

Research Article

Introducing a School-Based Sexual and Reproductive Health Curriculum in Ketu South Municipality of Ghana: The Perspective of Stakeholders

Polishuk RM^{1,2}, Nyadanu SD^{2*}, Adampah T² and Nawumbeni DN²

¹Nurse Practitioner-University of Vermont Medical Center, USA

²ECHO Research Group International, Aflao, Ghana

*Corresponding author: Nyadanu SD, ECHO Research Group International, Aflao, Ghana

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Abstract

Background: There are numerous evidences of the risk of sexual and reproductive ill health and the associated medical and socio-economic burdens on teen mothers. For developing countries in particular, adolescents are not given adequate and timely Sexual and Reproductive Health (SRH) information and services. The question is what is the perception of the stakeholders on the provision and implementation of SRH information and services to the young people?

Methods: A cross-sectional approach was used to elicit the views of the frontline community stakeholders on the introduction of a school-based SRH curriculum. Adolescents SRH presentation and focused discussion was held with invited stakeholders. A structured evaluation questionnaire, covering the major areas of concern for SRH programmes was administered to the participants. The information from the focused discussions and responses to the questionnaire were analysed.

Results: All the 24 stakeholders who participated endorsed the need for the introduction of the SRH curriculum. They chose junior high school to be the most appropriate level for this project. In covering and ranking the major areas of concern and the need for SRH programmes, the stakeholders first three priorities were reduction in teen pregnancy, promotion of abstinence and prevention of HIV/AIDS. With the exception of one respondent stating otherwise for local religious groups, all respondents believed that SRH curriculum would be supported by parents and community members, traditional leaders and civic organizations. Financial constraint was cited by 45.8% of the respondents as the main inhibitor. Twenty-two (91.7%) of the respondents expressed interest to participate in the design, implementation and evaluation of the school-based SRH curriculum and programmes in the municipality.

Conclusion: The stakeholders showed positive perception to the provision of SRH information and services to the adolescents and had showed strong desires to promote and participate in all stages of the adolescent SRH programmes in the area. To the stakeholders, the main reasons for introduction of SRH programmes are to reduce teenage pregnancy, promote abstinence and prevent HIV/AIDS. It is therefore anticipated and suggested by both the researchers and the stakeholders that further study should be supported to design and pilot a field trial in selected schools in the district.

Keywords: Sexual and reproductive health; Curriculum; Adolescents; Teenage pregnancy; Ghana

Abbreviations

AIDS: Acquired Immune Deficiency Syndrome; AGI: Alan Guttmacher Institute; CHNs: Community Health Nurses; GDHS: Ghana Demographic and Health Survey; GES: Ghana Education Service; GHS: Ghana Health Service; HIV: Human Immunodeficiency Virus; JHS: Junior High School; SHS: Senior High School; MDG: Millennium Development Goal; PHC: Population and Housing Census; PTAs: Parent-Teacher Associations; STIs: Sexually Transmitted Infections; SRH: Sexual and Reproductive Health; UN: United Nations; UNFPA: United Nations Population Fund; WHO:

World Health Organization

Introduction

Adolescents constitute the greater proportion of the population. Adolescent fertility is important on both health and social grounds because children born to very young mothers are at increased risk of sickness and death. Teenage mothers are more likely to experience adverse pregnancy outcomes and are more constrained in their ability to pursue educational opportunities than young women who delay childbearing [1]. There is a great knowledge deficiency in adolescents about Sexual and Reproductive Health (SRH) issues.

