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Assessment Of Communication Messages Used In Adolescent Reproductive Health Education

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ABSTRACT
The adolescent being a primary agent of socialization, the communication can exert a strong influence on adolescent sexual behaviour. Reproductive health is a vital aspect of growth and development throughout our lives, especially among the adolescence. Therefore, to aid in the design and implementation of effective prevention programmes, it is important to assess the communication messages used in adolescent reproductive health education among school-going adolescents.

The study used a survey methodology that involved self-administered questionnaires to solicit data from 190 SHS students from the Kwahu-South District. Data analysis was done using SPSS and results presented using tables and charts. In this study, significant discoveries have been made. It was found out that the sources of adolescent reproductive or sexual health education included school and media. About (72.9%) of males and 52 (67.5%) of females indicated mothers as those who normally give education. The most identified channel of communication was the inter-personal form. The Levene's Test (t=-3.077, Sig. = 0.002) revealed a significant difference between the opinion of males and females toward frequency of facing of sexual health problems. The findings of this study suggest that prevention programmes that seek to educate Ghanaian school-going adolescents about sexual risk behaviour must strongly encourage communication

1.1 Background of the study

Reproductive health is a vital aspect of growth and development throughout our lives, especially among the adolescence. By offering high-quality reproductive health education that celebrates its positive power and not just its negative side of unwanted pregnancy and infection (Hendrix-Jenkins et al., 2002). Adolescence, as explained by Holder-Nevins (2012) is that part of the life course when health is shaped by an interplay of physical, psychological, social and environmental factors, is a special time for supportive relationships and care.

In Ghana, it is estimated that 2.5 million people will be living with HIV/AIDS by the year 2012, with the majority expected to be adolescents and young people (Ghana AIDS Commission Report, 2013). This estimate is not surprising because previous studies on adolescents and youth in Ghana have documented that they are engaging in sexual activities; they are doing so at an early age; and they are not using condoms consistently (Adu-Mireku, 2003). By engaging in risky sexual behaviours, adolescents and youth in Ghana face a number of serious negative health consequences, including placing themselves at risk of acquiring HIV and other sexually transmitted diseases. In light of the previous findings, research efforts must continue to identify the social factors and processes that are likely to positively impact the sexual behaviours of adolescents in Ghana.

An argument by some authors (Holder-Nevins, et al., 2009) is that the proliferation of technologically-driven information channels popularly the Internet, music and television – often raises concerns about the exposure of adolescents to sexual information, sometimes with the potential for more harm than good. And some possible questions therefore is whether the media have taken over from parents, educators and other socialisation agents with respect to building a value system relevant to sexual and adolescent reproductive health (SARH)?

Devito (2002) opined that unlike information dissemination, communication is a two-way traffic involving the sharing of ideas, knowledge and experience. It is distinct from the one-way traffic of mere transmission of information without commensurate feedback mechanism. Thus communication must be between adolescents and the agents of the messages and not only one group of persons. On the basis of the above considerations, a compelling case is made for this study, which examines the communication messages used in SARH education given the fact that limited studies have been conducted to provide insight into the issue of adolescent education.

1.2 Research problem

Communication and public education is vital in reproductive health. It enables awareness of disease, emergent infections, safety and preventive measures (Nwadigwe, 2012). However, health communication programmes in Africa and Ghana in particular is faced with a lot of problems among which are the wrong choice of source of messages and media channels which results in the message not reaching the targeted population.

In recent times, there is an increased focus on birth control, child spacing, family planning and prevention of factors and conditions that potentially harm or complicate the reproductive health of women in Ghana. Therefore an emphasis of health promotion programmes. However, these programmes seem to face significant challenges in Ghana among which is ineffective communication. A key reason after a close examination in the district revealed that adolescence choice of channels of communication was far from right. It appeared that though there were adequate health care unit for the adolescents, they appear under resourced in terms of facilities/ logistics and personnel to man the whole centre. It was sometimes discovered in the preliminary investigation that the centres were most times closed up.

