



KNOWLEDGE REGARDING RISK FACTORS AND PREVENTIVE MEASURES OF VARICOSE VEIN AMONG STAFF NURSES AT DHIRAJ GENERAL HOSPITAL, WAGHODIA, VADODARA.

Dr. Ravindra H.N	Principal, Sumandeep Nursing College, Sumandeep Vidyapeeth, Waghodia, Vadodara
Mr. Ashish Thakor*	M.Sc, Nursing Student, Dept. Of Medical Surgical Nursing, Sumandeep Nursing College, Sumandeep Vidyapeeth, Waghodia, Vadodara *Corresponding Author
Mr. Kevin Christian	Assistant Professor, Dept. Of Medical Surgical Nursing, Sumandeep Nursing College, Sumandeep Vidyapeeth, Waghodia, Vadodara

ABSTRACT **BACKGROUND:** As the heart beats, it pumps blood through a system of blood vessels called the circulatory system. The vessels are the elastic tubes that carry blood to every part of the body. Arteries carry blood away from the heart while veins return it. Vascular disease includes any condition that affects the circulatory system. Varicose veins are swollen, twisted, and sometimes painful veins that have filled with an abnormal collection of blood. Normally veins have leaflet valves to prevent blood from flowing backwards (retrograde flow or reflux). Leg muscles pump the veins to return blood to the heart (the calf muscle pump mechanism), against the effects of gravity. When veins become varicose, the leaflets of the valves no longer meet properly, and the valves do not work (valvular incompetence). This allows blood to flow backwards and they enlarge even more. When a person stand up we can see varicose veins as large, bluish vessels that may feel like a rope. Varicose veins are very common condition. Women tends to be more affected than men, with approximately 30% of women developing varicose veins in their life time, compared to 15% of men. The major problem is that many people are not aware that they suffer from varicose veins. Awareness is lacking not only in patients but also in the medical fraternity. It is an under treated disease; more than 40% of the Indian population suffers from it.

MATERIAL AND METHODS: An evaluative research approach with non-experimental descriptive design was used. The sampling technique used was non- probability convenience sampling. Data was collected from staff nurses who are working in Dhiraj General Hospital, Pipariya, Waghodia, Gujarat. Data was analyzed by using descriptive and inferential statistics. Descriptive statistics used were frequency, mean and standard deviation.

RESULTS: The majority of the respondents (70%) had moderate knowledge. There was no significant association between age and knowledge regarding risk factor and preventive measures of varicose vein ($\chi^2=0.23$ at 0.05 level of significance). There was no significant association between experience and knowledge regarding risk factor and preventive measures of varicose vein ($\chi^2=2.06$ at 0.05 level of significance). There was no significant association between residency and knowledge regarding risk factor and preventive measures of varicose vein ($\chi^2=0.09$ at 0.05 level of significance). There was no significant association between gender and knowledge regarding risk factor and preventive measures of varicose vein ($\chi^2=0.015$ at 0.05 level of significance). There was significant association between education and knowledge regarding risk factor and preventive measures of varicose vein ($\chi^2=7.03$ at 0.05 level of significance).

KEYWORDS : knowledge, staff nurse, risk factor and preventive measures of varicose vein.

INTRODUCTION

Vascular disease includes any condition that affects the circulatory system. Varicose vein is the most common type of vascular disease.¹ Varicose veins are dilated, tortuous, elongated superficial veins that are usually seen in the legs. Superficial veins (saphenous vein) of the legs are most commonly affected.² Varicose vein usually occurs in the saphenous veins and perforator veins in the ankle. Congenital or family disposition that leads to loss of vessel wall elasticity is a primary cause. Standing for a long periods, obesity, and pregnancy are possible contributing factors. Trauma, DVT, and inflammations that results in vein valve damage are secondary causes.³ Varicose veins are very common condition. Women tends to be more affected than men, with approximately 30% of women developing varicose veins in their life time, compared to 15% of men. Awareness is lacking not only in patients but also in the medical fraternity. It is an under treated disease; more than 40% of the Indian population suffers from it.⁴ The use of compression stockings to squeeze the patient's legs and improve circulation and added that these stockings must be worn properly. Conventional surgical treatment and modern non-surgical treatment of varicose veins can be done.⁵

STATEMENT OF THE STUDY:

“ Knowledge regarding risk factors and preventive measures of varicose vein among staff nurses at Dhiraj General Hospital, Waghodia, vadodara.”

