renovated and re-used. This reduces the number of hospitals and hospital beds as hospitals are taken out of service temporarily or permanently. The numbers involved are comparatively small.

It is difficult to know exactly how many beds there are in a hospital, especially in the Ministry of Health hospitals. Some hospital authorities place extra beds in corridors or add beds through quick expansions, for example by adding verandas to the rooms. For some hospitals published figures show that the number of beds vary each year, sometimes by large numbers. This point should be kept in mind as published sources may give different number of beds than those mentioned in the list below.

The names of hospitals are often changed, and this can lead to confusion as to how many hospitals exist and where are they located. The names used in the list below are the same as those used in the latest available published sources, and as accurate as I can ascertain. This point should be kept in mind as some sources may use different names for the same hospitals. The location of the hospital is important in reducing confusion.

Despite these limitations, it appears that the actual number of hospitals and hospital beds in the country exceeds reported figures officially and privately. The number of planned hospitals may be more than what is suggested here because of the wide range for which the term is used. Planned hospitals include those in the tendering stage, technical consideration stage, ideas' stage, and wishes of senior health officials. The period between planning and construction can be either a long or a short one. This means that the scope for hospital development in the country is relatively wide.

A list of Existing Hospitals, Hospitals under Construction and Planned Hospitals

General Organization for Social Insurance:

Existing hospitals

National hospital, Riyadh. 85 beds

Planned hospitals

200 beds hospital in Riyadh.

similar hospitals in Dammam and Jeddah.

King Faisal Specialist hospital:

Main hospital, Riyadh. 250 beds

Medical Care Centre, Riyadh. 150 beds

Expansion, Riyadh. 250 beds

King Khalid Eye Specialist hospital:

Main hospital, Riyadh. 263 beds

Ministry of Defence and Aviation

Eastern Province:

Armed Forces hospital in King Abdulaziz
Air Base in Dhahran, Dhahran Airport. 160 beds

Armed Forces hospital in King Abdulaziz
Naval Base in Jubail, Jubail. 90 beds

Dhahran Medical Complex (not open yet) 338 beds

Central Province:

Armed Forces hospital, Riyadh. 600 beds

Al-Kharj Armed Forces hospital, Al-Kharj. 100 beds

Military Factories hospital, Al-Kharj. 80 beds

King Abdulaziz Academy hospital, near Riyadh. 34 beds

Southern Province:

Armed Forces hospital in King Faisal Air
Base, Khamis Mushayt. 130 beds

Armed Forces hospital in the Southern
Region, Khamis Mushayt. 130 beds

Armed Forces hospital, Sharourah. 200 beds

Armed Forces hospital, Jizan.	50 beds
Wadeah hospital, Abha.	100 beds
Western Province:	
Armed Forces hospital, Taif.	
Armed Forces hospital in Huda, Taif.	308 beds
Handicapped Centre, Taif.	50 beds
King Fahd hospital for Armed Forces, Jeddah.	160 beds
Northern Province:	
Armed Forces hospital in King Abdulaziz city in the North, Tabouk.	380 beds
King Khalid hospital for Armed Forces in the Northern Region, Tabouk.	100 beds
Mothaleith Al-Sharief hospital, Tabouk.	150 beds
Armed Forces hospital in King Khalid Military city, Hafer Al-Batin.	300 beds
Ministry of Health	
General Directorate of Health Affairs in Al-Baha Province:	
Existing hospitals	
Al-Baha King Fahd hospital, Al-Baha.	355 beds
Baljarshi General hospital, Baljarshi.	223 beds
General Directorate of Health Affairs in Asir Province:	
Existing hospitals	
Abha General hospital, Abha.	280 beds
Abha Chest and Fever Diseases hospital, Abha.	106 beds
Khamis Mushayt hospital, Khamis Mushayt.	154 beds
Dhahran Al-Janoub hospital, Dhahran Al-Janoub.	102 beds
Muhayl hospital, Muhayl.	116 beds
Bisha General hospital, Bisha.	192 beds
Abha Psychiatric hospital, Abha.	100 beds
Asir Central hospital, Abha.	574 beds
Tathlith hospital, Tathlith.	100 beds
An-Nammas hospital, An-Nammas.	100 beds
Balsamr hospital, Balsamr.	100 beds
Majardah hospital, Majardah.	100 beds
Sarat Obaid hospital, Sarat Obaid.	100 beds
Hospitals under construction	
Bisha General hospital, Bisha.	345 beds
General Directorate of Health Affairs in Eastern Province:	
Existing hospitals	
Dammam Central hospital, Dammam.	442 beds
Dammam Chest Diseases hospital, Dammam.	42 beds
Hofuf King Fahd hospital, Hofuf.	645 beds
Al-Qatif General hospital, Al-Qatif.	175 beds
Hafer Al-Batin hospital, Hafer Al-Batin.	89 beds
Hafer Al-Batin New hospital, Hafer Al-Batin.	170 beds
Dammam Children and Maternity hospital.	275 beds
Hofuf Psychiatric hospital, Hofuf.	66 beds
Dhahran General hospital, Dhahran.	50 beds
Hospitals under construction	
Al-Qatif New hospital, Al-Qatif.	354 beds
Gulf hospital, Dammam.	574 beds
Jubail New hospital, Jubail.	150 beds
Al-Khafji General hospital, Al-Khafji.	100 beds

