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Research Paper

Barriers And Solutions To Sexual And Reproductive Health Education Of Adolescents In Community Secondary School Amassoma, Bayelsa State

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ABSTRACT
Introduction- *Barriers are peculiar elements inimical to implementation and achievement of meaningful programme objectives in every field of human endeavour and it is not uncommon with sexual and reproductive health education programmes. Thus, it is essential that school health gladiators explore and elicit barriers from adolescents' point of view and proffer solutions as key steps towards prevention of avoidable global adolescents` death and promotion of health. Therefore, the* ***purpose*** *of this article was to explore barriers and proffer solutions to sexual and reproductive health education of secondary school adolescents in Bayelsa State.* ***Method***- *A descriptive qualitative design was adopted for this study using purposive sampling technique with a sample of 10 participants in a public secondary school. Source of data was a semi-structured interview guide and voice recorder. Data was analyzed thematically in six consecutive steps.*
Findings- *Two (2) themes namely: barriers to sexual and reproductive health education; solutions that would reduce the barriers to sexual and reproductive health education with six (6) sub-themes emerged.* ***Conclusion***- *Findings indicate that adolescents in secondary schools lack confidence and trust on health care providers, their teachers and parents. Not only that, lack of parental and societal education which translates to general lack of knowledge on safe sex practice to sexual and reproductive health education are some of the barriers inimical to effective sexual and reproductive health education. However, in adolescents` perception, effective sexual and reproductive health education, effective counseling programmes and provision of secondary school adolescents' friendly services by government as well as periodic organization of seminars on sexual and reproductive health are solutions identified in this study that would reduce the barriers to a low ebb.* ***Keywords: barriers, health education, sexual and reproductive health, solutions***

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I. INTRODUCTION

Barriers are peculiar elements inimical to implementation and achievement of meaningful programme objectives in every field of human endeavour and it is not uncommon with sexual/ reproductive health education programmes. The perceived barriers to sexual and reproductive health programmes among young adults are in fourfold, which Thongmixay, Essink, Greeuw *et al.,* (2019) describes as: - 1. Access to facility with regards to site, hours and secrecy. Access to facility is further categorized into: - (a) Cognitive accessibility- The cognitive accessibility barriers according to Thongmixay, Essink, Greeuw *et al.,* (2019) are: lack of sexual awareness and knowledge of services. (b) Psychosocial accessibility - Under psychosocial accessibility there is general feeling

of apprehension and embarrassment caused by negative cultural attitudes to premarital sex which cumulates to fear of parents finding out about adolescents` visit to public sexual and reproductive health services. Again, adolescents express lack of confidentiality on healthcare providers. (c) Geographical accessibility- The geographical accessibility mainly **are inadequate** youth-friendly health clinics. 2. Service entry in terms of waiting time, waiting environment and eventual not being seen by healthcare providers. 3. Quality of services, health care providers` physiognomies and availability of healthcare facilities needed for the service. 4. Personal/sundry factors that could emanate (Thongmixay, Essink, Greeuw *et al.,* 2019).

Globally, though no estimated figures, Mokdad, Forouzanfar, Daoud *et al.* (2019) assert that sexual and reproductive health education barriers are the remote and immediate causes of high morbidity and mortality rates among young people. Earlier on, Pachauri (2011) had estimated 1.15 billion adolescents in the world, of which more than 700 million of the adolescents between age 15-24 years live in Asia. Not only that, Pachauri (2011) estimates the figure to comprise about a third of the population in Asia as students at varying levels who are susceptible to sexual and reproductive health issues that needs health education. This estimate could be inferred that, if such captive population is prone to one sexual and reproductive health issue or the other, addressing the barriers should be considered paramount and should be an issue of public health interest to reduce some of the barriers earlier mentioned. By way of improving the programme, Thongmixay, Essink, Greeuw *et al.,* (2019) recommend a multi-component approach, which are not limited to: promotion of youth-friendly health clinics and health/sexual education in secondary schools. In addition, Global Health e-learning Center (2017) commented that, efforts to attain quality sexual and reproductive health are constrained by inadequate access to and inequitable distribution of quality reproductive health education needs. The agency affirmed that, the above constraints have resulted in high prevalence of sexual and reproductive health problems especially among the adolescents.

In Brener, Demissie, McManus, *et al.* (2017), WHO (2014a) and WHO (2014b), perspective, health education is educating people about environmental, physical well-being and social health as well as emotional health. The writers further added intellectual, spiritual and sexual/reproductive health education to what health education is made off. To put it differently, health education is designed for individuals or the public at large to gain awareness, understanding and expertise with a view to design attitude development programme necessary to promote, maintain, and improve as well as restore either personal, or other person's, health and well-being.

