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Youth friendliness of sexual and reproductive health service delivery and service utilization in the Kwadaso Sub-Metro of the Ashanti Region, Ghana

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ABSTRACT: *Background:* Incidence and prevalence of reproductive health difficulties have been shown to be higher among younger people. In Ghana, youthfriendly sexual and reproductive health services and facilities are very limited. The study aimed at examining the friendliness of sexual and reproductive health service delivery and utilization.
Methods: Across sectional design with both qualitative and quantitative methods was conducted to examine the friendliness and utilization of reproductive health services among youth in the Kwadaso Sub-Metro of Ashanti Region, Ghana. A multi-stage stratified sampling was used to enroll 170 youth (150 in-school and 20 out of school youth) aged 10 - 24years. Data analysis involved descriptive statistics using SPSS software version 20.
Results: Findings demonstrated that out of the 150 in-school youth sampled, 56% ever had a boyfriend or girlfriend, however, about one third(39.3%) did not recall the length of stay with partner, 58% have heard about sexual reproductive health services offered in the study area. A total of 55.8% of all categories of youth had used at least one or more reproductive health service before. Findings again revealed that 37.2% and 44% respectively of youth who had used sexual reproductive health considered the services received at a facility to be very friendly and friendly, yet, a few 18.6% indicated unfriendliness with services received at the facility.
Conclusion: An integrative and comprehensive approach is required to scale up youth utilization of sexual reproductive health services especially facility based. This requires baseline survey of youth users of reproductive health services and the quality of services offered.

KEYWORDS: Youth friendliness, sexual and reproductive health, service delivery, service utilization, Ghana.

RESEARCH HIGHLIGHTS

A little over a half of the youth studied utilized sexual and reproductive health service with a low proportion accessing service at the facility. Notwithstanding, services was rated as highly youthfriendly among the small proportion who utilized services.

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INTRODUCTION

The youth are the trust of every country. According to a report by the United Nations Children's Fund (UNICEF) over 2.6 million young people aged 10 to 24 across the globe die annually due to preventable causes such as unsafe births, abortions, HIV/AIDS and [1].Critical among the factors derailing family planning programmes in sub-Saharan Africa in particular is how to address the reproductive health needs of young persons during the periods of sexual initiation and exposure to the risk of pregnancy [2].

Conceptually, there is no unanimous definition for youth. The United Nations define youth to encompass all persons aged 15-24 years[3].Though this appears to be universal in nature, country specific definitions exist due to differences in national policies. Within the Ghanaian context, the National Youth Policy (NYP) defines all persons 15-35 years to constitute youth. There is an overlap of adolescents and children between 15 and 19 years and beyond the 24 year-old cut-off used by the United Nations. This study defines and operationalizes youth as those aged 10-24 years combining adolescents aged 10-19 years and youth aged 15-24 years [3].

Several reproductive health challenges confront youth globally and more pervasive in developing countries where services and facilities are absent. Townsend[4] argues that amid the difficulties in youth accessing reproductive health services despite the unavailability, outreach programs can show the way forward. The UNPF report in 2012using DHS data indicated huge number of young persons whoare sexually active[5, 6]. The report cites that in Mali and Zambia, a high 50 and 53 per cent of youth surveyed were sexually active. Notwithstanding, vast variations exist in modern contraceptive usage among the young people. In Zambia and Mali respectively, only 33 per cent and 7 per cent of sexually active youth use modern contraceptives[5]. There was, however, a lower level in comparison of contraceptive prevalence rate for modern methods for the same countries (for all women aged 15-49). Teenage births and Adolescent birth rates per 1,000 women aged 15 to 19 ranges from a lower 70 in Ghana to 190 in Mali. This establishes the need for tailoring services that are at the preference of youth. In Ghana, the Guttmacher Institute [7] reports that whiles 12 percent of adolescents 15-19 years and one percent of their male counterparts haveever had a child, one in 10 births occurs among adolescent mothers. This is against the background that16 percent of women and 11 percent of men 12-24 years in Ghana who have ever had sex have attempted at aborting the pregnancy.

