Sexual and reproductive health information in Mulanje District, Malawi: Exploring perceptions of adolescent girls, their mothers and initiators

Kristin Nash

A thesis

submitted in partial fulfillment of the

requirements for the degree of

Master of Public Health

University of Washington

2017

Committee:

Donna Denno
Gabrielle O'Malley
Ellen Schell
Elizabeth Geoffroy

Program Authorized to Offer Degree:
Health Services

University of Washington

Abstract

Sexual and reproductive health information in Mulanje District, Malawi: Exploring perceptions of adolescent girls, their mothers and initiators

Kristin Nash

Chair of the Supervisory Committee:
Donna Denno, MD, MPH
Professor, Pediatrics
Joint Professor, Global Health
Adjunct Professor, Health Services
School of Public Health and School of Medicine

Purpose: Adolescent pregnancy contributes to mortality, morbidity and social consequences due to factors including poorer maternal outcomes among adolescents, unsafe abortion, and school dropout. This study aims to explore what girls in Mulanje District learn about sexual and reproductive health (SRH), the venues and sources currently providing this information, as well as preferred channels of such information. This formative research was undertaken in preparation for an information, education, and communication (IEC) intervention to reduce unintended pregnancy among girls less than 18 years old.

Methods: The data were gathered through semi-structured interviews with three participant groups: adolescent girls, mothers/female guardians of adolescent girls, and women who counsel adolescent girls in initiation rites. Interviews were conducted in 15 different Mulanje village sites. Data were analyzed and coded using Dedoose 7.5.

Results: Most participants confirmed that transactional sex among young girls is common and that some initiation rites still encourage girls to practice sex at puberty. Yet, contraceptives, and even condoms in many cases, are discouraged for girls under age 18. And there are misconceptions about the side effects of contraceptives, as well as barriers to access. Many parents report delaying discussing SRH until after their girls have experienced sexual debut due to concerns that such discussion will actually encourage them to engage in sex.

Conclusions: Taken together, the results of this study indicate conditions that perpetuate high rates of unintended pregnancy. As a result, correct and comprehensive SRH IEC is urgently needed. While each of the study findings must be addressed to improve the problem, IEC on contraception for girls, targeted to girls, parents and leaders of initiation rites, as well as improved access to contraception, represents an effective and practical intervention. Messaging can emphasize the "cost" of not providing contraceptives and condoms in terms of the real costs of birthing and supporting a child. Equally important is training initiation leaders and village chiefs in correct and comprehensive SRH information and incenting them to update their practices accordingly. As gatekeepers, involving parents, especially mothers, is critical to IEC efforts addressing both contraception and timing of SRH education.

Introduction

With almost 35% of girls having given birth by age 18,[1] Malawi has the fifth highest adolescent birth rate worldwide.[1] Rates are higher in rural districts, where underlying causes such as poverty, limited education and economic opportunities, and lack of access to sexual and reproductive health (SRH) care and information are particularly prevalent. Malawi ranks near the bottom of the Human Development Index at 173 out of 188 countries[2] and it has the third-lowest Gross National Income worldwide, according to The World Bank. In addition, with a ranking of 140 out of 155 countries,[2] Malawi fares poorly on the Gender Inequality Index, a measure of reproductive health, as well as female empowerment and economic status. Low gender equality contributes to low decision-making power among girls to negotiate safer sex.

Childbearing among girls under 18 poses significant risk of death and disability to both mother and infant. Girls between ages 10 and 15 generally have undeveloped pelvic anatomy, putting them at risk of obstructed labor and associated morbidities, including high rates of obstetric fistula.[3] Girls between the ages of 10-14 are 5-7 times more likely to die during childbirth than mothers in their 20s. Girls between 15-19 years are twice as likely to die during childbirth as those over age 20.[3] Also illegal, unsafe abortion is common in Malawi, at 23 abortions per 1,000 women aged 15–44,[4] and linked to high rates of maternal mortality. As well, mortality among infants born to mothers under age 18 is 60% higher than those born to older mothers.[3] The risk of preterm birth and low birth

weight is 35-55% higher among babies born to mothers under age 18 than those born to adult mothers.[5] Notably, Malawi has the highest estimated preterm birth rate in the world.[6]

High rates of adolescent pregnancy create economic burden and perpetuate the cycle of poverty at an individual, society and country level. In one study, the children of mothers 19 and younger had 30-40% greater odds of failing to complete secondary school, which is inextricably linked to low socioeconomic status.[7] Alternatively, according to the most recent Demographic and Health Survey, the proportion of adolescents who have begun childbearing decreases as education levels rise: 54% of girls age 15-19 with no education have begun childbearing, compared with 32% of girls with a primary education and 19% with a secondary education.[8]

Adolescent pregnancy and high rates of fertility have created a fast-growing and proportionally young Malawian population -- 38% of the population is aged 10 to 29 -- and many of these young people live in poverty. The population has grown from almost 4 million in 1966 to 16.9 million in 2015. At the current rate, UN projections indicate that Malawi's population could more than double, reaching 37 million by 2050. As Malawi focuses on the Sustainable Development Goals, population growth will pose challenges for its development unless the fertility rate is reduced.[9]

Use of modern contraceptive methods by sexually active unmarried women in Malawi (all age groups) is 43%, and 40% of unmarried Malawian women have an unmet need for contraceptives.[8] In one recent study, 95% of adolescents (male and female) were aware of modern methods of contraception, yet only 19.5% of girls used them.[10] According to another study of Malawian adolescents, reasons for not using contraceptives include: religious and cultural beliefs, negative attitude of clinic staff, and inability to negotiate use with partners. [11] Misconceptions, including a belief that contraceptives can cause cancer or infertility, also contribute to low use of contraceptives among adolescents.[11] In yet another study, younger Malawian adolescents, ages 12-14, also demonstrated general awareness of contraception methods, but 85-92% of them lacked sufficient knowledge about how to prevent unintended pregnancy.[10] There is an urgent need for equipping adolescents, especially early adolescents, with correct and comprehensive SRH information before they become sexually active and unintended pregnancy occurs.

Because IEC is most effective if introduced before sexual debut,[12] determining the age girls are experiencing first sex is important. According to unpublished needs assessment data collected in Mulanje by the Global AIDS Interfaith Alliance (GAIA) in May 2016, pre- and early-adolescent girls are reluctant to share age of sexual debut, but interviewers report that girls at age 11 and younger have started having sex with most becoming active at menarche; and about 94% of girls have had first sex before age 18. Other studies show that

almost 20% of adolescent girls report first sex prior to age 16 and at least 10% by age 12-14.[12] The literature on older adolescents, ages 15-19, is more copious, in part driven by the age stratification scheme within Demographic and Health Surveys. However, more data is needed on how to improve SRH knowledge, attitudes, and practices among early adolescents, including a better understanding of the most effective methods and optimal timing for delivery of IEC.