In the middle East, Ram, Andajani, and Mohammadnezhad, (2020) quoted the manner in which sexual/reproductive health promotion issues are widely acknowledged by Mouhanna, *et al.* (2017), Helmer, *et al.,* (2015); Bayram, Beji, and Gökyildiz (2010) in terms of the role health education plays in health promotion. For instance, Mouhanna, *et al.* (2017) believed that adolescents who received some form of sex education are less likely to engage in inappropriate sexual activity and have the wherewithal to engage in safer sexual practice. In addition, it has been found out that sex education provides needed information to enable recipient make informed choices regarding their sexual health – (Sexuality Information and Education Council of the United States (SIECUS, 2012). This not-for-profit council upholds that sexuality is natural and promotes healthy aspects of life. To advocate this assertion, SIECUS (2012) fosters, gathers, and publicizes relevant information, supports comprehensive education about sexuality, and advocates the right of adolescents to make responsible sexual choices.

In similar development, Ram, Andajani, and Mohammadnezhad, (2020) and Ellington, (2016) also identified various pivotal role comprehensive sex education could play in the preparation of young people for a safe, productive, and fulfilling life. Another instance was from a study of high school students in Chicago which showed that students who had never received any sex /reproductive health education were more likely to engage in high-risk sexual behaviors than their peers in schools with some bit of sexual and reproductive health education. In otherwords, such students were equipped in terms of information they have received on sexual and reproductive health education, they were less likely to experience teenage pregnancy, engage in unprotected sex, and have multiple sexual partners (UNESCO. 2015).

Furthermore, more studies demonstrated that in other to stay healthy and safe, adolescents do not need access to good and adequate sexual/reproductive health services only, but as proven solutions they should be taught or adequately informed from a tender age in their development process (Denno, Hoopes, & Chandra-Mouli 2015; Newton-Levinson, Leichliter, & Chandra-Mouli, 2016).

However, in some context, avoidance of such education is considered an acceptable practice culturally with resultant spread of sexually transmitted disease, unwanted pregnancies and child abandonment have been recorded as some effects of poor sex education on the school girl, which is on the increase. Over a decade some of the solutions to these barriers were identified by other scholars in an article entitled "access to adolescent reproductive health services: financial and structural barriers to care" were to debunk myths and misconceptions, access to youths friendly sexual and reproductive health services and ensure confidentiality of problems shared by youths as well as improve financing of youth friendly services (Hock-Long, Herceg-Baron, Cassidy & Whittaker 2003).

Lumen (2021) confirmed that in every context, adolescents in secondary school are usually from ages 12 to 18, though with variation by school and by nation. Secondary school is a period after elementary or grade school period afore tertiary education (college/university). Lumen, (2021) and Parker, (2013) observed at different times that, as adolescents enter into secondary school, their continued cognitive development allows them to think conceptually, rationally, theoretically, as well as cogently, which present the adolescents to all forms of vices particularly sexual and reproductive health acts. Hearing from the secondary school adolescents` perspective regarding the barriers and solutions, researchers will understand, their point of view, learn from them and build the adolescents self-esteem since the subject under study impacts them directly.

Despite the fact that a large portion of Nigerian population consists of adolescents, the sexual and reproductive health education programmes are confronted with barriers, which the adolescents themselves can identify and perhaps suggest possible solutions that can reduce the barriers. Moreover, researchers have not identified studies been conducted fully to investigate barriers and solutions to reproductive health needs of these adolescents in this study context. The purpose of this study therefore is to explore and identify the barriers and solutions to sexual and reproductive health education of adolescents in community secondary school Amassoma, Bayelsa State.

Statement of Problem

Nigeria's adolescents in secondary school experience unfavorable health outcomes resulting from barriers to sexual/reproductive health education which lead to: - inadequate reproductive health information and risky sexual practices. Consequent upon these and other barriers, an estimated 333 million new cases of curable sexually transmitted infections occur mostly in developing countries with the highest rate among adolescents in various levels of secondary school within the ages of 15 and 24 years of which the females are mostly affected than their male counterparts (1.3 million and 780,000 for adolescent girls and boys respectively) in Sub-Saharan Africa.

In Nigeria, adolescents of about 12-19years constitute above 33.5% of the entire population (Efeunu & Wankasi 2019). It means that this population stands the risk of more negative health outcomes such as teenage pregnancies, abortion, child abandonment and school dropouts. These vices might increase inequality in terms of education, income wise and health. Aside these, though there are studies conducted to address these prevailing issues in diverse settings, but none is traceable to this present study setting that has a significant number of adolescents in secondary school and a university community. Thus, there is need to conduct this study to identify the barriers aimed at solving the overarching problems.