Planned hospitals	
Al-Nuariyah hospital, Al-Nuariyah.	30 beds
Al-Hasa Maternity hospital, Al-Hasa.	
Al-Hasa Accident and Emergency hospital.	
General Directorate of Health Affairs in Hail Province:	
Existing hospitals	
Hail General hospital, Hail.	375 beds
King Khalid hospital, Hail.	106 beds
Planned hospital	
Hail Specialist hospital, Hail.	700 beds
General Directorate of Health Affairs in Jizan Province:	
Existing hospitals	
Jizan General hospital, Jizan.	190 beds
Sabya General hospital, Sabya.	90 beds
Kasawia hospital, Kasawia.	141 beds
Abu Arish hospital, Abu Arish.	115 beds
Jizan King Fahd hospital, Jizan.	407 beds
Biass hospital, Biass.	43 beds
Samtah hospital, Samtah.	100 beds
Farasan hospital, Farasan.	50 beds
Planned hospitals	
Jizan Psychiatric hospital, Jizan.	200 beds
Fifa hospital, Fifa.	100 beds
General Directorate of Health Affairs in Al-Medina Province:	
Existing hospitals	
Medina King Abdulaziz hospital, Medina.	205 beds
Medina Maternity and Children hospital.	366 beds
Medina Eye hospital, Medina.	60 beds
Medina Fever hospital, Medina.	57 beds
Medina Psychiatric hospital, Medina.	122 beds
Medina Chest hospital, Medina.	50 beds
Medina King Fahd hospital, Medina.	500 beds
Tabouk General hospital, Tabouk.	105 beds
Tabouk Maternity and Children hospital.	94 beds
Al-Ula hospital, Al-Ula.	50 beds
Yanbu hospital, Yanbu.	108 beds
Al-Wajh hospital, .	91 beds
Duba hospital, Duba.	40 beds
Tabouk King Khalid hospital, Tabouk.	216 beds
Bader hospital, Bader.	200 beds
Al-Ula New hospital, Al-Ula.	100 beds
Hospitals under construction	
Tayma hospital, Tayma.	100 beds
Haql hospital, Haql.	100 beds
Ummalaji hospital, Ummalaji.	100 beds
Wajh hospital, Wajh.	100 beds
Duba hospital, Duba.	100 beds
General Directorate of Health Affairs in Najran Province:	
Existing hospitals	
Najran General hospital, Najran.	171 beds
Najran Chest and Fever Diseases hospital.	73 beds