This indeed has caused some adverse consequences' on the adolescents in the district. Some include inappropriate sources of communication messages and lack of understanding of these messages causing teenage pregnancies and abortions. In this study, the questions therefore are, does these messages get to the intended or target audience? Is the message communicated through the right channel? And does the adolescent understand the message well? This study proposes to assess the communication messages used in adolescent reproductive health education.

1.3 Justification of the Study

Adolescent is considered as a period of risk taking. This is so because most adolescents do not understand reproductive health messages that are being communicated. It is in line with this that the Government of Ghana published an adolescent reproductive health document in 2000 to address the health needs of adolescent. Some of which include adolescent/youth friendly services.

Even though a lot of intervention are been carried out, the adolescents still faces challenges. This study therefore is set to assess how adolescent understand reproductive health education and the findings of the study will help the DHMT to relook at their programmes on adolescent health education.

The study is significant as serves as a basis to inform the health profession or sector in the district and Ghana at large about the concerns of adolescents, regarding health education. Again, other health centers in Ghana will better be informed about the need to improve on existing educational programmes. The district health centre therefore will have access to the document of the research report to incorporate its findings into its policy.

1.4.2 Specific objectives

The specific objectives of the study were:

i. To identify sources of reproductive messages used in adolescent health education.
ii. To assess adolescent knowledge about reproductive health messages.
iii. To identify communication challenges related to adolescent reproductive education.

2.0 Literature Review

2.1 Definition of Terms

In this study, the key terms to guide this study are defined below.

Adolescent: a person between 10-19 years of age (WHO, 2006).

Communication: is the act of transferring information through speech, the written word, or more subtle, non-verbal ways from one place to another or from one person to another. In other words it is the sharing of ideas and information (Jaccard, et al., 2002).

Reproductive health: Is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity, reproductive health, or sexual health/hygiene, addresses the reproductive processes, functions and system at all stages of life. Reproductive health, therefore implies that people are able to have responsible, satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so (WHO, 2006; Biddlecom et al., 2005).

Sexuality: Sexuality is complex and spans a vast array of human experiences including family relationships, dating, sexual behavior, physical development, sensuality, reproduction, gender, body image and more (Schalet, 2004).

2.2Communication of adolescent reproductive health (ARH)

The process of adolescence is a period of preparation for adulthood. During this time, several key developmental experiences occur. These experiences include physical and sexual maturation, movement toward social and economic independence, and development of identity (James-Traore, 2001). Behavior patterns that are established during this process, such as drug use or non-use and sexual risk taking or protection, can have long-lasting positive and negative effects on future health and well-being. As a result, during this process providers have unique opportunities to influence young people. Although some problems that occur or that are magnified during adolescence require special attention, adolescents should be viewed as assets to society rather than as problems.

There appear to be a good communication between parents and adolescent on other issues like politics, investments and the likes but not with agents of reproductive health education and adolescents on issues related to sexuality or reproductive health. The findings from Burgess et al. (2005) indicated that the underestimations of the sexual behaviours of adolescents were based on erroneous assumptions made by the mothers especially and also positive parental perceptions of the parent–adolescent relationship increased the underestimation by the parents of their adolescent's sexual behaviours.

Indeed, research by authors like (Strohl Systems, 2009; Nwadigwe, 2012) have shown that knowledge of 'how sex, sexuality and relationships are understood and constructed in different societies has the potential to inform the development of sexual and reproductive healthcare services, improve care, and enrich sexuality education agendas' (Izugbara, 2004: 63). Thus in Africa and beyond, efficient communication in (reproductive) healthcare is indeed critical in achieving appropriate result.

Adolescent reproductive health education (SARH) is an area that generates misconceptions, confusion, fear and unwarranted caution, to say the least. These can be ascribed by many factors. First, policy makers, community members, parents and teachers are reluctant to confront issues of sexual and reproductive health. Teenagers often get their information from their peers who may be ignorant of the topic or the mass media which may provide sensational and inaccurate information (Nwadigwe, 2012).

2.3 Information Sources for Adolescent Sexual and Reproductive Health

Over the last two decades, the electronic media has gradually replaced print media as the main source of information on a wide range of issues, including sexual and reproductive health. Prior to the print revolution, traditional forms of transmitting information, such as interpersonal communication from older men and women in the community, friends, drama and community meetings, were the main avenues (Awusabo-Asare, et al., 2004).