While progress has occurred since the 1994 International Conference on Population and Development (ICPD), which first framed access to reproductive health, education and care as a right and a "key action" required to support the SRH of adolescents, discrimination toward and inequality among youth has limited the impact of interventions.[13] More recently, UNESCO has framed comprehensive sexuality education (CSE) for adolescents as a human right. In December 2013, Malawi signed the UNESCO Ministerial Commitment on CSE and reproductive health services for adolescents and young people in Eastern and Southern Africa, which among other things, commits participants to implementing quality CSE framework and CSE training for teachers, health providers and social workers. In Malawi, UNESCO has trained 221 secondary school teachers and 240 parent-teacher associations to teach CSE in public schools.[14]

More recently, the Malawi Ministry of Education has incorporated SRH topics into life skills education in primary and secondary school and the Ministries of Finance, Economic Planning and Development, and Youth Development and Sports have developed *Carrying Malawi Forward: Investing in Sexual and Reproductive Health for Young People,*[15] a multimedia advocacy tool to encourage CSE as a means to economic development. It is unknown how much of these educational efforts are concentrated in urban versus rural areas where they are most needed.

In addition, recent research efforts have focused on making SRH services adolescent friendly – that is, accessible, acceptable, equitable, appropriate and effective – in order to encourage utilization among this population.[16] A recent review of what works to increase utilization of adolescent SRH services found that a multi-pronged approach is needed—one that not only targets adolescent friendly improvements in health facilities and training for health workers, but also includes activities to increase demand and community acceptance for services.[16] In Malawi, high rates of adolescent sexual activity and childbearing, low rates of contraceptive use and a high unmet need for contraception led the Ministry of Health to implement a Youth Friendly Health Services (YFHS) program in 2007. In June 2014, USAID published the first evaluation, assessing implementation, coverage and factors influencing uptake of YFHS throughout Malawi. Among the report's recommendations: improve outreach to youth with accurate SRH information – specifically, review content of sex education to

address misconceptions about sex, contraception, and pregnancy – and develop strategies to generate awareness and support among parents.[17] According to a 2013 article reviewing effective adolescent SRH education programs in sub-Saharan Africa -- determined by calculating odds ratios based on pre- and post-intervention assessments[18] -- the most effective programs used multiple communication tools, including posters, models, demonstrations, role play, and print and electronic media, and were designed to reach both in- and out-of-school youth.[18] Overall, school, community, health facility, peer-led and, to a lesser degree, mass media were shown to increase knowledge and promote healthy change in attitude and behavior.[18]

An important, local source of SRH information and education is the "Rite of Passage," or initiation ceremonies, that have been long-established in Malawian culture along with other ceremonies such as those related to pregnancy and those that occur around age six to teach respect for elders and cultural traditions. Such ceremonies, or camps, generally last one week and are especially prevalent in southern rural areas of the country. In Mulanje, the ceremony often known as Ndakula is connected to menarche and pubertal maturation, marking the transition from "girl to woman." According to the unpublished needs assessment data collected in Mulanje by GAIA, 64% and 82% of girls had started menses by ages 13 and 14, respectively. In the rural south of Malawi, 57% of adolescent girls participate in initiation ceremonies according to one study.[19] Among Muslim girls in the south, more than 80%

participate.[19] However, the literature on the content of these rites is scant. An August 2016 GAIA report on initiation ceremonies attended by GAIA staff confirms that girls are told not to divulge what they learn, making it difficult to obtain reliable information. In addition to topics of personal hygiene, respect for elders and caring for family, traditional rites are alleged to advise girls on sexual matters, including how to entice and please sexual partners and sometimes encouraging sex as part of a "cleansing" ritual.[20] In the culture, "cleansing" through sex is thought to "clear the child dust"; failing to do so, according to tradition, can cause the girl to become ill.[20] As a result, some churches have created their own ceremonies that purportedly discourage sex before marriage.[20] Furthermore, practices may be changing, in part due to the HIV/AIDS epidemic.[19] However, both traditional and church-affiliated, or religious, initiation counselors, as well as women who consider themselves both a traditional and a religious counselor, currently conduct these ceremonies in Mulanje and in other villages throughout Malawi.

GAIA is an international NGO that has been supporting HIV prevention, testing and treatment, as well as primary health care activities in the Mulanje District, via mobile health care services, IEC and counseling since 2000. GAIA focused in Mulanje originally due to high rates of HIV infection and poor access to healthcare for the majority of residents. Even as healthcare access and HIV testing rates have improved, rates of adolescent pregnancy and maternal and infant mortality in Mulanje are among the highest in Malawi. The low status of

girls and high rates of unintended pregnancy and their impact on health outcomes has prompted GAIA to develop a SRH IEC and girl empowerment intervention. The effort is informed by evidence suggesting that emphasizing gender, power and rights within CSE both increases empowerment among girls *and* has a greater likelihood of reducing rates of unintended pregnancy.[21] The program includes IEC targeting girls and parents/guardians, and a summit for initiation counselors and chiefs to both honor tradition and work toward correct and comprehensive SRH teachings.

To be effective, we need a better understanding of what specific information to provide, from what sources, and at what ages. This study aims to inform development of GAIA's and other similar programs in rural sub-Saharan African settings, by assessing attitudes about and current and preferred channels and content of SRH information in the Mulanje District as perceived by adolescent girls, mothers/female guardians (M/FGs) of adolescent girls, and initiation counselors.

Methods

Study Design

This is a qualitative, descriptive study. Typical case, purposive sampling was used to recruit participants in each of 15 out of 577 villages in the Mulanje District. The number of interviews was decided on the basis of informational saturation.[22] A GAIA coordinator assisted the research team in choosing which

villages to visit, based on geographic and religious diversity, as well as which could be accessed on remote dirt roads and paths by mini bus. Approximately three villages under each group village headman were chosen, for the total of 15. Interview participants came from three groups:

- adolescent girls, ages 10-18,
- mothers/female guardians (M/FGs) of 10-18 year old girls living in the household, and
- women identified by GAIA and village chiefs as traditional and/or religious initiation counselors for adolescent girls.