Several policy-related barriers exist for young persons which places them at a much greater sexual risk. In most countries, abortion services remains illegal despite the high levels of unsafe adolescent abortions which account for 60% of the estimated 2.4 million unsafe abortions occurring in Africa[6]. It is not surprising to find out that abortion constitute one of the leading causes of maternal mortality in Africa. A study by Sedgh [8]has demonstrated some improvement in quality of service delivery to young people at the clinic inthe areas of: privacy, respect, and emphasis on dual protection. Prior to Sedgh study,[9]also reported that during the post evaluation stage of their youth friendly project intervention in Ghana, the youth who were engaged in the evaluation indicated satisfaction with services provided in 12 out of 18 clinics in all the facility used as the intervention setting. In a related study, Kane and Colton [10]reported on the Pathfinder Intervention that there has been a positive change of attitude among membersof the project communities towards condoms especially among the youth. This study,however,was not geared towards addressing how to prolong early sexual initiation but rather on how to reduce sexual risk of STI Infection, abortion and HIV AIDS.

The need to have a source reduction approach in risky sexual behaviour from the extant of literature has been poorly advocated and integrated in efforts towards reducingrisky sexual behaviour among youth[11]. The2008 Demographic Health Survey (GDHS) in Ghana found that the use of any modern contraception by all female aged 15-19 years was 5.2% and for females of same age who are married, it was a little higher with 7.6% .The national averages stoodat 13.5 percent and 16.6 percent for the same age group respectively while modern contraceptive usage for the age group 20-24 nationally was 13.6%.The contraceptive usage for the age group 15-24 is 28.4%.

Though this is projected to increase by a marginal 0.4 percent per annum from 2010 to 2020[12],more youth tailored services is required to even realized the projected estimates. There has been a minimal education and recommendation by reproductive right activist and scholars on abstinence as a family planning option or method. The abstinence message though often cited in reproductive health education as the option one in the ABC of sexually transmitted disease infection contraction and medium of preventing risky sexual behavioural outcomes, it has receivedvery limited prioritization[13] and focus in terms of reproductive health campaigns as well as research and funding. It has been left to the clergy to do the education which often is done without recourse to the medical and health benefits but rather grounding in religious and cultural values [14, 15].

Youth friendly sexual and reproductive health services (YSFRHS) have been recognized as an appropriate and effective strategy to addressing the Sexual and Reproductive Health (SRH) needs of the youth following the international Conference

on Population and Development in Cairo; Egypt, 1994 [16, 17]. Senderowitz, Hainsworth [18]admit that the essence of the friendliness of Sexual and Reproductive Health Services for the youth are because of the specific biological and psychological needs of the youth, the high risks of STIs, HIV, and pregnancy, disproportionately high risk of sexual abuse.The national Youth council of Malawi defines Youth Friendly Reproductive Health Services as health facility-based sexual and reproductive health services provided to the adolescents or the youths in a youth-friendly manner[19]. These services include provision of educational services, contraceptives, STI treatment, post-abortion and antenatal services. It must,however, be acknowledge that what constitute a youth friendly manner is subject to national protocols. This is because the variety of reproductive health services offered across countries is limited in some extent due to legal boundaries that exist in some countries. In developing countries like Ghana, while the service protocols that define friendliness is all involving, it differs in package and volume from that offered by Ethiopia, Kenya and Uganda and South Africa.

This is due to the fact that youth friendliness as a concept is beginning to gain groundsin Ghana with myriad challenges[12]hence the need for research to evaluate the intervention and improve upon it.While studies have indicated that the barriers faced by the youth in the utilization of services is attributed to the quality of the sexual reproductive health care offered[20], others view cultural norms as a critical component that continues to influence youths' behaviors and actions with regards to sexual and reproductive matters [21]. There are even instances where facilities are not available to the youth[22].This stems from the absence of a proper appreciation for the importance of sexual health care complemented with the current rapid social, political and economic transformations which has profound impacts on the social norms affecting the youths[23, 24].Other studies also hold the same view concerning cultural norms serving as barriers to the youth in accessing proper sexual health care services[25-27]. Tilahun, Mengistie [28] and Mbugua [29] have shared the viewthat the health workers in the various health centers are reluctant to teach the youths issues regarding sexual reproductive. This makes services unfriendly as the attitude pose a barrier to the youth in reproductive health service access.Pathfinder international[9] opines that inadequate behavioural change among service providers and as well as the youth remain major barriers to making sexual reproductive health service youth friendly. The paper examinesthe friendliness and utilization of youth sexual and reproductive health services in the Kwadaso Sub-Metro of the Ashanti Region, Ghana.

