






Home-Based Sexuality Education in Ghana: The Perspectives of Adolescents and Parents

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ABSTRACT

The extant literature has explored sexuality education from the perspectives of the adolescents, but the views of parents are largely neglected. The few studies that have examined the views of both parents and adolescents are selective in scope, coverage, and assessment. There is thus, a dearth of data on the type of topics discussed and the frequency of parent-adolescent sexual communication. The present study sought to explore adolescents' lived experiences of sexuality education and its impact on their sexual and reproductive health. To achieve this, a qualitative research design with a semi-structured interview was employed to gather data from thirty parents and adolescents in Ablekuma South Metropolis. An Interpretative Phenomenological Analysis (IPA) was used in analyzing the data with each theme showing divergence categories of experiences of sexuality education although the views of both parents and adolescents on each category were similar. Parent-adolescent sex communication showed frequently discussed topics and the less discussed ones. Perceptions of sexuality education revealed both positive and negative perceptions. Perceived impact of sexuality education also brought to light both positive and negative impacts. It is recommended that stakeholders ought to institutionalize diverse behavior change interventions such as interpersonal communication and skills training aimed at empowering both parents and adolescents to communicate explicitly about sexuality rather than using euphemisms and timing techniques.

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Introduction

Adolescence is a stage of development that comes with sexual discovery, exploration, and risk-taking behaviors (Chambers et al., 2016). Most adolescents during this stage go through a series of changes and transition from childhood life to adulthood life (Backes & Bonnie, 2019). Most adolescents experience growth in height and overall body changes such as the growth of pubic hair, development of breasts among girls, and development of muscles and deep voice among boys (Sawyer et al., 2012). Biological changes in male and female sexual characteristics come along with various problems (Kar et al., 2015). They are sometimes confused about the new transitions going on in their life. This confused state could serve as a driving force to propel them to fetch for various information to understand their current development (Azh et al., 2017). In their quest to

understand their transition period, some of these youths are sometimes misinformed, thereby raising their concerns about the possibility of contracting various forms of diseases. Others also see this transition as an opportunity to explore by engaging in varying kinds of sexual activities and illicit drugs (WHO, 2020).

This course of sexual discovery and exploration does not occur in a vacuum. Thus, these adolescents happen to use signals from their previous experiences to develop sexual scripts as a guide for future sexual behavior (Simon & Daneback, 2013). Education on sexuality, therefore, provides a benchmark for adolescents to explore their sexuality. In the literature, the terms 'sex education' and 'sexuality education' are used interchangeably, however, the two terms are different although interrelated. Sex education is structured to help adolescents gain detailed information, skills, and motivation about a broad variety of topics related

to sex, to help them make better decisions (Planned Parenthood, 2020). Magoon (2010) postulates that there are three approaches to sex education, namely, abstinence-only sex education, health and safety-oriented sex education, and comprehensive sex education. Comprehensive sex education is considered the best approach as it goes beyond abstinence to include preventive strategies from contraception to prevention of sexually transmitted diseases and unwanted pregnancy (Leung et al., 2019), thus allowing learners to construct their understanding of the information and material by critically engaging with personal experiences. Although there is little evidence concerning the impact of the learner-centered approach on comprehensive sex education, research by Kontula (2010) shows that there is a positive effect of sex education whenever participatory teaching techniques are employed.

Nonetheless, sexuality education refers to “an age-appropriate, culturally sensitive and comprehensive approach to sexuality education that include programmes providing scientifically accurate, realistic, non-judgmental information” (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2009, p. 61). Thus, comprehensive sexuality education cover topics that are discussed in sex education but include other topics such as relationships, attitude toward sexuality, sexual roles, gender relations and other social pressures to be sexually active. Additionally, comprehensive sexuality education provides information about sexual and reproductive health services (Leung et al., 2019). Comprehensive sexuality education programs, therefore, seek to ensure the safety of sexual activity among adolescents and equip the adolescents with the knowledge and ability to make informed choices (Awusabo-Asae et al., 2017). In the present study, our focus is on comprehensive sexuality education (CSE) in the Ghanaian context given the breadth of topics it encompasses.

A Cochrane review of 41 randomized controlled trials conducted in Europe, the United States, Nigeria, and Mexico found that concurrent use of interventions involving education, skills-building and contraception promotion prevent unintended adolescent pregnancies (Oringanje et al., 2009). A study in Kenya

involving over 6,000 students who had received sexuality education found that when these students reached secondary school, they had delayed sexual initiation and used more condoms than those who had not received sexuality education (Maticka-Tyndale & Tenkorang, 2010). According to a 2014 review of school-based sexuality education programs, increased HIV knowledge, increased self-efficacy related to condom use and refusing sex, increased contraception and condom use, a reduced number of sexual partners, and later initiation of first sexual intercourse were also observed (Fonner et al., 2014). Thus, comprehensive sexuality education promotes sexual, emotional, social and physical health rather than encouraging young people to have sex (European Expert Group on sexuality Education, 2016).

Contraceptives and reproductive health services are easily available to adolescents in Ghana. The services are provided by the Ghana Health Service through most of the public health facilities they operate in. In these facilities, there are adolescent/youth corners that offer sexual and reproductive health services that are tailor-made to the specific needs of adolescents (UNICEF & Ghana Health Service, 2016). Additionally, there are various non-governmental organizations such as PPAG and Marie Stopes that provide comprehensive adolescent reproductive health services (Asare et al., 2020). Condoms for example can be purchased in any pharmacy at a low cost. However, the lack of patronage among adolescents has been attributed to several factors including knowledge of the methods available and their usage, access to the methods, sociodemographic characteristics and their ability to negotiate for the products and stigma associated with contraceptive usage among young people (Boamah et al., 2014).