Three semi-structured interview topic guides – one each group – were adapted from tools developed and validated by the World Health Organization[23] and translated into the predominant local language, Chichewa, for this study (see Appendix I). Four areas of interest were explored: pubertal changes and menses; sexual expectations and behavior; pregnancy and childbirth; and contraception and condom use. We sought to understand preferences, as well as the content and channels of such information. Additionally, we included a series of questions specifically about initiation counselors to elucidate their role as a source of SRH information in the target community.

Recruitment and Consent

Village chiefs provided the GAIA coordinator with a list of households (with adolescent girls and M/FGs of adolescent girls) that would meet the study

criteria. The team received a list of 15-20 households per village, from which three (or more, if needed) were chosen. The team visited potential participants at their homes and, using the approved recruitment script (see Appendix II), explained the study. If the participant agreed, the researcher completed the informed consent/assent process, which included verbal assent for adolescent girls under age 18 as well as consent from their parent/guardian, and consent from girls who were emancipated minors.

For M/FGs and religiously affiliated and traditional initiation counselors, the same procedure as above was used to obtain verbal informed consent. (See Appendix III for consent/assent scripts.) All subjects were advised that they could stop participation at any time for any reason without any adverse consequences to their eligibility or participation in GAIA programs and services. Identifying information was not collected; the interviews were coded with unique numeric identifiers to maintain confidentiality.

The study protocol was approved by the Human Subjects Division at the University of Washington and the Malawi National Health Sciences Research Committee.

Data Collection

Data collection took place in April, 2016. The lead investigator (KN) along with a team of Malawian interviewers conducted face-to-face interviews. All interviews

were conducted in Chichewa. All interviews were audio-recorded, transcribed, translated into English, and coded for themes and patterns using Dedoose 7.5. Data was analyzed using a thematic approach, allowing the development of overarching categories, sub-themes and inductive interpretation.

Interviews were conducted with 18 adolescent girls ages 13-18, 12 M/FGs and 10 initiation counselors; interviews lasted approximately 45 minutes to one hour each. The lead researcher also conducted a longer interview with a teacher and headmaster of a village government school; this was opportunistic and provided a perspective that triangulated findings.

Although an effort was made to ensure that equal numbers of early (aged 10-14) and older (aged 15-18) adolescents were interviewed, girls in the younger group were reluctant to discuss issues of SRH, with four girls declining to participate. As a result, in the early adolescent sub-group (n=6), there were 50% fewer participants than in the older adolescent sub-group, including two 13 year olds and four 14 year olds. All parents or guardians of adolescent girls interviewed were female, as it is either a mother or a female guardian who discusses SRH with girls in the household. Five parents/guardians declined to participate due to scheduling conflicts. Of the 10 initiation counselors interviewed, four, one, and five identified as being a religious counselor, a traditional counselor, and both, respectively. They all reported beginning as traditional counselors. No counselors refused to participate in an interview.

Results

In addition to qualitative information, limited quantitative demographic data was collected for each of the three participant groups (Tables 1-3). Notably, four girls reported a previous pregnancy, and all were unintended pregnancies (Table 1). Of the five girls who dropped out of school, four dropped out due to pregnancy and one due to lack of finances. The girls had a higher average level of education, having completed 7.2 years, versus 3.4 and 1.8 for M/FGs and initiation counselors, respectively. Ninety-percent of initiation counselors reported having no formal training to conduct initiation ceremonies.

The girls' attitudes toward adolescent childbearing and family planning did not differ between the younger and older adolescent groups, however, one of the youngest participants, at 13 years, had not learned about sex, how pregnancy occurs or anything about contraceptive methods. She was an outlier in this regard. Differences in attitude seemed more likely linked to educational attainment, although this was not specifically addressed in this study.

Qualitative data analysis revealed nine major themes, which are listed and described in detail below. The themes are organized into the following categories: girls' current/preferred sources of SRH information, content and awareness of SRH IEC; M/FG's perception of most important sources, attitudes and timing; attitudes of girls and guardians toward initiation counselors; and perceptions among initiators regarding their role in educating girls.

Table 1. Summary Demographic and Attitudinal Data: Adolescent Girls (N=18)		
	N (%)	Median (mean, SD, range)
Age		
Early adolescent (age 10-14)	6 (33.3)	
Late adolescent (age 15-18)	12 (66.7)	
Average age	15.6	15.5 (15.6, 1.8, 13-18)
Average years of education	7.2	7 (7.2, 1.4, 5-10)
Level of education[1]		
Some primary	10 (55.5)	
Completed primary	6 (33.3)	
Some secondary	2 (11.1)	
School drop-out[2]	5 (27.7)	
Reasons for school drop-out		
Pregnancy	4 (80)	
Lack of finances	1 (20)	
Ever been married[3]	3 (16.6)	
Average age at marriage	16.3	16 (16.3, 1.5, 15-18)
Ever been pregnant[4]	4 (22.2)	
Unintended pregnancy	4 (100)	
Average age at 1st pregnancy	15.3	15.5 (15.3, 1.7, 13-17)
Is childbearing among girls <18 common in your village?		
yes	16 (88.8)	
Attitude toward adolescent childbearing		
think childbearing should wait until >18	18 (100)	
Attitude toward family planning (contraception and condom use)		
Condoms acceptable	12 (66.7)	
Contraceptives acceptable for nulliparous girls	2 (11.1)	
Attitude toward initiation ceremonies		
negative view	8 (44.4)	

1.Educational attainment in Malawi (girls age 15-19, as per DHS age cohort, DHS 2010):
Some primary: 59.6%
Completed primary: 14%
Some secondary: 19.2%
2. Rate of school dropout among girls in Mulanje is 40% (unpublished 2016 GAIA needs assessment).
3. 50% of girls in Malawi are married by age 18 (Malawi Population Data Sheet 2010).
4. 29% of 15-19 year-old girls have begun childbearing in Malawi (DHS 2015-16), an increase compared to 2010 DHS data, when it was 25.6%.

