Sexual and Reproductive Health Education for Adolescents: Perspectives from Secondary School Teachers in Northern Nigeria

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This is an Accepted Manuscript of an article published by Taylor & Francis in Sex Education on 26th January 2022, available online: https://www.tandfonline.com/10.1080/14681811.2022.2028613

Abstract

Lack of sexual and reproductive health (SRH) education contributes to poor SRH outcomes for adolescents and young people in Sub-Saharan Africa. School-based comprehensive SRH education programmes in low- and middle-income countries aim to advance gender equality and human rights and reduce risky sexual behaviours in adolescents. However, the implementation of these programmes in Northern Nigeria is opposed by community and religious institutions because of mistrust of health interventions perceived as being framed on Western ideologies. This study explored perceptions of such programmes among secondary school staff in Northern Nigeria. We focused on their knowledge and beliefs about comprehensive SRH education programmes, and views about barriers to delivery and ways to support their inclusion in schools. Sixteen semi-structured in-depth interviews were conducted with teachers and head teachers. Participants were aged 33–54 years and came from four public secondary schools in two states (Kano and Jigawa). Findings showed conflicting gender-based perspectives on the importance of comprehensive SRH education in schools. Barriers to delivery included lack of adequate skills and knowledge, beliefs/cultural norms and wider societal barriers. Involving traditional and religious leaders and schools in the design of tailored approaches could strengthen future delivery.

Key words: adolescent health, comprehensive sexual and reproductive health, sexuality education, barriers, beliefs, Nigeria

Introduction

Adolescents make up an estimated 1.2 billion of the global population and account for one-quarter of the population in Sub-Saharan Africa (SSA) (UNICEF 2019). Adolescents' health and well-being is crucial for the economic development and future prosperity of the continent. Existing global initiatives such as the Sustainable Development Goals (Targets 3.7 and 5.6) (UN 2015) recognise the right of all children, including adolescents, to access the information required for their growth and development. This includes comprehensive sexual and reproductive health education. However, limited knowledge of sexual and reproductive health (SRH) is a key factor influencing adolescents' sexual behaviour, teenage pregnancy and the high incidence of HIV and sexually transmitted infections (STIs) globally (Olayiwole et al. 2009; UNPFA 2016). This is particularly true for the growing population of young people in developing countries who are predisposed to poor SRH outcomes because of social, economic and cultural factors (Fonner et al. 2014).

Age-appropriate school-based comprehensive SRH education programmes are effective in preventing adverse reproductive health outcomes such as STIs and teenage or unintended pregnancy (CDC 2019). The implementation of these programmes in low- and middle-income countries has reduced risky sexual behaviours and increased HIV knowledge and use of contraception among adolescents (Fonner et al. 2014). Moreover, good quality comprehensive SRH education empowers adolescents to critically reflect on their behaviours in relation to others and to make safer decisions regarding their sexual behaviours (Acharya et al. 2019).

Nigeria has a robust national policy for comprehensive SRH education known as Family Life HIV Education (FLHE) which is currently in the implementation phase (Huaynoca et al. 2014). FLHE addresses various issues including HIV prevention, teenage pregnancy, abortion, risky sexual behaviour and SRH awareness. However, as in most developing countries, FLHE has faced a number of barriers to implementation in Nigeria, such as rejection by some parents and communities because of the belief it is not compatible with their values; schools' lack of capacity for effective delivery; teachers' negative disposition towards participating in the programme; lack of core funding; over-reliance on funding from non-governmental organisations (NGOs) and a relatively weakly specified curriculum (Huaynoca et al. 2014; Igbokwe et al. 2020). Although the Federal Ministry of Education mandated all schools throughout Nigeria to include FLHE in the curriculum, most of the states currently implementing the programme are in the south of the country (Udegbe et al. 2015).