Various studies on the sources of information on sexual and reproductive health for young people show that many sources are utilized, with one form or the other dominating, depending upon location. According to results from the 1998 GDHS, 26% of 15–19-year-olds had heard of family planning from both radio and television, 16% from radio only and another 5% from television only. Thirty percent of the young people also reported any print source and 27% reported posters only. Of the people who were exposed to radio messages on family planning, 75% approved of the messages (Tweedie and Witte, 2000).

Awusabo-Asare (2004) revealed that results from a study in 1998 regarding reproductive health showed that less than half of adolescent males and females had heard or seen anything about family planning in the mass media or via community for a or performance in the 6 months prior to the survey, despite the fact that half or more watch TV or listen to the radio at least once a month. Data from the 1998 GDHS on sources of information for HIV/AIDS indicate that the main source for young people is the mass media. Among those aged 15–19 who have heard of AIDS, radio (66% for females and 68% for males, respectively), workplace (52% for females and 50% for males) and TV (49% for females and 46% for males) were reported as sources of information. Erulkar (2003) indicated that only 2% of the females and 3% of the males reported health workers as sources of information, and the print media (e.g., newspapers and pamphlets) were reported by 13% of females and 18% of males aged 15–19.

Ghana Health Service (2003) reported that the evidence suggests that the mass media continues to be the main source of information for young people about HIV/AIDS, compared to interpersonal contacts such as those being promoted through peer education, seminars, religious preaching and community fora. The relatively weak reliance on interpersonal communication with parents or family members for sexual and reproductive health information is brought out in other studies.

2.4 Knowledge of reproductive health messages

Adolescents' knowledge in sexual activity and protecting themselves from pregnancy and sexually transmitted infections (STIs) are influenced by many factors. Some factors include state of parent family, socioeconomic status, location or residential status, performing better in school, feeling greater religiosity, and among others (Leshabari et al, 2009; Namisi et al, 2009 and Nundwe, 2012).

According to Hervish (2012) there are 883 million people living in sub-Saharan Africa today. One out of every three is between the ages of 10 and 24 that are 280 million young people. Today, young people are better educated, have access to more means of information and communication than ever before, and continue to show an interest in entrepreneurship and business development, a critical pillar for future economic growth but seriously lack education on sexual reproductive health.

For instance, a study by Cohen et al. (2010) revealed that students aged 13 to 18, reported that non- initiation of sex was associated with having a two-parent family and higher socioeconomic status, residing in a rural area, performing better in school, feeling greater religiosity, not having suicidal thoughts, and believing parents care and hold high expectations for their children. Supporting the above assertion, Connolly et al. (2000) reported that adolescents who were highly satisfied with their relationship with parents were 2.7 times less likely to engage in sex than teens who had little satisfaction with their parental relationships.

Indeed the notion that agents of health education have significant influence on the sexual and reproductive health of their adolescents cannot be over emphasized. Without doubt, these health programmes and activities are characterized by weaknesses and gaps as planners and implementers are usually held back from trying out innovative approaches by opposition and objections from concerned quarters.

It is often times believed that, knowledge is required to implement these ARH activities in towns, cities, districts, regions and countries. The main types of sources of knowledge include IEC/Advocacy/BCC materials, resource materials, newsletters, CD-ROM and video materials; training materials, including curricula and manuals; teaching and learning materials, including guides/manuals and research studies, including monitoring/evaluation modules (UNESCO, 2004).

In conclusion, comprehensive sex education and understanding of the message is an important first step in empowering young people to make healthy decisions about their behaviour (Ecker and Kirby, 2009). Global evidence shows that these programs help young people abstain from or delay sex; reduce the frequency of unprotected sex and the number of sexual partners; increase the use of contraception to prevent unintended pregnancies and sexually transmitted infections; and in turn, help delay that first birth to ensure a safer pregnancy and delivery. At the same time, youth-friendly services help young people address a range of sexual and reproductive health needs (Guttmacher Institute, 2010).