Adolescents prefer to obtain SRH information and services at established centres such as clinics, hospitals and schools but due to unavailability of established SRH programmes and shyness, they tend to many other sources which are not helpful to them. Action is therefore needed on many fronts to meet these SRH needs of the adolescents [2]. In 2007, the U.N. General Assembly emphasized the importance of SRH in the Millennium Development Goal 5 (MDG 5) with the target of *achieving, by 2015, universal access to reproductive health* [3]. Beyond improving maternal health and reducing maternal mortality, improved SRH offers a wide range of benefits; medical and non- medical to individuals, families, and societies at large. For the developing countries in particular, increase and sustain investment in sexual and reproductive health services had shown substantial returns in terms of economic growth, societal and gender equity, and greater participation in democratic governance [4]. Among the five strategic plans cited by United Nations Population Fund (UNFPA) framework for achieving reproductive rights and SRH for all, particular emphasis was made on the rights and needs of adolescents and youth [5]. Findings from the 2004 National Survey of Adolescents in Ghana and other studies highlighted that; females are more likely than males to indulge in sexual activities as teenagers. Moreover, many sexually active adolescents do not use contraceptives and that fear of pregnancy rather than STIs motivates many youth to avoid sex or use contraceptives [6-8]. The 2004 survey of Ghanaian adolescents calculated that 9% (90 per 1,000) of adolescents, aged 15-19, had given birth and that 42% of these do not want their last birth, while an additional 30% wanted to delay the birth to a later time [9]. The 2014 Ghana Demographic and Health Survey (GDHS) reported that 14% of women, aged 15-19 began having their first child, 11% have had a live birth and 3% were pregnant as at the time of the survey. The survey revealed that there is a rise in teenage-childbearing from 1% at age 15 to 31% at age 19 and with those without or little education tending to start bearing children earlier [1]. Complications of teenage pregnancy are numerous, ranging from socio-economic effect on the teenage mother, unsafe abortion, death and many more. Infants born to adolescent mothers also have higher rates of mortality, with lower birth weights and poorer overall health outcomes often related to the young mother's inability to adequately care for the child [10].

Generally, the unmet need for family planning is particularly high in sub-Saharan Africa. In 2007, only 22 per cent of women, aged 15-49, married or in a union were using any method of contraception [3]. According to the 2014 GDHS [1], the use of contraceptives increased somewhat over the last six years, from 24 percent and 17 percent respectively in 2008 to 27 percent and 22 percent in 2014. Among unmarried sexually active women, 42 percent have an unmet need for family planning and 45 percent are currently using a contraceptive method. Hessburg, *et al.*, (2007) [2] reported that only 28% of females and 21% of males had awareness about a woman's fertile period. They further stated that, females can become pregnant as a result of her first experience of intercourse. Some individuals have the awareness but are not accompanied by knowledge on how pregnancy occurs [6]. There are numerous medical, social and economic benefits to be realized from investing in sexual and reproductive health education and its interventions aimed at helping young women to control their fertility.

Extensive demographic evidence uncovered the need for

improved SRH knowledge services for adolescents living in rural areas of sub-Saharan Africa. Several studies have therefore recommended the design and implementation of school-based SRH curriculum. However, this has not been given the required practical policy consideration by the stakeholders in the developing countries such as Ghana. What could be the cause of the neglect? This research therefore aimed to adopt the community-based participatory approach, firmly grounded in the principles of community health nursing [11] to explore the opinion of the forefront community stakeholders on the introduction of a school-based SRH curriculum in the Ketu South municipality of Ghana.

Methods

Location and demography of the study area

Ketu South Municipality with a total land size of 779 square kilometres lies at the south-easternmost corner of the Republic of Ghana, West Africa, sharing the eastern border with the Republic of Togo, western border with the Keta Municipality, northern border with Ketu North District and bordered on the south by the Gulf of Guinea [12]. The district was further divided into zones/circuits for easy administrative works. The population of Ketu South municipality according to the 2010 Population and Housing Census (PHC) was 160,756, comprising of 52.9% females and 47.1% males with sex ratio of 88.9. A little over half (53.4%) of the municipal's population is rural with 37.8% of the population under 15 years and total age dependency ratio of 77.8. The Total Fertility Rate is 3.1 and with General Fertility Rate of 92.7 births per 1000 women aged 15-49 years. The crude birth and death rates are 24.2 and 7.2 per 1000 population respectively [13]. The basis of the local economy is small-scale agriculture (farming, fishing, and livestock), engaging 42.7% of the population [12]. The predominant culture and language is Ewe, one of the Ghanaian local ethnic groups and languages. However, all formal education, as well as all official business transactions is conducted in British English. The Ghanaian educational system is organized into four levels, primary (kindergarten through grade 6), three years of Junior High School (JHS), three years of Senior High School (SHS), and tertiary (three-year diploma programs and four-year degree programs, and master's and doctoral programs of varying lengths).

