

Knowledge and quality of adolescents reproductive health communication between parents and their adolescents children in Ibadan, Nigeria

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Abstract

Communication between parents and adolescents on Adolescent Reproductive Health (ARH) issues are emerging public health concerns in Nigeria; yet they can be tackled through parents' intervention. This study was designed to document the parents' knowledge and quality of communication relating to ARH between parents and their adolescents in Ibadan, Oyo State, Nigeria. A descriptive cross-sectional study was conducted in two Local Government Areas in the state. Interviewer-administered instruments were used to collect data from the parents and adolescents pair. Both instruments included a 28-point knowledge scale and questions on ARH practices. The instrument for adolescents contained an additional 15-point Perceived Quality of ARH Communication (PQARHC). Knowledge scores ≤ 9 , $\leq 10-18$ and ≥ 20 were categorized as poor, fair and good, respectively for both parents and adolescents. Data were analyzed using descriptive statistics and Chi-square tests at $P=0.05$. Ages of adolescents were 13.9 ± 2.4 years while parents' ages was 42.6 ± 8.5 years. Parent's and adolescents knowledge scores 22.6 ± 3.4 and 19.4 ± 5.9 , respectively with no significant difference. Adolescents whose parents ever discussed ARH issues with them were 20.9% as against 72.1% by the parents. The proportion of parents and adolescents with good knowledge of ARH were 89.4% and 64.7% with no significant difference while the proportion of Adolescents' PQARHC with their parents was adjudged to be of good quality communication was 82.2% with $P > 0.05$. Both the parents and adolescents had good knowledge of adolescent reproductive health but practice and quality of communication was poor. Therefore,

training intervention to improve the adolescent-parent communication is recommended for the parents.

Introduction

Adolescents have received considerable research attention during the last decade primarily because of the sheer size of this population and the fact that the adolescents are disproportionately affected by several reproductive morbidity including HIV/ADS. One of the major features of adolescence is sexual and reproductive growth and development,^{1,2} when parents are expected to socialize their children. One of the key areas of socialization is communication on sexual and reproductive health issues. This expectation rings true with research evidence that confirms that many adolescents are involved in sexual activities that elevate their risk to several reproductive morbidity including unwanted pregnancies, abortion and sexually transmitted infections. The need for parents to take a proactive role in providing sexual and reproductive information and education is further justified because research confirm that many adolescents lack basic knowledge on reproductive biology and prevention methods.³ A primary reason for this situation is that adolescents rely on mass media and peers as sources of information on Sexual and Reproductive Health (SRH), unfortunately information obtained from these sources are either false or incomplete.^{3,4} The communication that parents offer to their adolescent children are expected to transmit values, beliefs and expectations about SRH.^{5,6} Evidence has shown that the communication protects the young from engaging in risky sexual practices and associated adverse health consequences.^{7,8}

In Africa, communication about SRH issues is done along gender lines. For example, mothers are expected to inform girls about relationships, menstruation, and maternity care while fathers talk to boys about role of fathers in the family.⁹ However, communication on these issues are typically flawed because it typically consisted of warnings, threats and physical discipline and was triggered by seeing or hearing something a parent perceived as a negative experience (such as a death attributable to HIV and unmarried young person's pregnancy).⁹

There is a growing literature on the role of parents regarding adolescent sexual and reproductive health worldwide, including Sub-Saharan Africa.^{10,11} Moreover, interna-

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tional and non-governmental organizations have begun to implement activities that explicitly address the role of parents in improving adolescent sexual and reproductive health. Sexual and reproductive health communications are most likely promoting healthy sexual development and reduce sexual risks. Although communication is the principal means for parents to transmit sexual values, beliefs, expectations and knowledge to their adolescents, there is a paucity of evidence about knowledge and quality of ARH communication in Nigeria.