2.5 Barriers to reproductive health communication

Inadequate information available to reproductive health educators can be a barrier to sexual communication. Parents and other actors of health education need accurate information and support to feel more comfortable and

confident that they possess the necessary communication skills to be effective in discussing risk-taking sexual behaviours with their adolescents. The necessary logistics if unavailable will greatly cause an impasse on the health education programme. Logistics such as ICT gadgets like CDs, VCDs, sound speakers, personnel and the likes can be worrying to affect reproductive health communication. Although effective familial sex communication can lead to decreased adolescent risk-taking sexual behaviors (Holtzman & Robinson, 1995), discomfort experienced by parents and their adolescents in speaking about adolescent sexuality can prevent effective sex education from occurring (King & Lorusso, 1997).

Overcoming these barriers, have significant benefits. Reducing adolescent pregnancy through health education can help increase income at the individual, family, and national level. Over time, Ghana has been and will be able to reduce its adolescent fertility rate from 125 births per 1,000 adolescent girls to 66 births per 1,000 adolescent girls in just twenty years, and has increased its gross national income per capita (UNDP, 2010).

Ghana is on the verge of becoming successful because the country has developed an adolescent reproductive health policy, offered broad reproductive health services for youth, and encouraged young people to advocate for themselves at regional and district level meetings, recognizing that young people have an important role to play in shaping decision-making (UNDP, 2011). It is therefore important for all stakeholders involved in adolescent health education

3.0 Methodology

A descriptive cross sectional study was employed to conduct the study in the Kwahu South district of the Eastern Region. Purposive sampling was used to select all the four public SHS in the district. A structured self-administered questionnaire was administered to students. Data were collected from the four public Senior High Schools in the district to assess the communication messages used in adolescent reproductive health education.

Students were stratified according to the schools, namely Mpraeso SHS, Kwahu Ridge SHS, St. Pauls SHS and Bepong SHS. The sample size was determined using Epi Info™ stat calculator version 7(Epi info™ Incorp CDC, USA). With a total student population of 5795, the sample size was calculated based on the assumption that 85% of the students have knowledge on adolescent reproductive health education with 5% margin of error at 95% confidence interval, design effect 1 and cluster 1 a total of 190 students were attained as the sample size. The total population of each school was divided by the total population which was 5795 and then multiplied by 190 (factor) to proportionately get the sample size for each school.

4.0 Results

The result of the study was guided by the main objective that seeks to assess communication messages used in adolescent reproductive health education. This chapter presents the results of the study.

Table 1: Background of respondents

Characteristics	Frequency	Percentage
Age (years)		
15-18	163	85.5
19-22	27	14.2
Gender		
Male	103	54.2
Female	87	45.8
Form		
SHS 1	94	49.5
SHS 2	55	28.9
SHS 3	41	21.6

The table above shows that 54.2% of respondents were males while the remaining 45.8% were females.

As part of the background information, the ages of respondents were also looked at. Table 1 shows the age group of respondents. According to the results of the study as presented in figure 2, 86% were between the ages of 15 -

18 only 14% between the ages of 19 - 22. Out of 190 respondents, 94 of the students were in SHS One and 55 and 39 in SHS Two and Three respectively.

Identifying sources of reproductive messages used in adolescent health education

Respondents were again asked if they had ever attended any class or had talks on adolescent reproductive or sexual health education and the place the education was received.

Table 2: Attendance and Venue

	Venue					Total
	Church	School	Home	Health facility	From the media	
Yes	13 (8.2%)	130 (81.8%)	6 (3.8%)	6 (3.8%)	4 (2.5%)	159 (100.0%)
No	12 (75.0%)	3 (18.8%)	0 (.0%)	0 (.0%)	1 (6.3%)	16 (100.0%)

The result in Table 2 above indicates that 159 of the respondents attended classes or had talks on adolescent reproductive or sexual health education. Out of 159 respondents, 130 had the education in school while 4 had it from the media.