OBJECTIVES:

1. Assess the knowledge of staff nurses regarding risk factors and preventive measures of varicose vein
2. Find out the association between knowledge and selected demographic variable regarding risk factors and preventive measures of varicose vein.

MATERIALS & METHODS:

A quantitative was used: A non-experimental descriptive research

design was adopted. 60 sample were selected by using Convenience sampling method. The study was conducted in Dhiraj General Hospital, Pipariya, Waghodia, Vadodara.

A) INCLUSION CRITERIA:

1. Staff nurses who are working at Dhiraj General Hospital, Waghodia, Vadodara.
2. Staff nurses who are willing to participate in the study.
3. Staff nurses present at the time of data collection.

B) EXCLUSION CRITERIA

1. Staff nurse who are post graduated.
2. Staff nurses who are already having varicose vein.
3. Staff nurses who are not available during the period of data collection.

Instruments used for the study

PART A: Questionnaire pertaining to selected demographic variables will be administered.

PART B: Structured knowledge questionnaire will be used to assess the knowledge of staff nurses regarding risk factor and self preventive measures of varicose vein. It consists of 25 knowledge questionnaire where the maximum score will be 25 and minimum score will be 0.

Data collection procedure:

Prior permission was obtained from the Medical superintendent of Dhiraj hospital. The data collection was done within a given period of 2 weeks, dated 3rd to 14th October 2017. After a brief introduction of the self and establishing the rapport, the investigator has selected the sample with purposive sampling technique and gives a brief detail about the nature of the study and consent was obtained from the sample and confidentiality of the responses to be assured. Structured knowledge questionnaire were used to assess the knowledge regarding risk factor and preventive measures of varicose vein among the staff

nurse who are working in Dhiraj General Hospital, Pipariya, Waghodia, Vadodara.

RESULTS

SECTION-I : Baseline data containing sample characteristics using frequency and percentage

Table-1: demographic data containing sample characteristics using frequency and percentage.

Demographic Data			
Variable	No	Percentage	
Age	20-25 yr	44	73.33%
	25-30 yr	13	21.67%
	30-45 yr	3	5%
	45 & above	0	0%
Experience	< 1yr	22	36.6%
	1-3 yr	28	46.6%
	3-5 yr	5	8.4%
	>5 yr	5	8.4%
Recidency	Urban	44	73.3%
	Rural	16	26.7%
Gender	Male	23	38.3%
	Female	37	61.7%
Education	B.Sc(N)	44	73.3%
	G.N.M.	16	26.7%%

Here, observed that Majority(73.33 %) of respondents belong to the age group of 20-25 years, Majority of respondents(46.6%) were having 1-3 years work experience, majority(73.3%) respondents are belong from urban area,majority(61.7%) respondent are female, majority(73.3%)of respondents has studied B.Sc (N).

Section-2: Analysis Of Data Related To Knowledge Score Of Staff Nurse Working At Dhiraj General Hospital Regarding Risk Factors And Preventive Measures Of Varicose Vein.

Table-4: Association between knowledge score and selected demographic variables regarding risk factors and preventive measures of varicose vein among staff nurses.