In Northern Nigeria, the introduction of FLHE in schools remains stalled by Ministry of Education commissioners at the state level and religious leaders who oppose its inclusion in the school curriculum (Shiffman et al. 2018). Although a compromise was reached with officials from the various Northern Ministries of Education in 2002, the curriculum was significantly changed to recommend abstinence from sexual activity until marriage (Shiffman et al. 2018). Important topics such as contraception, masturbation, abortion and sexual diversity were removed. The word 'sexuality' was also deemed vulgar and struck from the curriculum. This was not surprising given the conservative cultures of the predominantly Muslim northern states where discussion about sex is forbidden and silenced

(Iliyasu et al. 2012). The implementation of SRH interventions is also influenced by the socio-cultural context, particularly reservations about and/or mistrust of health interventions perceived to be framed on Western ideologies (Sarki et al. 2019). This embargo on comprehensive SRH education is in stark contrast to the response of neighbouring middle belt states, where teachers have called for an upscaling of the national programme (Lan et al. 2019). Furthermore, in Southern Nigeria which is more progressive and has embraced Western values, better maternal outcomes for women and children have been achieved (Nigeria Population Commission and ICF International 2014).

In Northern Nigerian culture, families are expected to play a significant role in communication about SRH when the need arises. However, the content of family-based discussions is unclear, and the scope may be limited to the basic knowledge considered necessary for girls who are to be married.

Given the poor SRH outcomes for adolescents in Northern Nigeria (SFH 2021), there is a pressing need to explore teachers' views on comprehensive SRH education. Research in the southern and middle belt regions of Nigeria has explored teachers' perspectives about the introduction of comprehensive SRH education in schools and their willingness to participate in programme delivery (Fawole et al. 1999; Adegbenro et al. 2006; Lan et al. 2019). These studies showed that teachers in urban communities were more open to the idea of teaching comprehensive SRH education while those in rural communities expressed less enthusiasm. However, there is a paucity of research into teachers' views about comprehensive SRH education in schools in Northern Nigeria.

This study therefore aimed to explore perceptions on comprehensive SRH education delivery among teachers and head teachers in four secondary schools in two states in Northern Nigeria (Kano and Jigawa). We focused on exploring knowledge and beliefs about comprehensive SRH education views on possible barriers to delivery, and suggestions regarding ways to support its inclusion in schools. The perspectives of these stakeholders are essential to understanding challenges of implementing comprehensive SRH education in these states, and to a larger extent, the Northern region.

Materials and Methods

Study Setting

The sampling frame comprised four schools from two states (Jigawa and Kano) in North-West Nigeria that had previously participated in a larger study (Sarki et al. 2020). All four schools were single sex public secondary boarding schools, and the majority of students were Muslim. Of note, the majority of boarding schools in Northern Nigeria are single-sex, because of the conservative religious and cultural beliefs in the region.

Both Jigawa and Kano are characterised by poor health indices, low socioeconomic status and a high proportion of deaths and diseases compared with Southern Nigeria (NPC and ICF 2014; Sarki et al. 2019; Onukwugha et al. 2020). Kano has an estimated population of 13 million people (2016 estimate) and is ranked the sixth largest state in Nigeria based on gross domestic product. Jigawa is predominantly rural with a population of about 5.8 million

people (2016 estimate) (NPC 2017). Religious and cultural norms mean that early marriage and child marriage are common in the North-West region. About 54% of girls aged 15–24 years are married by age 15 years and 81% by age 18 years, with 16% having given birth by age 15 years and 36% by age 19 years (Mobolaji et al. 2020; Sharma et al. 2017). Overall, Nigeria has the highest proportion of child brides of any country in Africa, accounting for over 40% of child brides in Western and Central Africa (UNPFA & UNICEF 2018).

Study Design

This qualitative study was informed by an interpretivist approach and used semi-structured interviews to collect data.

Participants and Recruitment

Participants were recruited if they worked closely with secondary school students as teachers or in pastoral roles (e.g., housemasters/mistresses, school heads, vice principals, guidance and counselling teachers and kitchen masters/mistresses). Letters inviting individuals to participate in this study were distributed via school heads using school notice boards and online platforms. Interested individuals contacted the researcher (NE) by telephone and were sent information sheets and consent forms by a research assistant (MAA) who also was the interpreter for this study. The research assistant obtained written informed consent from each participant before the interviews took place.

We were particularly interested in the views and beliefs of school principals and directors since they are key decision-makers in school, including with respect to sexuality education. Subject teachers directly involved in comprehensive SRH education implementation or who have close contact with students could provide insight into the practical challenges to comprehensive SRH education delivery. Although there was no specific course on comprehensive SRH education, many participants taught courses such as civic education and biology that provided opportunities to discuss certain aspects of the subject area.

