Open access Original research

BMJ Open Stakeholders' perceptions of adolescents' sexual and reproductive health needs in Southeast Nigeria: a qualitative study

Chinyere Cecilia Okeke , ^{1,2} Chinyere Ojiugo Mbachu, ^{1,2} Ifunanya Clara Agu , ² Uchenna Ezenwaka, ² Ifeyinwa Arize, ^{2,3} Chibuike Agu, ² Chinonso Obayi, ²

To cite: Okeke CC. Mbachu CO. Agu IC, et al. Stakeholders' perceptions of adolescents' sexual and reproductive health needs in Southeast Nigeria: a qualitative study. BMJ Open 2022;12:e051389. doi:10.1136/ bmjopen-2021-051389

Prepublication history for this paper is available online. To view these files, please visit the journal online (http://dx.doi. org/10.1136/bmjopen-2021-051389).

Received 19 March 2021 Accepted 30 May 2022



@ Author(s) (or their employer(s)) 2022. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

¹Department of Community Medicine, University of Nigeria, Nsukka, Enugu, Nigeria ²Health Policy Research Group, College of Medicine. University of Nigeria, Nsukka, Enugu, Nigeria

³Department of Health Administration and Management, University of Nigeria, Nsukka, Enugu, Nigeria

Correspondence to

Ms Ifunanya Clara Agu; ifunanya.agu.pg82641@unn. edu.ng

ABSTRACT

Objectives This study explored the perceptions of adult stakeholders on adolescents sexual and reproductive health (SRH) needs, variations of perceived needs by different social stratifiers and adolescent's perceived interventions to address these needs. This will provide evidence that could be useful for policy and programme reviews for improving access and use of services in to meet the SRH needs of adolescents.

Design A qualitative cross-sectional study was conducted in Ebonyi state, Southeast, Nigeria. Data were analysed using thematic framework and content analysis approaches.

Setting and participants This qualitative study was conducted in six selected local government areas in Ebonyi state. Nigeria. The study participants comprised of adult stakeholders including community leaders, adolescent boys and girls aged 13-18 years. Adolescents were purposively selected from schools, skill acquisition centres and workplaces. A total of 77 in-depth interviews, 6 (with community leaders) and 12 (with adolescents) focus group discussions were conducted using pretested question auides.

Results Adolescent SRH needs were perceived to be unique and special due to their vulnerability, fragility and predisposition to explore new experiences. Recurring adolescent SRH needs were: SRH education and counselling; access to contraceptive services and information. These needs were perceived to vary based on sex, schooling and marital status. Adolescent girls were perceived to have more psychological needs, and more prone to negative health outcomes. Out-of-school adolescents were described as more vulnerable, less controlled, less supervised and more prone to sexual abuse. Unmarried adolescents were perceived more vulnerable to sexual exploitation and risks, while married were perceived to have more maternal health service needs.

Conclusions Perceptions of adolescents' SRH needs converge among stakeholders (including adolescents) and are thought to vary by gender, schooling and marital status. This calls for well-designed gender-responsive interventions that also take into consideration other social stratifiers and adolescent's perceived SRH intervention strategies.

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ The engagement workshop with key stakeholders in the study state before commencement of the study enabled priority setting in selecting of study sites and study participants.
- ⇒ The use of qualitative research approach enabled more in-depth exploration of perceived adolescents' sexual and reproductive health needs and adolescents' suggested strategies to meet these needs.
- ⇒ The involvement of local guides in data collection process bridged communication gap as this could have limited in-depth exploration of information among participants in the communities.
- ⇒ Succeeding data collection and analysis, a workshop was organised for validation of findings by key stakeholders and influencers.
- ⇒ Limitation to this study is that there could be information bias due to the sensitive nature of the topic being explored, as contextual factors may perhaps limit full disclosure of information.

INTRODUCTION

Adolescence is a period of biological growth and development when transition from childhood to adulthood occurs. 12 Although biological processes are universal, the social and cultural contexts within which they occur vary considerably.² Globally, there are about 1.2 billion adolescents who make up about 16% of the world's population and account for 23% of the total population in sub-Saharan Africa.³

Adolescents are prone to series of social, physiological and psychological changes which predispose them to unhealthy sexual behaviours such as unsafe sex, multiple sexual partners, transactional sex, intergenerational sex and early sexual debut. These unhealthy behaviours further predispose them to social and life-threatening health problems that are associated with unwanted teenage pregnancy





and early marriage, and sexually transmitted infections (STIs).⁵⁻⁷

Adolescents have the highest rates of unmet need for sexual and reproductive health (SRH) such as family planning, largely due to social stigma, poor access to information and services and absence (or poor implementation) of proadolescent health policies. About 16 million girls that are aged 15–19 years and roughly 2.5 million girls under 16 years of age, give birth each year in low-income and middle-income countries. Most of these teenage pregnancies are unplanned, thereby pushing about 3.9 million adolescent girls to undergo unsafe abortions, especially in countries with highly restrictive abortion laws. Hemsel adolescents are the most vulnerable to unsafe sex and bear most of the consequences. He

In a Nigerian study, an estimated two-thirds of premature deaths and one-third of total disease burden among adolescents are associated with unhealthy behavioural practices, particularly unsafe sex. 12 Report shows that very few (2.9%) adolescents aged 15-19 years use any method of contraception in Nigeria. ¹³ The risk of contracting HIV infection is also very high among adolescents. About 40% of all new HIV infections occur among 15-24year olds and a global report showed that Nigeria recorded the highest number of HIV-infected adolescents. ^{2 14} Evidence shows that adolescents who are socially and economically marginalised are the most vulnerable to the SRH problems that are driven by poverty, illiteracy, unemployment, lack of parental communication and negative social pressure. They are also more vulnerable to sexual exploitation and abuse.8 15