King Khalid hospital, Najran.	205 beds
Sharourah hospital, Sharourah.	50 beds
General Directorate of Health Affairs in Northern Province:	
Existing hospitals	
Arar Central hospital, Arar.	190 beds
Al-Jawf Central hospital, Al-Jawf.	319 beds
Qurayyat King Faisal hospital, Qurayyat.	140 beds
Al-Jawf Psychiatric hospital, Al-Jawf.	133 beds
Quarayyat hospital, Quarayyat.	100 beds
Turaif hospital, Turaif.	30 beds
Rafha hospital, Rafha.	30 beds
Domat Al-Jandal hospital, Domat Al-Jandal.	30 beds
Hospitals under construction	
Rafha hospital, Rafha.	100 beds
Domat Al-Jandal hospital, Domat Al-Jandal.	100 beds
Arar hospital, Arar.	100 beds
Planned hospitals	
Al-Jawf hospital, Al-Jawf.	150 beds
General Directorate of Health Affairs in Qasim Province:	
Existing hospitals	
Burayda Central hospital, Burayda.	302 beds
Ar-Rass hospital, Ar-Rass.	157 beds
Unaizah hospital, Unaizah.	160 beds
Unaizah Fever hospital, Unaizah.	100 beds
Burayda Children and Maternity hospital.	120 beds
Burayda Psychiatric hospital, Burayda.	50 beds
Burayda Chest hospital, Burayda.	50 beds
Hospitals under construction	
Al-Bukayriah hospital, Al-Bukayriah.	100 beds
Al-Midhnab hospital, Al-Midhnab.	100 beds
Unaizah General hospital, Unaizah.	345 beds
Ar-Rass hospital, Ar-Rass.	200 beds
General Directorate of Health Affairs in Riyadh Province:	
Existing hospitals	
Riyadh Central hospital (Shemmasi).	1,170 beds
Riyadh Maternity and Children hospital.	1,115 beds
Riyadh Fever hospital.	200 beds
Aticca Chest Diseases hospital, Riyadh.	120 beds
Shaqra hospital, Shaqra.	94 beds
Al-Kharj King hospital, Al-Kharj.	146 beds
Zilfi hospital, Zilfi.	123 beds
Majmah hospital, Majmah.	91 beds
Huraymela hospital, Huraymela.	34 beds
Dawadmi hospital, Dawadmi.	188 beds
Wadi Dawasir hospital, Wadi Dawasir.	104 beds
Quwayiyah hospital, Quwayiyah.	105 beds
Hawtat Sadir hospital, Hawtat Sadir.	80 beds
Aflaj hospital, Aflaj.	57 beds
Prince Sulman hospital, Riyadh.	225 beds
Majmah hospital, Majmah.	100 beds
Al-Kharj hospital, Al-Kharj.	200 beds

Afif hospital, Afif.	100 beds
Aflaj hospital, Aflaj.	100 beds
Kharias hospital, Riyadh.	120 beds
Hospitals under construction	
Al-Imman hospital, Riyadh.	200 beds
Huraymela hospital, huraymela.	100 beds
Hawtat bani Tameam hospital.	100 beds
King Fahd Medical Complex, Riyadh.	1,425 beds
Planned hospitals	
Rumah hospital, Rumah.	30 beds
As-Sulayyil hospital, As-Sulayyil.	30 beds

General Directorate of Health Affairs in Western Province:

Existing hospitals	
King Abdulaziz hospital, Mecca.	669 beds
Ajiad hospital, Mecca.	157 beds
Mecca Children and Maternity hospital.	354 beds
Abin Sina hospital, Mecca.	200 beds
King Faisal hospital, Mecca.	400 beds
Jeddah Central hospital, Jeddah.	73 beds
Jeddah King Abdulaziz hospital, Jeddah.	23 beds
Jeddah Maternity and Children hospital.	559 beds
Al-Shatteha hospital, Jeddah.	162 beds
Jeddah Eye hospital, Jeddah.	110 beds
Jeddah King Fahd hospital, Jeddah.	516 beds
Fever hospital, Jeddah. (quarantine)	173 beds
Taif King Faisal hospital, Taif.	522 beds
Taif Chest and Fever hospital, Taif.	800 beds
Taif Psychiatric hospital, Taif.	900 beds
Rabigh hospital, Rabigh.	55 beds
Al-Noor hospital, Mecca.	574 beds
Hiarah hospital, Mecca.	200 beds
Rabigh New hospital, Rabigh.	100 beds
Qunfuda hospital, Qunfuda.	100 beds
Adheam hospital, Adheam.	100 beds
Hospitals under construction	
Red Sea hospital, Jeddah.	385 beds
Al-Kamel hospital, Al-Kamel.	100 beds
Planned hospitals	
Al-Lith hospital, Al-Lith.	50 beds