Table 3: Resource Person

Responses	Frequency	Percent
Teacher	118	62.1
Health worker	42	22.1
Parents	7	3.7
Peer	7	3.7
Journalist/Panelist in media	6	3.2
Total	180	94.7

According to the results in Table 3, 62.1% of the resource persons were teachers. About 22.1% were health workers, while 3.7% were parents and peers with 3.2% coming from journalist/panellist in the media.

The study was used to gather information on whether or not respondents had ever had reproductive health education as part of their school curriculum.

Figure 1: School Curriculum

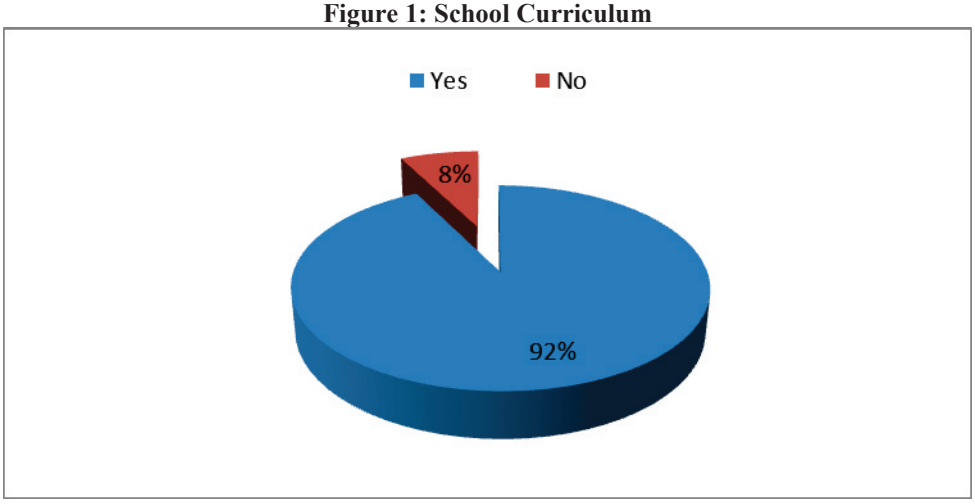
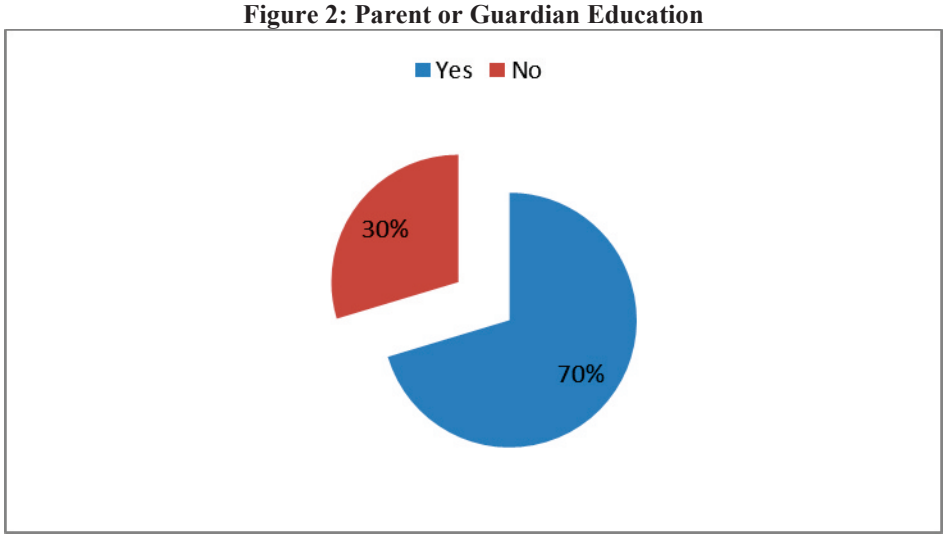


Figure 1 shows that out of a total of 190 respondents, 173 respondents indicated that reproductive health education was part of the school curriculum while 14 objected to that.

Respondents were asked if any of their parents, guardians or peers had ever given them education on reproductive health and the results have been shown in the figure below.