Table 2. Summary Demographic and Attitudinal Data: Mothers/Female Guardians of Adolescent Girls (N=12)

	N (%)	Median (mean, SD, range)
Average age	50.8	46 (50.8, 15.5, 32-80)
Average years of education	3.4	3 (3.4, 3.4, 0-8)
Average age at marriage	19.3	18 (19.3, 3.4,15-26)
Average age at first pregnancy	19.4	18 (19.4, 3.7,16-28)
Average number of pregnancies	7	6.5 (7, 3.9, 2-17)
Average number of living children	5.1	5 (5.1, 1.8, 2-8)
Is childbearing among girls <18 common in your village?		
yes	12 (100)	
Attitude toward adolescent childbearing		
think childbearing should wait until >18	12 (100)	
Attitude toward family planning		
Contraception and condom use unacceptable	10 (83.3)	
Attitude toward initiation ceremonies		
negative view	6 (50)	
Attitude toward education of girls		
think girls should stay in school	10 (83.3)	

Table 3. Summary Demographic and Attitudinal Data: Initiation Counselors (N=10)		
	N (%)	Median (mean, SD, range)
Average age	59	60 (59, 9.2, 45-70)
Average years of education	1.8	1.5 (1.8, 1.69, 0-5)
Religious counselor	4 (40)	
Traditional counselor	1 (10)	
Conducts both traditional and religious initiation ceremonies	5 (50)	
Any training received for becoming an initiation counselor?	9 (90) no	
Is childbearing among girls <18 common in your village?		
yes	8 (80)	
Attitude toward adolescent childbearing		
think childbearing should wait until >18	10 (100)	
Do you address family planning (condoms and contraception) during initiation camp?		
yes	1 (10)	

Girls' current/preferred sources, content and awareness of SRH information

Theme 1. M/FGs, school and outside experts are preferred sources due to regular contact, ability to ask questions, credibility and group learning.
Girls reported that during the initiation ceremony, they could not ask questions. It was clear that having a dialogue and the ability to clarify any questions was important to them. Mothers and female guardians were often preferred for this reason, as well as the daily contact and trust that M/FGs had their best interests in mind and would "not mislead them."

Mother is best because she is the one I am close with and open and because I see her daily makes it easy. 14-year-old girl; XKB01

Participants noted that school and youth clubs for girls led by outside experts, referred to as counselors, had the added benefit of serving groups of girls. Girls reported that participating in a group enabled them to learn from one another's questions and comments and, as a result, learn even more.

At the initiation camp we are not allowed to ask any questions. At school, you can learn about sexual intercourse and be able to ask the teacher where you

don't understand and where you want to get more information. 14-year-old girl; XKA01

When they [GAIA women, counselors, etc.] are educating us, many people especially girls, gather so this helps us to exchange information and we learn more. 16-year-old girl; XBS01

It's important to note that these preferred sources pertain to information on topics of body changes and menses; sexual expectations and behavior; and pregnancy and childbirth. To gain information on condoms and contraceptives, girls preferred to learn from health facilities/healthcare workers.

Theme 2. Contraception is considered harmful and messages for girls discourage its use before age 18 and/or for those who haven't yet borne children. Lack of IEC is also a barrier.

Girls are receiving strong messages that contraceptives are harmful to future childbearing from both M/FGs and initiation counselors. Culturally, contraception is considered a tool for birth spacing, but not appropriate for preventing pregnancy in a nulliparous girl for health reasons.

I say that contraceptives are dangerous for someone who has not given birth before because in future they may not be able to bear children. I tell them it's good to start using contraception when they are married and have kids already. M/FG; YCA01

I tell them contraception ways can look attractive but they are dangerous to girls who are not yet married. They have their own side effects that can make them never to bear children in the future. M/FG; YKB03

The majority of M/FGs and initiation counselors report that they do not address the issue of contraception, and even condoms in many cases, because they feel that it will either encourage girls to have sex or it is inappropriate. This has led to a gap in information on the topic.

Telling a girl aged 10-18 about contraception and condom use is like you are free to do it [have sex], for example the moment she gets contraceptives, she will know that she is safe and will be more sexually active, and will become a prostitute. M/FG; YAA01

Condom use and contraceptive methods? I have not been taught and I don't know anything. 13-year-old girl; XBB01

While attitudes toward contraceptive use, and especially condom use, are slightly more positive among the girls themselves, many girls raised concerns about their purported harmful effects.

Girls can also use a condom, but when the condom bursts they can also get pregnant and diseases. 14-year-old girl; XBA01

They [girls] should learn but they should not be given contraceptives, because using contraception will make them to have problems in future, like damage to the uterus. 18 year-old-girl; XBA02

Among girls who viewed contraceptives and/or condoms as acceptable, they reported access was a problem, due to distance, clinic hours when girls are in school, and unfriendly healthcare workers. In a few cases, they reported not receiving information and access to services until at the hospital during/after childbirth.

Doctors they do shout at them [for seeking contraceptives] since they are young. XKA03; 15-year-old girl

I never learned about these things until in hospital after giving birth, which is too late. 18-year-old girl; XKC02

Theme 3. Awareness of the dangers of early sex and childbearing (unintended pregnancy, birth complications, school dropout) is high, but behavior has not changed accordingly.

Even the youngest girls were familiar with the notion that childbearing while still young can be dangerous for mother and baby. There were different levels of detailed knowledge, but many could name specific risks, including fistula, C-section, preterm birth and even maternal or neonatal death.

When you are giving birth and you are too young, you can die during the process of giving birth because the passage is too small or the child can die during the time of birth. 14-year-old girl; XBA01

Girls reported that they are taught the value of staying in school; and they linked early childbearing to inevitable school drop out. Of the four adolescent girl participants in this study who had borne children, all four dropped out of school due to the pregnancy. While the return to school after childbearing was mentioned by a few girls as a possibility, in most cases the girls reported that having a baby marks the end of the girl's education.

I have learned that you are not supposed to start having sex while still in school. You are supposed to start after finishing secondary school. [If you have sex] you can get pregnant and drop out of school; you can get HIV/AIDS. 14-year-old-girl; XKA01

Girls must remember that school is the best thing for their future. M/FG; YFD01

While age of sexual debut was not directly asked, many girls and M/FGs reported anecdotally that it can be young, as early as 8 or 9, because they are motivated by receipt of gifts and money in return. This transactional sex is driven by poverty. However, every girl in this study, including those who already had children, reported feeling that childbearing should wait until after age 18. Yet, 88.8% said that childbearing among girls under 18 is common in their village.

At [age] 8 they have already started sleeping with men to get financial and material support to get their needs met. M/FG YAA03

Most of the time it [girls having sex] is because of poverty. Let's say you are lacking resources at home, like soap, food, a lot of things. You will do it. 18-year-old girl; XKC02

The most common suggestion to move girls on the continuum from awareness to behavior change was providing role models. Participants suggested that by hearing from female mentors, such as teachers or "social counselors," girls could envision how attaining education and avoiding unintended pregnancy could impact their future.