Ministry of Higher Education:

Existing hospitals	
King Saud University	
King Khalid Teaching hospital, Riyadh.	870 beds
King Abdulaziz Teaching hospital, Riyadh.	253 beds
King Faisal University	
King Fahd Teaching hospital, Al-Khobar.	383 beds
King Abudlaziz University	
King Abdulaziz Teaching hospital, Jeddah.	197 beds
Planned hospitals	
Teaching hospital, King Faisal University.	750 beds
Medical complex, King Abudlaziz University.	800 beds

Ministry of Interior:	
Existing hospitals	
Public Security hospital, Riyadh.	474 beds
Planned hospitals	
regional small hospitals.	
National Guards:	
Existing hospitals	
King Fahd hospital, Riyadh.	500 beds
King Khalid hospital, Jeddah.	500 beds
Planned hospitals	
hospital in Eastern Province. (Al-Hasa)	500 beds
hospital for liver diseases in Riyadh.	40 beds
Private Sector:	
Eastern Province	
Fakhri hospital, Al-Khobar.	260 beds
Al-Dosari hospital, Al-Khobar.	117 beds
Al-Salama hospital, Al-Khobar.	222 beds
Al-Manaei hospital, Al-Khobar.	200 beds
Abdullah Fouad hospital, Dammam.	180 beds
Arab Japanese Oil Company, Al-Khafji.	
Al-Amaal hospital, Al-Qatif.	
Dhahran Health Centre, Dhahran. (Aramco)	263 beds
Dhahran Health Centre. (expansion)	200 beds
Ras Tanura hospital, Ras Tanura. (Aramco)	100 beds
Abiqaq hospital, Abiqaq. (Aramco)	100 beds
Central Province	
Obaid hospital, Riyadh.	40 beds
Al-Mobarek hospital, Riyadh.	70 beds
Al-Ali hospital, Riyadh.	207 beds
Western Province	
Saudi National hospital, Mecca.	100 beds
Zaher hospital, Mecca.	160 beds
National hospital, Jeddah.	72 beds
Daghistani hospital, Jeddah.	108 beds
Edressey hospital, Jeddah.	60 beds
Maghrebi hospital, Jeddah.	120 beds
Jeddah Medical Centre, Jeddah.	100 beds
Dr. Saddiqa hospital, Jeddah.	34 beds
Bakhaseh hospital, Jeddah.	122 beds
Fakkeh hospital, Jeddah.	220 beds
Bugshan General hospital, Jeddah.	122 beds
Erfan hospital, Jeddah.	250 beds
New Jeddah National hospital.	107 beds
Zahara hospital, Medina.	50 beds
Dar Al-Shefa hospital, Jeddah.	72 beds
Al-Amin hospital, Taif.	30 beds
Northern province	
Turaif Tapline hospital, Turaif.	23 beds
Badanah Tapline hospital, Badanah.	70 beds
Rafhah Tapline hospital, Rafhah.	18 beds
Qaisumah Tapline hospital, Qaisumah.	15 beds

Appendix VIHealth Regions in Saudi Arabia

The number of health regions in the country is changed with each reorganization of the Ministry of Health, and sometimes there are also changes between re-organizations. The minister of health has the authority to make areas into health regions, and there have been a number of ministerial directives to re-organize regions. The list, which I provide, is based on the number of regions created by each re-organization of the Ministry, and approved by the Council of Ministers.