Adolescents have unique set of needs and even with the uniqueness of their needs, they are given limited attention as most of the SRH interventions are implemented to address adults, maternal and child health service needs. Yet, adolescents are known to account for a higher prevalence rate for most SRH problems. They require knowledge on reproductive health services to enable them make informed decisions and choices such as abstinence, use of condom, use of contraceptives, decision to keep a pregnancy and use of safe abortions services. Some of these decisions are influenced by key stakeholders whose perceptions of the adolescent needs should be captured to enable identification of the right interventions.

Adolescents' unique needs could be peculiar to different adolescent categories such as married and unmarried, girls and boy, in and out of school, older and younger adolescents. A Uganda study revealed that both adolescent in-school and out of school have similar needs which is to address issues of unwanted pregnancies, rape, STIs and substance abuse. Whereas, addressing issue of sexual advances by older men were unique to adolescent girls. It has also been documented that it is essential for all adolescents to have access to quality SRH information and services to reduce STIs, unwanted teenage pregnancies and other negative health outcomes. Yet, many adolescents are usually reluctant to seek for quality SRH information and services that addresses their needs.

In order to plan and implement strategies that effectively respond to the SRH needs of adolescents considering contextual differences, it is imperative to define and describe these needs from the perspective of adolescents and other stakeholders who determine and/or influence adolescents' SRH. This information is particularly useful in settings such as Nigeria where adolescents constitute a considerable proportion of the population and contribute significantly to the nation's economy. Literature has shown that adolescents need high quality education and particularly for adolescent girls they need to be empowered to adequately manage their fertility.¹⁹ A study carried out in Nigeria explored the challenges of reaching young people with sexuality education and SRH service, and concluded that in order to successfully motivate behaviour change in adolescents, there has to be an acknowledgement of the reality of adolescents' sexuality and their sexual needs by all stakeholders. 16 Within the Nigerian context, qualitative studies that explore the uniqueness of adolescents' SRH needs are limited and were investigated in the past decade^{20 21} yet, none explored the variations by social stratifiers.

Considering the trend in urbanisation, there is need to gain insights on the current adolescents' SRH needs to inform present and future interventions to improve adolescents' SRH outcomes. Particularly in a nation where 19% of adolescents aged 15–19 have begun child-bearing and over 60% of women being treated for complications due to unsafe abortion are adolescents. This study was therefore carried out to explore and understand the SRH needs of the adolescents from the views of all stakeholders and their variations by social stratifiers. This will help design targeted interventions to meet these identified needs with an impact on reducing most unwanted pregnancies, unsafe abortions and STIs that is prevalent in this group.

This paper provides new policy relevant knowledge that will help in understanding and developing strategies that will be used to improve SRH of adolescents. It presents the findings on the SRH needs of adolescents from the perspective of adults that influence local, communal, policy and resource allocation decisions on SRH of adolescents, while examining the areas of convergence or divergence and perceptions of variations of SRH needs by gender, schooling and marital status. The evidence presented in the paper should be useful for policy and programme reviews for improving access and use of services for meeting the SRH needs of adolescents.

MATERIALS AND METHODS Study area

The study was conducted in six local government areas (LGA) of Ebonyi State in the southeast geopolitical zone of Nigeria. The state had a population estimate of 6268 003 inhabitants in 2017 with an estimated area of 5935 km². Its annual population growth rate is estimated to be 2.7% and over 40% of the State's total population



are less than 15 years.²² It was reported that 8.2% of girls aged 15–19 years in Ebonyi State have already begun childbearing and 39.7% maternal mortality rate occurring among the same age bracket.¹³ Further description of study area can be found in previously published manuscripts.²³ ²⁴

Study design and respondents

A qualitative research method using exploratory approach was employed to interview policy-makers, SRH programme managers, health workers, community and religious leaders, and parents. The study explored information on (1) the SRH needs of adolescents and (2) variation in SRH needs with regards to gender, marital status and schooling status.

The respondents were state level participants that comprised programme managers, policy-makers and implementing partners in adolescent health. They were recruited from several governmental and nongovernmental organisations in the state which includes: State Ministry of Health, State Ministry of Women Affairs and Social Development, State Ministry of Youth and Sports Development, State House of Assembly, State Ministry of Education, State Universal Basic Education Board, State Primary Health Care Development Agency and civil society organisations working in adolescent health. Participants from the community level included formal and informal health service providers, village heads, youth leaders, religious leaders, school principals and parents of adolescents. In and out of school adolescent boys and girls were also selected from each community. The initial list of interviewees was drawn following recommendations from a stakeholders' engagement meeting, and additional people were added following participants' referrals.

Sampling procedure

The study adopted both purposive and random sampling techniques to recruit participants. In order to ensure equal representation of geopolitical and geographical zones, six LGAs (two from each senatorial zone) were selected. In each senatorial zone, one urban/semiurban and one rural LGA were selected to ensure geographical representation; and from each LGA, one community was selected. The LGAs and communities were selected based on recommendations by key stakeholders in the Ministry of Health as areas that have been prioritised by the State government for implementation of adolescent SRH interventions due to high rates of unwanted teenage pregnancy and abortion.