Assessing sexual and reproductive health service to adolescent and young people helps to avoid many health problems, and achieve the millennium development goal 3, 4, 5 and 6. Determining parent-adolescent communication about sexual and reproductive health issues helps to design appropriate intervention programs. Therefore, this paper reports the findings from a research designed to assess knowl-

edge and quality of adolescents' reproductive health communication among parents and their adolescents.

Materials and Methods

Ibadan, the setting for the study, is a metropolis with a population of over 3 million persons, and capital of Oyo State in southwest Nigeria.¹² The city is divided into smaller units, called Local Government Areas (LGA), for ease of its administration. The study was conducted in two out of the 5 periurban LGA in Ibadan, namely, Egbeda and Ido. The scope of the study was limited to parents and their adolescents aged 10-19 years in selected households in the two LGAs. Prior to the commencement of the study, the Ethical Review Committee of the Oyo State Ministry of Health reviewed the proposal and approved the research.

Study design and sample size calculation

Community based cross-sectional quantitative and qualitative study was employed. Two hundred and fifteen parent-adolescent pair were interviewed. Sample size was determined using single population proportion formula by considering assumptions of proportion of parent-adolescent communicating on sexual and reproductive health issues assumed to be 50.0%, desired precision of 5%, 95% confidence level. The study is a major project that had a descriptive and intervention component. The findings presented in this paper are derived from the descriptive component which also had had both qualitative and quantitative elements.

Data collection methods

Qualitative component

Focus group discussions (FGD) were first conducted to determine current knowledge about ARH, reproductive health problems that were common among adolescents, sources of reproductive health information and factors that can inhibit or enhance parent-child communication. Findings from the FGD were later used to develop ARH knowledge items and barriers to communication on the questionnaire with a view to developing appropriate interventions to overcome them. Sixteen FGD, eight each for Parents and adolescents, were conducted. To encourage full participation during discussions, the groups were stratified by sex and status among both parents and adolescents. Thus, we held four group sessions each for males and females among

adolescents and parents. Six to ten purposively selected persons participated in each group session. Trained Research Assistants (RAs) used a guide developed by the investigators to moderate FGD sessions, which were recorded on audio-tapes. Efforts were made to recruit RAs that had at least minimum academic qualification of National Certificate of Education. Adequate provision was made for successful sessions by making the environment conducive and serving refreshment during sessions. Each of the sessions started with general introduction of members and the purpose of the discussion. Each of the FGD lasted an average of 55 minutes. Informed consent was obtained from each participant by explaining that their participation in the discussion was voluntary and that the data collected would be used for research purposes only.

Quantitative component: sampling procedures

A three-stage sampling technique was used in selecting respondents for the quantitative component of the study. The first stage involved listing of communities in the two LGAs. In each of the LGA, five communities were randomly selected with the assumption that required sample size would be obtained. The houses/compounds in each of the selected communities were then enumerated. The second stage involved the systematic selection of the houses using the class interval. Simple balloting was adopted to select the starting point where the interviews took place. The third stage involved the selection of the parents and their adolescents based on inclusion and exclusion criteria. The research was introduced to the participants and only those that met the inclusion criteria and were willing to participate were recruited. Any parent that had adolescent male/female (in or out of school) aged 10-19 years were included in the study and interviewed. In cases where more than one parent was qualified for the study, one parent was selected by simple balloting from such house with the adolescents. To maintain gender balance, efforts were made to enrol equal number of males and females in the study.

Questionnaire

The researchers used the findings from FGD as basis for the development of a semi-structured questionnaire. A-108 item questionnaire was developed and use for data collection.

Questionnaire administration

The draft questionnaire was first field-tested for clarity and comprehension after which the revised version was administered

on the parents and their adolescent children (10-19 years). The RAs were paired and assigned different areas in the community. The RAs went from house to house to administer the questionnaire using face-to-face interview technique. The questions were read out to respondents and explanations were provided whenever it was necessary. The interviews were conducted in Yoruba language being the major language spoken by the majority of the people in the community.