Empirically, barriers to sexual and reproductive health education results of a study by Hoang, Nguyen and Duong (2018), indicated among 130 respondents in Vietnam and analyzed using SPSS version 4.0 after administration of questionnaire provide an insight into adolescent sexual behaviour and barriers related to cognitive accessibility and psychosocial accessibility of sexual and reproductive health services in Lao-PDR. The narratives of the respondents clearly showed that a proportion of the youth is sexually active but are often not taking appropriate precautions to promote themselves and that of their partners' with regards to reproductive health. The preventive measures youth in this study utilized–often irregularly were condoms, oral pills and emergency pills, as well as traditional contraceptive methods, such as withdrawal or periodic abstinence. Most unmarried youths said rather than using public health facilities, they looked for reproductive health education needs services from private clinics and pharmacies.

The respondents appeared poorly informed about reproductive health. Most did not recognize the health and social risks associated with unprotected sex, early marriage, early pregnancy, childbirth, and STIs. It is recommended that there should be national insurance system that will facilitate access to health care among adolescent.

Solutions to reproductive health education barriers showed in a quantitative and qualitative (mixed method) study on youth friendly interventions at non-governmental organisations (NGO) operated centres in Lusaka, Zambia using interview guide for data collection and thematic approach for analysis, way-back by Mmari and Magnaniin (2003) cited in Cook (2008). The authors found that, youth-friendly elements did improve the clinic experience for young people. The majority of the ten 'youth intervention' clinics served more young clients compared with the 'non-intervention' sites. The study also identified that community`s attitude towards young people accessing sexual and reproductive health services had an even larger impact on the health-seeking behaviour of young people. To make healthy decision about their behaviours, adolescents need more comprehensive sex education.

Again, global evidence shows that these programs would help young and adolescents refrain from early sex involvement, reduce the frequency of unsafe sex and the number of sexual partners; increase the use of contraception to prevent unwanted pregnancies and sexually transmitted infections. These would in turn, help delay the first birth to ensure a safer pregnancy and healthy delivery Kassa, Arowojolu, Odukogbe, *et al.* (2018). Kassa, Arowojolu, Odukogbe, *et al.* (2018) also cited a number of most effective ways to improve sexual health in the long-term commitment such as: - to ensure that adolescents girls are sufficiently educated to make healthy

decision about their sexual lives. Accurate, evidence based, appropriate sexual health information and counselling should be available to adolescents, and should be free of discrimination, gender bias and stigma. Such education can be provided via schools, workplaces, health providers and community and religious leaders. In addition, organising seminars for adolescents and training persons to deliver reproductive health services to adolescents as well as offering extended opening hours have been seen to be successful strategies to make static centres more accessible to young people. Again, there is need for feedback from client exit interviews and other monitoring mechanisms demonstrates that young people find evenings, weekends and school holidays more convenient times to seek services. These special hours may include fewer clinicians so as to control costs. Evidence generated on youth friendliness at static clinics supports the possibility that such measures increase service uptake.

II. METHODOLOGY

An exploratory descriptive qualitative design was adopted in this study to give an understanding on barriers and possible solutions on reproductive health education of adolescent girls in public secondary school in Amassoma Community, Bayelsa State as was adopted in previous studies.

The Community secondary school in Amassoma is two blocks away from the State owned pioneer university, which exposes the adolescents to inappropriate sexual and reproductive health behaviour, thus, it is expedient to conduct this study in the school.

Population

Because, this study is an offshoot of a wider study, the population include 52
students who constitute the chosen classes.

Eligibility criteria

Willing, public secondary school SSS2&3, adolescents between ages 18-20 years.

These age range and classes were chosen on the premise that majority of adolescents are exposed to an extent that, they have the capacity to provide answers to the study questions.

Sample technique

A non-probability, purposive sampling was adopted due to prior knowledge of the participants.

Sample size

The sample size was when data saturation was achieved at the tenth (10^{th}) participant when no new information was further elicited according to Creswell, (2014). The participants were; 6= ss3, and 4 = ss2.

Instrument for data collection

The instruments for data collection were a voice recorder, a semi-structured interview guide consists of section one as demographics and section two that addresses the main objective.