Study participants were purposively selected based on their knowledge, work experience and current involvement in adolescent health in the State. Community leaders (village heads, youth leaders) were purposively selected based on their potential influence on adolescents' SRH. Participants from the community were selected to represent variations in gender as well as to reflect values and beliefs. The school teachers and principals were selected because of the strategic role they play in socialisation and value formation for young people. A relationship was established with some of the target study population who attended the stakeholder engagement meeting before commencement of data collection. Out-of-school adolescents aged 15–18 years were purposively selected and invited for the interview. These adolescents were selected due to their willingness and participation during the project community survey. The in-school adolescents were randomly selected from the each community government secondary schools. Detailed description of sampling procedure and selection criteria have been provided in previously published manuscripts. 23 24

Data collection

Face-to-face in-depth interviews (IDIs) and focus group discussions (FGDs) were employed for data collection. IDI and FGD guides were developed specifically for the study by the research team, and were pretested in a proximate State among population groups similar to the study population. A total of 77 IDIs and 18 FGDs were conducted. The 6 FGDs were used to collect information from village heads, 12 sex disaggregated FGDs were used to collect information from adolescents basically, on perceived intervention to address their SRH needs, while IDIs were used for the rest of the participants. Each FGD session was facilitated by a moderator (a qualitative researcher), a note-taker (who doubled as the observer) and an interpreter (who doubled as the local guide). The IDIs were facilitated by an interviewer (qualitative researcher) and a note-taker. Interviews and discussions were conducted in English or the local language (depending on participants' preferences). The FGD were held in convenient locations for participants. Number of participants in each FGD ranged from 8 to 13 and the data collection lasted for 1 month. All interviews were audiorecorded and each session took an average of 60 min. A detailed description of data collection process can be found in previously published manuscript.²⁴

Data analysis

Parts of the method and process of data analysis has been described in detail elsewhere at Mbachu et al.²³ Audio files were transcribed and translated to English language where necessary. Microsoft word was used to process and edit the transcripts. Field notes were incorporated into the edited transcripts and anonymised using unique codes. Thematic framework approach was used and the key themes and subthemes relating to SRH needs of adolescents include: (1) perception of uniqueness of adolescents' SRH needs; (2) perception of SRH needs of adolescents; (3) variations in SRH needs of adolescents gender variations; schooling variations; marital status variations. Additionally, content analysis was performed on all the coded texts under perception of SRH needs of adolescents and perceived intervention to address the needs. This was performed to estimate the frequency of



 Table 1
 Sociodemographic characteristics of in-depth interview and focus group discussion FGD) participants

interview and focus group discussion FGD) participants	
Variable	Frequency (%)
In-depth Interview (N=77)	
Gender	
Male	38 (49.4)
Female	39 (50.6)
Place of residence	
Urban	49 (63.6)
Rural	28 (36.4)
Category of respondents	
Policy-makers/programme managers	25 (32.3)
Health workers	18 (23.4)
Parents of adolescents	8 (10.4)
Community leaders (including teachers)	20 (25.9)
Religious leaders	6 (7.7)
Level of operation	
State	25 (32.3)
Community	52 (67.5)
FGD participants—for village heads (N=59)	
Place of residence	
Urban	33 (55.9)
Rural	26 (44.1)
Occupation	
Trader	34 (55.9)
Farmer	10 (16.9)
Teacher, civil or public servant	9 (15.3)
Others (Retiree, Clergy, Artisan)	6 (10.2)

occurrence of each need as a proxy for measuring level of importance.

Patient and public involvement

Patients and public were not involved in designing and planning of the research study. However, experts and study communities were involved before field entry through stakeholders' engagement workshop, where they codesigned the study tools with the research team and through community mobilisation. During data collection, the study involved target population as they were invited to participate in the interview. Succeeding data collection and analysis, a workshop was organised for validation of findings by key stakeholders and community influencers. However, the public and target population were not involved in data analysis and writing of this manuscript.

RESULTS

Sociodemographic characteristics of the participants

Table 1 highlights some characteristics of the study participants. All the village heads were male. Otherwise,

the gender distribution was fairly equal for the IDI participants.

Perception of uniqueness of adolescents' SRH needs

All the respondents were of the opinion that adolescents have unique SRH needs. The reasons for these beliefs were various and include that adolescents are vulnerable, immature, forgotten, curious, risk takers, fragile, oftentimes neglected in health programming and immature/incapable of making the right SRH choices. For these reasons, it was opined that adolescents should be protected and treated with special care (privacy and confidentiality) from early adolescence till young adulthood. These perceptions about the uniqueness of adolescents SRH needs appeared to converge among stakeholders, except for the perception of adolescents as incapable of making the right SRH choices. The later reason was only given by a state-level policy-maker/programme manager who compared adolescents' choice making capabilities to those of adults. Some quotes to illustrate this include;

Yes, they do have those unique needs because they are at a stage in their lives when they are no more children and are transiting towards adulthood. The stage is really very critical because whatever decision they make is capable of undermining their future. Their needs are very unique because they are not mature (in their minds) to take some decisions. (Female state level stakeholder—SPM21)

They are a vulnerable group without much attention given to them. They need to be in a position to protect themselves as much as they can. There is a lot of emphasis on maternal newborn child services and adultness, while the adolescent group seem to be neglected (Male state level stakeholder—SPM02)

People see them as wayward without giving them the education they need... They are highly productive, they are fertile and when they are not taken through this education (comprehensive sexual and reproductive health education), they want to try it (sexual exploitation). Adolescents are always neglected, every group forgets them and even in the church, they are forgotten (Female state level stakeholder—SPM05)

Perceptions of SRH needs of adolescents

The respondents' transcripts were categorised into four groups—parents, healthcare providers, policy-makers and health managers, community leaders. Their perceptions of adolescents' SRH needs and frequency of occurrence in the transcripts are shown in figure 1.