Materials and processes

The Municipal Directors of Education and Health services were met to discuss and their approval and support sought for proposing the school-based SRH curriculum. Approval was also sought from the Municipal Chief Executive. Invitations were issued to the mutually agreed stakeholders. The categories of the stakeholders invited to participate in the study were: Director of Education, circuit supervisors from each of the five circuits, one JHS headmaster from each circuit, and any other district education service personnel with an interest in reproductive health education; the Director and Assistant Director of Health Services or their representatives, the Disease Control Officer, the Principal Nursing Officer, one community health nurse from each of the six circuits, and any other district health service personnel concerned with reproductive health; the Deputy Director of Nursing Services at the Aflao District Hospital. A PowerPoint presentation outlining the international, national, and regional policy initiatives and support for improving SRH education was done to the

Table 1: Need and Health Goals for SRH education (N= 24, Yes = 24, No =0).

Indicator	Reason for need of SRH education, number cited	Health goals, number cited	Health goals rank
Decrease teen pregnancy	11	11	1 st
Lack knowledge	9		
Decrease STIs	6	5	
Prevent HIV/AIDS	5	14	3 rd
Decrease Unsafe abortion	5	6	
Increase contraception use		8	
Promote abstinence		8	2 nd
Increase school retention	5		
Female SRH rights	4		

participants. Two-day presentations were delivered; the first geared towards participants from the Ghana Health Service (GHS), the second towards those from the Ghana Education Service (GES). The presentation included national and district statistics, demonstrating the need for SRH education, as well as proposed standards or guidelines for the development and implementation of a SRH education programme. At the end of the presentation, an evaluation questionnaire (Appendix) aimed at eliciting comments, observations, and suggestions from the presentation was administered to the participants concerning the design, implementation, and evaluation of a school-based SRH curriculum for the district. The questionnaires were developed using the principles of community health nursing [11], the participatory action research [14] and a set of standards developed specifically for use in establishing reproductive health and HIV prevention programmes [15]. The evaluation questionnaire covered the major areas of concern for SRH programmes: fertility, STIs/HIV/AIDS, contraception, abortion as well as the major aspects of program development: design, implementation, evaluation, sources of support and funding, and potential obstacles. After reviewing the responses from participants at the first session, two questions were modified in an attempt to elicit more specific information. Focused discussions were also held. Ten evaluation questionnaires along with electronic copies of the presentation were distributed to the invited individuals who were unable to attend the sessions. The evaluation questionnaire and the focused discussions were intended to elicit participant's views on SRH education issues in the local setting.

Results

Response to the questionnaires

A total of 22 individuals attended the two sessions, with 15 participants on the first day and 7 on the second day. Attendees included public health nurses (2), community health nurses (7), headmasters (1 JHS, 1 SHS), teachers (2 SHS), the Girls' Education Officer, the Guidance and Counselling Coordinator, the Assistant Director of Supervision for GES who is also a local Protestant minister, and ECHO Ghana members (6). Out of the 22 attendees to whom the written evaluation questionnaires were given after the presentation, seventeen participants (17) completed the evaluations at this time, while four chose to complete them at a later date and return them via email; one attendee chose not to complete the evaluation.

Three of the ten evaluation questionnaires distributed to the invited individuals who were unable to attend the sessions were completed and returned. In summary, of the 32 questionnaires distributed, 24 were completed and returned, yielding a response or returned rate of 75%. The response evaluations are presented below.

The need and health goals for SRH education in the municipality

Questions 1 and 2 ask about the perceived need and most important health goals for SRH education in the district. The responses to these questions are presented in (Table 1), indicating the need and health goals for SRH education as well as ranking of the health goals. All the 24 (100%) respondents agreed that SRH education should be included in the school curriculum and ranked the health goals as reduction in teenage pregnancy, promotion of abstinence and prevention of HIV/AIDS.