Figure 2: Parent or Guardian Education



The figure above shows that out of a total of 190 respondents,70.0% indicated that they had had reproductive health education delivered by their parents, guardians or peers while 30% indicated "no" to that.

Again, respondents were further asked, who normally gives the education and the results have been shown in the table below.

Table 4: Sex and Agents of health education

		Agent				Total
Gender		Mother	Father	Male guardian	Female guardian	
Male	Count	70	20	5	1	96
	% within Sex	72.9%	20.8%	5.2%	1.0%	100.0%
Female	Count	52	14	0	11	77
	% within Sex	67.5%	18.2%	.0%	14.3%	100.0%

The table above shows that out of 96 males, 70 (72.9%) and 20 (20.8%) indicated mothers and fathers respectively as those who normally give them education. On the other hand, the about 52 (67.5%) of the females viewed mothers as agents of education.

The study was used to gather information on the form of communication channel mostly used by the educators.

Table 5: Communication channel

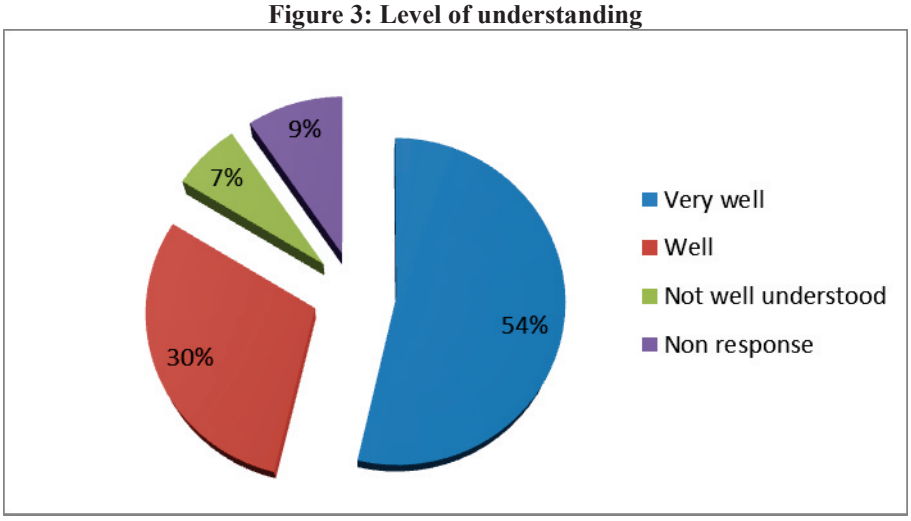
Responses	Frequency	Percent
Inter-personal	94	49.5
Group	78	41.1
Mass	17	8.9
Non response	1	0.5
Total	190	100.0

According to results shown in Table 5 above, 94 respondents indicated the educators mostly used inter-personal form of communication. Also, 78 and 17 indicated group and mass forms of communication respectively.

Assessing adolescent knowledge about reproductive health messages

The respondents were asked about how well they understood the education.

Figure 3: Level of understanding



The results above shows that 102 (53.7%) understood the education very well while 57 (30.0%) understood it well. On the contrary, 13 (6.8%) did not understand the education well.

Nonetheless, a question was asked concerning the indulgence of sex by respondents and whether or not they used condom as a form of protection before indulging in the sexual intercourse. The result has been shown below (Table 6).