When discussing sexuality with adolescents in Ghana, the main actors (i.e. parents, teachers, health counselors, and religious bodies) rarely collaborate. After several attempts to educate their teenagers about their sexuality have failed, parents usually turn to other agencies as a last resort (Anarfi & Owusu, 2011). The religious agencies in Ghana rather provide moral education to adolescents than sexuality education

(Anarfi & Owusu, 2011). Though the educational agency (i.e. Ghana Education Service) has included sexuality education topics such as abstinence, reproductive physiology, and sexual and reproductive rights in their curriculum, there is little emphasis on gender equity, contraceptive use, and sexually transmitted infection services (Awusabo-Asae et al., 2017). Little emphasis is also placed on providing comprehensive information on sexually transmitted diseases. The 2014 Ghana Demographic and Health Survey (GDHS) reported that although 64% of females and 84% of males aged 15–19 know where to get condoms only 18% and 25%, respectively, have a thorough understanding of HIV/AIDS. Consequently, contraceptive use for instance is relatively low in Ghana (Apanga & Adam, 2015; Beson et al., 2018; Eliason et al., 2014). Even though 98.8% of females between the ages of 15 and 19 have heard of at least one modern method, only 35.6% of those who are sexually active are currently using any contraceptive method, and only 27.2% are using a modern one (Ghana Maternal Health Service [GHS], 2017).

Such inadequate emphasis on these critical areas of sexual education in Ghana could be explained by various sociocultural factors. For instance, the discussion of sexual and reproductive issues among any individual who is not considered an adult (i.e. children and adolescents, henceforth to be used interchangeably in the introduction) has remained taboo (Baku et al., 2018). The convergence of the cultural, religious, and geographic factors engenders an environment that makes it difficult for individuals to express their opinions about sexuality. Thus, the mere mention of “sex” evokes an itchy feeling among both Ghanaian youth and the old (Abakah, 2015). Consequently, adolescents become afraid of asking questions about their sexuality since they will be regarded as disrespectful and disobedient (Nyarko et al., 2014). In effect, individuals perceive sexual issues as topics solely for adult discussions within the Ghanaian context. Among Akans for instance, it is considered taboo to talk about sex with an adolescent since it is believed they could go wayward following their involvement in such discussions (Asampong et al., 2013; Baku et al., 2018). The Ghanaian culture

considers sexuality sacred and for that matter teaching about sex to individuals who are not adults is perceived as introducing them to early sexual intercourse and subsequently early and unwanted pregnancy (Baku et al., 2017). As such, it is considered taboo in Akan society to mention the private part of the body (such as the vagina, penis, and breast) in the presence of a child or an adolescent and in public (Asampong et al., 2013).

Due to these lapses, several studies in Ghana, have recommended the use of comprehensive sexuality education (Awusabo-Asae et al., 2017). Most of the research works in Ghana have focused on the impact of education on sex on teenage pregnancy (Donkor, 2017; Donkor & Lariba, 2017). Others, on the other hand, attend to the knowledge, perceptions, and attitude toward sexuality education (Sumankuuro et al., 2020). Also, there is a paucity of research on how Ghanaian parents conduct sexuality education and the extent to which these adolescents experience the process. Most of the studies in Ghana sought information from the perspective of adolescents (Boamah et al., 2014; Donkor & Lariba, 2017). As such, the views of the parents are mostly neglected. The few studies that attend to the views of both parents and adolescents are selective in scope, coverage, and assessment. For instance, Adu-Mireku (2003) only explored family communication about HIV/AIDS whereas Kumi-Kyeremeh et al. (2007) operationalized communication on sexual behavior as an instance whereby an individual discusses sex-related matters with an adolescent. This implies that there is a dearth of data on the type of topics discussed and the nature of parent-adolescent communication about sexuality.

Research objectives

To address the identified gaps in the literature, this study aims to address the following research objectives by exploring: (1) How Ghanaian parents conduct sexuality education, (2) Ghanaian adolescents’ and parents’ perception of sexuality education, and (3) The experienced impact of sexuality education on Ghanaian adolescents sexual and reproductive health?

Methods

Design and participants

A phenomenological research design was used to explore the personal lived experiences of adolescents and parents. This approach is best suited since it considers the participants' perspectives on their experiences. In this case, the phenomenon is sexuality education. The research questions in the current study sought to explore the experiences of adolescents and parents concerning sexual and reproductive health without the imposition of the researcher's perceived ideas. This method is relevant because the information is needed directly from parents and adolescents (Bradshaw et al., 2017). Qualitative research helps us to gain an in-depth understanding of an individual's subjective experiences (Creswell, 2014).

The current study was conducted in Ablekuma South Metropolis, Greater Accra, since it is saddled with myriads of social issues including high population growth, and high rates of unemployment among others (Accra Metropolitan Assembly; AMA, 2021). Anecdotal evidence also suggests that the district has a high prevalence of unintended pregnancies due to low contraceptive use and thus a high prevalence of unsafe abortions. Adolescents aged 13 and 19 years and parents of such adolescents were selected through purposive sampling. A total of 25 households in the research settings were conveniently identified and visited in the evenings of the weekdays or on weekends to identify potential participants. The evenings and weekends were the most convenient times due to work, school or family responsibilities. Twenty households met the criteria (i.e. parents had adolescents aged 13 to 19 years), while five households did not and were therefore not recruited for the study. Out of the twenty households that met the inclusion criteria, eight of them declined to participate in the study because they were too busy to have time for discussions or felt the topic was too sensitive. In all, twelve households consisting of 15 parents and 15 adolescents participated in the study. Some households had more than one families meeting the inclusion criteria. Of the 30 participants, six were fathers, nine mothers, seven sons, and eight daughters. Participants were

sampled from various educational backgrounds including basic school through to the tertiary level. Additionally, participants were from various ethnic groups as well as religions.