Across all four categories of transcripts, SRH counselling was the most recurring need of adolescents. This was followed by sexuality education, contraceptive services and parental care. Other least mentioned needs were access to fully equipped youth-friendly centres, health/nutrition education, antenatal care and protective laws/policies. The specific SRH counselling needs mentioned



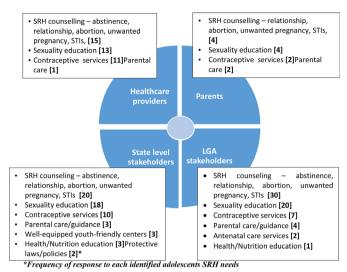


Figure 1 Identified adolescents sexual and reproductive health (SRH) needs. LGAs, local government areas; STIs, sexually transmitted infections;

were counselling on abstinence, relationship, abortion, unwanted pregnancy and STIs. The respondents were of the opinion that unmarried adolescents need to be consoled on how to abstain from sexual intercourse as the society and culture encourages sexual activities among married individuals. Also, they narrated that adolescents need to be engaged in counselling on dangers of unsafe abortion as this has be repeatedly reported among adolescents in the communities. Some of the respondents categorically mentioned that there is need for fully equipped and functional adolescent-youth friendly centres that will provide SRH counselling and other services to be established across the communities. Some quotes include,

When counselling, there is need to tailor down the sexual and reproductive health information to suit the adolescent. Empowering them to be able to negotiate safe sex and to say no if they do not want to have sex is very important. They (adolescent) need to know (informed) that as an adolescent in our society, virginity is a virtue and as such abstaining is the key to avoid pregnancy and will also prevent some diseases and challenges. - (Female state level stakeholder—SPM06)

The needs of adolescents for sexual and reproductive health in Ebonyi state are numerous. First, we are supposed to have adolescents' center that is fully equipped, where everything concerning adolescent sexual and reproductive health should be discussed... If we have the center I am talking about, we will have the opportunity of addressing the needs of adolescents through counselling and other services. The priority among them is contraceptives and counselling services, because you'd find out that the reason why we have abortions here and there is because of unmet needs. If we have that particular center, we will be able to counsel them on how to abstain from sex or contraceptive options for sexually active ones, so that they don't get pregnant and also have a healthy relationship. Unsafe abortions will also be averted. There

are many things that can be achieved by having adolescent centers. - (Male state level stakeholder—SPM01)

...their needs are centered on right counseling and they should be given adequate care. Again sexually transmitted infection is another ugly situation that adolescents may get into, so it is good for them to prevent this ugly situation. Adolescent that is sexually active is supposed to have contraceptives and should be counseled to enable them protect themselves from unwanted pregnancy and the issue of sexually transmitted infections. - (Female Healthcare provider—HAB02)

Perceptions of gender variation in the SRH needs of adolescents

The opinions of respondents about gender variations in the SRH needs of adolescents were varied. Although some respondents felt that the SRH needs of both genders were similar, many were of the view that the SRH needs of girls were different from that of boys. And these views were maintained regardless of respondent type/category.

There are areas their needs are the same, there are areas you have to diversify - (Male LGA Stakeholder—IOH06).

Some respondents perceived adolescent girls to be more vulnerable to the consequences of poor SRH choices. For instance, adolescent girls have to carry the unwanted pregnancy or undergo an unsafe abortion. They are also more likely to experience sexual violence and contract STIs. For these reasons, they were viewed to need more counselling on abstinence, contraceptive services, menstruation, prevention of unwanted pregnancy and unsafe abortions as shown in the quotes below.

Our culture is more lenient to boys and they are raised to be in-charge with domineering spirit, so they are less guided, and more exploratory, making them more likely to have (SRH) information than the girls. While the girls are raised to be timid ('a woman is not heard but seen'), having little or no information. They just want to please the men, then end up getting pregnant or infected.- (Female state level Stakeholder—SPM20)

Almost related, but there must be a difference, of course the girls are usually more at risk, most of the time we emphasize on the girls because they are more vulnerable to these things, including sexual harassment. Adolescent girls who don't know much about sexuality fall victims of unwanted pregnancy - (Male state level Stakeholder—SPM14)

It is slightly different because girls get pregnant but boys do not. So their counselling needs will be different as they need to know how to protect themselves by staying away from having sex with the boys or know how to avoid getting pregnant or even involving in abortions. (Female Parent-PAIK01)

With respect to the SRH needs of boys, some respondents opined that adolescent boys have higher sexual libido/urge than the girls, and therefore, require more counselling and education on how to control these sexual



urges and how to avoid getting a girl pregnant. Some quotes include.

