"Closed mouths don't get fed": Understanding the patterns of parent-adolescent communication on sexual and reproductive health issues in Ibadan slums, Southwest Nigeria

[1*]Taofeek Kolawole Aliyu and [1]Joshua Oyeniyi Aransiola
[1]Department of Sociology and Anthropology, Faculty of Social Sciences, Obafemi Awolowo Univeristy, Ile-Ife, Nigeria
[*]corresponding author: aliyutfk@oauife.edu.ng, kaliyu@cartafrica.org

Abstract

Background: Parent-adolescent communication about sexual and reproductive health (SRH) issues is associated with healthy sexual outcome in adolescents. The increasing evasion of this discourse at the home front in sub-Saharan Africa is receiving greater academic and public health attention. In many Nigerian households, adolescents lack access to informative and undiluted communication with their parents, a situation that is worse for adolescents dwelling in slums. This study aimed to document the SRH issues and patterns of parent-adolescent communication in selected slums of Ibadan, Southwestern, Nigeria.

Methods: A mixed sequential explanatory research was carried out in 10 selected slums in Ibadan, Oyo State, Nigeria. Structured questionnaire scripted on open data kits (ODK) and vignette for FGD were used to obtain data from parents and adolescents. A sample of 796 parent-adolescent dyads was interviewed for the quantitative strand, and 8 FGDs were conducted for the qualitative component. Analytical techniques utilized included frequency counts, chi-square and logistic regression while thematic analysis was adopted for the FGDs.

Results: Communication regarding SRH issues occurs in many households but indirectly. A higher proportion of mothers discuss all SRH issues with their adolescents and better more than fathers. While female adolescents engage their parents only on limited topics, consequences of sexual behaviours were the least discussed.

Conclusion: The findings of this study suggest that sexual education training intervention is germane to enhancing parent-adolescent communication on SRH issues for parents especially fathers and adolescents.

Key words: *adolescent, communication, Sexuality, patterns, slums, Nigeria*

Introduction

Over the last five years, development partners spent an estimated USD 6.42 million on adolescent sexual reproductive health (SRH) in Africa (IPPF, 2015). In spite of the funds allocated to improve the health of this teeming group, adolescent SRH remains a global health challenge. A report by WHO (2017) showed that HIV/AIDS and complications during pregnancy are amongst the top five causes of mortality in adolescence. This has resulted in an annual loss of over 38,000 adolescents globally (Unicef, 2018). Other SRH challenges faced by adolescent are early sexual activities, multiple sexual partnerships, unprotected sexual intercourse or erratic contraceptive use which places many adolescents at high risk of unintended pregnancies, STIs/STDs and abortions(Morris & Rushwan, 2015). In sub-Sahara Africa (SSA), specifically Nigeria,

adolescents' potentials are hampered by the attendant consequences of their risky sexual behaviour which trap them in an abject cycle of poverty that continues to suffocate the sub-region.

To raise the standards of adolescents' SRH behaviours and mitigate possible negative occurrences, some authors (Aspy et al., 2007; Cupp et al., 2013; Poulsen et al., 2010) have identified parent-adolescent communication as a strategic control mechanism. Such communication provides an avenue for parents to ingrain in their child, the SRH values and ensure that adolescents are accustomed to responsible sexual behaviours (Dilorio, Kelley, & Hockenberry-Eaton, 1999; Izugbara, 2008; Zamboni & Silver, 2016). In Grossman, Jenkins, and Richer's (2018) view, information and knowledge exchange on SRH issues between parents and adolescents have the potential to influence sexual decision-making and sexual experiences during adolescence. The significance of communication between parent and adolescent have also been highlighted (Awusabo-Asare, Bankole, & Kumi-Kyereme, 2008; Clawson & Reese-Weber, 2003; Luwaga, 2004; and Manu, Mba, Asare, Odoi-Agyarko, & Asante, (2015). Most observe that adolescents anticipate, trust, and prefer SRH information to come from their parents.

Despite the potential of parent-child communication as a strategy for improving adolescents SRH behaviours, discussion about SRH issues between parents and adolescents still remains a controversial issue in Nigeria, especially for the bottom millions dwelling in the slums. Many parents, especially in SSA region find it problematic broaching SRH issues with their children (Dessie, Berhane, & Worku, 2015; Kumi-Kyereme, Awusabo-Asare, Biddlecom, & Tanle, 2007; Manu et al., 2015; and Yadeta, Bedane, & Tura, 2014). This is implied in the culture of silence surrounding sexuality which often makes open discussion on SRH an illusion (Izugbara, 2008; Mutema, 2013) in Africa. The conservative norm and taboos around sexuality typically in Africa, as well as ill-preparation, have also been shown to generally limit parental involvement and engagement with their children on SRH communication (Dessie et al., 2015; Nundwe, 2012; and Wamoyi, Fenwick, Urassa, Zaba, & Stones, 2010). While some parents are conscious of the need to dialogue with their adolescents on SRH, parents and adolescents seem confused or nerve-racking on what and how to discuss such issues. When open or responsive discussion occurs, such conversations are largely opportunistic, arising only when the situation presents itself (Berg, Sun, & Babalola, 2012). Many times, parents gloss over critical SRH issues while others engage in verbal threats/warning with their adolescents rather than engaging discussions on such matters.

Although evidence on parent-child sexuality communication in Nigeria is growing, little is known about the concerns and patterns of parent-adolescent sexuality communication in urban slums where adolescents are vulnerable to poor SRH outcomes due to inadequate knowledge of SRH and low life skills. Evidence abounds that adolescents living in the slums are more likely to initiate sexual intercourse at an early age and subsequently graduate to risky sexual behaviours compared to non-slum dwellers (Dodoo, Zulu, & Ezeh, 2007; Kabiru, Beguy, Undie, Zulu, & Ezeh, 2010). Adolescents in slums face different challenges, threats and opportunities in their social context which requires adequate parental exchange and swift response to SRH communication needs. Therefore it is essential to understand the need for parent-child communication to improve SRH at adolescence. This study examines the concerns and patterns of parent-adolescent communication on SRH issues in urban slums in a state in Nigeria.

Theoretical Underpinning: Social Constructivism

The key research questions underpinning this study emanate from the underlying assumption of Berger & Luckmann's (1991) Social Constructivism theory. Social Constructivism is a theory of knowledge in sociology and communication with emphasis on shared meanings, understanding, and significance among interacting individuals within human society. Post-revolutionary Soviet psychologist Lev Vygotsky originally conceived this theory in 1978 as a response to the assumption made by the cognitivists. Vygotsky, (1978) rebuffed the cognitivists' assumption that learning and the social contexts are separable and each needs to be understood differently. Instead, he emphasized that learning is embedded in, and must be treated as a product of social interaction. This is consistent with the idea of Berger & Luckmann, (1991) but with slight modifications that link social psychology to sociology. It is apt to say that Berger & Luckmann's (1991) theory was influenced by the social phenomenology of Alfred Schutz and thus, provides a nuanced analysis of social reality as a construction of the people. The main assumption of Berger & Luckmann's (1991) theory is that communication (via language) is an essential system through which humans construct their reality. In effect, the goal is to understand the world of lived experience of individuals in their contexts.