Data analysis

Data from the FGD were transcribed verbatim and the transcripts were word processed and edited using Microsoft Word. The files were read and emerging themes were identified. Key themes relating to knowledge about adolescent reproductive health, source of adolescent reproductive information and barriers to parent-child communication were developed. The files and identified themes were loaded into the Atlsa.ti software program and analyses were done using emerging themes. The findings were presented in themes and verbatim quotations to express the world-view of study participants. Completed questionnaire were checked on the field for completeness and accuracy. A serial number was assigned to each copy of the administered questionnaire copy for easy reference and identification. Coding guide was developed from the questionnaire and the open-ended sections were coded and fed into the computer. Prior to data entry, questionnaire copies were reviewed and edited for random and systematic error and possible corrections were made in consultation with the interviewers. A logic check was developed to minimize data entry errors. SPSS package was used for survey data entry. The quantitative data were analyzed using descriptive, Chi-square (χ^2) and Student t-test statistic at $P < 0.05$. Quality of communication were measured under three major domains namely Clarity of message by the adolescents, Perceived parents' responsiveness to the message and comfortable during the discussion. The knowledge questions were assigned a score of one point for every correct answer making up a 30-point knowledge scale with scores ≥ 20 regarded as good knowledge, scores between $10 \leq 19$ were regarded as fair knowledge and ≤ 10 regarded as low knowledge.

Results

Profile of respondents

A total of 215 parents and adolescent

pair were interviewed consisting of 52.1% female adolescents (Table 1) and 81.4% mothers (Table 2). More than half of the adolescent respondents are between the ages of 10-14 years with mean age of 13.9±2.4. Large majority (92.6%) of the adolescent respondents were in-school and 91.6% are Yoruba ethnic group. Christianity is most practiced religion among 61.9%. Adolescent profile is summarized in Table 1. The age of the respondents' parents was 43.1±9.0, and majority of the parents are within the age bracket 30-49 years. Christian religion was mostly practiced by 60.9% parents' respondent. See Table 2 for parents' profile.

Knowledge about adolescent reproductive health: data from FGD

Parents and adolescents identified several health problems affecting adolescents including sexually transmitted infections including gonorrhoea, unwanted pregnancy, which at times resulted into abortion. As two adolescent discussants put it:

The problem of sexually transmitted infection like HIV and gonorrhoea are common among the female. They engage themselves in prostitution to get money. (Adolescent Participant).

Some people that engage in prostitution because there is no money and from that people can contract HIV. (Adolescent Participant).

Parents also confirmed that unwanted pregnancy, abortion, STI like gonorrhoeal are common among adolescents. Parents listed the following problems:

Sexual intercourse can lead to unwanted pregnancy. They will not want their parent to know so from there they can use drugs for abortion which can result in death or another health problem in their body. (Parent Participant).

The common sexually transmitted disease among adolescents in this community includes gonorrhoeal. (Parent Participant).

It is the abortion which is very bad but if they didn't join bad group they might not behave like that. (Parent Participant).

At times, it may be through their friends because there are some things they will not want to discuss with parent. (Parent Participant).

Some boys involve or love to drink alcohol, beverages and it always lead to broken

homes and to them they are enjoying life. They involve in taking Indian hemp, cocaine, beers of all stuffs. (Parent Participant).

sion, magazines/newspaper, from peers, clergymen, elderly person including parents and from seminars. Some of the typical statements are shown below:

Sources of ARH information

Several sources by which adolescent get information were mentioned during the discussion. These included radio and televi-

Adolescent in this community gets information about health matters generally from radio and newspapers. (Adolescent Participant)

Table 1. Demographic characteristics of adolescents (N=215).