I think counseling and teaching should be more centered on boys. The sexual and reproductive health need of boys is different from girls because adolescent boys have more sexual urge and less self-control. So the boys should be informed on how to control themselves and let them know that the feelings they are having is normal and should be controlled- (Male Healthcare provider-HEZ01)

Because they are of different sex relatively, their needs differs. The focus should be on boys as they have more sexual urge than the girls. If they are not properly guided, they allow the urge to lead them to sexually harassing or raping the girls. - (Male state level Stakeholder—SPMO3)

Perceptions of variation in the SRH needs of adolescents by schooling status

Similar to findings on gender variations, respondents' had various opinions about variations in the SRH needs of adolescents based on their schooling status. The prevailing view was that out-of-school adolescents are more vulnerable, more exposed, less controlled, less monitored and more predisposed to sexual harassment or abuse, and as such require more attention than those who attend school and are more guided. Although out-of-school adolescents were considered more vulnerable, respondents were of the opinion that both categories of adolescents have similar SRH needs. Below are some supporting quotes;

Those that are in school are more knowledgeable than those that are out of school because out-of-school adolescents can easily be deceived. In addition to the general needs of adolescents, they (out-of-school) should be given attention although they all need to be well informed as the same thing that takes place in the body of adolescents in school is the same thing that takes place in the body of adolescent not in school (Female state level Stakeholder—SPM13)

Adolescents who are in school are better placed because of the education they receive. They receive some basic science classes like biology. This exposes them earlier to what is happening in their body than the other person who has never been to school. Most adolescent out-of-school is as a result of poverty, pregnancy, or other reasons. (Male LGA Stakeholder—IIZ02)

They are not the same because those that are out-of-school are more exposed we can control those inside the school than those outside the school because some of them are hawkers and many of them are getting engaged in prostitution (transactional sex) as they see it as the easiest way of getting money. (Female LGA Stakeholder—IAB02)

Perceptions of variation in the SRH needs of adolescents by marital status

Respondents' views about variations in the SRH needs of adolescents based on their marital status also varied and these views were upheld irrespective of the category of respondents. Whereas, some people felt that unmarried adolescents had more need for counselling due to their vulnerability to unwanted pregnancy, STIs and unsafe abortion, married adolescents were perceived to have more need for maternal health services (including antenatal care and family planning). Some supporting quotes are;

Those that are married need family planning services more than those that are unmarried because of their propensity to get pregnant again, even when they had just put to bed. However unmarried adolescents will need more STI and HIV information than the married ones because of the chances of having more than one partner. Sexual relationship among unmarried adolescents usually occur with older adults and this affects their ability to negotiate sex. (Female State level Stakeholder—SPM08)

...Those that are not married don't have anyone to assist them either financially or otherwise. They may run to their parents but not all parents take good care of their children, and some may decide to do things that may result in unwanted pregnancy. Married adolescents are more concerned with child spacing while the unmarried ones are more concerned with prevention of pregnancy... The husband can pregnant the wife and it is his right. Even if they don't want pregnancy to occur, they can be protected by using contraceptives unlike the unmarried adolescents (Male LGA Stakeholder—IEZ01)

I think they (married adolescents) will need more Health Care in terms of health facility services (SRH services). They (married adolescents) should be able to get the right health services they require. (Female State level Stakeholder—SPM16).

Perceived intervention to address adolescents' SRH needs as suggested by adolescents

Adolescent were asked to suggest interventions that should be designed to address their SRH needs. They identified many perceived strategies to tackle their needs and these suggestions were merged into four headings which include; SRH service, SRH information, social/vocational and, policies and legislations. The suggested interventions are presented in box 1 below with the frequency of occurrence in bracket.

The most frequently suggested intervention among adolescents is provision SRH information through regular information campaign, seminar, workshops and conferences to create demand for SRH services provided in youth-friendly centres and health facilities. Adolescents frequently mentioned that parents and guardians should be reoriented on how to appropriately and regularly engage their children on SRH discussion. In provision of SRH services, adolescents mentioned provision of free contraceptive counselling and commodities to adolescents. Below are some quotes to support our findings;

There is need for government and non-governmental organisations to provide free condom and other



Box 1 Highlights the perceived interventions to address adolescents' sexual and reproductive health (SRH) needs

Health services

- ⇒ Establish more youth-friendly centres—Equip and create private spaces for provision of adolescent health services within Primary Health Centres (PHCs) and hospitals*.12
- ⇒ Train health workers on how to provide health services to adolescents including abortion and counselling services*.16
- ⇒ Provide free contraceptive counselling and commodities*.27

SRH information

- ⇒ Regular information campaign, seminar, workshops and conferences to create demand for services provided in youth-friendly centres and PHCs*.31
- \Rightarrow Train teachers to teach comprehensive SRH in secondary schools*.11
- ⇒ Orientation of parents/guardians on appropriate and frequent parent-adolescent SRH communication*.25
- ⇒ Mentorship—teachers and young adult mentors*.5

Policies and legislations

- ⇒ Revise secondary school curriculum to include sexuality education*.3
- ⇒ Revision of abortion laws*.4
- ⇒ Community security against rape*.2

Social/vocational

- \Rightarrow Vocational and skills building activities for out-of-school adolescents $\!\!\!\!^\star.3$
- ⇒ Media should propagate message on consequences of teenage pregnancy*.2

*Frequency of response to perceived interventions.

contraceptives. We need right information and to be educated to know more about sex so that we will be careful about their life. (Female adolescent—ADABF)

Religious leaders should be sensitized to encourage sex education and frequently counsel youths on right behaviour to reduce unwanted pregnancy and abortions. (Female adolescent—ADIKF)

Mothers should be informed to always advise her children about sex. (Male adolescent—ADABM)