Procedure for Data Collection

Data collection in this study was a step by step process as follows:

Introductory letter was obtained, which was presented to the respective class teachers and students through the Vice-principal of the secondary school under review. The teacher then picked those students that were able to response to the questions put forwarded appropriately in line with the eligibility criteria set by researcher. The entire purpose of the research was explained to interested participants and consents were obtained since the students were all of age. Individual interviews were conducted privately in classrooms during recess, which lasted 20mins. Key questions were asked, but very few further probing was done to clarify unclear issues because of limited time earmarked for students` recess. The interview lasted two (2) weeks. First week, researcher focused on Senior Secondary 3, because their final exams were the following week. The second week researcher interviewed senior secondary school 2 students.

Trustworthiness and Rigor of the Instruments

Trustworthiness was achieved through Guba and Lincolin (1989) framework namely:

Credibility- credibility of the instrument was ascertained by focusing on the research objectives through the use of semi-structured interview guide, though engagement was appropriate to the time permissible to the students. For conformability, researcher made copies of the instruments available to the supervisor and other research expert. Moreover, the step by step methods of data collection and analysis are clearly demonstrated.

Ethical Consideration

The following ethical principles guided the research in the course of carrying out this study.

Permission: A notice of approval was obtained from the Ministry of Health. A letter of introduction from the Faculty of Nursing Sciences, Niger Delta University to the selected school and permission to conduct the research study was obtained from the various authorities in charge of the school. This feat enabled the researcher gained access to the participants and information needed for the study.

Informed Consent: Participants were fully informed of the research aims, and potential benefits and disadvantages. Participants were given consent form to sign after they are fully informed about the study.

Confidentiality and anonymity

Information passed to the researcher was not revealed in the study. The researchers tagged Participant (P1,2,3 etc) rather than names to ensure anonymity.

Data Analysis

In this study, Creswell (2014) and Xia and Gong (2015) six steps of thematic data analysis using a deductive approach was carried out thus:

Step 1. Researcher, listened and transcribed the information.

Step 2. In step two, the transcript was repeatedly read to have in-depth knowledge, identify code-able areas with the core objective in mind.

Step 3: In this step, categories were created in consonance with the objectives

Step 4: In step four, specific statements were grouped to form sub-themes

Step 5: In this step, sub-themes were regrouped to form themes

Step 6. Researcher interpreted by discussing the results.

Findings

Findings were analysed, presented and discussed with a literature control.

Demographics of participants

A total of 10 students were interviewed for the study to gain knowledge of the barriers and solutions to sexual and reproductive health education of adolescents in Community secondary school Amassoma, Bayelsa State. Incidentally, all responses were elicited from female participants in SS2 - SS3. Mean age was 18 with a range of 16 – 20 years. Participants are all Christians, resident in Amassoma and attend the public secondary school in Amassoma, Bayelsa State.

The significance of this data is that all participants regardless of their demographic data expressed their view with regards to the barriers and solutions for reproductive health education. Findings related to the objectives have two (2) main themes barriers and solutions sexual and reproductive health education and six (6) sub-themes.

Table 1: Summary of Findings

Themes	Sub-themes
Theme 1: **Barriers to Sexual and Reproductive Health education**	1. Lack of Confidentiality and Trust of health care providers, teachers and parents. 2. Lack of parental and societal education on sexual and reproductive health. 3. Lack of knowledge on safe sex practice.
Theme 2: **Solutions to Improve Adolescent Sexual and Reproductive Health Education**	1. Sexual and Reproductive Health Education. 2. Counselling on sexual and reproductive health. 3. Service Provision by Government; Organization of seminars on sexual and reproductive health by government.

Theme 1: Barriers to Sexual and Reproductive Health

Sub-theme 1: Confidentiality and trust of health care providers, teachers and parents

Three participants expressed their lack of confidence and trust in their health care providers, teachers as well as their parents. This is due to the fact that when they tell them health problems in secret, the whole community may become aware. Below are their responses:

"If I visit the health centre with sexual health problem and tell them that I have this and that, the next day my friends will be asking me even though I have not told any of my friends about my problem. Because the information comes from health post itself and goes ear to ear and around community" ***(P5)***

"It is very difficult for the unmarried female to visit health centres with some issue of sexual health, the next day they will start assuming different nonsense things." ***(P4)***

"…. most of the people of my age would probably go to health institutions or nursing home in cities if some sex related problem comes. Because the first things are that everybody does not know what the services are available here, and second is that in villages almost everyone know everyone, so we cannot just go there and treat some problem relating to sexual health." ***(P2)***

Their responses correspond with findings similar to report by Hoang, Nguyen & Duong (2018), who provided an insight into adolescent sexual behaviour and barriers to be related issues of accessibility and confidentiality prompting most adolescent to seek for services in chemist and other source different from the formal health sector. Below are the responses from participants.