Variables	Frequency	Percentage
Age in years (overall mean 13.9±2.4)		
10-14	127	59.1
15-19	88	40.9
Sex		
Male	103	47.9
Female	112	52.1
Status		
In-school	199	92.6
Out-of-school	16	7.4
Ethnic group		
Yoruba	197	91.6
Hausa	3	1.4
Igbo	6	2.8
Benue	7	3.3
Beninese	2	0.9
Religion		
Christianity	133	61.9
Islam	82	38.1
Have Boy/Girlfriend		
Yes	71	33.0
No	144	67.0
Already had sex		
Yes	17	23.9
Never	54	76.1

Table 2. Socio-demographic characteristics of the parents.

Variables	Frequency	Percentage
Age as in years (overall mean 43.1±9.0)		
30-39	88	40.9
40-49	87	40.5
50-59	34	15.8
60-69	6	2.8
Status		
Father	40	18.6
Mother	175	81.4
Ethnic group		
Yoruba	197	91.6
Hausa	3	1.4
Igbo	6	2.8
Benue	6	2.8
Beninese	3	1.4
Religion		
Christianity	131	60.9
Islam	84	39.1
Level of Education		
No formal education	22	10.2
Primary education	62	28.8
Secondary education	92	42.8
Vocational	3	1.4
Tertiary education	36	16.7

Adolescent gets information relating to health at times from friends. (Adolescent Participant)

According to the parents' participants, adolescent get information from various sources which included seminar, their peers from their schools and workshops and churches. It was also noted that some parents will not like discussing issue of ARH with their adolescent but rather requested someone the adolescent respect to assist in discussing such an issue with him or her. The following are the typical statements made by the parent's participants:

They can get it through seminar when they call the youths for seminar. Also, in school, they can hear it from their teachers...It may be through their friends because there are some things they will not want to discuss with parent. (Parent Participant).

From the church, the adolescents acquired a lot of information about their health from the church. (Parent participant).

On the way parents communicate ARHI with their adolescents, the adolescent FGD participants reported that their parents usually talk to them in parables using proverbs that they did not understand. They also use fear tactics to motivate action. They also

tend to initiate discussion whenever they found one adolescent in the neighborhood did something that is not good. The parents were also suspicious whenever they see their adolescent with opposite sex. According to some of the FGD adolescent participants:

The way my parent communicate this to me is in a fearful way because they will say if they do it like this, if you do it like this is your own that everything they tell you is for your good. They say the day a child kills big fish and bring it to the house, he is not the only one that will affect. They will also tell us that is not women's issue that we should put in our mind now, finish your studies and start working, even if you did not learn trade, go to school; learn trade. (Adolescent Participants).

They will say, all those things they have done in the time past, they will not want us to do such. Because they will say if you impregnate somebody now, your education will stop. If guys own did not stop ladies will have to stop because it is a shame for a lady to be pregnant. Men can still guide their own self that me o, as long as they don't know what exactly that is happening, so is ladies that has that fault majorly do you understand. (Adolescent Participants).

My parent use to use proverbs and

parables to talk to me especially my mummy. If she sees anything like that with me she will not take it lightly with me, she burst out in anger and be saying all those stuffs that if any girl should come to this house and say you are the one who impregnated her, you will go out of this house. It will be the end of your life in this house. After all these words she will now come back to us to advice us gently that we should stop doing all these, that it is not good that it is against our health. (Adolescent Participant).

According to the parents participants, they initiate discussion with their adolescents when observe any of two following events: text message on his/her phone, commencement of menstruation. They consequently advise the girl 'not to move near the boys' (i.e. do not have sex). According the parent:

The way I used to talk to my children especially the female one when she started menstruation, I told her if you move near the boys, you will be pregnant and once pregnant, you are going to your husband's house, and if you don't wait to do what is expected of you before you go, whatever you see there it is left to you. And the one that is a boy; if I see any text message on his phone I will challenge not indulging that he is a boy, I will tell him that he is not doing the

Table 3. Percentage of parents and adolescent with correct knowledge of adolescents reproductive health.