Government should equip the youth friendly centres and always supply free contraceptives. They should inform teachers and health workers on ASRH needs. (Male adolescent—ADEZM)

The government has to provide job opportunities for our parents and youths so that they will help us. This will help us live well [better livelihood] in the community. They should also sensitize and train our teachers to teach sex education well. (Male adolescent—ADIKM)

DISCUSSION

The study findings revealed various perceptions of stakeholders about the SRH needs of adolescents and the variations in needs based on some social stratifiers. Our findings clearly shows that across the various stakeholders, all adolescents were perceived to need continuous SRH counselling, comprehensive sexual education, information and services on contraception/contraceptive use. This finding corresponds with previous studies from Nigeria reporting the diverse and numerous SRH needs of adolescents. Specifically, all adolescents were described to need SRH counselling on sexual abstinence, relationship, abortion, unwanted pregnancy and STIs. Slightly similar to our findings, a previous study noted that out-of-school adolescents precisely, needs to be provided with comprehensive sexuality education and counselling which should be backed up with SRH facility services. Empowering adolescents with the right SRH information enable them to overcome their challenging SRH needs hence, improving their SRH outcomes.

This study also found other adolescents' SRH needs which include, access to fully equip youth-friendly centres, health/nutrition education, antenatal care and protective laws/policies. Literature suggests that health services for adolescent subgroups ought to move beyond prevention of unwanted teenage pregnancy and STIs to the full range of SRH needs of adolescents. Tee Due to the fact that many adolescents take risky SRH decisions with little or no adequate SRH information. Lack of right SRH information and poor access to services among this age group have also been found to be part of the leading cause of wrong adolescents' SRH decision making. As adolescents have been described to have unique needs, SRH information and services should be tailored to suit and address the needs of this age group.

In this study, adolescents' SRH needs were perceived to vary based on their gender, schooling status and marital status. Some studies have looked at these variations with regards to system's needs,24 27 whereas others looked at it in terms of services delivered and the policies available to enable this. 28-30 Adolescent girls were reportedly described as more vulnerable than their male counterparts because they reach sexual maturation earlier, experience the emotional effects that accompany pubertal hormones, and bear the health and social consequences of unwanted pregnancy and unsafe abortions. These findings corroborate with a Nigeria report about the disproportionate vulnerability of adolescent girls to the negative outcomes of poor SRH choices, including STIs and sexual violence. ¹² Some respondents in our study expressed that adolescent boys are equally vulnerable because they are less able to control their sexual urges/libido compared with girls. These vulnerabilities are exacerbated by societal factors that are more permissive of adolescent boys' sexual escapades than those of girls. The conventional African culture encourages young boys to explore and seek out information while girls are required to remain quiet ('unheard' and 'unseen').31 32 Hence, young boys may consider themselves more knowledgeable and capable of advising their female companions on all SRH-related matters including prevention of unwanted pregnancy.³³ These beliefs about gender variations in adolescents' SRH needs highlight the importance of gender-responsive SRH interventions for adolescents.



These qualitative findings could be strengthened/validated through cross-sectional surveys of adolescent boys and girls.

In-school adolescents were described as being more knowledgeable about SRH issues compared with out-ofschool adolescents. This is similar to findings of studies that looked at needs of adolescents' in-school and outof-school independently both in Nigeria and outside Nigeria. 34 35 This could be attributed to the more organised system of the school environment where information can be easily accessed with the provision of better guidance and supervision. In-school adolescents are more guarded or protected (their time is more occupied, their lives more regimented, they have teachers to guide/control them) than those who are out-of-school.³⁵ Correspondingly, a study also reported that in-school adolescent girls have better knowledge of SRH issues than their out-ofschool counterparts. 12 In-school adolescents are usually the primary focus of most interventions and experiments because they are easily accessible and easier to organise and monitor. 12 Contrariwise, out-of-school adolescents were perceived to be less restricted, more likely to engage in risky sexual behaviours and more vulnerable to sexual exploitation and abuse. 12 Their vulnerability to sexual exploitation and abuse was attributed to low literacy, low self-esteem and engagement in economic activities such as hawking and trading.

By virtue of early marriage, married adolescents were perceived to require more counselling, information/education and access to maternal and child health services to be able to cope with teenage pregnancy and combat possible complications such as obstructed labour. This is similar to findings of a study that looked at needs of married adolescents girls.³⁶ They also particularly require the skills for negotiating sex with a spouse that is already more 'powerful', as well as access to health information and services for the prevention of unwanted pregnancies and child-spacing. Unmarried adolescents on the other hand were also perceived to require information and health services for prevention and management of unwanted pregnancy and STIs.

Adolescents mostly perceived intervention strategies targeting the provision of SRH information and services to adolescents as necessary tools to tackle their SRH needs. Provision of regular SRH information campaign, seminar, workshops and conferences were frequently mentioned among adolescents as ways to create demand for SRH services available in health facilities. This corroborates with the general view of other stakeholders on the need to provide adolescents with access to adequate and appropriate SRH services and information. From this study findings, addressing the identified SRH needs of adolescents obviously requires sustained support and guidance from all stakeholders which has also been previously reported in a study. 16 To ensure that these SRH needs of adolescents are met, specific institutions and structures should be created, equipped and frequently

supervised to address the identified adolescents SRH needs. Well-designed policies and programmes should be tailored specifically to adolescents, putting into consideration their above perceived intervention strategies.