Sub-theme 2: Lack of parental and societal education on sexual and reproductive health

Two participants responded that the lack of parental and societal on sexual and reproductive does not promote their reproductive health. Below are their responses which serves as evidence of the interview:

"…I think it will be better if our parents teach us about this issue or even in our church or community gathering" ***(P1).***

*"…if there are services available for the people of our age concerning sexual health, at least we should know about it. We were never told in school, nor do we talk to our parents about it. It's only from friends that we know if there is something. But my friends also probably have not visited there so I also don't know about services" (**P6**)*

Their responses conform to study by Erulkar, Onoka and Phiri (2005) which states that sexually active adolescents are at a particular disadvantage, facing barriers such as legal provisions or community norms that exclude them from receiving information, counselling and services. In many countries, young people under the age of majority require parental consent to obtain medical care, including HIV testing and counselling. In some countries where sexual activity under the age of 16 is illegal, health care providers may not be allowed to maintain patient confidentiality when serving young adolescents.

Sub-theme3: Lack of knowledge on safe sex practice

Two out of the ten participants responded that safe sex practice is a very vital part of reproductive health which when properly taught to adolescents can help them live a more productive sexual and reproductive life. These are their responses below,

"…I think it will be better if there are different classrooms for boys and girls during sex and reproductive health education. Because when it is provided in common classroom, nobody can concentrate, there is shyness everywhere." ***(P1).***

*"…if there are services available for the people of our age concerning sexual health, at least we should know about it. We were never told in school, nor do we talk to our parents about it. It's only from friends that we know if there is something. But my friends also probably have not visited there so I also don't know about services" (**P6**)*

The participants responded that the lack of parental and societal support lead to their lack of knowledge on safe sex practices which is similar to the study carried out by Erulkar, Onoka and Phiri (2005).

Theme 2: Solutions to Improve Adolescent Sexual and Reproductive Health

Sub-theme 1: Sexual and Reproductive Health Education.

Responses from two participants said, understanding the health needs of adolescents is important in reducing and preventing dangerous behaviors in teenage years and providing care services for these people and can improve the health situation of the teenagers and society as a whole. Participants stated there is needs for them to receive correct and timely sexual and reproductive health information through the involvement of the government, their teachers, parents and other community leaders. Below are their responses;

"We [the adolescents] need health talks because there are some problems we face when we totally have no idea on how to go about them. So, we should be health educated such that we know what to do." ***(P6)***

"…Teachers do not teach details about sexual and reproductive health education, they only teach about effect, sexually transmitted infections*… we adolescent should be given these services to protect us from unwanted pregnancy…. the information and services if given the adolescent is good because it will broaden our knowledge and prevent us from engaging in activities that will destroy our future…." (**P5**)*

This is in conformity with a study by Shah-hosseini and Hamzehgardeshi (2014), which states that teachers providing information about every aspect of reproductive health in schools is a great responsibility, and there is a need for centers that can provide necessary consultation services for teenagers and their families. Therefore, it is necessary to pay more attention to creation of centers and organizations that provide teenagers and their families with necessary consultation services in normal hours. Creating and advancing more innovative methods such as free phone lines, postal boxes and using the virtual environment can improve the coverage of these services.

Sub-theme 2: Counselling on sexual and reproductive health

Three participants responded that sexually active adolescents are at a particular disadvantage, facing barriers such as legal provisions or community norms that exclude them from receiving information, counselling and services. In many countries, young people under the age of majority require parental consent to obtain medical care, including HIV testing and counselling. Below are their answers to the questions asked.

"Now what I am saying is that we as the youth we should get a special day say like the weekend and we have counselling and guidance, it will help us" ***(P4)***

"I preferred that services be available all the time (opening and closing hours), by younger health workers and of the same sex and in places that ensure privacy." ***(P5)***

"For me am 19 years but the years I have lived here; I have never seen people coming to offer youth counselling here. Yes, as youths we normally get problems and we fear to visit the health centres that health workers will harass us. We cannot tell our parents neither our friends because they will spread the information to the public, so we need youth counselling here in the community" ***(P7)***.

Participants` responses conform with a recent review by Denno, Hoopes and Chandra-Mouli (2015) which states that, programs that trained health providers on counselling tend to more appropriately respond to the needs of adolescents, improved friendliness toward adolescents in facilities, achieved community acceptance and performed demand-generation activities were most effective in promoting access to and uptake of sexual and reproductive health services among adolescents.