In line with this assumption, parents and adolescents should share the same meaning and concerns around SRH issues if communication is to take place. This requires knowledge of SRH issues on the part of the parents to be able to nurture adolescent into practising responsible sexual behaviour. In some situations, this experience may be missing, such as the inability of the parents to offer reliable information or facts related to SRH or due to their lack of such knowledge. It is equally expected that parents and adolescents must have mutual trust and confidence in each other for communication on SRH matters to be effective. The lack of such belief or distrust coupled with other socio-environmental factors may severely hinder parent-child conversation on sexual and reproductive health issues.
Further, parents and adolescents' concerns may differ with respect to the conception of SRH information needed by the adolescents. Meaningful learning occurs when parents and adolescents have similar concerns about the need to engage in transparent and responsive communication around SRH issues. In part, this dialogue is contingent on the fears and readiness of the parents to swiftly respond to adolescents' SRH needs. Failure to respond to these needs appropriately have the potential to endanger adolescents' SRH behaviours. For instance, parents may be concerned about abstinence and the danger of unprotected sexual intercourse while adolescents concerns may revolve around issues of contraceptive and how to handle multiple sexual partners. The information needed at this point may vary as parents may be supplying wrong information of complete abstinence when the child is already sexually active. The adolescents may erroneously think of this communication as inappropriate and perceive their parents as being excessively protective and disrespecting their privacy.

Some studies have earlier asserted that most parents found it difficult to accept the fact that their adolescents are sexually active (Kunnuji, 2012; Ojo et al., 2011; Olasode, 2007). Therefore, the attitude of the parents and adolescents towards sexuality communication must be positive for effective communication to occur. In this case, if both the adolescents and parents share different meanings and concerns what constitutes the appropriate information on SRH issues, they are likely to develop a negative attitude towards communication.

Methods

Study Settings and Period

The study was carried out in ten slum communities within two Local Government Areas (Ibadan Southeast and Northeast) having the highest density of slums in Ibadan, the capital of Oyo state in Southwest Nigeria (Adedimeji, Omololu, & Odutolu, 2007; Fourchard, 2003; Makinde, 2012). Ibadan is found 78 miles away from Lagos State and 530km away from Abuja, the Federal Capital Territory. Geographically, along with political and ethnic considerations, Ibadan is presumed to be the largest city by geographical area in Nigeria and one of the most populous in Africa. According to 2006 population census, the projected population estimates of the Ibadan city in 2015 is put at 3,800,000. The choice of Ibadan was informed by the extremely poor ad unhealthy living conditions of slum dwellers which reflect limited access to basic services including running water, lack of proper waste disposal and poor access to health facilities (Fourchard, 2003; Makinde, 2012). These areas are inhabited by Yorubas (both indigenes and non-indigenes) and other tribes due to the low cost of living and opportunity for survival. This study conducted from April to June, 2018.

Research Design

The study adopted a sequential explanatory mixed method design involving both quantitative and qualitative approaches to explain the concerns and patterns of parent-adolescent communication on SRH issues in the selected slums. This design comprised two distinct phases of data collection. The first stage entailed the collection and preliminary analysis of quantitative data, and informed a critical exploration of issues in the second phase. In the second phase, qualitative data were collected and analyzed to complement the quantitative results, after which the qualitative data were used to further interpret the quantitative findings.

Population and Sample Size

The target population included households of either biological parents or guardians of both sexes having at least one adolescent aged 10-19 years residing in the selected slums. Parent-adolescent dyads residing in the randomly selected slum communities in Ibadan Southeast and Ibadan Northeast LGAs were the study participants. The study included parents of adolescent either biological or foster parent (father or mother) and who have stayed with adolescent for at least 5 years. Voluntary consent and assent were obtained from parents and adolescents respectively before the commencement of the data collection. Other participants chosen were the community leaders, women leaders, and health care providers due to their experiences in the communities. In contrast, the study excluded participants who are not residents of the selected slums. Also, parents and adolescents who were unwilling to participate, married adolescents and/or pregnant adolescent girls were not eligible, visitors during the data collection period, and recent immigrants of less than 2years in the selected slum communities were unsuitable for this study. The sample size was determined based on formula; $n = \frac{z^2(pq)}{d^2}$ where n = the least sample size expected per cohort in each study site; z = Standard normal deviation or z-score; p = proportion of sample with outcome measure: parent-child communication on SRH issues in slum areas; q = 1-p, d = the acceptable error level. The prevalence of parent-child sexuality communication (pq) was unknown in Nigeria due to insufficient information from previous studies. The calculation was done using a z-score of 1.96 equivalent to 95% confidence interval and the allowable error level of 5% (0.05). This was recommended based on the standard deviation and error levels in social science research (Bryman

and Cramer 1990). Hence substituting, the expected sample size into the formula is demonstrated below:

$n = \frac{1.96^2(0.5)(0.5)}{0.05^2}$ $n = \frac{(3.816)(0.25)}{0.0025}$ $n = \frac{(0.9604)}{0.0025}$ $= 384.16 \approx 384$. This is multiplied by two since the study is targeting two local governments to obtain a sample size of 768 in the two LGAs. Assuming 10% of incomplete responses or non-response rate, 10% of 768 was calculated which gives 76.8 ≈ 76 and was added to the sample size to make a sample size of 844 ≈ 840. Thus 840 parent-adolescent pairs were sampled.

Sampling Procedure

A multi-stage sampling technique guided the recruitment of survey participants. Stage one involved a purposive selection of two Local Government Areas (LGAs) with a high-density of slum communities. These were Ibadan Northeast and Ibadan Southeast. In stage two, a random selection of five slum localities from a list of slum localities in each LGA was done which translated to 10 slum communities in the two LGAs. Stage three entailed a random sample of four Enumeration Areas (EAs) in each community which added up to 40 EAs in the two LGAs. The fourth stage employed a systematic random sampling using random number generator (RNG) software to select 21 eligible households from the list of households that met the selection criteria in each selected EA. At this point, parent-adolescent dyads were chosen within the selected household units until the desired sample size was reached for each LGA. For qualitative data, a purposive sampling approach was deployed to obtain discussants for the FGD sessions. A total of eight FGD sessions, four from each LGA comprising parents FGD (one male and one female groups) and adolescents FGD (one male and one female groups) were conducted in the two LGAs. Also, a purposive sampling technique was adopted to recruit three other stakeholders, including one community leader, one women leader, and one health service provider in each LGA for In-depth Interviews (IDIs) making a total of six IDIs conducted in the two LGAs.

Data Collection Procedure

The quantitative data were obtained electronically using a semi-structured questionnaire encrypted on the Open Data Kits (ODK) and retrieved with an Android-enabled smart phone. The instrument was prepared in English language and translated to the local language (Yoruba language). A pilot test of the instrument was done in Ile-Ife, the cradle of the Yoruba race in Osun State among selected parent-child pairs for modification and finalization before the actual survey. Trained field assistants administered the semi-structured questionnaire to the study participants after obtaining their consents and assents. A separate private section was held differently for parents and adolescents with the assistance of supervisors. The questionnaire covered questions on socio-demographic and individual characteristics, household variables, concerns of parent-child communication on SRH issues, and patterns of parent-adolescent communication on SRH issues. The socio-demographic and individual factors were used as the independent variables while concerns and patterns of parent-adolescent communication were used as dependent variables. After preliminary analysis of quantitative data, vignette for Focus Group Discussion (FGD) and In-depth Interview (IDI) guide were developed from emerging issues from the quantitative findings for further exploration. The vignette was employed for participants to discuss sensitive issues from non-personal perspectives.

Measures

Concerns for SRH communication between parents and their adolescents were measured using sexual and reproductive health topics discussed by parents and adolescents. The assumption was

that parents and adolescents will only discuss issues they are anxious about. This was assessed using multiple choice five topical issues ranging from puberty to consequences of sexual behaviours which stemmed from available studies. A sample question includes "which of the following have you discussed with your adolescent in the last 12 months". The frequency distribution by topics are displayed in Table 2.