Maximum variation sampling was used. A minimum of four participants (two men and two women) were chosen from each school. Individuals were selected to provide variation in their age, teaching discipline/school role (e.g. mathematics, the sciences, social studies, information and communications technology, and guidance and counselling). One vice principal and all four school heads were also interviewed. A few participants had dual roles in their schools (e.g. one mathematics teacher also worked as a kitchen master). Although the views of participants who taught subjects related to comprehensive SRH education such as biology and guidance counselling were of particular interest, teachers covering other disciplines were included to obtain a diverse range of views about comprehensive SRH education delivery in secondary schools.

Data Collection

Data were collected between August and September, 2020 using semi-structured in-depth interviews. The topic guide was developed from previous research on comprehensive SRH

education with input from all co-authors. Questions were designed to elicit participants' knowledge and beliefs about comprehensive SRH education, perspectives on possible barriers to delivery, and ways to support the inclusion and delivery of comprehensive SRH education in schools. The interviews were conducted in the English language and lasted 40–70 minutes. English is the official language in Nigeria and the language of instruction in all schools. However, some participants chose to respond in Hausa, the predominant language in the region, to provide more nuanced answers/discussion. This was facilitated by the presence of a translator.

Because of COVID-19 restrictions at the time, it was not possible to conduct face-to-face interviews. Therefore, video-based interviews were conducted by a researcher who was not previously known to the participants. An interpreter was present in person with the participant in case they required further explanation or found responding in their own language more valuable. Interviews were recorded using a digital audio device. The interviewer also made field notes to record the observation of salient events during the discussions. All interviews were transcribed.

Conducting the interviews by video was not ideal because of limitations such as the difficulty in reading nonverbal cues and delayed connectivity (Deakin and Wakefield 2014; Weller 2015). However, the interviewer was able to observe some non-verbal cues (e.g. avoiding eye contact, shuffling and occasionally folding of the arms), which were validated by the interpreter's observations. These observations informed the interpretation of the data.

Data Analysis

Data analysis followed an inductive process (Thomas 2006). First, the interview transcripts were read several times to gain familiarity with the meaning participants gave to the issues being explored, and then hand coded by the interviewer. After identifying initial codes in the data, the codes were further refined and then categorised into subthemes and themes (Braun and Clarke 2006). For example, initial codes identified in the data were *resistance from parents* and *cultural norms*; these codes were grouped under a broader subtheme, *roles, responsibilities and social influences*. Careful consideration was given to the nuances of expression in English and Hausa. Interview transcription and data coding was undertaken by NE and checked for accuracy by FO, AS and LS.

Ethical Considerations

Ethical approval for this study was granted by the University of Hull Research Ethics Committee (FHS272) and the National Health Ethics Research Committee of Nigeria (NHREC/01/01/2007-20/08/2019B). Permission was sought and obtained from the participating schools, and the Ministries of Health and Education in Kano and Jigawa. All participants provided written consent to participate before their interview.

Results

Participants (N=16) were aged 33–54 years, with the majority being between 41–50 years of age. There was an equal number of women and men. Six subthemes were identified from the data, which were organised under two main themes as follows.

1) Considerations for the current implementation of comprehensive SRH education.
   a. Lack of clear understanding about comprehensive SRH education.
   b. Beliefs about the consequences of implementing comprehensive SRH education.
   c. Roles, responsibilities and social influences.

2) Improving the current delivery of comprehensive SRH education.
   a. Co-production of culturally sensitive content.
   b. Build capacity in schools.
   c. Student support: lectures, seminars clubs and provision of sanitary items.

Considerations for the Current Implementation of comprehensive SRH education

Throughout the interviews, participants' body language indicated comprehensive SRH education was a sensitive topic. Their comments showed that comprehensive SRH education was hindered by a lack of a clear understanding of the purpose of the programme, religious and cultural beliefs, professional roles and responsibilities, and concerns about the social consequences of teaching and talking about the topic. Specific concerns were of parents and religious leaders challenging teachers and school directors, parents taking their children out of school, and parents and community members using various media platforms to complain about the school.