The engagement workshop with key stakeholders in the study state before commencement of the study enabled priority setting in selecting of study sites and study participants. The use of qualitative research approach enabled more in-depth exploration of perceived adolescents' SRH needs and adolescents' suggested strategies to meet these needs. Identifying and involving local guides during data collection process bridged communication gap as this could have limited in-depth exploration of information among participants in the communities. The limitation of this study is that there could be information bias due to the sensitivity nature of the topic being explored, as contextual factors may perhaps limit full disclosure of information. Also, the study reports data from only unmarried adolescents aged 13-18 years hence, the generalisability of data should be applied with caution. However, this study enabled better representation of data from both in-school and outof-school adolescent boys and girls. Future research should use mixed method research approaches to determine the magnitude of adolescent's SRH needs and as well, better understand how to engage stakeholders to address identified needs.

CONCLUSION

The SRH needs of adolescents were perceived to be unique and special and these needs include counselling on SRH issues, sexuality education, access to contraceptive services and information, parental care and support, access to maternal health services, nutrition education, economic empowerment and protective laws and policies against sexual violence. These needs were perceived to vary based on the sex of adolescents, and their schooling and marital status.

The perceived variations in adolescents' SRH needs calls for well-designed gender-responsive interventions that take into consideration, other social stratifiers such as schooling and marital status. In addressing these needs, adolescent SRH programme managers, policy-makers and implementers could take reflective actions on the adolescents' perceived SRH intervention strategies. Considering the perceived needs, readily accessible well-equipped adolescent-youth friendly centres should be instituted across the nation to meet their needs. Services provided in the centres should be affordable for all categories of adolescents and young people to ensure utilisation. This study is applicable to the ministry of health at the national and subnational levels in designing targeted interventions to meet the identified SRH needs of these adolescents in order to achieve intended outcomes and impacts. The study findings provides valuable information applicable



to researchers, for designing a comprehensive SRH research approach that aims to determine the magnitude of adolescent's SRH needs and strategies to addressing these needs. It is also useful to non-governmental organisations, adolescent health programme managers, policy-makers and others who wish to design interventions that are targeted at addressing adolescents SRH needs.

Acknowledgements We are grateful to the funders of the project leading to this research findings: IDRC MENA+WA implementation research project on maternal and child health (IDRC grant number: 108677). The views presented in this manuscript are not those of the funders', but belong solely to the authors. We thank all the study respondents for their willingness to take part in the research and for their time.

Contributors CM and 00 conceptualized and designed the study protocol and data collection instruments. CO, CM, IA, UE, IA, CA and OC were involved in data collection. All authors participated in data analysis. CO and IA wrote the first draft of the manuscript. CO is the guarantor. All authors reviewed and approved the final version for journal submission.

Funding The research leading to results included in this manuscript has received funding from IDRC MENA+WA implementation research project on maternal and child health (IDRC grant number: 108677).

Competing interests None declared.

Patient and public involvement Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the Methods section for further details.

Patient consent for publication Consent obtained directly from patient(s)

Ethics approval An ethical approval to undertake the research study was obtained from Health Research Ethics Committee of University of Nigeria Teaching Hospital Enugu with reference number NHREC/05/01/2008B-FWA00002458-IRB00002323. Also, ethical approval was secured from Research and Ethics Committee of Ebonyi State Ministry of Health before entry into the study site. Participants were informed of the purpose of study, they were told that participating in the research was voluntary and confidentiality of information was assured. Informed written consent was obtained from study participants prior to each interview and FGD.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available on reasonable request. The study dataset will be made available by the corresponding author on reasonable request.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

ORCID iDs

Chinyere Cecilia Okeke http://orcid.org/0000-0001-6213-4539 Ifunanya Clara Agu http://orcid.org/0000-0001-9048-064X

REFERENCES

- 1 Sawyer SM, Azzopardi PS, Wickremarathne D, et al. The age of adolescence. Lancet Child Adolesc Health 2018;2:223–8.
- 2 World Health Organization, The global early adolescent study (GEAS) tool kit. Human reproductive programme: research for impact, 2019. Available: https://www.who.int/reproductivehealth/publications/adolescence/geas-tool-kit/en/
- 3 United Nations, Department of Economics and Social Affairs, Population Division. World population prospects 2019. Available: https://data.unicef.org/topic/adolescents/demographics/ [Accessed 14 Apr 2020].
- 4 World Health Organization, Adolescent health. Regional office for Africa, 2020. Available: https://www.afro.who.int/health-topics/ adolescent-health
- 5 Odo AN, Samuel ES, Nwagu EN, et al. Sexual and reproductive health services (SRHS) for adolescents in Enugu state, Nigeria: a mixed methods approach. BMC Health Serv Res 2018;18:1–12.