There will be a change [fewer adolescent pregnancies] because girls will realize the importance of a message coming from people who live far away from their community. They admire the life of the one telling them, therefore they listen and do according to what they have been advised. Thinking that perhaps their lives will become more like the life of the counselor. M/FG; YDA02

There must be regular meetings about these issues in the villages and role models must come as a way of convincing the girls. M/FG; YFB01

If mentorship programs can be added, girls can get encouraged to learn from them, concentrate in school to become like them. M/FG; YCC01

M/FG's perception of most important sources, attitudes and timing

Theme 4. Mothers/female guardians perceive themselves as the key source of SRH information, yet acknowledge that outsiders are viewed as more credible by the community and the girls.

Both M/FGs -- and the girls themselves -- cite M/FGs as a current and one of the preferred sources for SRH information. For the most part, girls and M/FGs value their relationship and the regular exchange of information that close proximity enables.

[M/FG is important source] because it is the job of every responsible mother to counsel her child. We want them to get good examples in future to become good mothers in the village after finishing school and getting good jobs or setting up big businesses. M/FG; YCC01

They [mothers] are so open with you as a result you are also open to ask questions where you do not understand. 16-year-old-girl; XKA03

Yet both groups also report that girls view sources from the village, including M/FGs, as less knowledgeable and less credible than "outsiders."

Girls do not listen or obey what their parents teach or advise them. M/FG; YAA03

As we are staying together we become used to each other and they become rude and challenging and don't listen to us. M/FG; YFA01

Many M/FGs suggest that girls need counselors from outside the village with correct knowledge and information to teach the girls. Both groups felt that girls would listen to outsiders more earnestly and act on their advice more readily.

Yes, there will be a change [fewer pregnancies among girls under 18] because they will realize the importance of a message coming from people who live far away from their community… When the social counselors come into the picture, they [girls] tend to begin valuing such advice as true and helpful. M/FG; YDA02

Theme 5. Staying in school is strongly supported and encouraged, but barriers including poverty and unintended pregnancy continue to drive school dropout among girls.

M/FG participants almost universally responded that girl education is important and adolescent childbearing is undesirable. Despite low education attainment

among the M/FGs, there certainly is an understanding of the importance of education for a girls' economic future, and that of her family as the children usually help their parents.

I encourage them to work hard at school because girls are like flowers-- they shine if they get the best education... She supports the parents and they are always proud of her. M/FG; YCA01

We tell them [girls] that they should avoid sex because once they have sex they will be pregnant, we tell them to work hard at school so that their future should be brighter… a girl should go to school and be well educated so that in the end we parents should be helped by our girls. M/FG; YAA03

For the girls I encourage them to go to school because myself I didn't go to school and I used to depend on my relatives who many of them died so I tell them to continue with school so they can support each other in future. MF/G; YFB01

Although there is increasing sentiment that girls should return to school after giving birth, it is generally acknowledged that this is extremely difficult and only possible with family members available to care for the child and support the girl. The biggest structural barrier to achieving secondary school completion is poverty.

When a girl is in this situation [pregnant], after difficulties to look after her baby, she ends up asking her parents to allow her to go back to school. M/FG; YAA03

[I dropped out of school because] My parents were not able to provide my needs, personal needs. I was admiring my friends so I decided to have a relationship to give me money to fulfill my heart's desires and later found myself pregnant. M/FG; YCB03

Mother stays in South Africa [to work]. If she sends [school fees] it wasn't enough for me to pay for the whole term in a year, so sometimes I went to school, sometimes I would not attend school because of school fees… I decided to drop because it was so disturbing that I should learn half in a year per term. 18-year-old-girl; XBD01

Theme 6. SRH teaching often comes too late.

Many M/FGs reported providing SRH information to their girls after age 15 and as late as age 18. The most common reason cited for delaying presentation of SRH information is the view that discussing it will encourage girls to engage in sex. As a result, they report that they wait until "changes" in the girls are

observed, such as coming home late or a “rude” attitude. These behaviors indicate to the parents that, perhaps, their daughter has begun to have sex and that is the signal for parental discussions of sex to begin.

If they hear more about this [SRH] at a tender age it disturbs their school plans. It really gives problems to those under 18 of age because the information reaches their shallowest point of their mind due to immaturity. MF/G; YFA01

We just notice the change in behavior, coming late at night at home, stubbornness, and we know she has started sleeping with men. I call her and advise her. M/FG; YCA02

Actually it [SRH IEC] is only when we start observing their movements. For example, a child could just leave the house as though she is going out for studies and returns very late. She sometimes answers in a challenging manner when questioned and sometimes gives rude remarks. M/FG; YDC02

Some parents did note that by the time a girl has begun having sex, it’s too late. While these parents advocated for an earlier discussion on SRH, M/FGs who opposed this felt that educating early adolescents, especially on topics related to birth control, was not appropriate.

At 8 they have already started sleeping with men, so according to me age does not matter but maybe if parents start advising them while they are still young even before they reach 8. M/FG; YCC01

Most parents start counseling their children at 15, missing it at 10, 11, 12, 13, 14. To start counseling them at 15, it’s too late, and within 2-3 years you will find out that she is pregnant. So maybe the counseling can start as early as 8 years old. M/FG; YCB03

Attitudes of girls and guardians toward initiation counselors

Theme 7. Many M/FGs and girls have a negative view of initiation ceremonies and initiation counselors as sources of information, primarily because some still advise “cleansing” or practicing sex, although this seems to be changing.

Although it seems to be changing, three initiation counselors in this study reported that they still teach girls how to satisfy a man sexually and then encourage sexual practice after the ceremony, a practice known as “cleansing” or “clearing the dust.” All three consider themselves to be both a religious and a traditional counselor. Although the majority of counselors claim they do not encourage girls to practice sex, they report knowing “others who do.”

At traditional initiation camps, they [girls] are told to bend and dance in a sexual manner. When that girl comes out of the initiation camp she will begin having sex because that is what she has been taught. They are taught how men perform in bed; they even tell the girls that that's what your parents do in the secrecy of their bedroom. Initiation counselor; ZDB01

We tell them to remove dust after finishing an initiation to cleanse themselves. Removing dust is our traditional way of doing things where by on the day of releasing the girls from the camps, men are arranged to have sex with them in that way they have been cleansed. Initiation counselor; ZCC02

If you go for initiation, they told you to sleep with a man after you have been initiated. So if you didn't have any idea before, you want to try sex because you have been initiated. 18-year-old-girl; XBA02

Almost half of girls and M/FGs specifically mentioned that initiators, including some religious ones, teach girls how to perform sexually. Most religious initiation counselors report that they no longer encourage sexual cleansing, despite the reports from parents and girls that conflict with that. In fact, religious counselors report that they do not even use anatomical terms or explain specific acts, because it's "pornographic" or not appropriate.