Lack of Clear Understanding of the Meaning of comprehensive SRH education

Participants indicated they lacked knowledge regarding the aims and purpose of comprehensive SRH education, the potential benefits to young people and wider society, and what the content should cover. This was attributed to a lack of inclusion of comprehensive SRH education in the school syllabus and in teacher education courses. Participants held conflicting views about the importance of the delivery of sexual health information in schools, relying on the interviewer to clarify the different issues covered. When participants were asked what they understood comprehensive SRH education included, references were made to topics in biology.

> This is a part of education that can improve the reproductive organs, that can increase the level of reproduction. (Hafsat, Female, 33 years)
>
> In biology, we have a topic 'you and your health'...When we teach them about things like organs and the eyes and the ears, we teach them how to take care of those organs. (Hamisu, Male, 37 years)

These comments indicated the inability to distinguish between topics such as reproduction and the wider issues covered under comprehensive SRH education (e.g.

human development, sexuality, relationships, personal skills, sexual behaviour and sexual health).

Comprehensive SRH education was also described as learning about the relationships between women and men:

> It's the way of enlightening somebody about the relationship between a male and a female. (Nasir, Male, 51 years)

This comment was vague and demonstrated the apparent lack of comprehension about what comprehensive SRH education entails. Most participants attributed their limited knowledge to lack of inclusion in the school syllabus or in teacher education. The absence of teachers designated to deliver comprehensive SRH education in the participating schools, was an exacerbating factor. There was no sense of ownership of the topic and teachers taught aspects of SRH informed by their personal judgement and whether a related subject was included in the curriculum.

> Sexual and reproductive health education is taught by the biology teacher as well as civic education teachers because they teach about reproduction and relationships, respectively. At times, English language and Hausa literature teachers discuss the topics when they come across them in passages during lessons. (Abdulhamid, Male, 42 years)

Because comprehensive SRH education was not a stand-alone subject in the secondary school curriculum; some schools only organised informal activities such as group discussions to help students with SRH issues. The pedagogical framework therefore lacked consideration of a student's individual development, emotions and relationships.

Beliefs about the Consequences of Implementing comprehensive SRH education

Participants held conflicting views about the potential impact of implementing comprehensive SRH education in schools. Some recognised the potential benefits in terms reducing social problems. Others opposed its inclusion in schools for cultural and religious reasons. Overall, female participants were more open to talking about the positive value of comprehensive SRH education compared with their male counterparts. Some female participants expressed feeling a 'motherly' sense of responsibility towards their students by acting as confidants and advisors on SRH matters.

> In my own case they come to me, I am like their mother, they do tell me a lot, pertaining to their reproductive health. (Maimuna, Female, 43 years)

Some participants expressed concern that teaching Comprehensive SRH education would lead to open discussions about sexual intercourse, which could then cause sexual promiscuity among adolescents. This view was widely shared within the community.

> People feel like sex education will expose their kids to sex. If we say sex in general, parents typically translate it directly to mean their children will learn about sexual intercourse. (Safiya, Female, 48 years)

> Our tradition is the reason why the teachers are not coming out to tell the students the exact things when educating the students on such issues as sexual education. […] Telling them such issues […] might encourage them to involve themselves in such things, that is why, based on my understanding, teachers are dodging away from telling them the realities when educating them. (Abdulhamid, Male, 42 years)

Islam considers premarital sex an immoral act and a sin against Allah. When students openly sought information from teachers or opportunities to discuss sex arose when working with adolescents, religious beliefs and constraints lead teaching staff to avoid discussion about sexual health. These misconceptions also fuel resistance to CRSHE delivery as expressed below.

> Right now, we have not even started teaching about sexual health, but we still face challenges when we try to support the students because of society and the community in regard to their beliefs that such discussions will lead students to think about having sex. (Maimuna, Female, 43 years)

Although concern about the negative consequences of comprehensive SRH education was common among participants, some felt that teaching young people about sexual health matters would be beneficial and that negativity towards teaching comprehensive SRH education derived from lack of understanding of the benefits for their children.

> They do not know that there is an aspect to it [comprehensive SRH education] that can be beneficial to not only the students but adults as well…they [parents] think the students are going to be exposed to a different thing [sexual intercourse] not knowing that what the students know now is worse because of the films they are watching. The videos on the phones they are using are worse than learning about their sexual health in school. (Safiya, Female, 48 years)

Some participants argued that comprehensive SRH education provided a means of helping young people make the right choices about their bodies. This sentiment was expressed most frequently by female participants who saw comprehensive SRH education as a means of improving students' SRH-related well-being, especially with respect to decision making and the avoidance of abuse.