- 6 Abajobir AA, Seme A. Reproductive health knowledge and services utilization among rural adolescents in East Gojjam zone, Ethiopia: a community-based cross-sectional study. *BMC Health Serv Res* 2014;14:138.
- 7 Atuyambe LM, Kibira SPS, Bukenya J, et al. Understanding sexual and reproductive health needs of adolescents: evidence from a formative evaluation in Wakiso district, Uganda. Reprod Health 2015;12:1–10.
- 8 UNFPA. Girlhood, not motherhood: preventing adolescent pregnancy. New York: UNFPA, 2015.
- 9 World Health Organization, Sexual and reproductive health. Human reproductive programme: research for impact, 2019. Available: https://www.who.int/en/news-room/fact-sheet/detail/adolescentpregnancy
- 10 Darroch J, Woog V, Bankole A. Adding it up: costs and benefits of meeting the contraceptive needs of adolescents. New York: Guttmacher Institute. 2016.
- 11 Okorie P, Abayomi O. Abortion laws in Nigeria: a case for reform. Annu Surv Intern Comp Law 2019;23.
- 12 Adogu P, Udigwe I, Nwabueze A. Sexual health knowledge, attitude and risk perception among in-school and out-of-school female adolescents in Onitsha, Anambra state, Nigeria. SEEJPH 2014:1–11.
- 13 National Population Commission (NPC) [Nigeria] and ICF. Nigeria demographic and health survey 2018. Abuja, Nigeria, and Rockville, Maryland, USA: NPC and ICF, 2019.
- 14 UNICEF: UNAIDS, the Joint United Nations Programme on HIV/ AIDS. Opportunity in crisis: preventing HIV from early adolescence to young adulthood, 2011. Available: https://www.unicef.org/aids/files/ Opportunity in crisis-Report EN 052711(4).pdf
- 15 McFarlane SJ, Kim S, Kirch Schneider K, et al. Cultural factors influencing teenage pregnancy in Jamaica. Cult Health Sex 2019;21:929–45.
- 16 Godswill J. Education and sexuality: towards addressing adolescents' reproductive health needs in Nigeria. Current Research Journal of Social Sciences 2012;4:285–93.
- 17 Kyilleh JM, Tabong PT-N, Konlaan BB. Adolescents' reproductive health knowledge, choices and factors affecting reproductive health choices: a qualitative study in the West Gonja district in northern region, Ghana. BMC Int Health Hum Rights 2018;18:6.
- 18 Envuladu EA, Massar K, de Wit J. Adolescent sexual and reproductive health care service availability and delivery in public health facilities of plateau state Nigeria. *Int J Environ Res Public Health* 2021;18:1369.
- 19 Incorporated AH. "A Promise to Keep: Supporting Out-Of- School Adolescent Girls to Reach Their Potential". Lagos, Nigeria: AHI, 2011.
- 20 Okereke Cl. Unmet reproductive health needs and health-seeking behaviour of adolescents in Owerri, Nigeria. Afr J Reprod Health 2010:14:43-54.
- 21 Dare OO, Oladepo O, Cleland JG, et al. Reproductive health needs of young persons in markets and motor parks in South West Nigeria. Afr J Med Med Sci 2001;30:199.
- 22 USAID and health policy plus (HP+). Nigeria population and development Ebonyi state. Abuja Nigeria: USAID and health policy plus (HP+), 2017. http://www.healthpolicyplus.com/ns/pubs/7149-7286_EbonyiRAPIDFactSheet.pdf
- 23 Mbachu CO, Agu IC, Eze I, et al. Exploring issues in caregivers and parent communication of sexual and reproductive health matters with adolescents in Ebonyi state, Nigeria. BMC Public Health 2020;20.
- 24 Ezenwaka U, Mbachu C, Ezumah N, et al. Exploring factors constraining utilization of contraceptive services among adolescents in Southeast Nigeria: an application of the socio-ecological model. BMC Public Health 2020;20:1162.
- 25 Osakwe GO, Uhuegbu SI. Female adolescent health and reproductive needs: challenges and counselling implications. International Journal of Health and Psychology Research 2018;6:1–9.
- 26 World Health Organization. Health for the worlds: adolescents a second chance in the second decade. Geneva: World Health Organization, 2014.
- 27 Beksinska ME, Pillay L, Milford C, et al. The sexual and reproductive health needs of youth in South Africa - history in context. S Afr Med J 2014;104:676–8.
- 28 Braeken D, Rondinelli I. Sexual and reproductive health needs of young people: matching needs with systems. *Int J Gynaecol Obstet* 2012;119 Suppl 1:S60–3.
- 29 Woog V, Kågesten A. The sexual and reproductive health needs of very young adolescents aged 10–14 in developing countries: what does the evidence show? New York: Guttmacher Institute, 2017. https://www.guttmacher.org/report/srh-needs-very-youngadolescents-in-developing-countries
- 30 Lisa R, Woog V, Mhloyi M. "Sexual and Reproductive Health Needs of Adolescents in Zimbabwe.". Issues in Brief 2014;3:1–8.

Open access



- 31 Buller AM, Schulte MC. Aligning human rights and social norms for adolescent sexual and reproductive health and rights. *Reprod Health Matters* 2018;26:38–45.
- 32 Challa S, Manu A, Morhe E, et al. Multiple levels of social influence on adolescent sexual and reproductive health decision-making and behaviors in Ghana. Women Health 2018;58:434–50.
- 33 Kagashe GAB, Honest G. Knowledge and use of contraceptives among secondary school girls in Dar ES Salaam Tanzania. J Appl Pharma Scie 2013;3:66–8.
- 34 Seifu A, Fantahun M, Worku A. Reproductive health needs of out-of-school adolescents: a cross-sectional. *EJHD* 2006;20:10–17.
- 35 Adeokun LA, Ricketts OL, Ajuwon AJ, et al. Sexual and reproductive health knowledge, behaviour and education needs of in-school adolescents in northern Nigeria. Afr J Reprod Health 2009;13:37–49.
- 36 Santhya KG, Shireen JJ. "Sexual and reproductive health needs of married adolescent girls.". *Econ Politl We* 2003:4370–7.