Procedure and ethics

The first author recruited participants using the purposive sampling technique after obtaining approval from an ethics committee in the authors' institution. The study's participants volunteered to take part. The interviews were conducted in the evenings or on weekends when both parents and adolescents were at home. Participants were briefed on the research requirements and informed that they could leave at any time for any reason. A semi-structured interview guide was used to allow for greater freedom in probing both parents' and adolescents' accounts. Parents and adolescents were first interviewed together to gain an accurate picture of their sexuality communication. The interview lasted within 1 hour 6 minutes to 1 hour 24 minutes, with an average time of an hour. The individual interviews followed the same interview guide, intending to allow individuals to share information they might not have felt comfortable sharing during the joint interview. However, these parents and adolescents were very open with each other and thus, there was little new information they shared in the individual interviews. Individual interviews lasted between 15 and 50 minutes, with a 35-minute average. The interviews were audio-recorded with a digital audio recorder, with the permission of the participants. Throughout the interviewing process, the participant's emotional state was considered. This was done to ensure that participants were not subjected to any psychological harm during the data collection process.

Validity of interpretation

The researchers conducted an introspection to identify subjective beliefs, opinions, and personal backgrounds that could potentially affect the study's outcome. During the interview, participants were assured of complete confidentiality for them to feel at ease sharing their experiences.

Table 1. Summary of Themes of Parent-Adolescent Sexuality Education.

Superordinate themes	Subordinate themes	Themes
Parent-adolescent sex communication	Commonly discussed topic	1. Abstinence 2. Consequences of premarital sex 3. Puberty discussions
	Less discussed sexual topics	1. Experiential sex topics 2. Contraceptive use topics
Perceptions of sexuality education	Negative perceptions	1. Infertility and sterility 2. Sexual experimentation
	Positive perception	1. Prevention of sexually transmitted diseases 2. Pregnancy Prevention
Impact of sexuality education	Positive impact	1. Psychological wellbeing 2. Prevention of sexually transmitted diseases 3. Pregnancy Prevention
	Negative impact	1. Early sex initiation 2. Anxiety

A one-on-one interview was also conducted to mitigate any power play that might influence adolescents' decision to openly express their opinions in the dyadic interview. The researchers also used diary writing as a cathartic tool to express any frustrations or fears encountered during the interview process. The gender of the researchers could also have posed a potential effect on the study. As such, A female researcher attended to the female participants, while a male research assistant attended to the male participants, allowing the participants to express themselves as clearly as possible, particularly in the individual interviews. After the interviews, the transcript was initially read several times to allow for reflection on the experiences of parents and adolescents. The first author and research assistant immersed themselves in the data by listening to the audio recording several times while remembering the atmosphere and setting of the interviews. Following that, the first author took note of emerging themes and established connections or associations between them by clustering them based on conceptual similarities. These clusters were then labeled descriptively. Finally, the themes were written up with exemplification quotes from the interviews, followed by analytic comments from the first author. The other authors reviewed the findings and finetuned them before the final write-up.

Data analysis

Interview data were analyzed using Interpretative Phenomenological Analysis (IPA) to make sense of Ghanaian parents' and adolescents' lived experiences with sexual exploration and reproductive

health (Reid et al., 2005). IPA was utilized by following steps such as transcribing, bracketing, and phenomenological reduction, listening to the interviews, describing units of general meaning, and describing units of meaning relevant to the research questions. Based on the steps opined by Pietkiewicz and Smith (2012), the researchers attempted to understand the participants' experiences from their point of view. The data were analyzed through a psychological lens, and interpretations were made using psychological theories and concepts relevant to the research problems.

Findings

Three (3) superordinate themes were extracted from the data: *parent-adolescent sex communication*, *perceptions of sexuality education*, and *impacts of sexuality education*. These superordinate themes are summarized in Table 1 explicated in the succeeding subsections.

Parent-adolescent sex communication

A wide range of sexuality issues is discussed during home-based sexuality education. Both parents and adolescents admitted that specific topics such as abstinence, physical development, and the consequences of premarital sex are often discussed. The majority of the adolescents, however, stated that their parents frequently use fear-inducing stories during these discussions. Parents, on the other hand, stated that they use specific times to discuss sexuality with their children. Furthermore, both parents and adolescents agreed that contraception and experiential sex topics are rarely discussed during home-based

sexuality education. The majority of parents believe that experiential sex matters are inappropriate in the public or adolescent's domain and should thus be kept private. Despite parents' efforts to keep such information private, most adolescents stated that they obtain it from their friends and the internet.

Commonly discussed topics

Both parents and adolescents ($n = 28$) revealed that during parent-adolescent communication, adolescents are typically advised by their parents to abstain from having sex until marriage. Additionally, most parents end up discussing sex-related topics such as puberty and the consequences of premarital sex with their adolescents.

Abstinence. This theme explains how adolescents are advised to abstain from sexual behaviors. Most of these adolescents were advised to live chastely and to keep their virginity until marriage. Parents usually preach abstinence until marriage because most parents with strong religious beliefs held the view that sex unites two people and completes the marriage bond. In the excerpt below, this participant strongly advocates for abstinence until marriage because of her religious faith. She understands that sex is the final rite of passage in marriage. As such, it should only be performed by married couples to spiritually unite them as one. This type of religious orientation influences how she raises her children concerning sex. One can thus, deduce that most of the discussions she has with her children highly centers on abstinence until marriage because of her strong religious orientation.

I believe abstinence is the key to a good life. I always tell my children to refrain from bad company and remain chaste since our Catholic faith tells us sex is solely for married people. To me having sex is a spiritual affair and that is why it is consummated in marriage rites. It unites people spiritually and therefore young people who are not married should make efforts not to engage in sex. (P25, Mother, 46 years, Christian)

Likewise, most of the adolescents pointed out that they are usually advised by their parents to refrain from having sex until marriage because sex is considered sacred. According to these

adolescents, some of their parents who led chaste lives before marriage tend to educate them to follow in their footsteps to live a good life.