Concern about rising levels of gender-based violence and rape was raised by most participants. Some participants stressed the importance of students (especially girls) being able to recognise predatory sexual behaviours and knowing how to resist unwanted advances. A guidance counsellor gave the example of a female student who had been sexually assaulted by a religious leader who claimed to be performing cleansing rituals to rid her of demons.

> They need to know about the risks; how to get away, how to avoid all these cases of rape. If they have that knowledge, we will be able to get rid of new cases and students will know the way to avoid dangerous situations. There are so many tactics, these sexual predators are very wise, the approaches that they follow, if the girls know these tactics and have the knowledge, they will know the ways and the techniques, and they will be creative in avoiding these things. (Maimuna, Female, 43 years)

Views about potential benefits were not restricted to girls. A female teacher from a boys' school said that comprehensive SRH education was needed to teach boys restraint because they grow up to become men.

> When you talk about sexual education, they are boys. They are going to grow to become men. We are in a world now that rape is constant, you just have to enlighten them, you have to talk to them about self-control. (Salma, Female, 37 years)

Another benefit of comprehensive SRH education was its potential to empower students to make informed decisions about pursuing a career or marriage. According to participants in the girls' schools, early marriage was common among students. In the local context and especially in disadvantaged families, it is customary for girls to be married at the onset of puberty. In many cases, students were happy to drop out of school to fulfil the wishes of their families.

> In some cases, parents withdraw their children from school when they want to give them out in marriage…comprehensive SRH education will help the girls make the right choice between getting married or higher education. (Safiya, Female, 48 years)

Roles, Responsibilities and Social Influences

Although some participants recognised the importance of delivering comprehensive SRH education in schools, many were sceptical about whether school was an appropriate setting in which to discuss matters relating to sexuality. They believed that students were too young to learn about SRH and this topic should be handled by the family unit since schools had limited infrastructure and support to deliver comprehensive SRH education. They were also concerned that delivery of comprehensive SRH education could lead to community backlash; this was considered problematic because of the lack of policy in support of their actions.

> The religious and cultural affairs of our environment restrict us from discussing anything about sex in school or anywhere, except (!) if a girl is going to be married or given to her matrimonial home. (Jafar, Male, 54 years)

> It is not our right to teach them how to make decisions about sex, looking at the nature of the community. It is their parents' right to teach them at home; it is not a school affair. (Jafar, Male, 54 years)

The tendency for older men to express such views is perhaps not surprising as they belong to a generation with strong conservative beliefs. It follows that they would be unlikely to recognise the value of comprehensive SRH education delivery in schools when their culture leads them to believe otherwise. Some men saw the introduction of SRH education in school as premature.

> Sexual education will help them at the later stage, not at this young age. Not in school. (Nasir, Male, 51 years)

Others felt that cultural norms prohibited discussion about sexual health in school. For example, one male school director described how Islamic teaching could prohibit a female biology teacher from delivering aspects of comprehensive SRH education to boys.

> When it comes to the reproductive system, if a female teacher is the one taking the boys, there could be some difficulty in teaching it. Well, that's my own understanding, because from the Islamic point of view, those issues are very sensitive, because care has to be taken in teaching all those aspects, so someone does not go out of bounds. (Nasir, Male, 51 years)

A male participant working in a girls' school described how students might become suspicious of his intentions if he were to go too deeply into SRH topics and offer support.

> It's not all the explanations about comprehensive SRH education that you give for the students. At times, you will give them an introduction and advice and stop there because the students are young… If you go deep, they will think that you want to talk about those sexual things because you have an interest in doing all those things. (Adamu, Male, 38 years)

Overall, this group of participants distrusted information from any source that did not align with their beliefs. For example:

> The problem now is that we have a kind of global problem. Most of our students learn immorality from TV channels. And apart from that, even the handset, a lot of this social media platforms, YouTube, etc. there are a lot of sites where the students are not supposed to visit, but they have very good handsets at the early stages, so maybe they used to go there and learn a lot of things. To me, these are the things that bring these kinds of problems. (Mubarak, Male, 52 years)

As members of their communities, participants expressed strongly held beliefs and values, especially in relation to religion. For example, all expressed the view that premarital sex was bad for young people and that SRH discussion should discourage young people from engaging in sexual behaviour and promote abstinence. One participant reported that the school they worked in severely punished students caught engaging in sexual behaviours such as masturbation and male students sneaking out to meet girls in the local community. Punishment for these acts could involve suspension or even expulsion from school.