Variables	Parents		Adolescents	
	No	%	No	%
Knowledge on ways or means of pregnancy prevention				
Abstaining from sexual intercourse (True)	207	96.3	193	89.8
Using Traditional ring (False)	147	68.4	104	48.4
Using condom for every act of sexual intercourse (True)	130	60.5	141	65.6
Having sexual intercourse only during safe period (False)	126	58.6	37	17.2
Use of any modern method of contraceptives (True)	124	57.7	96	44.7
Use of traditional beads (False)	154	71.6	97	45.1
Avoid casual sex (True)	154	71.6	128	59.5
Knowledge on ways of avoiding STIs				
Abstaining from sex completely (True)	171	79.5	173	80.5
Being faithful to one partner (True)	173	80.5	146	67.9
Avoiding casual sex (True)	185	86.0	147	68.4
Using condom for every act of sexual intercourse (True)	157	73.0	126	57.6
Avoiding commercial sex worker (True)	187	87.0	153	72.1
Not sharing objects-blade (True)	137	63.7	135	62.8
Not sharing of toilets (False)	106	49.3	100	46.5
Not sharing of eating plates or utensils (False)	139	64.7	112	52.1
Knowledge relating to puberty				
Puberty is the beginning sign of sexual maturity (False)	41	19.1	43	20.0
Puberty starts in girls earlier than boys (True)	184	85.6	171	79.5
Girls aged 10-14 years who experience menstruation cannot become pregnant because they are too young (False)	174	80.9	149	69.3
Attraction towards opposite sex is normal at puberty (True)	192	89.3	164	76.3
It is possible for male adolescent to impregnate girl (True)	196	91.2	166	77.2
Adolescent who don't have sex occasionally are sexually unhealthy (False)	184	85.6	15	73.5
Not having sex at all or not having sex occasionally can lead to sickness for boys (False)	172	80.0	161	74.9
Not having sex at all or not sex occasionally can lead to sickness for girls (False)	190	88.4	171	79.5

right thing; that he still have a long way to go, a boy of 20 years should not be thinking of girl friend. I don't want to see any girl-friend but school mates, any friends, I don't want to see the names of girls on your phone any longer, I did not approve of it. I use to tell my children both male and female that they should always remember the children of whom they are. (Parent Participant).

....talking to them about sex maybe like puberty, don't do this even when female child has started having breast on their chest, that is when they will start telling them that ah this is dangerous o, that this thing you are looking at don't go near it o, that his place o is dangerous o, when the child hears this, such child will know that what their parent are telling them is true. (Parent Participant).

Data from the survey

The percentage of respondents' with correct knowledge of the statements on ARHI is shown in Table 3. A higher proportion of parents than adolescents knew that

abstaining from sexual intercourse is one of the ways of preventing pregnancy (96.3% Parents; 89.8% adolescents). By contrast, only 49.3% and 46.5% of parents and adolescents respectively knew that not sharing of toilets is not one of the ways of avoiding STIs (Table 3).

Knowledge about ARHI was generally high among the two groups. Four main ARH knowledge domains were assessed namely prevention of STI/HIV, potential risk of early pregnancy, mode of HIV transmission and knowledge of adolescent physiological development. Comparison of the mean knowledge score of ARH according to the four main domains show that only knowledge on mode of HIV transmission and knowledge of adolescent physiological development were significant among the adolescent group (Table 4). The overall mean knowledge score of the parents was 22.63±3.421 while that of the adolescents was 19.39±5.91. Table 5 shows that 64.7% and 89.3% of adolescent and parents had good knowledge of ARH respectively while only 7.4% and 0.9% of adolescents and parents had poor knowledge of ARH respec-

tively. The difference between the knowledge score were not statistically significant among both parents and adolescents group as P-value >0.05.

Quality of communication: discussion of ARH issues

According to the adolescents, only 45 (20.9%) had ever had the opportunity to communicate with their parents on ARH issues but the majority of parents 153 (72.1%) claimed that they had done so with their adolescents during last six month preceding data collection (Figure 1).