Table 6: Indulging in sexual intercourse and Use of condom Cross tabulation

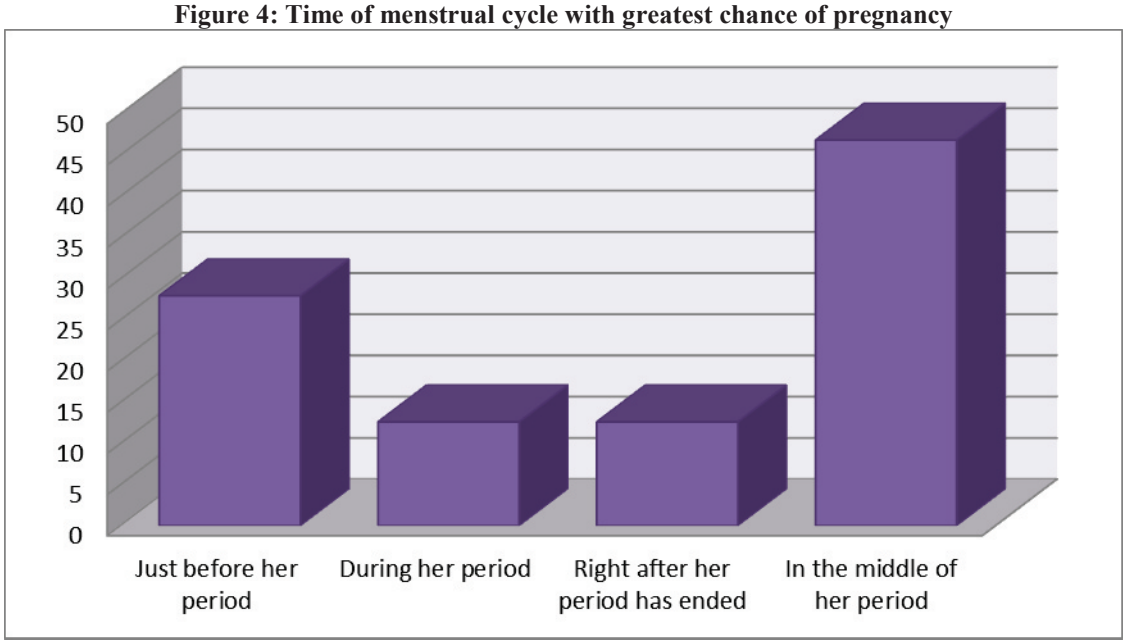
Indulging in sexual intercourse		Use of condom		Total
		Yes	No	
Yes	Count	81	34	115
	% within Indulging in sexual intercourse	70.4%	29.6%	100.0%
No	Count	3	0	3
	% within Indulging in sexual intercourse	100.0%	.0%	100.0%
Total	Count	84	34	118
	% within Indulging in sexual intercourse	71.2%	28.8%	100.0%

Source: Field data, Kwahu South District.

According to the results in the table above, majority of the respondents who had indulged themselves in sexual intercourse 81 (70.4%), used condom as a form of protection while 34 (29.6%) did not.

To test respondents understanding on reproductive health messages, information regarding which time of the menstrual cycle does a woman has the greatest chance of becoming pregnant was inquired.

Figure 4: Time of menstrual cycle with greatest chance of pregnancy



According to the results shown above, 43.7% of respondents stated that a woman was most likely to get pregnant in the middle of her menstrual cycle. On the other hand, 27.9% and 12.6% indicated just before her period and during and right after her period has ended respectively.

Table 7: Indulging in sexual intercourse and Pregnancy at first intercourse

Indulging in sexual intercourse	Possibility of getting pregnant at the first time of intercourse		Total
	Yes	No	
Yes	99	25	124
No	53	13	66
Total	152	38	190

The results from the table above shows that out of a total of 190 respondents, 99 of them who had had sexual intercourse indicated that an adolescent is likely to get pregnant the first time she had sex while 25 disagreed to that.

Communication challenges

Moreover, the respondents were asked if they sometimes faced sexual or reproductive health problems and how they solved them. The results have been shown in the table below.

Table 8: Facing of sexual health problems and Solution Cross tabulation

Solution					Total
Kept to myself	Friends	Parent/ guardian		Counselor	
Yes	47 (36.7%)	43 (33.6%)	32 (25.0%)	6 (4.7%)	128 (100.0%)
No	1 (25.0%)	0 (0.0%)	3 (75.0%)	0 (.0%)	4 (100.0%)

The results above shows that most of the subjects 47 (36.7%) who faced sexual health problems solved them by keeping their problems to themselves while a few of them 6 (4.7%) sought for advice from counsellors.

Facing sexual health problems by gender

The t-test tool was used to assess the significant difference between gender and frequency of facing of sexual health problems.