Patterns of parent-child communication: a five-point Likert scale was employed to measure the degree to which parent and adolescent agree to statements on SRH communication with responses ranging from strongly agree (1) to strongly disagree (5) as shown in the literature. A sample question is "My child needs to learn about SRH to be able to take informed decisions". Composite score was derived for this and was used to classify patterns of communication into direct communication, indirect communication, and no communication.

Analysis

Quantitative data collected were downloaded from the ODK server on a laptop and processed via excel sheet. Data was imported into STATA package version 14 for cleaning and analysis. Data analysis plan (DAP) was developed to guide data analysis. The descriptive and inferential analytic techniques were employed to analyse data at univariate and bivariate levels. At univariate level, frequency counts and simple percentages, as well as bar charts, were used. At the bivariate level, chi-square was employed. Patterns of communication were measured under three domains namely direct communication, indirect communication and no communication. 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 parent-adolescent communication on SRH issues were developed. The files and identified themes were loaded into the Nvivo 11 software program and analyses were done using thematic content analysis. The findings were presented in themes and verbatim quotations to express the world-view of the study participants.

Ethical Consideration

This study obtained ethical clearance from the Institute of Public Health, College of Health Sciences, Obafemi Awolowo University, Ile-Ife (HREC NO: IPH/OAU/12/983). Participants' identities were protected in the course of this study and it was ensured that the study did not leave any harmful impacts on them. Written and verbal consents were sought from parents while written and verbal assents were obtained from adolescents after explaining the study objective, design, and potential cost and benefits. Participants were assured their freedom of participation and the choice of opting out of the study at any point without giving further explanation. Confidentiality of participants' responses and privacy of participants were emphasized and were maintained during data collection. All other ethical considerations were given due considerations and followed strictly including disclosure of researchers' identity.

Results

Background characteristics of participants

Socio-demographic Characteristics of Respondents (parents and adolescents)

Table 1 below contained the socio-demographic characteristics of 796 parent-adolescent dyads who participated in the study. Among the parents, the table showed that the participants'

age varied from 25 years to 75 years. About three quarters (74.6%) of the participants are between the ages of 30-49 years with a mean age of 42 years and a standard deviation of 10 (*SD*= ±10). The implication is that majority of the study participants clustered around age 32 to 52 years. With respect to gender of the parents, more than half (66.6%) of the participants were mothers and majority (80.3%) were married. This reflects the patriarchal structure where women are culturally expected to be more involved in home keeping while men went in search of food. A consideration of educational status showed that over three quarters (86.7%) had attended one form of school or the other while 13.3% had no formal education. Also, the participants comprised different ethnic groups, largely dominated by Yoruba (98.6%) ethnic group. With reference to religious affiliation, Islam and Christianity were mostly practiced (57.9% and 40.5 respectively) by the participants. Occupation indicated that a higher proportion of the parents engaged in an informal sector. Slightly above half (52.0%) of the parents engaged in business or trading while about 14.1% had no jobs as at the time of the survey. This is an indication that people in slums suffered from many disadvantages such as lack of education which may have compelled them to engage in petty business or trading or low paid jobs.

Adolescent socio-demographic characteristics are also described in Table 1. The age of the adolescents ranges from 10-19years where slightly more than half (54.0%) falls within the age bracket of 15-19years with a mean age of 15years and a standard deviation of 3years (*SD*= ±3). The implication is that majority of the adolescents clustered around age 12 years to 18 years. In terms of gender, Table 1 showed that there were more female (51.8%) than male (48.2%) in the sample although the difference was not too conspicuous. Overall, the majority (84.5%) of the adolescents were single and 63.6% had primary school education while 3.0% had no formal education. Religion and ethnic affiliation were similar to that of their parents with Islam and Christianity being the most practiced (57.9% and 40.5 respectively) religions by the adolescents. This indicates that, adolescents' religions are not different from that of their parents. The majority (98.6%) of the adolescents were also from the Yoruba ethnic group.

Table 1: Socio-demographic characteristics of Parents and adolescents

Parents (N=796)			Adolescents (N=796)		
Characteristics	**Frequency**	**Percentage**	**Characteristics**	**Frequency**	**Percentage**
Age group (10years interval)			**Age** (5years interval)		
≤ 29years	55	6.9	10-14	366	46.0
30-39years	297	37.3	15-19	430	54.0
40-49years	297	37.3	**Mean Age in yrs**	15	
≥ 50years	147	18.5	**SD**	(±3)	
Mean Age in yrs	42				
SD	(±10)				
Gender			**Gender**		
Male	266	33.4	Male	384	48.2
Female	530	66.6	Female	412	51.8
Marital status			**Relationship Status**		
Never married	19	2.4	Single	673	84.5
Married	639	80.3	Dating	123	15.5
Divorced/separated	61	7.6			
Widowed	77	9.7			
Educational level			**Educational Level**		
No formal education	106	13.3	No Formal Edu	24	3.0
Primary	147	18.5	Primary	506	63.6
Secondary	410	51.5	Secondary	266	33.4
Post-Secondary	133	16.7			
Ethnic Affiliation			**Ethnic Affiliation**		
Yoruba	785	98.6	Yoruba	785	98.6
Others	11	1.4	Others	11	1.4
Religion			**Religion**		
Christianity	322	40.5	Christianity	322	40.5
Islam	461	57.9	Islam	461	57.9
Traditional	13	1.6	Traditional	13	1.6
Occupation					
Farming	13	1.6			
Artisan	177	22.2			
Business/Trading	414	52.0			
Teaching/Professional	49	6.2			
Civil servant	31	3.9			
Not working	112	14.1			
Total	**796**	**100**	**Total**	**796**	**100**

Discussion of Sexual and Reproductive Health Issues by Parents and Adolescents

In this section, respondents were asked if they have ever discussed SRH issues in the last twelve months with a 'yes' or 'no' response for parents and adolescents. As demonstrated in Table 2, out of the 796 parent-adolescent dyads in this study, a little more than 3 out of every 5 parents (61.9%) and above half (56.9%) of the adolescents have had discussions on SRH issues. This

implies that discussions of SRH matters were not uncommon among parents and their adolescents. However, the proportion of parents and adolescents who were not having a conversation on SRH issues is equally high meaning around 2 out of every 5 parents and adolescents have not discussed SRH issues. This is of concern, although not different from what has been reported in the literature due to contextual barriers to parent-child communication around sexuality.

Table 2: Percentage Distribution of Parents and Adolescents by Discussion of SRH Issues

Parents		**(N=796)**	**Adolescents**		**(N=796)**
	Freq.	**Percentage**		**Freq.**	**Percentage**
Discussion of SRH issues			**Discussion of SRH issues**		
Yes	493	61.9	Yes	453	56.9
No	303	38.1	No	343	43.1

Parents and Adolescents Reports on General Discussion of SRH Issues and their Level of Agreement

Table 3 further explained discussion of SRH issues by presenting parent-adolescent agreement on communication around SRH issues using Kappa coefficient. Parents and adolescents reports of dialogue on SRH issues showed a substantial levels of agreement (0.80). This suggests that communication on SRH issues exist between parents and their adolescents.

Table 3: Distribution of Parents and Adolescents Reports of Communication on SRH issues by agreement

Discussion of SRH issues	**Adolescents**				
Parents	Yes	No	Total	Kappa	p-value
Yes	434	59	493	0.80	0.000
No	19	284	303		
Total	453	343	796		

Concerns for SRH Discussion by Parents and Adolescents and their Level of Agreement

Depicted in table 4 are the specific SRH topics discussed by parents and adolescents – indicating their concerns for such topics. Discussions on specific topics by parents with their adolescents range from 29.5% to 81.3%. From the six items investigated, puberty was the most frequently (81.3%) discussed topic. Relationship with the opposite sex appears as the second most discussed (75.6%) topic between parents and their adolescents. The reports on menstruation and preventive practices showed that a little above half of the parents (58.3%) and (50.2%) respectively have had such communication with their adolescents. The least discussed topics were sexual issues (29.5%) and consequences of sexual behaviours (38.3%). On the other hands, adolescents report of communication on specific topics range from 28.1% to 76.0%. Over three-quarter of the adolescents have had communication with their parents on puberty (76.0%) and relationship with the opposite sex (74.0%). Also, slightly above half (52.5%) have had discussion on menstruation. The least discussed topics among adolescents were consequences of sexual behaviours (28.1%), preventive practices (42.2%), and sexual issues (42.6%).