Among those with the revised version of the questionnaire soliciting for the most appropriate educational level for the SRH education, six (50%) responded that junior high school would be most appropriate, four (33.3%) of them indicated upper primary grades, and two (16.7%) indicated senior high school.

Support for a school-based SRH curriculum

All the 24 (100%) respondents believed that SRH curriculum would be supported by parents and community members, including traditional leaders and civic organizations. One respondent, however, felt that local religious groups would not support such a curriculum.

Perceived major obstacles or impediments to implementation of the SRH curriculum

The most frequently mentioned obstacle to the implementation of the SRH curriculum was lack of finance, cited by 11(45.8%) of the respondents. Teacher inability to present the topic, religious objections, and unspecified implementation difficulties were each cited by four (16.7%) of the participants. Other likely impediments cited included lack of teaching materials, student inability to change behaviours, leaders with questionable characters (that is; are not good role models), and general lack of attention or awareness of the problem.

Implementation, evaluation and funding

Questions six through to ten of the evaluation cover issues of delivery of the curriculum, community assistance in implementation, monitoring and assessment, and potential sources of funding (Table 2). With regard to the suitability to deliver the SRH curriculum, 8 (36.4%) of the responses each stated that Community Health Nurses (CHNs) and Teachers/Heads are most appropriate while 34.3% of the respondents indicated that religious groups/youths could assist in the implementation. Ghana Health Service (GHS) and Community Health Nurses were cited suitable for monitoring and evaluation of the SRH programme. The main suggested source of funding was the local government represented by the municipal assembly (39.4%).

Interest in participating in design, implementation, and/or evaluation of a school-based SRH curriculum

Twenty-two of the 24 (91.7%) of the respondents expressed interest to further participate in the development of a district-wide SRH curriculum. Eight (33.3%) of the respondents specified an interest

Table 2: Delivery, implementation, evaluation and funding of SRH curriculum, n(%).

Organization/ individual	Suitability to deliver	Assist to implement	Monitor & Evaluation	Funding
Religious groups/youth ministries		12(34.3)		
NGO		5(14.3)	2(4.7)	9(27.3)
District Assembly members		5(14.3)	3(7.1)	13(39.4)
Minister of Parliament				4(11.1)
Federal government				
GHS			12(28.6)	
Hospitals/clinics		3(8.6)	6(14.3)	
CHNs	8(36.4)	2(5.7)	11(26)	
GES			8(19.0)	
Teachers/Heads	8(36.4)			
Guidance & and Counselors	5(22.7)			
Student leaders	1(4.5)			
Opinion leaders		3(8.6)		
Family members		3(8.6)		
PTAs		2(5.7)		
Corporate organizations				2(6.1)
Individuals/Philanthropists				5(15.2)
Total response	22	35	42	33

in evaluating the program, five were interested in implementation, and three expressed an interest in the programme design. All of these respondents provided contact information, including phone numbers and email addresses, if available.

Information from focused discussions

Focus group discussions yielded valuable information regarding SRH needs and related local cultural practices and beliefs. In the course of the focused discussions, district education officials explained that Sexual and Reproductive Health (SRH) is not established as a required part of any current curriculum at any educational level in Ghana. While human reproduction is included as a topic in the science curriculum, administrators, teachers, and students all reported that it is not handled in line of SRH on the ground that it is not required per the curriculum. The community and public health nurses routinely trained in delivering SRH education expressed to be competent in presenting the SRH information to the students. Even though they occasionally visit schools to give presentations on SRH topics, SRH curriculum are not established and these sessions are generally not comprehensive or given required attention by students and some stakeholders because it is not curriculum based. In our discussions, nurses expressed frustration with the lack of a consistent or comprehensive scheduling system, stating that schools frequently cancelled or failed to make time for their presentations. They further expressed their feeling that, given adequate time, priority and well structured school-based SRH curriculum, they could deliver an effective SRH education to students.