The church doesn't allow that [sexual teaching] but the counselor, just because they come from the villages, they normally fix in a little of that… we know that normally whenever they say initiation ceremony, normally it's something to do with bed work. M/FG; YWA02

Christian counseling is the best without mixing it with the traditional kind where they talk about private body parts in an obscene way. Christian counseling guides them on right things in a calm manner. During traditional counseling, they are taught to perform various dances that involve moving their waist front, back and center symbolizing how sex is best performed in bed. So as Christians, we find that to be disrespectful. Initiation counselor; ZDB01

Due to the legacy of the tradition of sexual cleansing, there is still suspicion or distrust among some parents regarding what the girls are taught during the one-week initiation ceremonies. As a result, roughly half of both girls and M/FGs expressed disapproval of initiators of any kind as a source of SRH information.

She [my daughter] did not attend any initiation ceremony. I said no to any type of initiation. I was afraid she might get confused and leave school and dominate into the culture thing into which most people in this area believe. M/FG; YWA02

I think girls must not be sent to camps because when they come back they are completely changed, they go astray. But if a parent can take part in the counseling process it can be good. M/FG; YAA02

Perceptions among initiators regarding their role in educating girls

Theme 8. Parents are the gatekeeper and important to the SRH education of girls.

Initiators emphasize the importance of parents in girls' SRH education. The reason is that initiation counselors do not interact with the girls until and unless the parents choose to bring her to the initiation camp. Therefore, if a parent or guardian views the ceremony negatively, it is their prerogative to keep the girl at home and some in this study reported doing so.

Because when the girls come of age, if parents do not hand them over to us for traditional counseling, it's not our fault. We just keep quiet until they hand them over to us… It's a sharing responsibility between parents and counselors because each of the two has a role to play in the lives of these girl children. Initiation counselor; ZFC01

Theme 9. Teaching about contraception/condom use is taboo in initiation camps.

While initiators do not prefer childbearing among girls under age 18, 90% report that they either do not teach or discourage birth control methods in initiation ceremonies because they lack knowledge and/or do not think it's appropriate or necessary. Yet they teach and even encourage sex in some cases. When taken together, these norms reinforce high rates of unintended pregnancy among adolescent girls.

These children are chewing bigger food than their mouth; it's not necessary for them between 10 to 18 years of age [to learn about contraception]. They are supposed to wait [to use contraception] until their time comes… In initiation camps, no one can tell them the use of condoms or contraception; it's not proper according to culture. Initiation counselor; ZFC01

We don't tell them the use of condoms at church [initiations], condoms are not trust worthy… Condom doesn't make any sense to me." Initiation counselor; ZFA02

They are taught that after initiation they should go and have sex for the first time which is called sexual cleansing." Initiation counselor; ZZA01

Discussion

The results of this study depict a perfect storm of four factors that contribute to high rates of unintended pregnancy among adolescent girls in Mulanje District and that must be addressed in order to improve SRH outcomes: 1) Poverty as a driver of early sex in exchange for gifts and money. 2) Cultural ceremonies that sometimes encourage sex at puberty as a rite of passage. 3) Lack of acceptability and, often, access to contraceptives and condoms for adolescent girls. 4) Reluctance by many parents to discuss SRH issues before sexual debut. As a result, efforts to reduce unintended pregnancy and improve school completion among girls, including through IEC interventions, will be more successful when situated within an ecological framework that considers structural and cultural factors. For example, programs that effectively deliver SRH information and target female empowerment, including economic empowerment through increased opportunities for girls, can increase girls' status in the community, improve access to education and reduce transactional sex.[18]

Poverty is a primary structural factor that drives early sex and unintended pregnancy among adolescent girls in the rural Malawian setting. All three groups in the current study reported that transactional sex among girls under age 18 is a social norm in the community, and that boys and men give girls gifts and money in exchange for sex. This drives both early sexual debut – anecdotally reported as young as 8 or 9 -- and multiple sexual partners. In this

study, girls commonly reported having sex in order to fulfill their "heart's desires" with pocket cash from boyfriends. Transactional sex among young girls is a well-documented phenomenon in many parts of sub-Saharan Africa. As a result, interventions aiming to reduce early pregnancy in the region must be considered in the context of poverty and transactional sex. Cash transfer programs, for example, have been found to improve school attendance, and decrease early marriage and pregnancy among girls who had already dropped out of school.[24]

Initiation ceremonies have been a primary cultural tradition encouraging sex among pubertal girls and putting them at risk of early pregnancy. As previously noted, the practice of "sexual cleansing" seems to be occurring less often, but it has not been eradicated. We found many contradictions among reported practices of initiation counselors in this study, most of whom claim they do not encourage girls to practice sex, but they are aware that others still do. For example, church counselors report that traditional counselors encourage cleansing, while some parents and girls indicate that both church and traditional counselors still teach the practice. Therefore, distinctions between the two types are unclear. Because cleansing is increasingly discouraged, there is an incentive to keep it secret when it is still happening. Many counselors identify as both church-affiliated and traditional, and all reported that they began as traditional counselors. Because of this duality and the roots in traditional practices, a teacher in one village reported that many parents are opposed even

to church ceremonies, because religious initiators may "sneak" cleansing into the teachings. All of this points to the religious syncretism found within the culture.

Two other studies have documented the role of initiation ceremonies in Malawi. One suggests they can become an "important platform" through which programs can reach adolescents with correct and comprehensive SRH information.[19] Another study found that initiation rites are perceived as a risk factor for HIV among adolescent girls, and that programming needs to help girls navigate the conflicting information they receive regarding expected sexual behavior.[20] In that context, and given that 90% of initiators in this study have received no formal training, a curriculum for counselors, both traditional and religious, is urgently needed.

GAIA already has begun this process by convening village chiefs and a cohort of initiation counselors at a pilot "summit" to begin discussing how to transform the initiation rite into a safe experience with correct and comprehensive SRH content. While some may suggest moving away from initiation counselors and ceremonies due to some of the harmful teachings, they do represent an existing social structure that can be leveraged and, perhaps more important, cultural sensitivity dictates honoring and working within local custom. Therefore, with the support of village chiefs, the next and crucial step is to train and incentivize all initiation counselors in the region to abide by agreed upon, updated and

healthy practices. Incentives or penalties can be determined by village chiefs based on local custom. While the current study did not specifically address transmission of HIV and other STIs, the notion that initiation ceremonies are a risk factor for adolescent girls puts an exclamation point on the importance of training initiation counselors and transforming the practices.