METHODS

StudyArea

Ghana is a lower middle-income West African country, with an estimated total population of24,658, 823 (GSS,2012). The average life expectancy at birth for Ghanaian males is 60(59 for male and 60.7 for females. The study was conducted in the Kwadaso Sub-metro district of Ghana. It is one of the Sub Metro district constituting the Kumasi metropolis located in the western part of Kumasi. It shares boundary with Atwima Nwabiagya (Nkawie) to the north, Bantama to the South Nhiaeso to the east and the AtwimaKwawoma (Ofoase) to the west with a population of 220,798out of which 84,083 [12]are youth aged 10-24 years.The sub-metro district is an urban setting with several educational establishments. One of the nation's public Universities is located in this sub metro district; the University of Education Winneba-Kumasi campus. The Sub Metro Council has more than five hospitals within its boundaries. It has a very youthful population with several artisanal and apprentice's shops located in the area.

Study Design and Sampling

The study used a cross sectional design involving qualitative and quantitative methods to assess the youth friendliness on sexual and reproductive health services in the Kwadaso Sub Metro Council in Ghana.The study administered structured questionnaireto 150 youth in classrooms and a voice recording interview with20 youth in affiliated category to obtain a total sample size of 170 participants. The two stage sampling procedure was adopted. At the primary stage one, the Kwadaso Sub Metro Council was randomly sampled out of the nine Sub Metros in the Kumasi Metropolis. The schools in the study area were stratified according to level of education.

Three schools were purposely selected out of the Tertiary, Senior High and Junior High School categories in the Sub Metro Council. The stage two sampling involved the application of the stratified sample according to the class of the students in the categories. Through the stratified sampling, out-of-school youth were classified into "affiliated youth 'and "unaffiliated youth "after which ten respondents were sampled from each category randomly.

The proportional allocation of 50 sample size to each of the three purposely selected schools aided in the sampling process. In each school, the classes formed the strata. Fifty questionnaires were distributed proportionally by a 15:15:20 to first, second and third year students in the Tertiary (Nursing Training) and Secondary school. The proportion of 20: 30 formed the basis for collecting data from the Junior high school students as the first year(JHS1) pupils were considered too young by

the researchers to be able to appreciate into detail the questions asked.The dependent variable was "utilization of sexual and reproductive health services" and "satisfaction with sexual and reproductive health service" with the independent variable being youth friendliness.The data collection instruments were pre-tested at Elite College; a mixed sex secondary school after which modifications were made.

Statistical Analysis

The data was analyzed using descriptive statistics to generate frequencies and percentages. Analysis was carried out by means of the SPSS 20.0 statistical software package SPSS. The qualitative data was analyzed through content analyses which involved the examining of the recurring themes in the transcribed data.

Ethical Clearance

The study conformed to the Ethical clearance standards from the Department of Sociology and Social Work. Additionally, the researcher sought informed consent from the heads of the schools, the students engaged in the study and the out-of-school youth.

RESULTS

Table1: Youth knowledge of family planning method

Variable	*Frequency*	*Percentage*
○ Pill	37	24.7
○ IUD	18	12.0
○ Injections	29	19.3
○ Foam/Jelly	6	4.0
○ Condoms	60	40.0
○ Female sterilization	1	0.7
○ Male sterilization	9	6.0
○ Natural method	17	11.3
○ Withdrawal	12	8.0
○ Herbs	3	2.0
○ Abstinence	20	13.3
○ None	30	20.0

Table 1 provides results on youth knowledge on family planning options known. Knowledge about the family planning method known to the youth was obtained by asking the youth to tick against the method known to them. A total of 60 respondents representing 40.0% of the youth said they were more aware of condom usage than any other method of family planning. Another 37(24.7%) of the respondentsrevealed that they were more knowledgeable about the usage of pill. The use of injections was also known to 19.3% of the youth. The rest of the methods youth were aware of per the study were IUD (12.0%), Natural method (11.3%), withdrawal (8.0%), foam/Jelly (4.0%) and Herbs (2.0%). The study, however, revealed that30 respondents representing 20.0% claimed they did not know of any of the methods. This notwithstanding, a total of 20 youth representing a percentage of 13.3% claimed they knew about abstinence a family planning method.