Sub-theme 3: Service Provision by Government; Organization of seminars on sexual and reproductive health by government

Four participants responded that there is a need to build capacity within existing health systems through organized programmes to address challenges specific to adolescents` reproductive health. This response is evidenced below:

"Workshops can be organised by the government for our pastors and Mallams to educate adolescents on how they can protect themselves…we all go to the churches mosques and so if the same education reaches us through their leaders it will go a long way to help… We shouldn't forget about the media… when the adolescents go to the drugstores the dispensers must try and find out and explain things to them properly… also advertise for people to know that it is easy for people to walk in and access services……" ***(P1)***

"The government provide services, either it be education or health or another thing, it will never be enough because the quality of the services provided by government are not good. In school, there is no good education and in health post there might not be good service ***(P6)***

"It should be the Nigeria Health Service because they are paid to provide RH information and services and then maybe the social welfare and in collaboration with the district assembly…this is an issue of bringing on board all stakeholders; the chiefs, the traditional leaders, the whole lot with all the departments that are concerned, so that we can achieve success, but when some leaders like chiefs and the other heads are eliminated, then target might not be achieved. It must be a collaborative effort." ***P3)***.

These responses concurred with results of a study conducted by Braeken and Rondinelli (2012) which found insufficient evidence to recommend widespread programmes implementation of the youth centre as a model for promoting sexual and reproductive health services. However, it is important to recognize that multiple strategies are needed to meet the needs of different population subgroups across varying contexts. Prior assessments have shown that investing in key elements of interventions, such as training service providers, organising seminars, improving facilities and mobilizing communities to generate demand for services, are all worthwhile. Because youth participation in the design and development of programs and policies can lead to better sexual and reproductive health outcomes, youth involvement should be a priority.

III. DISCUSSIONS

Barriers to Adolescent Sexual and Reproductive Health Education

Participants who are the adolescent girls face different challenges in the course of ensuring optimum sexual and reproductive health. These challenges range from issues of confidentiality and trust to lack of education and knowledge on safe sexual and reproductive health.

These findings are similar to report by Hoang, Nguyen and Duong (2018), who provided an insight into adolescent sexual behaviour and barriers to be related issues of accessibility and confidentiality prompting most adolescent to seek for services in chemist and other source different from the formal health sector. The barriers were subsequently discussed under three sub-themes which includes; confidentiality and trust of health care providers, teachers and parents, lack of parental and societal education on sexual and reproductive health and lack of knowledge on safe sex practices.

All but one of the adolescents had had at least a rudimentary form of sexual and reproductive health education in school or during extracurricular activities. Nevertheless, lack of appropriate education was mentioned as a reason for their insufficient knowledge about the risk of pregnancy and sexually transmitted infections. In secondary schools, sexually transmitted infections education was integrated in biology courses. Adolescents complained that the course focused on body functions, with insufficient emphasis on knowledge and practical skills related to their sexually transmitted infections. The majority of adolescents suggested a need for more education and available sexual and reproductive health services, and on talk on sexual and reproductive health issues.

A perceived negative cultural attitude towards sexual activity before marriage was especially felt by females. Parents actively discouraged relationships among youth, and topics like relationships and sex were taboo to discuss with parents.

Despite the cultural barriers to access to sexual and reproductive health services, adolescents mentioned that a cultural transition was underway: the current adolescent generation was more open and accept premarital sex, compared to older generations.

Shyness and shame caused by cultural lack of acceptance of premarital sex were mentioned as the main reasons that adolescents felt reluctant to access sexual and reproductive health services and to talk about sexual and reproductive health with a health provider. This affected females more than males. However, they were mainly afraid of being seen by others from the community when accessing the sexual and reproductive health services.

Aside from negative comments from community members, adolescents feared that if someone saw them, their parents would be informed, would be disappointed in them and may get frustrated.

Earlier studies in Lao PDR also reported that youth lacked sexual and reproductive health literacy and that they perceived themselves to be at low risk for sexually transmitted infections and unwanted pregnancies. Lack of knowledge and health literacy have been demonstrated to lead to less demand for sexual and reproductive health service. The importance of improving young people's sexual and reproductive health knowledge was also appreciated by the youth, who called for more sexual and reproductive health education, starting at a younger age. Sexual and reproductive health education has proven to be effective in increasing sexual and reproductive health knowledge, utilization of mother care and decreasing adolescent pregnancies. Sexual and reproductive health education can help to prevent risky sexual behaviour and may facilitate access to sexual and reproductive health services (Bam, Haseen & Newman, 2015).