> Recently in the boarding schools, you hear cases of sex and many of these acts, and we normally admonish them. Usually, when they are caught red-handed and investigated and found guilty, students are normally expelled, to be candid. (Hamisu, Male, 37 years)

Such mindsets make teaching or talking about sex and sexuality challenging. Opportunities to provide students with comprehensive information on SRH are therefore missed.

Improving the Current Delivery of comprehensive SRH education

In addition to discussing actors that made the delivery of COMPREHENSIVE SRH EDUCATION problematic, participants identified a number of strategies that could be used to mitigate these challenges.

Co-production of Culturally Sensitive Content

Some participants questioned the appropriateness of comprehensive SRH education in terms of its existing content. Most were in favour of developing a curriculum that aligned with traditional and religious beliefs. They suggested this curriculum could be jointly produced by government/ministries, religious/traditional leaders, community elders and schools.

> What I think is those in charge of the curriculum—I mean the three parties [Federal, State and Local education authorities] can come together including traditional and religious leaders to see what they will accept. If they can do this, then comprehensive SRH education will be delivered all over Nigeria. We can study examples from other places such as the US where they are teaching sex education in schools. We can borrow some of their ideas that are culturally appropriate. If these group of people, including educators, sit down together to form this syllabus, then at the end, all aspects will be covered in schools. (Safiya, Female, 48 years)

This same participant believed that a culturally relevant curriculum would promote local expectations through a focus on abstinence and exclude other areas of comprehensive SRH education, such as the rights of an adolescent to choose whether to engage in sexual relations. Were such a perspective to be adopted, then comprehensive SRH education would gain religious and community leaders' support. Education authorities working in partnership with community and religious leaders would be able to develop programmes that are acceptable for communities, schools and teachers. Participating teachers also expressed a willingness to be trained and to deliver comprehensive SRH education after religious and traditional leaders had first sanctioned the content.

Building Capacity in Schools

As previously discussed, most participants agreed that they lacked adequate knowledge of comprehensive SRH education. All expressed the view that workshops and seminars

covering comprehensive SRH education content and teaching methods would support teaching in schools.

> The government has to look for those specialists. Let them train our teachers. At least each school must have the special teachers. By training teachers and showing them how to impact the knowledge, it will make the teachers more confident in delivering that particular subject or topic to the students. (Safiya, Female, 48 years)

Such training would help build capacity in the schools and offer opportunities for discussion of otherwise forbidden topics. In addition, training teachers could help change the perspectives of those who held the traditional views that currently limit the delivery of comprehensive SRH education.

Student Support: Lectures, Seminars, Clubs and Provision of Sanitary Items

In addition, participants suggested that students would benefit from the inclusion of talks, lectures, educational seminars and club activities that focused on improving student well-being. They suggested that these activities could be managed and coordinated by specialists in partnership with teachers.

> Maybe during the week or weekend, specialists could be invited to present lectures and seminars. Let the government organise lectures. Let all schools be involved. I believe this will assist the schools and the students. (Safiya, Female, 48 years)

Three teachers from a girls' school suggested that sanitary items should be provided for students from disadvantaged backgrounds, as they believed students would pay greater attention when a genuine interest was taken in their welfare:

> A student will not accept what you bring to her unless they feel free, and they know that you are a person that can assist them. (Adamu, Male, 38 years)

Discussion

This study explored the views of teachers and head teachers from four secondary schools in Kano and Jigawa in Northern Nigeria. We investigated knowledge and beliefs about comprehensive SRH education, perceived barriers to its delivery, and identified ways that it's inclusion in schools could be supported.

We found that major barriers to implementation of comprehensive SRH education in schools were lack of clear knowledge of what it entailed, cultural and religious beliefs, beliefs about the consequences of implementation, lack of clarity around roles and responsibilities and social influences. These findings are consistent with similar studies among school teachers in Eastern Nigeria (Oshi and Nakalema 2005) and Zambia (Zulu et al. 2019), which showed that teachers were reluctant to teach the comprehensive SRH education curriculum because of a lack of training and skills to discuss sex education.