Table 2: Whether in-school youth has heard of Youth friendly sexual and reproductive health services (YFSRHS)

Variables	*Frequency*	*Percentage (%)*
Heard about YFSRHRS		
○ Yes	87	58.0
○ No	63	42.0
Total	150	100.0

Table 3: Whether out of school youth has heard of sexual and reproductive health services (YFSRHS)

		Out of school youth		
		Affiliated youth n (%)	***Unaffiliated youth n(%)***	**Total**
○	Yes	5 (50)	6 (60)	55.0
○	No	5 (50)	4 (40)	45.0
Total		10 (100)	(10)	100.0

Table 2 and Table 3 present whether youth has heard about youth friendly sexual and reproductive health. With respect to the number of youth who had heard about youth friendly reproductive health services, the majority of in-school youth (58.0%)had heard about such services. Nonetheless, 42.0 %of in-school youth indicated they had not heard about such services. The number of proportion of out of school youth who had heard about youth friendly sexual reproductive health services was relatively lower than their counterparts in school (55%).

Structured Interviews conducted with the out of-school-youth (Affiliated and unaffiliated category) showed that 60% (6/10) of youth who were in Unaffiliated category (street sellers, traders at the Sofo line area and vendors on Ohwimase road) had heard much in relative terms about youth friendly reproductive health than their counterparts belonging to the affiliated/apprentices and trade learning category (50%).An interview with an airtime seller (unaffiliated youth) affirmed service use by indicating “I have heard about reproductive health services and used one before. It was access at a hospital down there”.

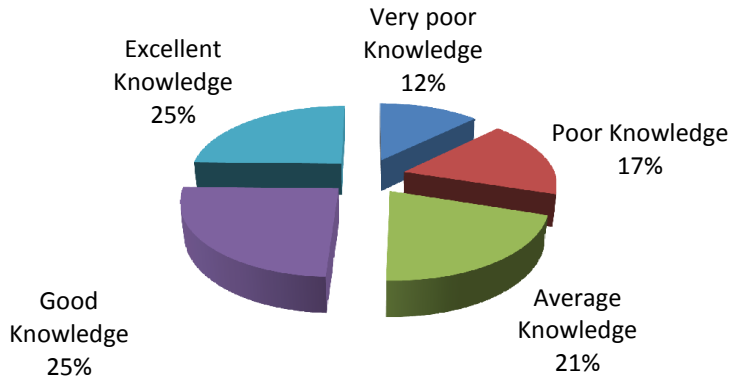

Fig 1: Assessment of youth knowledge on youth friendly sexual and reproductive health services

In assessing the knowledge levels of the study participants on YFSRH matters from the perspective of the in- school youth, it was revealed that 25% of the youth had excellent knowledge about YFSRH matters, 25% had good knowledge while 21% of youth rated the knowledge they had as average. On the other hand, 17% of the youth revealed that in assessing the YFSRH matters they had poor knowledge while another 12% added that overall very poor knowledge have been acquired. The implication is that half (50.0%) of the youth consider the knowledge level as being above average.

Table 4: Youth visit to resource center in the last six months

Variables	*Frequency*	*Percentage (%)*
Visit to the resource center in the last six months		
○ Yes	19	12.6
○ No	24	16.0
○ Don't Know of any Resource Centre	107	71.4
Total	**150**	**100.0**
Reason for visiting the resource center		
○ Meet friends	6	31.6
○ Recreational activities	3	15.7
○ Get reproductive health information	8	42.2
○ Share reproductive health information	2	10.5
○ Use internet services	**19**	**100**
Total		

Youth knowledge of the existence of a youth center in the study area was very minimal (28.6%). Out of the total of 43 who were in the known of an existing youth center in the study area, less than half 19 (44.2%) visited the youth center in the past half year as presented in Table 4. In a sharp contrast, none of the out-of school youth who were interviewed knew about the availability of a youth resource center in the district. A male youth who was a store keeper indicated that "there is no Youth center here, are you talking about the community center, we don't know of any youth resource center"

Among the reasons cited by the youth who had visited resource centers were 10.5% (2/19)to obtain reproductive health information, 3.3% (6/19) to meet friends, 15.7% (3/19) recreational activities, 10.5 % (2/19) share reproductive health information. This however implies that the majority of youth who accessed the resource center within the last six months 42.2 % (8/19) went to get information on reproductive health.