Majority of adolescent respondents acknowledged that they understood the importance of the message shared by their parents while many also affirmed that parents responded to their questions and request quickly during the discussion. On their comfort level in discussing ARH issues with parents, 44.4% adolescents said they were nervous talking to parents while 95.6% of adolescents felt comfortable interacting with parents (Table 6). The majority, 93.3% and 88.9%, of adolescents that held discussion with their parents said they were

Table 4. Proportion of parents and adolescents with correct knowledge about modes of transmission of HIV.

Variables	Parents (N=215)		Adolescents (N=215)		Total (N=430)	
	No	%	No	%	No	%
Modes of transmission of HIV						
Sexual intercourse with infected person (True)	198	92.1	156	72.6	354	82.3
Sharing of sharp object (True)	6	2.8	156	72.6	162	37.7
Through contaminated blood transfusion (True)	5	2.3	58	27.0	63	14.7
Mother-to-Child transmission (True)	5	2.3	34	15.8	39	9.1
Sharing of spoon/Cutlery (False)	5	2.3	5	2.3	10	2.3
Using of the same sponge (False)	0	0.0	5	2.3	5	1.2
Sharing of toilet (False)	0	0.0	8	3.7	8	1.9
Having sex with sex workers (True)	0	0.0	7	3.3	7	1.6
Through kissing (True)	0	0.0	1	0.5	1	0.2
Potential health risks of early pregnancy						
Maternal mortality	86	40.0	125	58.1	211	49.0
Caesarean birth	52	24.2	109	50.7	161	37.4
Contacting diseases including HIV/AIDS and STDs	47	21.9	41	19.1	88	20.5
Genital Fistulae	21	9.8	14	6.5	35	8.1
Infertility	5	2.3	20	9.3	25	5.8
Cervical cancer	1	0.5	2	1.0	3	0.7
Others*	3	1.4	5	2.3	8	1.9

*Others: Loss of parental care, partner may deny pregnancy; education disrupted; death.

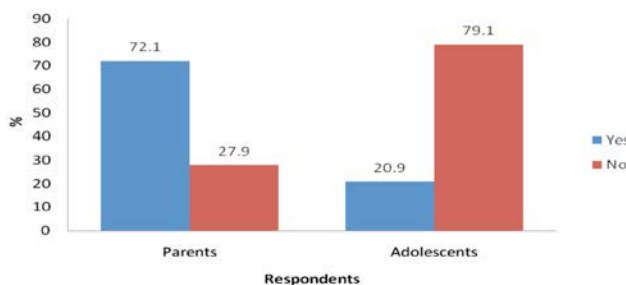


Figure 1. Discussion of adolescents reproductive health issue between parents and adolescents.

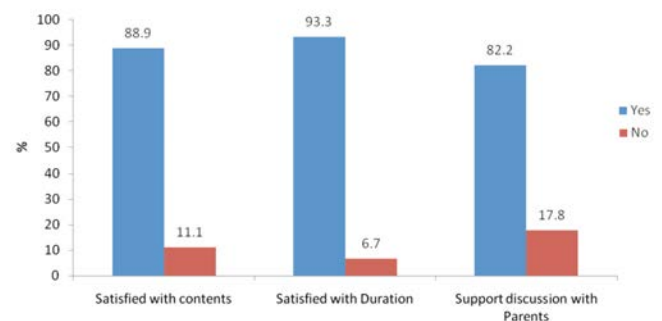


Figure 2. Adolescents' perceived satisfaction with discussion with parents on adolescents reproductive health issues.

satisfied with the duration and contents of what were discussed respectively (Figure 2). Most of the adolescents (82.2%) affirmed that their parents supported the idea of discussing ARHI with them. Out of those that ever had discussed ARH issues with their parents, majority (82.2%) had good perception about the quality of communication, 13.3% and 4.4% had fair and poor perception of the communication respectively (Table 7).