I used the term "health region" here, though health regions were referred to differently in different re-organizations. For example, in the 1969 re-organization they were called Mandobiat (the singular is Mandobia), and in the 1983 re-organization they were called General Directorates of Health Affairs. It is not clear what is the significance of the change in terminology which seems to parallel the expansion of services in the regions. I used the term "health regions" to maintain uniformity and simplify the presentation.

1. Health regions following 1951 organization

Asir Health region
 Al-Hasa Health region
 Jeddah Quarantine Health region
 Mecca Health region
 Medina Health region
 Riyadh Health region
 Tapline Health region

2. Health regions following 1962 re-organization

Central Province Health Region
 Eastern Province Health Region
 Hail Health Region
 Medina Health Region
 Northern Health Region
 Qasim Health Region
 Southern Health Region
 Western Province Health Region

3. Health regions following 1969 re-organization

Asir Health Region
 Eastern Health Region
 Jeddah Health Region
 Jizan Health Region
 Mecca Health Region
 Medina Health Region

Northern Health Region
Qasim Health Region
Riyadh Health Region
Taif Health Region

4. Health regions following 1983 re-organization

Al-Baha Health Region
Asir Health Region
Eastern Province Health Region
Hail Health Region
Jizan Health Region
Medina Health Region
Najran Health Region
Northern Health Region
Qasim Health Region
Riyadh Health Region
Western Province Health Region

Appendix VIIA List of Health Centres run by the Ministry of Health in
the Al-Qatif Area

Al-Awamia Health Centre
Al-Jaroodia Health Centre
Al-Jish Health Centre
Al-Koualdiah Health Centre
Al-Malaha Health Centre
Anik Health Centre
Al-Oujam Health Centre
Al-Qudhiah Health Centre
Al-Rabaiah Health Centre
Al-Toubi Health Centre
Dareen Health Centre
Duhkil Al-Mahdood Health Centre
Safwa hospital out-patient clinics
Sayhat Health Centre
Social Centre Health Centre, Al-Qalif
Tarout Health Centre
Um Al-Hamam Health Centre
Um Al-Sahiak Health Centre

Appendix VIIIA List of Secondary Health Institutes in Saudi Arabia 1985.1. Secondary Health Institutes for Men

<u>Institute</u>	<u>Opening Date</u>
Riyadh Male Secondary Health Institute.	1959
Jeddah Male Secondary Health Institute.	1962
Dammam Male Secondary Health Institute.*	1965
Mecca Male Secondary Health Institute.	1975
Abha Male Secondary Health Institute.	1981
Burayda Male Secondary Health Institute.	1981
Medina Male Secondary Health Institute.	1981
Baha Male Secondary Health Institute.	1982
Bekaria Male Secondary Health Institute.	1983
Taif Male Secondary Health Institute.	1983
Jawf Male Secondary Health Institute.	1983
Majmah Male Secondary Health Institute.	1983
Wadi Dawasir Male Secondary Health Institute.	1984
Jizan Male Secondary Health Institute.	1984
Hofuf Male Secondary Health Institute.	**
Tabuk Male Secondary Health Institute.	**
Najran Male Secondary Health Institute.	**

* known until 1982 as Safwa Health Institute.

** to be opened.

2. Secondary Health Institutes for Women

<u>Institute</u>	<u>Opening Date</u>
Riyadh Female Secondary Health Institute.	1961
Jeddah Female Secondary Health Institute.	1961
Hofuf Female Secondary Health Institute.	1967
Jizan Female Secondary Health Institute.	1972
Taif Female Secondary Health Institute.	1975
Abha Female Secondary Health Institute.	1978
Qatif Female Secondary Health Institute.	1979
Jawf Female Secondary Health Institute.	1980
Medina Female Secondary Health Institute.	1981
Rass Female Secondary Health Institute.	1981
Unaizah Female Secondary Health Institute.	1982
Bisha Female Secondary Health Institute.	1982
Hail Female Secondary Health Institute.	1982
Mecca Female Secondary Health Institute.	1982
Dammam Female Secondary Health Institute.	1983

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