Sr.no	Variable	No	Percentage	16 & above	Below 16	Total	X2	DF	SIG.	
1	Age	20-25 yr	44	73.33%	23	21	44	0.2355	2	NS.
		25-30 yr	13	21.67%	7	6	13			
		30-45 yr	3	5%	2	1	3			
		45 & above	0	0%	0	0	0			
2	Experience	< 1yr	22	36.6%	10	12	22	2.0671	3	NS
		1-3 yr	28	46.6%	15	13	28			
		3-5 yr	5	8.4%	3	2	5			
		>5 yr	5	8.4%	4	1	5			
3	Recidency	Urban	44	73.3%	24	20	44	0.0974	1	NS
		Rural	16	26.7%	8	8	16			
4	Gender	Male	23	38.3%	13	10	23	0.0152	1	NS
		Female	37	61.7%	19	18	37			
5	Education	B.Sc(N)	44	73.3%	28	16	44	7.0373	1	SIG.
		G.N.M.	16	26.7%%	4	12	16			

The obtained X² value in education qualification variables are greater than the table value of X² at 0.05 level of significance. Hence the obtained X² value is significant and There is an association between selected educational qualification and knowledge regarding risk factors and preventive measures of varicose vein among staff nurses.

DISCUSSION:

The aim of study was to assess the knowledge regarding risk factors and preventive measures of varicose vein among staff nurse. The researcher found that staff nurses are having moderate knowledge regarding risk factors and preventive measures of varicose vein. **Sharif Nia H,et. al**, Varicose veins of the legs among nurse, A cross-sectional study was carried out among 203 nurses from three general hospitals in Amol, Iran. This study had determined the occupational risk variables on VV which could be interventional in improving the working nurses' environment and quality of life for their long-term career.⁷ **Sisto T , Reunanen A(1995) , et. al**, Prevalence and risk factors of varicose veins in lower extremities.A Cross-sectional study with self-administered questionnaire. Urban dwelling and high income correlated positively with varicose veins treated surgically in women.⁷ **Mekky, R. S. F. Schilling,et. al**,Varicose Veins in Women

Table-2: Mean, Mean percentage and standard deviation for the knowledge scores of risk factor and preventive measures of varicose vein.

N=60

Sr. No	Knowledge aspects	Maximum Score	Mean	Mean percentage	Standard Deviation
1	Introduction	6	3.6500	60.83%	1.07080
2	Risk factors	3	2.0500	68.33%	.67460
3	Sign and symptoms	2	1.1000	55%	.62977
4	Diagnostic evaluation	3	2.0333	67.77%	.78041
5	Causes	2	1.0667	53.33%	.75614
6	Prevention	5	3.8000	76%	1.03825
7	Alternative Therapies	4	1.2333	30.83%	.81025
8	Overall knowledge scores	25	14.9333	59.73%	5.76022

Table-3: Description of knowledge score and level of knowledge

Range of Score	% score	Level of knowledge	No. of Nurses	% of Nurses
0-9	0-33	Inadequate	6	10%
10-17	34-66	Moderate	42	70%
18-25	67-100	Adequate	12	20%
Total			60	100%

Here, observed that majority of the respondents(70%) had moderate knowledge, 20 % had adequate knowledge score and 10 % had inadequate knowledge regarding risk factor and preventive measures of varicose vein.

SECTION-3: ASSOCIATION BETWEEN KNOWLEDGE SCORE AND SELECTED DEMOGRAPHIC VARIABLES REGARDING RISK FACTORS AND PREVENTIVE MEASURES OF VARICOSE VEIN AMONG STAFF NURSES.

N=60

Cotton Workers. An Epidemiological Study in England and Egypt. After a similar standardization a significant excess was found in women who stood at their work compared with those whose jobs entailed walking or sitting.⁸ **Kay ball RN(2003)**, Deep Vein Thrombosis and Airline Travel. This article describes the causes and risk factors for DVT, discusses preventive strategies, and offers recommendations for making air travel safer.⁹ **Ann Van Hecke (2009) et. al**, Venous disease treatment and compliance: the nursing role. Nurse education is key to effective, tolerable treatments that are acceptable to patients.¹⁰

CONCLUSION

From this study, it could be concluded that:

- Majority of participant has moderate knowledge regarding risk factor and preventive measures of varicose vein
- There is significant association between knowledge regarding risk factor and preventive measures of varicose vein and their educational qualification.

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