Discussion

The findings from this study revealed that about one quarter (23.9%) of adolescents said they had already started having sexual intercourse. This finding corroborated with other survey found that by age 13 years over a quarter of a sample of secondary school students in Plateau state had had sexual intercourse.¹³ It was also documented by another study in Ethiopia¹⁴ where 55(13.3%) students reported to have had sexual experience.

Knowledge of ARH issues was high among both adolescents and parents though there are still misconceptions about how STIs is transmitted as less than half of both

group (49.5% parents and 46.5% adolescents claimed that sharing of toilets is one of the ways of preventing/avoiding STIs. The finding is similar to the results reported by Emelumadu *et al.*¹⁵ in their study in Ethiopia where more than three fourth (77.2%) of students knew about common sexual transmitted infections including HIV/AIDS. This indicates that there are still knowledge deficit in term of mode of transmission of STIs/HIV. Another misconception found in this study is that puberty is the beginning sign of sexual maturity. Accurate knowledge of sexuality is important for healthy sexuality development; it serves as a foundation for adolescents to understand their sexuality better, which in turn influences their sexual behavior and the outcomes.¹⁶ The implication is that interventions targeting adolescents and parents using appropriate channels are needed to address this knowledge deficit.

This study also shows that the proportion of adolescents with good knowledge of ARHI was lower than that of their parents. This is expected and can be attributed to the experience and age of the parents as they already had exposure to information, attending antenatal care and even seminars. On the potential health risks of early pregnancy, more adolescents as compared to the

parents mentioned maternal mortality (58.1%) and caesarean birth (50.7%) as compared to 40.0% and 24.2% by parents respectively. This is because both caesarean section maternal mortality are surrounded with suspicion, aversion, misconception, fear, guilt, misery and anger among the women of South Western Nigeria,¹⁷ which most women don't like discussing.

Reported communication on sexual and reproductive health issue between adolescent and their parent was low (21%). This finding is similar to other studies. Study conducted among high school students in Dire Dawa, Eastern Ethiopia, revealed that only 37% of students had ever discussed on at least two sexual and reproductive health topics with their parents and only 16% of parents had discussed all sexual and reproductive health topics.¹⁶

Also very few adolescents (5.5%) talked with parents on the reproductive health issues in a study carried out in Myanmar.¹⁸

This is due to the fact that sexual conversations are deemed a taboo subject in many African communities, for example in Ghana, Sierra Leone, Nigeria and South Africa, this finding is consistent with this study which suggests that parents limit them self to safe topics that students do not

Table 5. Respondents Knowledge score on adolescent reproductive health.

Categorization	Parents (N=215)				Adolescents (N=215)			
	No	%	* χ^2	P-value	No	%	χ^2	P-value
Poor (0-9)	2	0.9	0.290	>0.05	16	7.4	0.075	>0.05
Fair (10-18)	21	9.7			60	27.9		
Good (19-28)	192	89.3			139	64.7		
Total	215	100	-	-	215	100	-	-

* χ^2 Yate corrected value.

Table 6. Adolescent's perceived quality of communication with parents (N=45).

Variables	Yes (%)	No (%)
Clarity of message		
Understood what parents talked about	44 (97.8)	1 (2.2)
Understood the importance of the message shared	44 (97.8)	1 (2.2)
Parents clarified issues that were difficult to understand	40 (88.9)	5 (11.1)
Parent understood the reproductive health concern I shared	43 (95.5)	2 (4.5)
Message exchange easily understood by the adolescent	43 (95.5)	2 (4.5)
Perceived parents' responsiveness to the message		
My parent responded to my question and request quickly during the discussion	37 (82.2)	8 (17.8)
The discussion ran smoothly without any uncomfortable silent moments	37 (82.2)	8 (17.8)
My parents were willing to listen to my perspectives	40 (88.9)	5 (11.1)
Parents addressed my concerns immediately	41 (91.1)	4 (8.9)
Listened to one another during the discussion during discussion	28 (62.2)	17 (37.8)
Comfort during the discussion		
Nervous talking to parents	20 (44.4)	25 (55.6)
Felt parents trusted me	30 (66.7)	15 (33.3)
Felt parents are trustworthy	39 (86.7)	6 (13.3)
Comfortable interacting with parents	41 (91.1)	4 (8.9)
My parents feel comfortable discussing with me	43 (95.6)	2 (4.4)

Table 7. Adolescents' perception about quality of adolescents reproductive health communication.