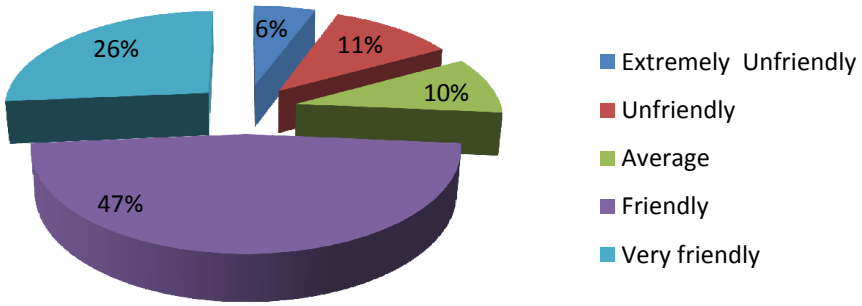

Fig 2: Youth assessment of peer counselor level of friendliness

In evaluating the peer counselor's level of friendliness during youth last encounter, the majority (47%) of the respondentssaid the peer counselor was friendly, 26% said very friendly, 10% considered the peer counselors friendliness as average. On the contrary,a total of 11% of the respondents opined the counselor was unfriendly whilst 6% revealed they were extremely unfriendly.

Table 5: The use of reproductive health servicesat hospitalby In-school youth in the last six months

Variables		*Frequency*	*Percentage (%)*
Visit to Hospital for RH in the last six months			
○	Yes	30	20.0
○	No	120	80.0
Total		**150**	**100.0**
Reason for visiting the hospital for RH			
○	Treatment for STIs infection	10	33.3
○	Family planning	5	16.6
○	Counseling	13	43.3
○	Abortion and pregnancy	2	6.6
Total		**30**	**100**

In gathering information about whether youth had visited the hospital or clinic in the last six months for reproductive health services, 120 respondents representing 80.0%said they had not while 30 respondents representing20.0% said they had visited a hospital or clinic for reproductive health services in the last six months.Among respondents who visited the hospital for RH services, the majority (43.3%) said they visited there for counseling services, 33.3% visited there for STIs treatments, 16.6% for family planning and 6.6% received services on abortion and pregnancy related issues.

Table 6: Youth satisfaction with the attitude of the nurses and the nature of the services received

	Variables	*Frequency*	*Percentage (%)*
○	Very satisfied	19	50.0
○	Satisfied	6	15.8
○	Neither satisfied nor dissatisfied	8	21.0
○	Dissatisfied	5	13.2
Total		**38**	**100**

A total of 19 youths who had used facility based representing half the total youth who had ever utilized facility based sexual reproductive health services said they were very satisfied with the attitude of the nurses and also the type of the services they received. Another 15.8% said they were satisfied while 21.0 % were ambivalent about the services received and such were neither satisfied nor dissatisfied. However, five of the youth signifying 13.2% were dissatisfied with the attitude of the nurses and also the nature of services they received from the health facility. Out of the five (5) out- of-school youth who were interviewed and had used facility based reproductive health services, three (3), of them considered the attitude of nurses friendly as well as the nature of the services

Table 7: Youth assessment of the friendliness of FBSRHS received

Variable		*Frequency(N=43)*	*Percentage (%)*
▪	Very friendly	17	39.5
▪	Friendly	19	44.1
▪	Unfriendly	5	11.6
▪	Extremely unfriendly	2	4.6
Total		**43**	**100**

Table 7presents responses on respondents who had used any facility- based sexual and reproductive health service. The total number of youth who had used facility-based sexual and reproductive health services was 43 comprising 38 in-school youth and 5 out-of school youth. This represents 25.2% of all the youth studied. The respondents gave an overall assessment of the facility-based sexual and reproductive health services receivedabout39.5% of the respondents considered services as very friendly and44.1% said the services were friendly. On the contrary, 11.6% of the youth said facility-based sexual and reproductive health services utilized were unfriendly and 4.6% said they were extremely unfriendly.

DISCUSSION

The aim of the study was toexplore the friendliness of sexual and reproductive health service provision and utilization. The findings of the study revealed that 58% of youth had knowledge on YFSRH. In fact, knowledge on youth friendly sexual reproductive health isrelevance to the youth in ensuring healthy sexual behaviour as previous research have demonstrated[22]. Most of the youths who visited resource centre in the past six months did so in order to get reproductive health information. However, nearly one third visited the centres just to meet friends and others went there to undertake recreational activities as well asto share reproductive health information. Accessibility of the youths to Youth counsellors outside the domain of hospitals is very fundamental as attested by [4] who proposed that friendliness of reproductive health services should focus on youth and peer out-reach programmes which are innovative platform in identifying and reaching the youth in variety of places. Finding again corroborated with previous study by [30]. In contrast to [30] on the specificity of reproductive health outreach programmes, community outreach programmes were absent and almost non-existing according to the findings of this study.