Based on the parents and adolescents reports, three dimensions of communication can be discerned. One, parents discussed four out six topics more with their adolescents while adolescents

only reported communication on three topics. Second, parents and adolescents reports appeared to have fair agreement about discussions on puberty, menstruation and relationship with the opposite sex compared to other sensitive issues such as sexual issues, preventive practices and consequences of sexual behaviours. Third, parents reported that sexual issues were the least communicated topic whereas adolescents reported consequences of sexual behaviours as the least discussed topic. Furthermore, Table 4 revealed the level of agreement between parents' reports and adolescents' reports of dialogue on SRH issues. The kappa coefficients for parents and adolescents communication on SRH issues range form 0.39 – 0.64, depicting fair agreement to substantial agreement. Parents and adolescents had substantial agreement on menstruation (0.64) and puberty (0.62) whereas moderate agreement were recorded for relationship with the opposite sex (0.58), preventive practices (0.56) and consequences of premarital sexual behaviour (0.47). Only sexual issues fell in fair agreement benchmark (0.39).

Table 4: Distribution of Parents and Adolescents' Concern about SRH Discussion

Discussion of SRH issues	**Parents (n=434)***		**Adolescents (n=434)***		
	Yes **Freq (%)**	No **Freq (%)**	Yes **Freq (%)**	No **Freq (%)**	Kappa*
Puberty	353 (81.3)	81 (18.7)	330 (76.0)	104 (24.0)	0.62
Menstruation	253 (58.3)	181 (41.7)	228 (52.5)	206 (47.5)	0.64
Relationship with Opposite Sex/Dating	328 (75.6)	106 (24.4)	321 (74.0)	113 (26.0)	0.58
Sexual Issues (vagina sex, touching, fondling, oral sex, anal sex)	128 (29.5)	306 (70.5)	185 (42.6)	249 (57.4)	0.39
Preventive Practices (Abstinence and contraceptives)	218 (50.2)	216 (49.8)	183 (42.2)	251 (57.8)	0.56
Consequences (Pregnancy, abortion, STIs/STDs, HIV/AIDS)	166 (38.3)	268 (61.7)	122 (28.1)	312 (71.9)	0.47

Note: *n was based on parents and adolescents' agreement (yes-yes) of SRH discussions
*Kappa compares agreement between parents and adolescents report of communication

Concerns for SRH Discussion by Parents and Adolescents in Relation to their Gender

Table 5 displayed the SRH issues discussed by parents and adolescents in relation to their gender. These SRH issues denote the concern that parents and adolescents have and it ranges from discussion about puberty, menstruation, relationship with the opposite sex, sexual issues (comprising touching; foundling; vaginal; oral; and anal sex), preventive practices such as abstinence and contraceptive use, and consequences of sexual behaviours which includes pregnancies, abortion, STIs/STDs and HIV/AIDS. A total of 493 parents and 453 adolescents declared they had dialogue on SRH issues. A cursory glance at Table 5 revealed that puberty is the most discussed, of all the SRH issues. Among those parents who have had discussion on SRH issues with their adolescents, 86.1% of mothers (n=330) and 67.5% of fathers (n=163) had communication on puberty. A similar trend occurred among adolescents, where 76.6% of female (n=273) and 72.2% male (n=180) adolescents reported to have had discussions on puberty. Responses about relationship with the opposite sex and dating was the next and showed, 77.9%

for mothers and 73.6% for fathers while 76.1% male and 72.2% of female adolescents mentioned communication around the relationship with the opposite sex and dating.

The dialogue about menstruation indicated that 61.0% of mothers and 52.5 % of fathers had talked about menstruation. Among adolescents, the discussion of menstruation were higher for female (70.7%) while it was lower among male adolescents (22.8%). This is expected as the issue of menstruation is within female adolescents' domain. However, male adolescents equally require education on menstruation so that they are able to give necessary support to adolescent girls. Table 5 also illustrated that 52.4% of mothers had communication on preventive practices such as abstinence and contraceptives while among fathers, 42.3% have had such discussion. In contrast, preventive practices were more communicated among male (46.7%) than female (39.2%) adolescents. This is quite interesting because adolescent girls are more vulnerable; thereby, they require more information on preventive sexual practices to lead a healthy life. In all, most of the discussions were done by and with mothers than fathers. Sexual issues and consequences of SRH behaviours were the least discussed SRH topics among parents and adolescents.

Table 5: Percentage Distribution of Parents and Adolescents' Concerns for SRH Discussion and their Gender

SRH issues discussed	**Parents (n=493)***		**Adolescents (n=453)***	
	Father (n=163) **Freq (%)**	Mother (n=330) **Freq (%)**	Male (n=180) **Freq (%)**	Female (n=273) **Freq (%)**
Puberty	110 (67.5)	284 (86.1)	130 (72.2)	209 (76.6)
Menstruation	85 (52.2)	201 (61.0)	41 (22.8)	193 (70.7)
Relationship with Opposite Sex/Dating	120 (73.6)	257 (77.9)	137 (76.1)	197 (72.2)
Sexual Issues (vagina sex, touching, fondling, oral sex, anal sex)	43 (26.4)	125 (31.2)	70 (38.9)	120 (44.0)
Preventive Practices (Abstinence and contraceptives)	69 (42.3)	173 (52.4)	84 (46.7)	107 (39.2)
Consequences (Pregnancy, abortion, STIs/STDs, HIV/AIDS)	65 (39.9)	125 (37.9)	38 (21.1)	88 (32.2)

Note: *n was based on parents and adolescents discussion of SRH issues irrespective of agreement

Patterns of Parent-Adolescent Communication on SRH issues

Data presented in table 6 indicated that one-third (38.0%) of the total population of parents had no communication about SRH with their adolescents. The percentage were higher among adolescents as nearly half of adolescents mentioned no communication with their parents. Slightly more than half (56.2%) and (51.8%) of the parents and adolescents respectively have had indirect communication on SRH issues. It can be inferred that, parents and adolescents adopted indirect means of communicating SRH information rather than direct pattern of communication.

Table 6: Percentage Distribution of Patterns of Parent-Adolescent Communication about SRH Issues

Patterns of Communication	Parents Freq (%)	Adolescents Freq (%)
No Communication	303 (38.0)	343 (43.1)
Direct Communication	46 (5.8)	41 (5.1)
Indirect Communication	447 (56.2)	412 (51.8)
Total	796 (100)	796 (100)

Concerns and Patterns of SRH Communication

Table 7 showed the distribution of participants' concerns and patterns of communication about specific SRH issues. As demonstrated in the table, parents and adolescents expressed concerns for all the six domains of SRH issues that is, puberty, relationship with opposite sex/dating, sexual issues, preventive practices and consequences of sexual behaviour. For all these SRH issues, Table 7 clearly illustrated that majority of the parents and adolescents had adopted an indirect pattern of communication on all the six domains of SRH. The chi-square values for each of the topics were not significant for parents and adolescents, however, only discussion of preventive sexual practice was significant for parents (0.042) at a significant level of 0.05 and adolescents (0.000) at a significant level of 0.01.