They tell us to abstain from sex till we get married. My mother is very particular about it and says sex is a spiritual affair because it binds two together. She usually uses herself as an example since she remained a virgin till she got married to Dad (P11, Daughter, 19 years, Christian).

Consequences of premarital sex. This theme depicts how parents create an avenue to discuss issues related to pregnancy and sexually transmitted diseases with their adolescents during home-based sexuality education. Parents often emphasize the negative repercussions of premarital sex to deter adolescents from engaging in it. In their quest for this feat, most of the parents rely on fear-evoking tales. Discussions about sexuality education highly centers on the consequences of sexuality education in the teenager's home environment. Most of the adolescents highlighted that their parents frequently employ fear-provoking strategies to reduce their proclivity to engage in any form of sexual behavior.

One of the participants narrates how her parent usually employs some timing and tactics to educate her on the consequences of premarital sex. She recounts how her mother usually adopts the vicarious learning approach (learning as a result of the experience of others) to educate her on the negative repercussions of premarital sex.

My mother often talks about how sex can end me up pregnant and I can contract some diseases such as HIV/AIDs, syphilis, and gonorrhoea. One thing I have studied about her is she usually talks about these things when we are watching local movies where, a young teenage person became pregnant or was infected with HIV/AIDs. (P11, Daughter, 19 years, Christian).

In the same way, most parents emphasized that they educate their children about how sex could lead to sexually transmitted diseases. In doing so, they heavily employ some timing and tactics. From their perspective, home-based sexuality education is usually discussed when they find any sexual escapades on the part of the adolescent. This 42-year-old mother highlighted that she relies on specific cues to talk to her adolescent about her sexual behaviors. She employed

the tactic of going through her daughter's WhatsApp messages to find any sexual escapades. Following the discovery of such an incident, this parent initiated open discussions about sex with the adolescent.

I went through my daughter's phone some time ago and I was surprised to find she was sharing WhatsApp love messages with a guy. I felt disappointed in her. I sat her down and discussed with her how early sex could lead to unintended pregnancies and other diseases. Till now, I have been educating her about it. (P4, Mother, 42 years, Christian).

Puberty discussions. Both parents and adolescents also admitted that puberty topics are typically discussed during home-based sexuality education. Puberty discussions usually occur during the onset of menstruation in girls. Parents usually take the opportune moment to educate their adolescents about personal hygiene and physical changes such as breast development, and growth of pubic hairs among other things. However, there are sometimes concerns about the use of euphemisms during sexual discussions with adolescents. In the case of this 18-year-old, her mother explained why there were drastic changes in her body shortly after she began menstruating. The onset of menstruation serves as a symbol for parents of their daughters' potential fertility and sexual development. Hence, parents go out of their way to teach their daughters to be extra cautious with their male counterparts to avoid unintended pregnancy.

My parents started talking to me about sex and why my breasts are becoming large during my first menstruation. For me, I believe the menstruation period is the right time to talk to a child about sex. My mother made me aware that I am mature now and I am more susceptible to temptations[sexual] from boys. I should therefore be very careful so that I don't get pregnant (P18, Daughter, 18 years, Muslim).

Most of the parents also admitted that they usually use euphemisms when especially mentioning the sexual organs. They pointed out that they sometimes feel embarrassed when teaching their adolescent, the correct anatomical names of sexual organs. The narrative by this 41-year-old parent buttresses this assertion.

This is difficult. It's not right to just tell the child everything. Sometimes you feel uncomfortable when the

child asks you where does a baby come from. Just coming down to their level and using names like melons, and secret sticks makes things easier (P27, Mother, 41 years, Christian).

Less discussed sexual topics

Although most participants agree that some topics are always covered during home-based sexuality education, only a few believe that related topics such as contraceptive use and experiential sex are covered. Most of these parents are hesitant to discuss experiential sex topics such as contraception and condom demonstrations. Parents expressed feelings of embarrassment and shame to discuss contraceptive use and experiential sex topics with their children and perceive demonstrations of these sex-related topics, especially in the presence of their adolescents as inappropriate.

Experiential sex topics. According to one of the parents, she hardly discusses experiential sex topics such as condom demonstrations with her teenage son. From her narration, one can easily deduce that experiential sex matters are off-limits especially when the parent-adolescent communication is between opposite sexes (i.e. father-daughter or mother-son). It is no surprise, then, that the mother ardently recounts how humiliating it is to perform a condom demonstration in front of her son. The parent ardently stated;

How do I begin this demonstration as a single mother? It will be embarrassing for me to bring up the subject of condom use with my son. His father would have the best person to do this with him. This is extremely difficult, so I have never done it with him. (P27, Mother, 41 years, Christian)

This adolescent's report corroborates his father's claim that experiential topics are rarely discussed during home-based sexuality education. He goes on to explain that his parents' aversion to discussing sex issues stems from their introverted personalities. That is, this adolescent believes that his father's introverted personality makes him feel very shy and embarrassed to engage in open sexual discussions and demonstrations.

Never!!! I don't remember the last time they did that. They hardly ever talk to us about issues related to

sexual anatomies, and let alone demonstrations on contraceptive use... My parents especially my father is very reserved and conservative. I suspect it's hard for them to share such things with us because they are very shy. (P5, Son, 17 years, Christian).

Contraceptive use topics. Most of both parents and adolescents pointed out that topics on contraceptives are rarely discussed in home-based sexuality education. Society believes that teaching adolescents about the use of condoms and pills, among other things, may influence their decision to begin experimenting. Interestingly, despite parents' efforts to keep contraceptive information from their adolescents, some adolescents obtain detailed information about their use by relying on friends and the internet. The narration of this adolescent confirms most of the issues raised.

No parent will talk about contraceptives with you. To them, it's a no-go area. You know there is a general perception that teaching such stuff to the child might make him bad. Me in my case for instance I got to know about condom use from friends and the internet. (P26, Son, 19 years, Christian)

Like the adolescents, this father asserted that topics about condom use are hardly discussed during home-based sexuality education. He ardently believes having discussions with an adolescent about condom use might influence their decisions to use it without relying on abstinence from sex.