Participants held conflicting views about the potential impact of implementing comprehensive SRH education in schools with female teachers being more positive and optimistic compared with male teachers. In some communities in Northern Nigeria, social expectations mean that most girls look forward to marrying early as a way of upgrading their social status. If the support of female teachers could be harnessed, they might serve as influential role models to girls. Thereby, empowering them to understand the burdens of early marriage, and help them to convince their parents of the benefits of continuing their education in school (UNESCO and WHO 2018).

Another interesting finding was the view that school may not be an appropriate setting to discuss matters relating to sexual education, and that such matters should be handled within the family unit. However, our previous research and engagement with stakeholders in the region showed that parents were uncomfortable discussing sexual health-related matters with their children (Sarki et al. 2020). Furthermore, research on parent-child communication about sexuality in SSA has shown that these discussions may not be informative if authoritarian and uni-directional, and characterised by vague warnings rather than direct, open discussion (Bastien et al. 2011).

Notwithstanding the barriers identified in this study, our results suggest that co-production of culturally sensitive content and building the capacity of teachers could improve the delivery of comprehensive SRH education in the region. Co-production of the curriculum should include the views of young people as their perspectives on developing comprehensive SRH education content is important (Simuyaba et al. 2021). Although, lack of political will by government authorities remains an issue (Kolawole 2010), governmental involvement has the potential to open discussions about best practices that are culturally and religiously appropriate. Research eliciting the views of a range of stakeholders, including teachers, carried out in Iran and Saudi Arabia suggest a way forward where comprehensive SRH education can be taught in schools and still honour the Islamic scriptures (Horanieh 2020; Tabatabale 2015). By involving all relevant stakeholders, a syllabus could be developed which combines both scientific and religious perspectives to produce comprehensive SRH education that is consistent with a harm reduction model.

Our participants emphasised the need for community engagement (Silumbwe et al. 2020) on the premise that enlightening the community would help them see the benefits of supporting the inclusion of comprehensive SRH education, especially as religious leaders and community chiefs are pillars of authority within these communities and dictate the pace and tone of cultural norms (Mukoro 2017). This could be effectively achieved through a health extension programme as in Ethiopia where communities are empowered to take responsibility for improving and maintaining their health (Assefa et al. 2019).

Conclusion

Study findings provide insight into issues around the uptake and promotion of SRH education, including factors limiting the implementation of the government mandated FLHE in Northern Nigeria. They also offer insider perspectives on what might improve comprehensive SRH education delivery. Findings provide concrete suggestions for the

revision of regional and local policies and the implementation of comprehensive SRH education delivery in Northern Nigerian schools.

The growing population of adolescents in Nigeria and threats to their health and well-being necessitate a revised and targeted national strategy focused on their health. Our findings indicate the need for a well-tailored programme that takes into account religious background and cultural norms. To be effective, such programmes should be co-produced with young people and relevant stakeholders, including religious and community leaders. Part of its work must involve educating parents and community leaders/members about the importance of comprehensive SRH education; perhaps by using health extension workers to reach different communities. Training programmes for teachers, jointly organised by the Ministries of Education and Health should aim to strengthen the capacity of schools to facilitate its delivery.

Across Nigeria, school-based education comprehensive SRH education is an important area for future investment, and one which complements the national strategy of integrating youth-friendly health services into primary healthcare, to improve service uptake among adolescents. Together these efforts can help Nigeria maintain an upward trajectory on efforts to towards achieving the target of universal access to SRH services by 2030.

Acknowledgements

Appreciation goes to Ifeoma Dan-Ogosi for support with proofreading the manuscript and to Maryam Ahmad Abubakar (MAA) and Isah Musa for assistance with data collection and interpretation. We thank the reviewers for useful feedback, which helped improve the quality of the paper.

Funding Details

This work was supported by QR-GCRF pump-prime funding from the University of Hull, UK. The funding body had no role in the design of the study or collection, analysis and interpretation of data, or the preparation of this manuscript.

Data Availability Statement

The datasets generated and/or analysed during the present study are not publicly available because of the need for confidentiality and anonymity and the sensitive nature of the data. Some data may be available from the corresponding author on reasonable request.

Disclosure Statement

The authors declare that they have no competing interests.

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