Table 7: Percentage Distribution of Respondents' Concerns and Patterns of SRH Communication

SRH issues Discussed	Parents (n = 493)				Adolescents (n = 453)			
	Patterns of SRH Communication				Patterns of SRH Communication			
	Direct Freq (%)	Indirect Freq (%)	Total Freq (%)	(χ^2) p-value	Direct Freq (%)	Indirect Freq (%)	Total Freq (%)	(χ^2) p-value
Puberty	34 (8.6)	360 (91.4)	394 (100.0)	1.140 (0.286)	28 (8.3)	311 (91.7)	339 (100.0)	1.024 (0.311)
Menstruation	27 (9.4)	259 (90.6)	286 (100.0)	0.010 (0.921)	26 (11.1)	208 (88.9)	234 (100.0)	2.496 (0.114)
Relationship with Opposite Sex/Dating	32 (8.5)	345 (91.5)	377 (100.0)	1.345 (0.246)	27 (8.1)	307 (91.9)	334 (100.0)	1.444 (0.229)
Sexual Issues (Sex, touching, fondling, oral sex, anal sex)	12 (8.2)	134 (91.8)	146 (100.0)	0.303 (0.582)	13 (6.8)	177 (93.2)	190 (100.0)	1.939 (0.164)
Preventive Practices (Abstinence and contraceptives)	16 (6.6)	226 (93.4)	242 (100.0)	4.154* (0.042)	5 (2.6)	186 (97.4)	191 (100.0)	16.602** (0.000)
Consequences (Pregnancy,	16 (8.4)	174 (91.6)	190 (100.0)	0.302 (0.582)	14 (11.1)	112 (88.9)	126 (100.0)	0.900 (0.344)

abortion, STIs/STDs, HIV/AIDS)								

**= p<0.01, *=p<0.05

From the results in Table 7 above, it is evident that parents and adolescents had similar concerns for SRH issues and have adopted patterns alike for SRH discussions. Previous analysis of concerns for SRH issues revealed disagreement between parents and adolescents in terms of numbers of SRH issues they have concerns for and it was established that parents and adolescents adopted an indirect communication pattern. This provided a ground to explore further the concerns and patterns of SRH communication as expressed by the study's participants using qualitative approach. Thus, parents and adolescents participants in the FGD sessions expressed concerns for SRH issues in different ways ranging from issues such as menstruation, puberty, sexual activities, pregnancy, abortion, STIs/STDs. HIV/AIDs, to preventive practices like condom use and abstinence.

Overwhelming majority of the parents expressed concerns for puberty, menstruation, STDs/STIs, HIV/AIDS, pregnancy, abortion, condom use, bad companies, poverty, and death. In reaction to the vignette characters, FGD participants acknowledged that many adolescents engage in risky sexual practices that could put their future on hold, rejuvenate the cycle of poverty, and result in undesirable outcomes for them. Both men and women participants confirmed that peer influence has detrimental impact on the adolescents. The parent groups observed that adolescents' sexual behaviours are easily influenced by peer behaviour and parents were worried about the kinds of company adolescents keep in recent time. More men and women reported that adolescent females keep more of male friends than females and vice versa. In totality, parents were of the view that as early as age 12 to 13 years adolescents are exposed to sexual activities without protection. The consequences of this early sexual activities as explained by the parents are unplanned pregnancy, HIV/AIDs, STIs/STDs and abortion. It was evident from the discussions that parents had discussed some of these issues with their adolescents. Parents advised that adolescents need to avoid living reckless life, being serious with their academics, being careful with the way they dress and knowing the son/daughter of whom they are. Also, emphasis was placed on spirituality. The possibility was expressed in some of the FGD sessions, in Ibadan South, a man revealed that:

> *It is important for parents to know the child's company. Some girls have only boys as friends but if a parent sees that there are many boys for the child, she must tell her that these boys I am seeing around you, your schoolmates, do not allow your relationship lead to pregnancy because you are not matured for that. If we did not tell them, they can contact HIV or even gonorrhea. So parent must let the child be aware because most females have males as friends. They dress showing half of their body. Parents need to pray for the child because it is only God that can help these children* **(A 45year old man, FGD with men, Ibadan Southeast)**

Another opinion from a woman from Ibadan North reads:

> *Parents need to monitor their adolescents because small boys what they ought not to understand at 20 years already do at 12 years and results into rubbish. Imagine a boy of 14 years that gave a girl of 12 years pregnancy that she gave birth, let us say you were helped with the ceremonies after and other things but to take care of a child is much more than that. What about training the child? The child will now become an unwanted child in*

the street, an unwanted child in the town…….. ……A girl living waywardly will be treated as such. So, a 12 years old child that got pregnant, when she is 13 years, she will give birth. If she gives birth at 13 years, please, which work will a 13 year old child have that will make her take responsibilities for the child? We all know the state of the economy, so they ought to be talking to them and be monitoring them so that they will not get use to poverty from their early age **(A 42year old woman, FGD with women, Ibadan Northeast)**

Some parents are afraid of diseases and death, this reflects in their expression:

The fears are quite much. Many diseases talked about are very common through sex because most of them do not go to the hospital for check up on themselves. Even when given money, they won't go especially those not civilized. Yet, they will not tell their parents at home having had sex with a female that day. Though the fear is there and we have seen such which resulted to death, he keeps harbouring the disease which AIDS is a part and also other diseases difficult to mention, one can think it is even Malaria and before one gets to hospital, "unknown". So, this is why we warn them. I prefer a male child of 18 having a wife than have like 9, 10 females following him. If it is a girl, we can be rest assured that one who has 5 boyfriends today can have 10 tomorrow because she will not want to bring them home and will go elsewhere go meet them. So, that is how it is. Government is trying and warns against pre-marital sex, even God says it, so anyone who does it is wrong and if he gets infected and die as a result, who did he die for? His parents? **(A 52year old man, FGD with men, Ibadan Northeast)**

Other parents are worry about the spate of adolescents' sexual activities and associated consequences:

The fear of parents is the increasing rate of sexual activities among girls of nowadays which may lead to unwanted pregnancy which will lead to abortion, so she will damage her womb and to encourage her to continue in sexual activities. Imagine that kind of child and others of different sorts. There are some girls that if they do not have sex in a day, their body cannot be alright. But it is the parents' fault, much of the mothers. They will have to talk to her so that she will not turn to "Olosho" at her age **(A 39year old woman, FGD with women, Ibadan Southeast).**

When adolescents were asked about what they expect parents to discuss with their adolescents, they reported that they want to know everything about sexual issues, parents should be free to discuss sex, how it is being done and the consequences. They also emphasized that they expected parents to discuss issues of HIV/AIDS, condom use, pregnancy, abortion and STDs/STIs with their adolescents. They were of the view that if parents equipped adolescents with requisite information about their SRH, adolescents would make informed decisions about their lives rather than living them in the dark. Adolescents' expectations about SRH discussion emerged in the participants' reflections of what Adio's and Abeni's parents should discuss with them (the characters in the vignette):

Abeni's parents should discuss about sex with her, how they do it, they should talk to them by not having sexual intercourse with a guy. They should tell them the use of condom and when condom is not used in sexual relationship what the consequences can be. Abeni's parents may also be the cause of this Abeni's attitude because I think Abeni's parents are

not supposed to be having sex in the presence of their children, I think this is what lead Abeni to having sex with Adio **(A 16 year old girl, FGD with adolescent females, Ibadan Northeast)**

Adolescents from Ibadan Southeast explain the challenges parents and adolescents are likely to face. In their words:

The challenges Adio and Abeni may face is that, if the two of them have sex and the girl gets pregnant, they may want to abort the pregnancy. During the course of the abortion the womb may get destroyed or the person may die. The challenge the parents may have is that, they should not assume that they have not been having sex like some of our parents would assume. They should caution the children because if anything happens to them it will affect the parents. It is important for parents to talk to them early even before seeing condom with them, they need to know about these things. It is not new anymore, so parents should not hide it "joo" **(A 18 year old boy, FGD with adolescent males, Ibadan Southeast)**

At this point, many adolescents emphasized the need for parents to advise or talk to their children generally on sexual behaviours and securing their future. According to one of them:

They should discuss sexual health issues with Adio and Abeni. They should advise a female child who is on her period to be careful with men and be patient. They would advise her not to move close to any man during that period, even if the two of them are friends, she should be mindful of the conversations they have and not indulge in any filthy act. They would also advise the boy not to have sex with any girl or else he will get her pregnant, and with that her education would be disrupted and would become a housewife. They should advise the boy to be careful not to impregnate a girl at that stage, that he is not matured enough to impregnate a girl, although he is a bit matured but he is not matured enough. They don't have a job yet, so they should be patient, complete their education and get a job for themselves before they can get engaged **(A 18 year old Female, FGD with adolescent females, Ibadan Northeast)**

In relation to patterns of communication between parents and their adolescents about SRH issues, FGD participants expressed diverse views on the patterns parents should adopt when having dialogue with their adolescents. In general, parents stated that they usually advise their adolescents on SRH issues and noted that it should be done step-wisely. Many parents and majority of adolescents agreed on a direct pattern of communication about SRH issues. From the parents' perspective, two distinct positions emerged from the discussion of Adio and Abeni's sexual behaviour vis-à-vis the possible patterns of SRH communication between parents and adolescents. Convergent and divergent views were also evident from the key informant interviews.

The first position asserted that parents should adopt a direct pattern of communication when in dialogue with their adolescents about SRH issues. Some parent participants felt that parents should "call a spade a spade and not a tool for digging" that is, explain openly issues of sex, condom use, menstruation, puberty, pregnancy, abortion, STDs/STIs and HIV/AIDS to their adolescents. According to the interview participants, discussing these issues openly should not be considered disgusting rather be seen as an avenue to educate the adolescents. They emphasized that parents are in the best position to guide their adolescents about SRH issues. It was further submitted that adolescents will know better and be able to take informed decisions when information about these issues are communicated in an engaging manner and not in a vague

manner. Parent-participants noted that although the conservative norm around sexuality may serve as a constraint, parents need to come out of their shell to face the new realities around sexuality and advise their wards accordingly. Many parents lamented that contemporary SRH issues that were in existence now were non-existent in their adolescent days. The following excepts illustrate some of the positions articulated by the participants:

> *If a child is already an adolescent, one should sit him or her down and talk to them in a frank way that he/she will express what they are experiencing. One should also advise the child always so that he can be so conscious of it. Because nowadays, things have changed and one shouldn't sit back and watch the children just like that. One should advise them every time on how to behave and also pray that they listen* **(A 47year old woman, FGD with women, Ibadan Southeast)**

Buttressing this view, a man from Ibadan Northeast stressed the important role of parents that:

> *……. it lies in the hands of the parents, this is because, the teachings are in the Quran and Bible to train your children. When a child is 7 years as a girl, the teachings is different from a boy of age 7. The training of girls is different from that of boys. If we look at what life is now, everything is in the hands of parents. We need to give room for them to talk to us and we also talk to them. Like my child now, since the time I saw that she is already having her period, I have talked to her mother to educate her on what to do and what not to do when a girl is having her period. (***A 40year old man, FGD with men, Ibadan Northeast)**

Supporting this notion, majority of the adolescents lamented that they prefer open or direct pattern of SRH communication with their parents. When reacting to Adio and Abeni's story, they submitted that parents should sit them down and engage Adio and Abeni openly so that they can understand the message. Based on adolescents' discussions, they submitted that parents should not use fear approach or threat, castigate them based on other adolescents' experiences, or using parables when they want to talk to their adolescents on SRH issues. This they believed would only mislead the adolescents rather such discussion should be done in an engaging manner such that it addresses adolescents SRH need. The asserted that they could use other adolescents' experiences to initiate discussion about SRH issues and do it in way they can learn from such experiences. One thing that is clear in their submission was that parents and adolescents should have mutual discussion on SRH issues where parents are expected to take the lead. The following are the typical statements made by the adolescent's participants:

> *They should try to sit her down and encourage her but they should not react to the matter. They should not try to put fear in her mind otherwise she will not understand the message…….* **(A 17 year old girl, FGD with adolescent females, Ibadan Southeast)**
>
> Another participant submitted that:
>
> *Although it may be difficult for Adio's parents to start the discussion but they need to sit him down and educate him on sexual behaviour in general. They don't need to be harsh on him because being harsh will not make him listen to them. All they need to do is to talk to him in a way that will make him pour out his mind to them. That is the best* **(A 16 year old boy, FGD with adolescent males, Ibadan Southeast)**

One adolescent echoed that parents must live with the reality that the world is changing and their parents must flow with the trend. According to him:

Sometimes parents need to come to the realization that their children are not young again. Both Adio and Abeni have their lives to live and their parents should respect that. They should bring it up in a normal way such that they both discuss about the issues. They should talk to him as if they still love Adio so that he will not feel bad as if they are blaming him. They will make him curious about it if they blame or talk indirectly. They should talk to the person in a normal way and in a moral way **(A 17 year old boy, FGD with adolescent males, Ibadan Northeast)**

Also, a female adolescent explained that discussion should be done in the form of question and answer without being harsh. She said:

In the case of a condom as a parent if I were to be, you see it is not every time you cane a child that a child will key to your correction. When they see her having a condom, they are going to sit her down and talk to her. I will ask her why is she having a condom in a friendly manner and if she tells me about it, I am not supposed to beat her. I am supposed to advise her because she already have the condom to have sex, so no one can stop her, so I will have to advise her on how to use the condom in other to prevent her from getting pregnant because she is still a young girl and if she gets pregnant now, she will be mentioned that so and so have gotten pregnant. So her parent is to advise her on how to use the condom and when and when it should be done. **(A 18 year old girl, FGD with adolescent females, Ibadan Northeast)**

As a counter reaction to a direct pattern of communication, most men and women participants affirmed that parents should communicate in an indirect manner with their adolescents on SRH issues. In the FGD with parents (men and women), the participants suggested diverse ways of passing SRH information across to the adolescents which include warning, threat, beating or scolding, storytelling, words of God and advice. The participants lamented that, despite several warnings, threats and punishments, adolescents still indulge in indiscriminate sexual activities and other risky sexual behaviour. In their opinion, KII participants submitted that early exposure to sexual discussion promotes promiscuity and sexual indiscipline. Although most parents felt uncomfortable discussing issues bothering on SRH openly with their adolescents, they noted that adolescents may want to experiment when SRH issues are discussed in a direct way. Thus, parents are cautious in the process of engaging their adolescents on SRH discussion. In general, most parents thought that adopting a direct pattern of communication would make them promiscuous or spoil them rather than beneficial to them, hence they wait till an opportunity presents itself for such discussion. As opined by the participants:

Well, in a way it could look very unsettling or strange if a mother or a father would just call on a child and say I want to discuss sexual matters with you. But rather they wait for opportunities, like when there is an incidence may be in their neighbourhood and examples of the outcome of such irresponsible sexual activities and use that opportunities to actually sit down and discuss with the child. For example, they seize that opportunity, and say you have seen what happened to your mate because the way she has been handling issues concerning relationships, this is the outcome that have finally befallen her. So what I will advise you is this and that, make sure you know how you are relating with your opposite sex, make sure you don't expose yourself unduly, you are not allowed to be cornered more or less in a situation where you cannot for example protect yourself. So get in a position

where you are, may be in the open wherever you visit for example the opposite sex, and make sure you don't go there alone. Make sure they don't touch you unduly both your peers and of course adult……..Don't get too intimate with the opposite sex, especially you watch out for the tricks which I will call tricks of the opposite sex **(A 54year old man, KII with health care provider, Ibadan Northeast)**

One FGD participant also expressed his opinion:

What I see is that a child, before one can talk to a male child about such issue, what is common is that the female child is the most corrupt. My little boy was called in by a girl in my area. When I caught them and wanted to beat them, my child said no that it's the girl that called him to bring out his penis, that this and that. So, it's girls that seduce boys. So, what I see is that one will have to use iron hand on the boys……..When we also want to talk to a girl, I believe the child should reach 12 years to 14 years, so parents should not take nonsense from my view **(A 47 year old man, FGD with men, Ibadan Southeast)**

In a similar vein, when responding to Adio and Abeni's story, only a few adolescents conceded that some parents usually adopt an indirect pattern of SRH communication. As articulated by the adolescents:

If it is me my mother will beat me like mad. Because I remember when my brother did such a thing like that, they beat him like… they beat him and they put him inside the house that he should not go out for three days and three nights. That's what I know about it **(A 18 year old boy, FGD with adolescent males, Ibadan Northeast).**

Discussion of Findings

To address this objective, quantitative and qualitative approaches were used. In general, the study found that a higher proportion of parents and adolescents had had some form of discussion about one or more sexual and reproductive health topics in the selected slums in Ibadan. This concurred with earlier findings by Iliyasu *et al.* (2012) and Kunnuji (2012) from Nigeria and other reports from Ethiopia (Dessie *et al.*, 2015) and Tanzania (Wamoyi et al., 2010) that communication about SRH issues occurred between parents and their adolescents. Both parents and adolescents agreed that they had had communication on three topics effectively that is puberty, relationship with the opposite sex, and menstruation out of the six items covered in this study. Parents reported to have been concerned with four issues such as puberty, menstruation, relationship with the opposite sex and preventive sexual practices. Adolescents, on the other hand, indicated that they had concern for just three issues which include; puberty, menstruation, and relationship with the opposite sex. The implication is that parents and adolescents have had concern for at least one or more SRH issues whereas communication usually reflect the worries parents had about their children's SRH. This builds on the report by Manu and colleagues (2015) from Ghana who submitted that over 70% of parents had ever discussed an aspect of sexual and reproductive health matters with their children. The reason for the increase in concern for several SRH issues may be attributed to a topic-specific measure of parent-child communication used in this study which appears to be more effective than a global measure of communication used in previous studies (Iliyasu *et al*., 2012; Kunnuji, 2012; Nundwe, 2012).

However, the findings of this objective negated the finding of Nundwe (2012) in Ghana. Nundwe documented that parents fail to communicate sensitive SRH issues like condom use, puberty, STIs, and physical development but do so on less sensitive ones such as the effects of HIV with their adolescent children due to some barriers. According to Bushaija, Sunday, Asingizwe, Olayo, and Abong (2013); Nundwe (2012); Velazquez (2014); and Velcoff (2010),

barriers such as cultural norms and taboos, gender differences, religion to mention a few are linked to inadequate parent-child communication on SRH issues in sub-Sahara Africa. This current study noted that a global single-item measured used in previous studies may have accounted for inadequacy in parent-child communication and interpretation bias in their findings. A lack of or inadequate effective communication about sensitive SRH issues between parents and adolescents may not reflect poor parent-adolescent relationship but may indicate parents' lack of knowledge about SRH topics, and they may not be comfortable broaching these issues or belief that discussion of such could lead adolescents into sexual immorality. Hence, the general trend connotes that parents are concerned about their adolescents' SRH safety. This further reinforces the need to change the culture of silence around sexuality and educate adolescents appropriately on SRH issues.

As social-actor-in-context (i.e. parents and adolescents), culture or society may have dictated what the topic of discussion could be, however, the reality of adolescents may warrant a reconstruction of meaning around SRH issues to foster active learning as postulated by social constructivism theory. As a precondition of social constructivism theory, parent and child must have a good rapport and share similar meaning and understanding of SRH issues for responsive communication to take place. Parents need to live with the current reality that most adolescents are sexually active and require appropriate SRH information to live a healthy life. Concerning the finding of this study, parents are well aware of the need for SRH communication between them and their adolescents. Parents reported that they want their children to be well informed about sex, sexual health and relationships, and belief that factual SRH information can only come from them to their children. The finding of this study is exciting and encouraging as the topic of SRH discussion is increasing between parents and adolescents – an indication that the culture of silence about sexuality in Nigeria and by extension in Africa is gradually being broken. A probable explanation for this finding is the fact that adolescents are growing up in an information age and a world that is much different from that of their parents. This world is filled with technological advancement, cultural changes, modernization and urbanization requiring parents' involvement.

Also, this study established that even when communication about specific SRH topics occurs, it is often not factual as the pattern employed is devoid of open dialogue between parents and their adolescents. Both parents and adolescents reports indicated that they had engaged an indirect pattern of communication concerning SRH issues. These indirect patterns include the use of warnings, instructions, threats, other adolescents' experiences, story, books among others. Similar findings were reported in a study conducted in Ghana by Kumi-Kyereme *et al.* (2007) that communication between parents and adolescents often takes the form of instruction from parents to adolescents rather than dialogue.

In the same vein, another study from rural Tanzania submitted that SRH discussion between parents and their children was often unidirectional, initiated by parents and took the form of warnings or threats or sometimes gossip (Wamoyi et al., 2010). As noted by Kajula, Sheon, Vries, Kaaya, and Aarø (2014) parents are naturally inclined to be concerned about their children becoming infected with HIV/AIDS, mainly because there is no cure available. However, they submitted that when parents employ scare tactics, it may induce anxiety and thereby discourage adolescents from asking relevant questions. The implication is that when adolescents do not have the opportunity to ask questions about their SRH issues, they are denied the chance to clear and consistent information about what seem to be complex SRH issues. Therefore, it can be concluded that adolescents may not benefit fully from such communication compared to when parents give

clear explanations and direction on “what to do and how” and especially when such discussion is mutually engaging.

Conclusion

Limitation

Conflict of Interest

Acknowledgement: This research was supported by the Consortium for Advanced Research Training in Africa (CARTA). CARTA is jointly led by the African Population and Health Research Center and the University of the Witwatersrand and funded by the Carnegie Corporation of New York (Grant No--B 8606.R02), Sida (Grant No:54100029), the DELTAS Africa Initiative (Grant No: 107768/Z/15/Z). The DELTAS Africa Initiative is an independent funding scheme of the African Academy of Sciences (AAS)’s Alliance for Accelerating Excellence in Science in Africa (AESA) and supported by the New Partnership for Africa’s Development Planning and Coordinating Agency (NEPAD Agency) with funding from the Wellcome Trust (UK) and the UK government, " The statements made and views expressed are solely the responsibility of the fellow.

References

Adedimeji, A., Omololu, O. ., & Odutolu, O. (2007). Urban slum residence, HIV risk-perception and constraints to Protective behaviour among young people in Ibadan, Nigeria. *J Health Population Nutrition*, *25*(2), 146–157.