	No	%	χ^2	P-value
Categorization			0.672	>0.05
Poor (0-5)	2	4.4		
Fair (6-10)	6	13.3		
Good (11-15)	37	82.2		
Total	45	100	-	-

discuss about sexual issue with parent;¹⁹ Cultural taboo, shame and lack of communication skill were reasons that hinder communication between parent and adolescent about sexual matters.¹⁶

We are surprised about the great disparity between parents and adolescent concerning discussion of ARHI in the last 6 months preceding the study. While higher proportion of parents reported they had communicated with their adolescents, the latter reported lower figures. There are two possible explanations for this disparity. First, the disparity may be due to different perception of communication between parents and their adolescents. Adolescents may not consider their parents' discussion as a good communication because it is full of reprimand and instructions that leaves the adolescent limited chance for meaningful dialogue. As findings from the FGDs suggest parents use euphemisms, for example, do not move near a boy, to discourage adolescent from having sex. This often creates confusion for adolescents girls who often discover that mere physical interactions with boys do not result in pregnancy as their parents have warned.

Most African parents may not be in a good position to provide sexuality information to their children because the information they provide is often ambiguous and laced with fear; hence, it does not imbue confidence nor protect children from unhealthy sexual practices.¹⁵ Parents have significant potential role play in reducing the sexual risk behaviors and promote healthy adolescent sexual development by providing correct and non-ambiguous messages to their adolescents children.¹⁵

This finding was also similar to the findings of the study conducted in Atlanta Georgia in USA, which revealed that the content of parent adolescents conversation seemed to focus more on the negative outcomes of sexual intercourse and sexuality and low on what adolescents should know to more completely understand how they are growing and developing.^{14,20} This finding was also consistent with the FGD conducted in this study, which indicates that there is a gap in discussing the positive aspects of adolescent sexuality related issues. Thus, if discussions with young chil-

dren are conducted in a negative and threatening way, they will be unlikely to turn to their parents to discuss sexual matters as they get older.¹⁴

Implications for intervention to promote health communication on ARH issues between adolescents and parents

Various perceptions that need improvement were found from the study. For instance, the perception of parents that adolescents are sexually matured at puberty reflects the need to educate and train parents on adolescents reproductive health issues. Secondly, there is the need to build the capacity of parents such that they know what sex education is all about and how to communicate with their children. The views of the community members are still dominated by the traditional perspective of issuance of warnings, threats and discipline of erring adolescents. There is need for a re-orientation of the parents on adolescents reproductive health. To be effective, sex education programs targeting adolescents need to be comprehensive, provide unbiased and scientifically based information; emphasize risks of unprotected sex; explain the various practices and methods that can reduce the risks of pregnancy and of acquiring a sexually transmitted infection during intercourse; discuss values about sex and condoms and other contraceptives. Based on the findings from this study a training intervention is recommended for parents to improve their skills for initiating and discussion adolescent reproductive health issues in ways that is meaningful and address the information needs of adolescents.

Conclusions

Parents are expected to play a crucial role in transmitting appropriate sexual and reproductive health information and skills to their adolescents to ensure that adolescents grow up to lead safe reproductive and sexual lifestyles. This underscored by the research evidence that confirm that many adolescents are involved in sexual activities

that elevate their risk to several reproductive morbidity including unwanted pregnancies, abortion and sexually transmitted infections. Our study indicates that both the parents and adolescents had good knowledge of adolescent reproductive health, communication on reproductive health issues remain low. Therefore, training intervention to improve the adolescent-parent communication is recommended for the parents.

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