No way. I will never teach them how to use condoms. They have to be taught to abstain at all costs. If you preach to them about alternatives, then whatever you say about refraining from sex is nothing. You know they are young and always want to have their way around things. So it's not the best at all to talk about condom usage. (P9, Father, 51 years, Christian)

Perception of sexuality education

Participants had either positive or negative perceptions of sexuality education. With regards to the negative perceptions of home-based sexuality education, both parents and adolescents postulated that some topics of sexuality education violated societal moral values and could lead to sexual experimentation among adolescents. Additionally, both parents and adolescents perceived contraceptives use as a means of causing

infertility and sterility. On the part of parents, they see contraception as a subtle way for white men to exterminate the black race. The majority of adolescents, on the other hand, regard infertility as a normal side effect of long-term contraceptive use that any race may experience. Both parents and adolescents also had a positive perception that discussions on sexuality could promote adolescents' sexual and reproductive health.

Negative perception

Both parents and adolescents highlighted some negative repercussions of sexuality education. According to these participants, sexuality education could engender sterility and infertility as well as sexual experimentation.

Infertility and sterility. This theme describes how participants believe that contraceptive use could lead to infertility and sterility. Their reason for this perception stemmed from their beliefs about strong conspiracies from the Westerners aiming to sterilize the blacks via the means of emergency pills and Intrauterine devices (IUDs). Most of the parents had the idea that contraceptive use is Westerners' plot to sterilize the black community. Narration from this parent corroborates some of these perceptions.

Contraception is not something I believe in. It has been suggested that it may affect your womb because long-term use may make it difficult to conceive... I read some articles about how these Whites are brainwashing us to use various contraceptives to make us produce less so that our numbers will decrease in the world. (P4, Mother, 42 years, Christian)

Although some adolescents claimed that contraceptive use could result in sterility, they believe it is one of the common symptoms that anyone, regardless of race, experiences. From their perspective, it alters the menstrual cycle which over time result in infertility. This 19-year-old asserted;

Yes!!! It is likely to cause complications. I have heard when one often uses emergency pills, for instance, it can cause infertility among women. You know it changes your menstrual cycle so with time you become infertile. Which could then affect your sexual life and marriage. (P11, Daughter, 19 years, Christian)

Sexual experimentation. Parents and adolescents perceive comprehensive sexuality education as a

conduit for people's sexual gratification, potentially leading to sexual behaviors such as masturbation, sexual intercourse, and others. As a result, they consider it highly unacceptable and inappropriate to include some sexuality topics, such as contraception, in home-based sexuality discussions.

From the narrative below, this parent claims that some sexuality topics, particularly contraception, should not be taught to adolescents because it may encourage adolescents to engage in sexual behaviors. He goes on to argue that because most adolescents mimic what they see in their surroundings, teaching them how to use condoms signals to them that you have permitted them to engage in sex at their age.

Some content need not be taught to these children. You know they are still young and they always want to practice what you preach. When you educate them on how to use a condom, you are signaling to them that you have given them the green light or passport to engage in sex. With time you will see them experimenting with all kinds of sexual fantasies, which might be out of control. (P6, Father, 46 years, Christian)

Some adolescents agree with their parents that exposure to condom use could influence their decisions to sate their sexual desires. As such, sexuality education should be devoid of teaching adolescents about contraceptive use.

It needs not to be taught to us. We are still young and we usually want to practice some new things that come to our minds. Teaching us condoms, and contraceptives in schools and the house, imprints in our minds that it is normal to use it so we would use it. (P3, Daughter, 16 years, Christian)

Positive perception

Some participants had a favorable opinion of sexuality education. They believed that sexuality education is important since it plays a role in the prevention of sexually transmitted diseases and teenage pregnancy.

Prevention of sexually transmitted diseases. Some participants believe that sexuality education is important since it protects one from sexually transmitted diseases. They often postulate that through sexuality education adolescents tend to abstain from sex and those who are sexually active make a conscious effort to use condoms to

protect themselves. The quote below depicts how, as a result of the health risks associated with sex, most adolescents are extremely cautious about their health. They usually make efforts to abstain from sex and those who are sexually active try to make use of condoms before engaging in any sexual intercourse.

Sexuality education is very essential to us. Because it makes us aware of the dangers associated with sex, especially HIV/AIDS. Due to this most of us try to abstain from sex and those who can't restrain themselves from sex are educated to understand to use condoms before having sex. (P11, Daughter, 19 years, Christian)

Along the same lines, most parents emphasized the importance of home-based sexuality education as a means of preventing sexually transmitted diseases. Being sexually active, in their opinion, predisposes one to all types of sexually transmitted diseases. As a result, when adolescents practice abstinence, they are primarily saving themselves from all forms of sexually transmitted diseases. The narration of this parent confirms the majority of the issues raised;

Children who engage in sex are the ones who usually get some of these sexually transmitted diseases. That's why we normally tell them to always abstain so that all these HIV/AIDS, and others will not be a portion of them. (P4, Mother, 42 years, Christian)

Pregnancy prevention. Participants believe that most home-based sexuality education between parents and adolescents focuses on abstinence by instilling fear in the adolescent to restrain their sexual desires. This participant described how, during parent-adolescent conversations about sexuality education, parents frequently use fear-arousing stories to keep their adolescents from becoming pregnant. The participant goes on to say that this type of sexuality education strategy has been extremely effective in preventing teenage pregnancy.

You know African parents. They will try to say all kinds of tales to make you have some form of fear. I believe this has worked over the years to prevent us from any form of teenage pregnancy. (P1, Son, 19 years Christian)

Also, most parents agree that early home-based sexuality education promotes abstinence which in

effect reduces teenage pregnancy. They thus, emphasized that early sexuality education brings the adolescent closer to the parent, and as a result, the parent can detect any sexual advances made to their adolescents on time. Most adolescents refrain from having sex until they reach the age of marriage as a result of such discussions.