Youth further indicated that the reproductive health services they accessed were very friendly.This implies that the service providers are leading the frontier to ensuring that youth have a welcoming reproductive health services. However, the finding of friendly reproductive health services fail to concur with previous studies in Kenya [29] and Ethiopia [28] respectively, where sexual and reproductive health services provided to adolescence were rated unfriendly. Consistently, the friendliness of the services offered to the youth at the facility support earlier finding by [9] and[8]. Despitethis, the satisfactory/friendliness level of services delivered unto the youth in the previous study were lower than the results accounted for in this study. Though the study of Sedgh [8]depicted some level of satisfaction among the youth; its level was not as much as the level of satisfaction expressed in this particular research. Less than a fifth of the youth rated the services they received as extremely unfriendly. Furthermore, the finding revealed that a relatively low number(27%) of youth have ever used modern contraceptive. This finding corroborates similar studies by the UNFPA (2012A) and Prata, Weidert [6]though the modern contraceptive usage reported in this study is lower than the national average for the same age group.

Interestingly, greater number indicated that they would not visit the reproductive health centre for services despite the greater satisfaction they received. This goes contrary to the argument held by[20],[10]and[9] that youth friendly services are able to attract the youths and succeed in retaining them for continuity of care. The fact that the youth would not visit health facilities despite their greater satisfaction could be fuelled by Maclean [11]viewpoints that encouragement for young people to access services at health facilities is very poor. That is, despite the levels of satisfaction affirmed by the few youth who have ever accessed; little is done to encourage first timers to access reproductive health services subsequently.

Large number of the youth indicated that they have never used reproductive health service and are not aware of any youth friendly services rendered to them; though some (marginal) expressed awareness of the service. This goes on the same path with Senderowitz and Kirby [22] finding that high level of youth awareness increases their knowledge on reproductive health services and their utilization

CONCLUSION

The findings of this study highlight the need for multi-sectorial approach and diverse strategy of interventions in encouraging youth to utilize sexual reproductive health service. Such intervention should have as their focus, providing services that directly meet the needs of young persons as they are involved in the design of the interventions. It is significant to add that out of facility services will be tailored for the youth to increase service access. This requires that both out of school youth and in-school youth are factored involve schools in the design of programmes to promote healthy lifestyles.

LIMITATION OF THE STUDY

The study design was a cross-sectional. The researcher included both lifetime and current explanatory variables. It will therefore be difficult establishing temporality and causal associations. Additionally, most of the responses were confined to forced-choice responses (e.g., yes/no). This has a potential of precluding more detailed and in-depthresponses as the results of the qualitative aspects are presented only on out of school youth. In interpreting the quantitative results one should be guided by the possible greater detail and appreciation of issues discussed through the in-depthqualitative findings. The data collected were retrospective and as such the need of recall by the youth. Studying such an area as sexual behaviour may give respondents a difficulty as respondents might resort to guessing at times about their past sexual engagements. However, the study was subjected to rigors scientific methods; pre-testing, probability sampling which did not affect the validity of the findings.

AUTHOR'S CONTRIBUTION

ASCY conceptualized and designed the study, interpreted the results, wrote the manuscript and approved the final manuscript as submitted; EB collaborated in interpreting the data and preparing the manuscript; JDM and TH both collaborated in the final review of the manuscript and in preparing the manuscript; AM collaborated in organizing data collection and input and also preparing the manuscript; All authors have read and approved the final manuscript.

REFERENCES

[1] UNICEF, *Children in Ghana*. 2009, UNICEF/Ministry of Women and Children's Affairs: Accra, Ghana.

[2] Blanc, A.K. and A.A. Way, *Sexual behavior and contraceptive knowledge and use among adolescents in developing countries.* Studies in family planning, 1998: p. 106-116.

[3] Kesterton, A.J. and M. Cabral de Mello, *Generating demand and community support for sexual and reproductive health services for young people: A review of the Literature and Programs.* Reprod Health, 2010. **7**: p. 25.

[4] Townsend, J.W., et al., *Sex education and family planning services for young adults: alternative urban strategies in Mexico.* Studies in Family Planning, 1987: p. 103-108.