Barriers to the use of birth control exacerbate high rates of adolescent pregnancy. Melinda Gates has declared that "birth control is a woman's way out of poverty." A recent Guttmacher Institute study indicates that adolescent pregnancy rates in the United States declined by 25% between 2007-2012, despite unchanged levels of teen sexual activity, and are thought to be "entirely driven by improved contraceptive use."[25] Furthermore, according to UNFPA data, adolescent girls aged 15-19 worldwide have the highest unmet need for family planning, at 25% compared to 15% among women aged 30-34. And, in this study, girls identified contraception as a "knowledge gap" area.

Unfortunately, we identified two themes that demonstrate a lack of support in Mulanje for contraceptive and, surprisingly, even condom use. These findings suggest that in the rural Malawian setting, and other similar low-education, highly religious settings, contraception is both discouraged and not accessible to adolescent girls. Beliefs that contraception is for birth spacing subsequent to first birth, and the misconception that contraceptives prior to first birth leads to reduced future fertility, were reported by all three groups. While the adolescent

girls themselves are more open to contraception, they report difficulties accessing clinics, which are often distant and open only during school hours, and sometimes staffed by health workers who themselves disapprove of contraception for adolescent girls. This suggests that the YFHS push has not been sufficiently successful in Mulanje. The fact that M/FGs disapprove of condom use by girls under age 18 and that initiation counselors are unwilling to teach about condom use is particularly harmful in light of the HIV/AIDS epidemic that has ravaged rural Malawi.

Sensitization of adults in the community, including initiation counselors, mothers and community leaders, regarding adolescents' need for information and contraception is critical to ensuring adolescent access to modern family planning methods.[26] Messaging can emphasize the "cost" of not providing contraceptives and condoms in terms of the real costs of birthing and having a child, and missed years of school to future economic opportunities, as well as the girl and baby's wellbeing.

At the International Family Planning Summit in July 2012, the Malawian government committed to increasing funding for family planning to address unmet need, including increasing the prevalence of modern contraceptive use from 42% in 2010 to at least 60% by 2016. However, expenditures for reproductive health, in general, and for family planning, in particular, have been modest. NGOs in the region can help by holding the government accountable

for these commitments and filling the gaps where needed by providing free condoms in friendly places, as well as long-term birth control and correct information about its effects (i.e., that it can take a few months for fertility to return after discontinuation) in youth-friendly clinics.

Finally, introduction of SRH information often starts too late. In this study, we found that M/FGs often broach the topic after first sex; or girls learn about SRH at the hospital after giving birth for the first time. A common reason cited by M/FGs for delaying presentation of SRH information is the fear that it will encourage girls to start having sex. "Not a single study has found evidence to support the myth that CSE can lead to increased risk taking" with regard to sexual behaviors.[27] In fact, reviews of the evidence indicate that withholding information increases risk of unwanted pregnancy.[27] The literature shows that girls who receive CSE delay first sex and have a reduced risk of pregnancy.[28] Given the young age of sexual debut, marriage and childbearing in Malawi, especially rural Malawi, early introduction of SRH IEC is critical.

It's important to note the dearth of information on SRH IEC for young adolescents. However, a recent study in four African countries, including Malawi, concluded that school-based SRH education is a promising means of reaching adolescents at least up to age 15, as school enrollment tends to be high at least to this age.[12] The same study reported that two-thirds of Malawian 12-14 year olds do not receive sex education at school -- that number is

probably even higher in rural regions -- despite the fact that the Malawi Ministry of Education has adopted a CSE curriculum. GAIA and other NGOs working in rural villages can assist schools with access to the curriculum and resources, like training, to ensure its effective provision in primary school. Teacher training, especially of female teachers, has been identified as an urgent priority for scale-up and improvement of SRH/IEC in the school setting.[29] Also in this study, girls reported school as one of three most preferred sources.

The participants themselves offered specific ideas about how adolescent girls in Mulanje, and other similar settings, would best learn about SRH issues: 1) Provision of counseling by a respected person outside of the village with content expertise. GAIA and another organization, Theater for a Change, were both mentioned as examples of trusted sources by participants. 2) Youth clubs and/or village gatherings as a forum for exchange of information as long as there was continued programming to ensure meetings on a regular basis. There was concern that such meetings are frequently initiated, but often abandoned. Indeed, this idea suggested by participants is consistent with data that supports the creation of enabling environments that encourage girls to make healthy choices; these "safe spaces," or girl groups, offer confidential and judgment-free places to obtain information.[29] 3) Role models and mentors were suggested as ways to give girls a vision of what is possible with an education. Participants in the study suggest mentors and role models could inspire girls with reasons to stay in school; the literature suggests mentors/role models can improve SRH

outcomes by developing girls' aspirations for school completion and work possibilities.[30] One mother said, "I'm just pleading with you, to start these programs very soon because our girls are lacking knowledge on sexual and reproductive health issues in our village."

The importance of educating parents in this process and making them part of any program cannot be underestimated. Clearly both M/FGs and girls value this relationship as an important source of SRH information. A recent review suggests that if parents are supported both with content knowledge and responsiveness techniques, parent-child communication can improve and that can, in fact, impact social norms.[30] As we learned from the initiation counselors, parents are the gatekeepers for their girls, so whether counseling their girl child directly and/or making the decision to send her to the initiation counselor, parental attitudes are relevant. Parents will be the ones who can insist on updated initiation practices and, perhaps, if they understand the role of birth control, they can be important influencers in shifting that community norm. In Mulanje, a combination of parent/guardian education and information exchange through village meetings is needed.

This study is limited by several factors. Due to budget and time constraints, the research team relied on the village chiefs to provide lists of households that met the criteria. Although researchers were able to randomly choose households from lists provided, it is possible that the inadvertent desire to appear in a

positive light could have biased the chiefs to provide names of people who would demonstrate desired characteristics. This identification process could have biased the sample away from harmful practices and toward recognized healthy practices, like girls who have remained in school and avoided pregnancy. In fact, rates of pregnancy under age 18 and school dropout in this study are somewhat lower than those reported in GAIA surveys of the same geographic area and the most recent DHS national data. Also, because early adolescents were more reluctant to participate, the results are skewed to the older adolescent experience. However, these results provide novel and useful information for the development and implementation of IEC programming to improve adolescent SRH outcomes in Mulanje and beyond.