It's really good especially when the children are taught to abstain from sex at an early age. They easily listen to the parent's advice and make sure that they report anyone who makes advances toward them to the parent. Through this, engaging in sex and pregnancy at an early, is not an option for them. (P27, Mother, 41 years, Christian)

Impact of sexuality education

Home-based sexuality education was discovered to have a significant positive or negative impact on the lives of adolescents. Both parents and adolescents reported that sexuality education had a significant positive impact on some aspects of adolescents' psychological and sexual health. Interestingly, home-based sexuality education was also reported to have negative impacts in some areas of adolescents' lives.

Although both parents and adolescents asserted that some topics discussed during home-based sexuality education had a significant influence on early sex initiation, their explanations differed. As a result, the majority of parents believe that contraception and experiential sex topics are more likely to elicit early sexual initiation. Some adolescents, on the other hand, argue that the fear-inducing stories used in home-based sexuality education encourage them to engage in sex at an early age whereas others expressed concern that the fear-inducing stories make them nervous and anxious.

Positive impact

Sexuality education was found to have a significant positive impact on the mental health of adolescents. The participants emphasized that home-based sexuality education has helped them to have control over their sexual urges. Additionally, sexuality education has had a significant impact on the prevention of teenage pregnancy and sexually transmitted diseases.

Psychological wellbeing. Participants pointed out that home-based sexuality education affected their psychological well-being. Psychological well-being took the form of a sense of autonomy, personal growth, and competence. From the narration below, this 18-year-old participant emphasized that sexuality education has primarily increased her self-efficacy and competency level. She currently possesses the knowledge, skills, and attitudes required to control any sexual urges or demands from others. In general, home-based sexuality education has made her more assertive, preferring to say, "No to Sex."

I believe my knowledge of sexuality has helped me to have control over certain situations. I am a girl and sometimes guys want to have their way out because you are beautiful and have all the supposed qualities, they sexually desire. I am mostly assertive and say "no to sex" to them. I tell them the consequences of their sexual actions and they never come back or make such advances again. (P29, Daughter, 18 years Muslim)

Almost corroborating the view of the 18-year-old daughter is a parent who highlights that, through home-based sexuality education, her daughter has learned to be assertive enough to allow others to understand her boundaries. This Christian parent acknowledges that sexuality education has created some sense of autonomy and competency in her daughter to be assertive around her male counterparts. According to her, due to her daughter's friendly nature, some male friends tend to make sexual advances toward her. Her daughter thus relies on her religious values or preferences and inner goals to negotiate and draw sexual boundaries with such male friends.

My daughter has a lot of male friends because she is easy-going and approachable. Sometimes when you are very friendly to boys, they misinterpret your actions. She has learned to always hold unto her religious faith about remaining chaste until marriage... She tries to draw boundaries and let them know they can only be friends and nothing else whenever they make attempts of any sexual advances." (P13, Mother, 49 years, Christian)

Prevention of sexually transmitted diseases. Some participants benefited from home-based sexuality education to protect themselves against sexually transmitted diseases. Sexuality education was

beneficial in that those who were sexually active were better informed about the importance of using condoms or insisting that their partners use condoms before engaging in sexual activity. In the case of this adolescent, he learned how to use condoms from friends and social media. Even though he is sexually active, he believes that home-based sexuality education has influenced his decision to always use condoms before having sex.

Yeah, it has helped me, you know. Because frankly speaking I am not a virgin and through some education from friends and social media about HIV/AIDSs, syphilis, and co, I do make sure that I always wear condoms before having sexual intercourse with any girl. (P26, Son, 19 years, Christian)

Most of the parents also pointed out that their adolescent sons and daughters, as well as people they know, have significantly benefited from sexuality education. From the parents' perspective, most adolescents who receive home-based sexuality education are much more careful in their dealings with any sexual escapades in order not to be infected by any form of sexually transmitted disease. The narration by this 42-year-old mother captures most of these assertions highlighted.

It has helped a lot. I have seen some improvement in my son when I started talking to him about sex. Now he is quite careful about girls because he doesn't want to get any AIDs and other diseases. (P4, Mother, 42 years, Christian)

Pregnancy prevention. Some adolescents believed that home-based sexuality education had helped them avoid pregnancy. These adolescents primarily learn to listen to home-based sexuality education through the consequences of other people's behaviors to avoid pregnancy. This 17-year-old for instance asserts that through vicarious learning, she has learned to listen to home-based sexuality education to avoid becoming pregnant. As a result, she believes that at her age, her only priority is her studies.

Me it has influenced my decisions a lot. I have a neighbour who is of the same age as me and she is pregnant. I have learned to always listen to my parents' advise about sex so that I don't fall into the trap like that girl. I am very cautious now because, at my age, I don't want to be pregnant with any guy.

Focusing on my studies is my major aim now. (P17, Daughter, 17 years, Christian)

This parent's report corroborates her daughter's claim that through vicarious learning, she has learned to listen to home-based sexuality education to avoid becoming pregnant. She goes on to point out that her daughter has made a solemn promise to remain chaste till marriage.

My daughter has grown a lot. She has a friend who lives close by and is currently pregnant due to bad choices she made. Currently, the girl's education has come to an end since she ought to cater for the child. I believe she has learned from the girl's mistake and keeps mentioning why it is essential to maintain her virginity till after marriage. (P4, Mother, 42 years, Christian)

Negative impact

The adolescents demonstrated how sexuality education had a negative influence on some parts of their lives. Some participants opined that the home-based sexuality education they receive has caused them a great deal of anxiety. They stated once more that home-based sexuality education influenced their decision to initiate sex at an early age.