[5] Greene, M., *By Choice not by chance: Family Planning, Human Rights and Development*, R. Kollodge, et al., Editors. 2012, United Nations Population Fund: United States.

[6] Prata, N., K. Weidert, and A. Sreenivas, *Meeting the need: youth and family planning in sub-Saharan Africa.* Contraception, 2013. **88**(1): p. 83-90.

[7] Guttmacher Institute. *Adolescents in Ghana: Sexual and Reproductive Health*. 2004 July, 2004 [cited 2012 June 30, 2012]; Available from: http://www.guttmacher.org/pubs/rib/rib1-04.html.

[8] Sedgh, G., *Abortion in Ghana.* Issues in brief (Alan Guttmacher Institute), 2010(2): p. 1-4.

[9] Pathfinder International, *Youth-Friendly Services: Ghana nnd of program evaluation report*. 2005, Pathfinder International: USA.

[10] Kane, M. and T. Colton, *Integrating SRH and HIV/AIDS services: Pathfinder Internationals experience synergizing health initiatives.* 2005.

[11] Maclean, A., *Community involvement in youth reproductive health and HIV prevention: A review and analysis of the literature.* Family Health International/YouthNet, 2006.

[12] Ghana Statistical Services, *Population & housing census: Summary report of final results 2010*. 2012, Ghana Statistical Service Accra, Ghana.

[13] Inyang, M.P. and O.P. Inyang, *Nigerian secondary school adolescents' perspective on abstinence-only sexual education as an effective tool for promotion of sexual health.* F1000Research, 2013. **2**.

[14] Underhill, K., D. Operario, and P. Montgomery, *Abstinence-only programs for HIV infection prevention in high-income countries.* Cochrane database syst rev, 2007. **4**(4).

[15] Trenholm, C., et al., *Impacts of abstinence education on teen sexual activity, risk of pregnancy, and risk of sexually transmitted diseases.* Journal of Policy Analysis and Management, 2008. **27**(2): p. 255-276.

[16] DeJong, J., *The role and limitations of the Cairo International Conference on Population and Development.* Social Science & Medicine, 2000. **51**(6): p. 941-953.

[17] McIntosh, C.A. and J.L. Finkle, *The Cairo conference on population and development: A new paradigm?* Population and development review, 1995: p. 223-260.

[18] Senderowitz, J., G. Hainsworth, and C. Solter, *A rapid assessment of youth friendly reproductive health services.* 2003.

[19] National Youth Council of Malawi (NYCOM), *Youth Friendly Reproductive Health Services training manual for health providers*. 2001, National Youth Council of Malawi Malawi.

[20] Senderowitz, J., *Making reproductive health services youth friendly*. 1999: FOCUS on young adults.

[21] Godia, P., *Sexual reproductive health service provision to young people in Kenya; what is the best model?* 2012, University of Liverpool.

[22] Senderowitz, J. and D. Kirby, *Standards for curriculum-based reproductive health and HIV education programs.* Arlington, VA: Family Health International/YouthNet, 2006.

[23] Blum, R.W., *Youth in Sub-Saharan Africa.* Journal of Adolescent Health, 2007. **41**(3): p. 230-238.

[24] Ham, F., *Aids in Africa - How Did it Ever Happen*. 2004, Malawi: Kachere Series,. 224.

[25] Kaler, A., *AIDS-talk in everyday life: the presence of HIV/AIDS in men's informal conversation in Southern Malawi.* Social science & medicine, 2004. **59**(2): p. 285-297.

[26] Kaler, A., *"My Girlfriends Could Fill A Yanu-Yanu Bus": Rural Malawian Men's Claims About Their Own Serostatus.* 2003.

[27] Chege, J., *Interventions linking gender relations and violence with reproductive health and HIV: rationale, effectiveness and gaps.* Gender, Culture and Rights, Agenda Special Focus, 2005. **115**: p. 114-123.
[28] Tilahun, M., et al., *Health workers' attitudes toward sexual and reproductive health services for unmarried adolescents in Ethiopia.* Reprod Health, 2012. **9**(1): p. 19.
[29] Mbugua, N., *Factors inhibiting educated mothers in Kenya from giving meaningful sex-education to their daughters.* Social Science & Medicine, 2007. **64**(5): p. 1079-1089.
[30] Bond, K., *Key issues in the implementation of programmes for adolescent sexual and reproductive health.* 2004.