Solutions to reproductive health education gaps among participants

Participants attest that integration of sexual and reproductive health services with other key services and counselling are important. Studies also have shown that young people value convenience; offering multiple services together saves clients time and effort. Moreover, combining sexual and reproductive health services with general health services offers young people a measure of confidentiality when seeking contraception, post-abortion care or HIV services. At integrated service delivery locations, young clients could just as easily be seeking a general health service as a contraceptive method. Infrastructure providing exclusive services for teenagers was reported as lacking in the majority. Some female adolescents said that it was always hard for them to collect condoms and other medicines from the general health facilities where all the adults including their parents and relatives receive care from. However, they expressed willingness to freely do so if they had a separate medical centre. This is in line with a study by Shah-Hosseini Hamzehgardeshi (2014), teachers have stated that providing information about every aspect of reproductive health in schools is a great responsibility, and there is a need for centers that can provide necessary consultation services for teenagers and their families. These steps in which adolescent reproductive health can be improved were subsequently discussed under three sub-themes; sexual and reproductive health education, Counselling on sexual and reproductive health and service provision by government; organization of seminars on sexual and reproductive health by government.

In this study, most adolescents had expressed the need for education on the reproductive health in order to resolve their problems and asked for training in these areas. In other studies, teenagers have stated that they need to know more about adolescence (Olfati and Aligholi, 2008). According to the recommendations of World Health organization (WHO), informing teenagers about reproductive health is one of the main elements in starting national plans for improving teenagers' health situation. On the other hand, according to the reproductive rights in the national law which accepts the international documents.

Organising seminars for adolescents and training persons to deliver reproductive health services to adolescents and offering extended opening hours has been a successful strategy to make static centres more accessible to young people. Feedback from client exit interviews and other monitoring mechanisms demonstrates that young people find evenings, weekends and school holidays more convenient times to seek services. These special hours may include fewer clinicians so as to control costs. Evidence generated on youth friendliness at static clinics supports the possibility that such measures increase service uptake. In their 2003 quantitative and qualitative study on youth friendly interventions at non-governmental organisation operated centres in Lusaka, Zambia, researchers found that youth-friendly elements did improve the clinic experience for young people. The majority of the ten 'youth intervention' clinics served more young clients compared with the 'non-intervention' sites. The study also identified that community attitudes toward young people accessing sexual and reproductive health services had an even larger impact on the health-seeking behaviour of young people. (Mmari and Magnani, 2003)

It is therefore necessary to pay more attention to creation of centers and organizations that provide teenagers and their families with necessary consultation services in normal hours. Creating and advancing more innovative methods such as free phone lines, postal boxes and using the virtual environment can improve the

coverage of these services. It is evident the needs of such a numerous group especially in the reproductive health area, is a complicated endeavor that is beyond the scope of any one organization or institution and requires the cooperation of multiple organizations. Providing the necessary education through media, especially national television, due to its national coverage, can create a suitable framework for this type of education (Shah-hosseini & Hamzehgardeshi, 2014).

IV. CONCLUSION

In conclusion, adolescents in secondary schools lack confidence and trust on health care providers, their teachers and parents. Not only that, lack of parental and societal education which translates to general lack of knowledge on safe sex practice to sexual and reproductive health education are some of the barriers inimical to effective sexual and reproductive health education. However, in adolescents` perception, effective sexual and reproductive health education, effective counseling programmes and provision of secondary school adolescents' friendly services by government as well as periodic organization of seminars on sexual and reproductive health are solutions identified in this study that would reduce the barriers to a low ebb.

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Not applicable to this article.