Discussion

The strongest and most consistent message expressed in both the evaluation questionnaires and the focused discussions with participants is overwhelming and unequivocal. There is therefore the

need for sexual and reproductive health education for adolescents as suggested in previous studies and reports [2,3,6,16,17]. Respondents were also quite consistent in their views about why this education is needed as well as the major health goals that should guide a SRH education program. The views were ranked as; decrease in teenage pregnancy, promote abstinence and prevent HIV/AIDS. In their responses and discussions, participants acknowledged that, the burden of poor SRH education and services falls disproportionately on the adolescent girls. This reaffirms that teenage mothers are more likely to experience adverse pregnancy burdens and are more constrained in their ability to pursue educational opportunities than young women with delayed-childbearing [1]. The most perplexing and apparently contradictory response was the position of religious groups in relation to SRH education and its content. While all but one respondent believed that religious groups would support a SRH curriculum in the schools, twelve (50%) cited religious groups as a major source of community support in implementing a SRH programme. Four (16.7%) respondents named religious objections as an impediment to implementation. When asked about these conflicting responses, almost all the participants at the smaller second session offered some clarification, explaining that certain religious groups (some Christians, particularly the Catholic Church, and Islamic) would only be supportive of an SRH curriculum if abstinence was advocated as the most beneficial sexual behaviour instead of the use of contraceptives. Responses concerning suitability for delivering a SRH curriculum as well as who would be best qualified to design, implement, and evaluate the program appeared highly influenced by the professional association of the respondents; teachers and educators felt they were best suited for these roles, while nurses and health care professionals also expressed their appropriateness for these duties. This implies that both educational and health service professionals feel competent and could be used to deliver the SRH

education to students. Most encouragingly, all but one participant expressed the desire to participate in future efforts to establish a SRH curriculum in the district. This strong desire clearly indicates that the community stakeholders are ever-ready to support any initiative to address the problems confronting the adolescents as far as their SRH is concerned. Participants offered several particularly interesting and potentially useful suggestions in the course of our discussions. A participant who was interested in promoting abstinence suggested that outstanding students practicing abstinence could be asked to speak to their peers about how they “avoided temptation” and were able to stay in school and focused on their studies. Another participant revealed that the district is currently working on starting “girls clubs” in the junior high schools which could be an appropriate venue for teaching communication skills for girls in relation to their sexuality and reproductive health. Lack of funding was the most frequently stated impediment to implementing a SRH curriculum. Hiring and training appropriate SRH educators and purchasing teaching materials were identified as the most immediate costs. Maintaining staff for on-going monitoring and assessment of the curriculum would also require funding. The GES administrators, however, suggested that the SRH curriculum could be included in currently funded departments and programmes (health education, girls’ education, and guidance and counselling services) as a means of minimizing the additional funding needed.

Conclusion

From the response rate of 75%, the stakeholder’s perception on a school-based SRH curriculum was positive with the aim of reducing the rampant teenage pregnancies and associated outcomes, prevent HIV/AIDS, and to promote abstinence. Despite very few impediments identified, the stakeholders showed the desire and willingness to champion the introduction of the SRH curriculum in schools but the majority suggested that junior high level will be most appropriate. It could be concluded from the overwhelming support for a school-based SRH curriculum by project participants that the community would welcome the opportunity to establish and implement such a programme. Participant’s suggestions regarding the design and implementation of the programme pointed to the way for the next steps in making SRH education a reality in this community. It is evident from this study that, the community-based project has purposefully stimulated the conditions for change and mobilizing citizens and communities for health action with regard to adolescent sexual and reproductive health.

Limitations

The low turnout leading to relatively small total sample size of 24 respondents could be a limitation to the project result’s generalisability. Vigorous pre-testing of the evaluation questionnaire was not done but this might have strengthened the quality and usefulness of the responses of the instrument. Offering much comparison of the project outcomes was difficult, as the review of the literature failed to discover any published information on comparable community-based action projects for SRH education carried out in a similar setting.

Implications for Future Practice and Research

The future directions for this project are various and compelling.