Table 9: Facing of sexual health problems by gender

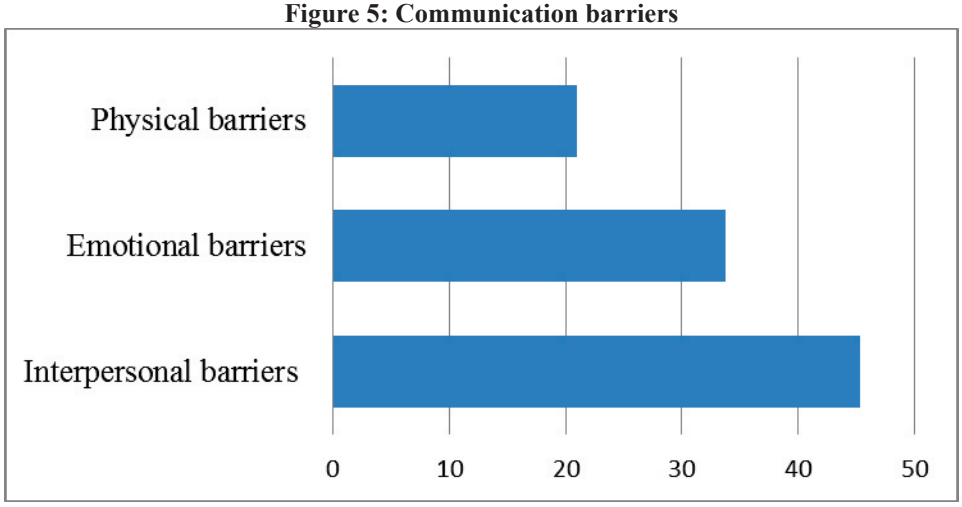
Statement	N	Faculty	Mean	t	Sig.
sexual health problems	101	Male	1.2277	-3.077	0.002
	85	Female	1.4353		

The Levene's Test (t=-3.077, Sig. = 0.002) reveals that there was a significant difference between the opinion of males and females toward frequency of facing of sexual health problems (Table 9).Thus, it was seen that female students perceived significantly stronger frequency of Facing of sexual health problems than their male counterparts. Some possible reasons for the significant difference between males and females might be that that most females were challenged with social or environmental problems than males.

In agreeing with the above results, it was found out by Musa et al. (2008) that higher proportion of the female students was susceptible to early pregnancies and HIV/AIDS more than their male counterparts (p=0.0249).

Lastly, the study revealed some communication barriers faced by respondents during adolescent health education and figure 5 highlights the results

Figure 5: Communication barriers



Adolescents' revealed that communication barriers faced included Physical barrier, emotional Interference and Interpersonal barriers. According to Figure 10, 86 (45.3%) stated that interpersonal barriers inhibited them from easily understanding the communication messages from the educators whiles 21% identify physical barriers as their communication barrier to understanding communication message.

5.0 Conclusion / Recommendation

The study aimed at assessing the communication messages used in adolescent reproductive health education. The main purposes of these ARH activities were awareness-raising, education and sharing experiences; capacity-building and material development; and providing ARH services. The key target audiences were SHS students. The main types of information for ARH were Advocacy materials and resource and training materials and manuals. In this study, the subject matter most frequently used in ARH education were reproductive health and sexuality education; teenage pregnancy, HIV/AIDS and STIS.

Effective Sexual Education

Sexuality education delays the onset of sexual activity, increases safer sexual practices by those already sexually active. Sexuality education is to help young people develop the knowledge, autonomy and skills such as communication, decision-making and negotiation to make the transition to adulthood in good sexual health.

Sexuality education should include information about anatomy and physiology, puberty, pregnancy and STIs, including HIV/AIDS.

Fostering Parent-child communication

Although the study identified parent-child communication about sexuality, methods of fostering healthy sexuality among children and teens remain controversial. Unfortunately adolescents receive complicated messages from the media; peers; and professional, religious, and lay leaders. Paediatricians' can help parents clarify their own values and beliefs, provide medically accurate information, and identify community resources to support positive communication about sexuality.

Parents often do not know how to start conversations about sexuality, and pediatricians can help facilitate this process. Discussions of sexuality should begin long before puberty and adolescence, but parents often wait until their children are preteens or teens which sometimes appear to be late.

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