Early sex initiation. This theme depicts how some home-based sexuality education topics influenced adolescents' decisions to have sex at a tender age. Most home-based sexuality education which focuses on inducing fear influences adolescents' sexual imaginations to engage in sexual experimentation. From the narration below, this adolescent believes the fear arousal stories that are typically infused in home-based sexuality education do not affect his decision to abstain from sex. It, on the other hand, fueled his sexual curiosity and forced him to satiate his sexual desires by sexually experimenting.

Sometimes I don't understand why our parents are not straight with us about sex and put us in fear. To me, it doesn't work. When I was very young my parents, especially my mum used to tell me not to expose my private part to girls or else it will vanish. I think that challenged me growing up to try sex for the first time if that is possible. (P26, Son, 19 years, Christian)

In a similar vein, most parents agree that some content in home-based sexuality education

increases adolescents' desire to sexually experiment. From their perspective, home-based discussions on contraceptive use and demonstration are one major means which lead to sexual experimentation among adolescents. The narration from this parent confirms the issues highlighted.

I have witnessed cases whereby parents thought it is okay to teach their children how to use condoms and others. But things didn't end well the way they were expecting. They felt doing this might prevent their children from getting pregnant or impregnating others. That's not true. At the moment some of these children are pregnant at a younger age. (P9, Father, 51 years, Christian)

Anxiety. Some participants believe some aspects of home-based sexuality education usually evoke anxiety. In this participant's case, she is always nervous around male counterparts who usually act friendly because of fear-inducing stories she heard from her parent. This has made her significantly withdrawn from her male counterparts who act over-friendly.

I used to be very friendly around guys. Things have changed now. I remember my mother sat me down and told me to be careful with these guys because the boys will destroy me from having babies if I ever have sex with them. I still have those thoughts and become afraid whenever a guy draws closer and acts too friendly. (P29, Daughter, 18 years Muslim)

Discussion

The current study sought to explore parents' and adolescents' lived experiences of sexuality education and its impact on adolescents' sexual and reproductive health. As documented in the literature, commonly discussed topics such as abstinence, and consequences of premarital sex were identified. Contraceptive use and experiential sex topics were rarely discussed during parent-adolescent communication about sex and sexuality. Additionally, some negative and positive perceptions, as well as the impacts of sexuality education, were discovered.

The finding of abstinence as one of the most commonly discussed topics in home-based sexuality education reflects the adolescent's exposure to strict African cultural norms. In most African

cultures which Ghana is inclusive, sex is considered to be sacred and thus, must solely be shared between married couples (Baku et al., 2017). In adolescents' quest to have a positive image in society, they are constantly taught by significant others to live a chaste life until marriage. Topics on abstinence may also be motivated by reasons such as a desire to live a "Christian life" and live according to Bible principles, avoiding negative consequences and trouble, and an attempt to distinguish oneself from other people who have promiscuous sexuality (Iyer et al., 2014). These reasons echo the findings of many studies that show that sexual abstinence is primarily determined by religious beliefs and personal values (Gardner, 2011; Gesser-Edelsburg & Arabia, 2018; Landor & Simons, 2014).

African parents usually resort to timing and tactics (such as snooping on the adolescent's phone and/or watching a television programme about sex with the adolescent) as a means to educate the adolescents about abstinence and the consequences of premarital sex. Parents' reliance on this type of timing and tactics resonates with Wayomi et al.' (2010) assertion that parent-adolescent dyads about sex communication are often spontaneous and triggered by factors such as the parent watching sex-related radio and television programmes with the adolescent, the adolescent being seen in the company of opposite sexes, the adolescent being found with love letters and other erotic materials such as pornographic films, books, or magazines. Despite the fact that parents' ultimate goal in using these timing and tactics was to discourage sexual activity among the adolescents, this did not deter them from engaging in sex. As a result, it appears that using these timing and tactics leads to mistrust and violates the adolescents' integrity.

It was also noted that parents wait until the puberty stage to discuss issues about sex with their adolescents. This stage is in consonance with Izugbara (2008) finding that African parents strongly hold onto the fact that the puberty stage is the best time to introduce education about sex and sexuality. Their justification for using this period is that during puberty, the adolescent has enormous cognitive development to understand sex issues (Izugbara, 2008; Pop & Rusu, 2019).

As a result, until puberty, parents postpone sexuality issues because they believe the adolescent is sexually innocent before puberty (Stone et al., 2013). In other cases, parents withhold certain sexual matters from their children out of fear that the teenager's innocence will be tainted or destroyed. Even during puberty, some parents expressed concerns about their adolescents losing their innocence, and as a result, they make efforts to keep their children from entering the world of grown-ups (Stone et al., 2013). Parents rely on euphemisms because it is considered taboo in Akan society especially, to discuss the private parts of the body (i.e. vagina, penis, and breast) in the presence of an adolescent, as well as in public (Baku et al., 2018).

In addition, both parents and adolescents reported that some sexuality topics such as contraception and experiential sex were rarely communicated by parents during home-based sexuality education. That is, parent-adolescent communication was hampered by the shame and fear surrounding sex as seen in the rhetorical question asserted by a parent, "*As a single mother, how do I start this demonstration with my son?*". Most parents' aversion to discussing these sex issues stems from the African cultural construction of sexuality as an adult affair and as belonging to the realm of the private (Baku et al., 2018; Izugbara, 2008), thus discussing particularly experiential sex topics, with the adolescent usually appears awkward on the parents' part. This awkwardness usually breeds shyness and embarrassment between parents and adolescents whenever attempts are made to demonstrate for instance experiential sex topics to the adolescent (Tesso et al., 2012). Also, parent-adolescent sexuality education was inhibited when the communication is between opposite sexes (father-daughter or mother-son). In this case, parents deny responsibility, emphasizing that discussing sexual matters with the opposite sex is inappropriate (Izugbara, 2008).