Aspy, C. B., Vesely, S. K., Oman, R. F., Rodine, S., Marshall, L., & McLeroy, K. (2007). Parental communication and youth sexual behaviour. *Journal of Adolescence*, *30*(3), 449–466. http://doi.org/10.1016/j.adolescence.2006.04.007

Awusabo-Asare, K., Bankole, A., & Kumi-Kyereme, A. (2008). *Views ofadults on adolescent sexual and reproductive health: qualitative evidence from Ghana, Occasional Report*. *Guttmacher Institute*. New York.

Berg, K., Sun, C. J., & Babalola, S. (2012). SAHARA-J : Journal of Social Aspects of HIV / AIDS : An Open Access Journal Predictors of parent – child communication among a nationally representative sample in Nigeria, (April 2015), 37–41. http://doi.org/10.1080/17290376.2012.683583

Berger, P., & Luckmann, T. (1991). *The social construction of reality.* London: Penguin Books.

Clawson, C. L., & Reese-Weber, M. (2003). The amount and timing of parent-adolescent sexual communication as predictors of late adolescent sexual risk-taking behaviors. *J Sex Res*, *40*(3), 256–265. http://doi.org/10.1080/00224490309552190

Cupp, P. K., Atwood, K. A., Byrnes, H. F., Miller, B. A., Fongkaew, W., Chamratrithirong, A., … Chookhare, W. (2013). The impact of Thai family matters on parent-adolescent sexual risk communication attitudes and behaviors. *Journal of Health Communication*, *18*(11), 1384–96. http://doi.org/10.1080/10810730.2013.778371

Dessie, Y., Berhane, Y., & Worku, A. (2015). Parent-Adolescent Sexual and Reproductive Health Communication Is Very Limited and Associated with Adolescent Poor Behavioral Beliefs and Subjective Norms : Evidence from a Community Based Cross-Sectional Study in Eastern Ethiopia. *PLOS ONE*, *10*(7), 1–14.

http://doi.org/10.1371/journal.pone.0129941
Dilorio, C., Kelley, M., & Hockenberry-Eaton, M. (1999). Communication About Sexual Issues: Mothers, Fathers, and Friends. *Journal of Adolescent Health*, *24*, 181–189.
Dodoo, F. N., Zulu, E. M., & Ezeh, A. C. (2007). "Urban-Rural Differences in the Socioeconomic Deprivation - Sexual Behavior Link in Kenya." *Soc Sci Med.*, *64*(5), 1019–1031. http://doi.org/10.1016/j.immuni.2010.12.017.Two-stage
Fourchard, L. (2003). *Urban Slum Reports: The case of Ibadan, Nigeria*. *Understanding Slums: Case Studies for the Global Report on Human Settlements*. Ibadan, Nigeria.
Grossman, J. M., Jenkins, L. J., & Richer, A. M. (2018). Parents' perspectives on family sexuality communication from middle school to high school. *International Journal of Environmental Research and Public Health*, *15*(1). http://doi.org/10.3390/ijerph15010107
IPPF. (2015). *IPPF Briefing : The World Bank Group ' s funding for sexual and reproductive health*. Retrieved from www.who.int/pmnch/media/events/2015/cso_ippf_briefing.pdf
Izugbara, C. O. (2008). 'Home-Based Sexuality Education: Nigerian Parents Discussing Sex with Their Children.' *Youth and Society*, *39*(4), 575–600.
Kabiru, C. W., Beguy, D., Undie, C.-C., Zulu, E. M., & Ezeh, A. C. (2010). Transition into first sex among adolescents in slum and non-slum communities in Nairobi, Kenya. *Journal of Youth Studies*, *13*(May 2015), 453–471. http://doi.org/10.1080/13676261003801754
Kumi-Kyereme, A., Awusabo-Asare, K., Biddlecom, A., & Tanle, A. (2007). Influence of social connectedness, commu- nication and monitoring on adolescent sexual activity in Ghana. *Afr J Reprod Health*, *11*(3), 133–147.
Kunnuji, M. O. N. (2012). Parent-Child Communication on Sexuality-Related Matters in the City of Lagos , Nigeria. *Africa Development*, *XXXVII*(3), 41–56.
Luwaga, L. C. N. (2004). Parent-adolescent communication on sexuality in the context of HIV / AIDS in Uganda : An exploratory study.
Makinde, O. O. (2012). Housing : Central City Slums , A Case Study of Ibadan. *Journal of Environment and Earth Science*, *2*(9), 21–32.
Manu, A. A., Mba, C. J., Asare, G. Q., Odoi-Agyarko, K., & Asante, R. K. O. (2015). Parent-child communication about sexual and reproductive health: evidence from the Brong Ahafo region, Ghana. *Reproductive Health*, *12*, 16. http://doi.org/10.1186/s12978-015-0003-1
Morris, J. L., & Rushwan, H. (2015). Adolescent sexual and reproductive health: The global challenges. *International Journal of Gynecology and Obstetrics*, *131*, S40–S52. http://doi.org/10.1016/j.ijgo.2015.02.006
Mutema, F. (2013). Breaking the Silence: Communication between Parents and Secondary School Adolescents in the Context of HIV/AIDs in Zimbabwe: A Case of Mkoba High Density Suburb, Gweru. *Journal of Emerging Trends in Educational Research and Policy Studies*, *4*(4), 604–612.
Nundwe, C. S. (2012). *Barriers To Communication Between Parents and Adolescents Concerning Sexual and Reproductive Health Issues : a Case Study of Kinondoni Municipality , Tanzania*. Muhimbili University of Health and ALlied Sciences.
Ojo, O., Aransiola, J. O., Fatusi, A. O., & Akintomide, A. (2011). Pattern and Socio-demographic Correlates of Parent-Child Communication on Sexual and Reproductive Health Issues in Southwest Nigeria: A Mixed Method Study. *The African Symposium: An Online Journal of the African Educational Research Network*, *11*(2), 29–48.
Olasode, O. A. (2007). Sexual behaviour in adolescents and young people attending a sexually transmitted disease clinic ,. *Indian Journal of Sex Transm Dis*, *28*(2), 83–86.
Poulsen, M. N., Miller, K. S., Lin, C., Fasula, A., Vandenhoudt, H., Wyckoff, S. C., … Forehand, R. (2010). Factors associated with Parent-Child Communication about HIV/AIDS in the United States and Kenya: a Cross-Cultural Comparison. *AIDS Behaviour*, *14*(5), 1083–94.
Unicef. (2018). The AIDS epidemic continues to take a staggering toll, but progress is possible. Retrieved August 1, 2018, from https://data.unicef.org/topic/hivaids/global-regional-trends
Vygotsky, L. S. (1978). *Mind in Society The Development of Higher Psychological Processes*. (M. Cole, John-Steiner, S. Scribner, & E. Souberman, Eds.). London, England: Harvard University Press.
Wamoyi, J., Fenwick, A., Urassa, M., Zaba, B., & Stones, W. (2010). Parent-child communication about sexual and reproductive health in rural Tanzania: Implications for young people's sexual health interventions. *Reproductive Health*, *7*, 6. http://doi.org/10.1186/1742-4755-7-6
WHO. (2017). *Global Accelerated Action for the Health of Adolescents (AA-HA !) Guidance to Support Country Implementation – Summary*. Geneva, Switzerland.

Yadeta, T. A., Bedane, H. K., & Tura, A. K. (2014). Factors affecting parent-adolescent discussion on reproductive health issues in Harar, eastern Ethiopia: A cross-sectional study. *Journal of Environmental and Public Health*, *2014*. http://doi.org/10.1155/2014/102579

Zamboni, B. D., & Silver, R. (2016). Family Sex Communication and the Sexual Desire , Attitudes , and Behavior of Late Adolescents. *American Journal of Sexuality Education*, *6128*(April), 58–78. http://doi.org/10.1080/15546120902733257