Most immediately, community groups and individuals identified in the evaluation questionnaires (religious groups, PTAs, youth groups, traditional leaders) should be involved in the project through outreach efforts that could include further presentations, questionnaires, and discussions. Most importantly is the support to design and implement a pilot intervention trial in selected district schools that would include detailed pre- and post-curriculum surveys of student knowledge and behaviours related to SRH. Results from these surveys could be important in guiding curriculum design and in measuring curriculum effectiveness. The results of the field trial will necessitate the funding for full implementation of the curriculum coupled with researches involving long-term observation and analysis of changes in behaviours and health outcomes. These district-level efforts should be coordinated with the appropriate regional and national level authorities as well as ministries for improved SRH education and services throughout Ghana. Support of further study to design and pilot a field trial of SRH curriculum in few selected schools in the municipality is highly recommended.

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References

1. Ghana Statistical Service, Ghana Health Service and the DHS Program, ICF International, Ghana Demographic and Health Survey 2014, Key Indicators. 2015.
2. Hessburg L, Awusabo-Asare K, Kumi-Kyereme A, Nerquaye-Tetteh J, Yankey F, Biddlecom A, et al. Protecting the Next Generation in Ghana: New Evidence on Adolescent Sexual and Reproductive Health Needs. New York: Guttmacher Institute. 2007.
3. The United Nations. The Millennium Goals Report 2010. New York: The United Nations. 2010.
4. Singh S, Darroch J, Vlassoff M, Nadeau J. Adding It Up: The Benefits of Investing in Sexual and Reproductive Health Care. New York: The Alan Guttmacher Institute. 2004.
5. United Nations Population Fund. Making Reproductive Rights and Sexual and Reproductive Health a Reality for All: Reproductive Rights and Sexual and Reproductive Health Framework. New York: United Nations. 2008.
6. Awusabo-Asare K, Biddlecom A, Zulu E. National Survey of Adolescents, 2004: Ghana. Ann Arbor, MI: Inter-university Consortium for Political and Social Research. 2008.
7. Amuyunzu-Nyamongo M, Biddleton A, Ouedraogo C, Woog V. Qualitative evidence on adolescents; view of sexual and reproductive health in Sub-Saharan Africa. New York: The Alan Guttmacher Institute. 2005.
8. Kumi-Kyereme A, Awusabo-Asare K, Bankole A. Views of Adults on Adolescent Sexual and Reproductive Health: Qualitative Evidence from Ghana. New York: AGI. 2008.
9. Alan Guttmacher Institute (AGI). Adolescents in Ghana: Protecting the Next Generation: Facts in Brief. New York, NY, USA: AGI, June. 2006.
10. Donovan P, Wulf D. Alan Guttmacher Institute (AGI). Family Planning Can Reduce High Infant Mortality Levels. New York. 2002; 2: 1-4.
11. Anderson D, Guthrie T, Schirle R. A nursing model of community organization for change. Public Health Nursing. 2002; 19: 40-46.
12. Ketu South District Assembly. Four-Year District Medium Term Development Plan (2010-2013). Denu, Ghana: Ministry of Local Government and Rural Development, Government of Ghana. 2010.

13. Ghana Statistical Service. 2010 Population and Housing Census. The District Analytical Report for the Ketu South Municipality. 2014.
14. Minkler M. Using Participatory Action Research to Build Health Communities. *Public Health Reports*. 2000; 115: 191-197.
15. Senderowitz J, Kirby D. Standards for Curriculum-Based Reproductive Health and HIV Education Programs. Arlington, VA: Family Health International. 2006.
16. ICF Macro. Trends in Demographic, Family Planning, and Health Indicators in Ghana, 1960-2008: Trend Analysis of Demographic and Health Surveys Data. Calverton, MD: ICF Macro. 2010.
17. Dick B, Ferguson J, Ross DA. World Health Organization (WHO). Preventing HIV/AIDS in young people: a systematic review of the evidence from developing countries. WHO Press, 20 Avenue Appia, 1211 Geneva 27, Switzerland. 2006; 938: 1-13.