It was further discovered that from the participants' perspective, sexuality education leads to sterility and infertility, as well as early sexual experimentation. The finding that adolescents and parents perceive sterility and infertility as one of the major side effects of contraception is consistent

with a study of black American adolescents who reported sterility as one of the reasons for not using contraceptives (Coles et al., 2011). Also, ambivalence toward pregnancy has long been identified as a risk factor for ineffective contraception, pregnancy, and childbearing during adolescence (Brückner et al., 2004). Most adolescents and parents are probably less informed of the possible side effects of contraceptives. Some parents may also lack the right parental skills and knowledge to speak effectively with the child about sexual-related matters (Stone et al., 2013). This lack of information influences how these adolescents respond to the side effects, and it may also contribute to a family's decision to avoid health facilities or to rely on inaccurate information circulating in their communities (Chebet et al., 2015).

Some positive impacts of home-based sexuality education were also discovered. Home-based sexuality education promotes the prevention of adolescent pregnancy and sexually transmitted infections. Because adolescents are frequently exposed to fear-inducing stories during home-based sexuality education, most of these adolescents believed sexuality education significantly reduced teenage pregnancy and sexually transmitted diseases. Parents, thus, go to the extent of presenting scary stories to reinforce chastity and abstinence in their children (Beckett et al., 2010; Izugbara, 2008; Manu et al., 2015). The positive impacts of sexuality education found in this study corroborates Reis et al. (2011) assertion that individuals exposed to sexuality education often engage in fewer sexual behaviors, such as fewer occasional partners, less sex-related to alcohol and drugs, and prevention of pregnancies and sexually transmitted diseases. Sexuality education was found to have had a positive impact on adolescents' sexual health because the home-based sexuality education received by these adolescents improved their knowledge of sexually transmitted diseases, pregnancy prevention, and other sexual and reproductive health issues (Rashid & Mwale, 2016; Wylie, 2010).

A significant number of the adolescents indicated that home-based sexuality education influences early sexual initiation and induces anxiety. From the perspectives of the adolescents, the fear-inducing stories used by parents during home-based sexuality education discussions

encourage them to engage in sex at an early age or engender nervousness. The finding that home-based sexuality education led to early sex initiation is in sharp contrast with existing studies that have reported that an early-stage introduction of sexuality education reduces early sex initiation among adolescents (Erkut et al., 2013; Lindberg & Maddow-Zimet, 2012; Tortolero et al., 2010). Most of the home-based sexuality education in the African context centers on risk-avoidance (abstinence-only and fear-arousing tales). Risk-avoidance sexuality topics have been found to have a significant effect on fueling the adolescents' sexual curiosity, thereby forcing them to satiate their sexual desires (Shepherd et al., 2017; Stanger-Hall & Hall, 2011).

Limitations and directions for future research

This study has several limitations worth mentioning. Adolescents and parents involved in the study were recruited from a metropolis in the Greater Accra Region of Ghana, which was a relatively small portion of the entire region. As a result, future studies should consider exploring families across the entire region, if not nationwide. This study centered on a sensitive topic due to the social stigma attached to premarital sex among young individuals in Ghana. Assessment of sexual behaviors in Ghana thus, are prone to recall biases, confidentiality concerns, and stigmatization of the behavior in question. Although these might affect the credibility and generalizability of the findings, efforts were made to mitigate the effects of these by assuring participants of full confidentiality. In addition, the study included more mothers than fathers because mothers were more willing to participate in the study. Future studies should consider including more fathers or even focusing solely on fathers' experiences. This would help to highlight the Ghanaian or African father's unique experiences and draw potential gender differences in how sexual education is conducted by parents.

Implications for research and practice

Despite its limitations, the current study has shed light on how sexuality education is delivered and

its significant impact on the sexual and reproductive health of adolescents. The findings of the study revealed that contraception and experiential sex topics are rarely discussed. Therefore, the necessary stakeholders must raise awareness about the importance of educating adolescents on topics such as contraception and experiential sex. Electronic (radio and television), print media (e.g., cartoons, youth-focused magazines, posters, stickers, and handbills), and social media (e.g., Facebook, Twitter) can be used as primary platforms to communicate some of these sexuality education topics to youth and parents to dispel some of the myths surrounding contraception and other sex topics. Mass media programmes should be encouraged, and if possible, such programmes should include specific suggestions on how parents can have constructive sexuality discussions with their children. Stakeholders should also raise parents' awareness that while scare tactics may work for a limited time, they do not foster self-reflexivity and an internal locus of control over their adolescent's sexuality. Parents must also be psycho-educated about the fact that their concerns about the relationship between exposure to sexuality education and adolescent sexual activities do not hold as shown by research. Rather, equipping adolescents with a comprehensive education on sexuality has been found to lead to sexual health (Leung et al., 2019). As such, the Ghana Health Service must collaborate with the Ghana Psychological Association to organize training programs in areas of parent-adolescent communication on sexual reproductive health, aimed at empowering both parents and adolescents to be frank with each other and communicate explicitly rather than using euphemisms and timing techniques. The training program should not only focus on educating parents to instill abstinence in their children but also on including contraception and experiential sex topics in home-based sexuality education to assist especially sexually active adolescents, in having safe sex practices at the appropriate time.

Conclusion

The study has identified that a home-based comprehensive sexual education tends to protect

young adolescents from premarital sex, whereas fear-arousing stories, as well as ignoring sexual topics such as contraceptive use and experiential sex topics, put the adolescents at risk. Given that the sexual behaviors of adolescents are influenced by several factors, it is imperative that an integrated multi-sectoral approach involving all stakeholders in providing comprehensive sexuality education to the adolescents is institutionalized.

Ethical approval

The study protocol was approved by the University of Ghana's Departmental Research and Ethics Committee (DREC/016/20-21)

Author contributions

JOO conceived of the study, participated in the study design, data collection and analysis, and drafted portions of manuscript. JSY conceived of the study, participated in the study design and data analysis, and drafted portions of manuscript. JO participated in study design, data interpretation and drafted portions of the manuscript. All authors read and approved the final manuscript.

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