REFERENCES

[1]. Bayram, G. O Beji, N. K. and Gökyildiz, Ş (2010)"Reproductive health," in *Sexuality Education and Attitudes*, J. Stanovic and M. Lalic, Eds., pp. 1–64, Nova Science Publishers, Inc., New York, NY, USA, 2010.
[2]. Braeken, D., & Rondinelli, I. (2012). Sexual and reproductive health needs of young people: matching needs with systems, *International Journal of Gynaecology &Obstetrics*, 119(1), 60–63.
[3]. Brener, N. D., Demissie, Z., McManus, T., Shanklin, S. L., Queen, B., & Kann, L. (2017). School health profiles 2016: Characteristics of health programs among secondary schools.
[4]. Cook, P. (2008). Understanding the effects of adolescent participation in health programmes. *Int'l J. Child. Rts.*, *16*, 121.
[5]. Creswell, J. W. (2014). Qualitative, quantitative and mixed methods approaches. Sage.
[6]. Denno, D. M. Hoopes, A. J. and Chandra-Mouli, V. (2015). "Effective strategies to provide adolescent sexual and reproductive health services and to increase demand and community support," *Journal of Adolescent Health*, vol. 56, no. 1, pp. S22–S41, 2015.
[7]. Efeunu EN and Wankasi HI (2020). Adolescent Girls` Perception of Sexual and Reproductive Health Education in Amassoma Community, Bayelsa State. MSc Dissetation.
[8]. Ellington, R. D. (2016). *Sexual health education policy: Influences on the implementation of sexual health education programs* (Doctoral dissertation, Walden University).
[9]. Global Health e-learning Centre (2017) Youths' sexual and reproductive health. http://www.globalhealthlearning.org/course/youth-sexualreproductive-health-update. Accessed October 2nd, 2021.
[10]. Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Sage.
[11]. Helmer, J. Senior, K. Davison, B and Vodic, A. (2015) "Improving sexual health for young people: making sexuality education a priority," *Sex Education*, vol. 15, no. 2, pp. 158–171, 2015.
[12]. Hock-Long, L., Herceg-Baron, R., Cassidy, A. M., & Whittaker, P. G. (2003). Access to adolescent reproductive health services: Financial and structural barriers to care. *Perspectives on sexual and reproductive health*, *35*(3), 144-147.
[13]. Kassa, G.M., Arowojolu, A.O., Odukogbe, A.A. *et al.* Prevalence and determinants of adolescent pregnancy in Africa: a systematic review and Meta-analysis. *Reprod Health* 15, 195 (2018). https://doi.org/10.1186/s12978-018-0640-2
[14]. Lumen, (2021) update on Lifespan Development: School During Adolescence. https://courses.lumenlearning.com/wm-lifespandevelopment/chapter/school-during-adolescence.
[15]. Mokdad AH, Forouzanfar MH, Daoud F, Mokdad AA, Bcheraoui C El, Moradi-lakeh M, *et al.* (2019). Global burden of diseases, injuries, and risk factors for young people ' s health during 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. 2016;6736(16):1–19.
[16]. Mouhanna, F.. DeJong, J.. Afifi, R. Asmar, K. Nazha, B and Zurayk,H. 2017 "Student support for reproductive health education in middle schools: findings from Lebanon," *Sex Education*, vol. 17, no. 2, pp. 195–208, 2017.
[17]. Newton-Levinson, J. S. Leichliter, and V. Chandra-Mouli, "Sexually transmitted infection services for adolescents and youth in low- and middle-income countries: perceived and experienced barriers to accessing care," *Journal of Adolescent Health*, vol. 59, no. 1, pp. 7–16, 2016.
[18]. Pachauri Saroj. Sexual and reproductive health services: Priority of South and East Asia. Indian Journal of Community Medicine. 2011 Apr-Jun; 36(2): 83–84. pmid:21976789.
[19]. Olfati, F., & Aligholi S. (2008). A study on educational needs of teenage girls regarding the reproductive health and determination of proper strategies in achieving the target goals in Qazvin. *The Journal of Qazvin University of Medical Sciences*,12(2), 76-82.
[20]. Parker, A. K. (2013). Understanding and supporting young adolescents during the transition into middle school. In P. G. Andrews (Ed.), Research to guide practice in middle grades education (pp. 495-510). Westerville, OH: Association for Middle Level Education.
[21]. Ram, S., Andajani, S., & Mohammadnezhad, M. (2020). Parent's perception regarding the delivery of sexual and reproductive health (SRH) education in secondary schools in Fiji: A qualitative study. *Journal of environmental and public health*, *2020*.

[22]. Sexual Information and Education Council of the United States (SIECUS) (2012). Available at https://www.nsvrc.org/organizations/103. Accessed 4th October, 2021.
[23]. Thongmixay S, Essink DR, Greeuw Td, Vongxay V, Sychareun V, Broerse JEW (2019) Perceived barriers in accessing sexual and reproductive health services for youth in Lao People's Democratic Republic. PLoS ONE 14(10): e0218296. https://doi.org/10.1371/journal.pone.0218296.
[24]. UNESCO. (2015). Emerging evidence, lessons and practice in comprehensive sexuality education: a global review.
[25]. WHO. Adolescent Pregnancy. Geneva: World Health Organization; 2014. Available from: http://www.who.int/mediacentre/factsheets/fs364/en/. Accesses 3rd October, 2021.
[26]. World Health Organisation Adolescent pregnancy. Fact sheet No.364. September (2014) http/www.who.int/mediacenter/factsheets/fs364/en/accessed October 5th, 2021 google scholar
[27]. Xia, B. S., & Gong, P. (2014). Review of business intelligence through data analysis. *Benchmarking: An International Journal*.