In looking forward, ideally, GAIA and others will include programming for boys in an intervention to reduce unintended pregnancy. This should include evaluation of male attitudes regarding birth control, early pregnancy and best sources and messages to encourage responsible male behavior. Attitudes toward condom use in this study were surprising and warrant further investigation to understand barriers, as well as urgent intervention, coupled with program evaluation, to improve knowledge, attitudes, and behaviors. This should involve study of both male and female attitudes and norms, as well as condom availability and accessibility in the community. Adolescent-friendly services require health worker training and facility improvements. A recent qualitative study of adolescents in Uganda suggest that adolescent-friendly services can be

achieved through health provider training, involvement of key stakeholders like parents, teachers and government officials, and correct and comprehensive information, education and communication materials.[31]

Conclusions

Taken together, the results of this study indicate conditions that perpetuate high rates of unintended pregnancy – and a public health crisis. Correct and comprehensive SRH IEC is urgently needed, yet each of the study findings must be addressed to decrease these rates. As a result, in addition to IEC, the following must be considered: 1) economic empowerment programs for adolescent girls to reduce transactional sex; 2) improved youth-friendly SRH services in all facilities and, specifically, access to condoms/contraceptives for adolescents and youth friendly workers; 3) hold government accountable for funding commitments to family planning; 4) hold government accountable for commitments to provide CSE in schools and ensure availability in rural, not just urban, settings and 5) facilitate training of female teachers through scholarships and mentorship programs.

Education and training for initiation counselors – and village chiefs as community law enforcers -- on correct and comprehensive SRH information, as well as incentives to actually update practices with such IEC is vital. As gatekeepers, parents, especially mothers, are important targets for IEC efforts addressing both contraception and timing of SRH education. And finally, IEC on

contraception, with emphasis on the risks of not using it, for girls, parents and initiation counselors represents – along with improved access – perhaps the most effective and practical intervention. Reducing the terrible burden associated with early pregnancy in this setting by providing the tools and opportunities outlined herein will not only improve health outcomes, it will help break the cycle of poverty.

Appendix

I. Interview Guides
    A.For adolescent girls
    B.For parents/guardians of adolescent girls
    C.For initiation counselors of adolescent girls
II. Recruitment Script
III. Consent/Assent Scripts
    A. Adult consent for minors
    B. Assent for minors
    C. Consent for emancipated minors
    D. Consent for adult participants

---

[1] UNICEF 2008-2012

[2] UN Development Program 2014

[3] Nour, N. M. "Child Marriage: A Silent Health and Human Rights Issue." Reviews in Obstetrics and Gynecology. (Winter 2009).

[4] Vlassoff, M, Tsoka, M. "Benefits of Meeting the Contraceptive Needs of Malawian Women." Guttmacher Research Institute. (November 2014).

[5] Nour, N.M. "Health consequences of child marriage in Africa." Emerging Infectious Diseases. (November 2006).

[6] Ahlsen AK, Spong E, Kafumba N, Kamwendo F, Wolff K. "Born too small: who survives in public hospitals in Lilongwe, Malawi?" Archives of Disease in Childhood Fetal and Neonatal Edition. (March 2015).

[7] Saloojee, H. Coovadia, H. "Maternal age matters: for a lifetime, or longer." The Lancet Global Health. (July 2015).

[8] Demographic and Health Survey 2015-2016.

[9] Malawi Department of Population and Development. "Why population matters to Malawi's Development" 2012. Retrieved from http://www.prb.org/pdf12/malawi-population-matters.pdf
[10] Kaphagawani, N.C., Kalipeni, E. "Sociocultural Factors Contributing to Teenage Pregnancy in Zomba District, Malawi." Global Public Health. (Sept. 2016).
[11] Stephenson R., Simon C., Finneran C. "Community Factors Shaping Early Age at First Sex Among Adolescents in Burkina Faso, Ghana, Malawi and Uganda." Journal of Health, Population and Nutrition. (June 2014).
[12] Bankole A., Biddlecom A., Guillea G., Singh S., Zulu E. "Sexual Behavior, Knowledge and Information Sources of Very Young Adolescents in Four Sub-Saharan African Countries." African Journal of Reproductive Health. (Dec. 2007).
[13] Khosla R. "Putting the S into AYSRH: Sexual Health and Human Rights." The World Health Organization. (Sept. 2015).
[14] "Sex education to start in Malawi schools." Nyasa Times. July 9, 2015. Retrieved from http://www.nyasatimes.com/2015/07/09/sex-education-to-start-in-malawi-schools/
[15] "Carrying Malawi Forward: Investing in Sexual and Reproductive Health for Young People." Malawi Youth ENGAGE Task Force. 2014. Retrieved from http://www.prb.org/pdf14/engage-malawi-youth-guide.pdf
[16] Denno D, Hoopes A, Chandra-Mouli V. Effective Strategies to Provide Adolescent Sexual and Reproductive Health Services and to Increase Demand and Community Support. Journal of Adolescent Health. (Jan. 2015).
[17] USAID. "Evaluation of Youth-Friendly Health Services in Malawi." (June 2014).
[18] Kalembo FW., Zgambo M., Yukai D. "Effective Adolescent Sexual and Reproductive Health Education Programs in Sub-Saharan Africa." California Journal of Health Promotion. (2013).
[19] Munthali, A., Zulu E.M. "The Timing and Role of Initiation Rites in Preparing Young People for Adolescence and Responsible Sexual and Reproductive Behavior in Malawi." African Journal of Reproductive Health. (2007).
[20] Skinner, J. Underwood, C., Schwandt H., Magombo A. "Transitions to Adulthood: Examining the influence of initiation rites on the HIV risk of adolescent girls in Mangochi and Thyolo Districts of Malawi." AIDS Care (2013).
[21] Haberland N, Rogow D. "Sexuality Education: Emerging Trends in Evidence and Practice." Journal of Adolescent Health. (Jan. 2015).
[22] Fusch, P., Ness L. "Are we there yet? Data Saturation in Qualitative Research." The Qualitative Report. (2015).
[23] Ingham, R. Stone, N. "Asking young people about sexual and reproductive behaviors. Topics for in-depth interviews and focus group discussions: partner selection, sexual behavior and risk taking." World Health Organization.
[24] Baird, S, McIntosh C, Özler B. "Cash or Condition? Evidence from a Cash Transfer Experiment." World Bank, Washington, DC. (2011).
[25] Lindberg, L. "Understanding the Decline in Adolescent Fertility in the United States, 2007-2012." Guttmacher Institute. (2016).

[26] Chandra-Mouli V. "Contraception for adolescents in low and middle income countries: needs, barriers and access." Reproductive Health. (2014).
[27] Santhya, KG, Jejeebhoy, SJ. "Sexual and Reproductive health and rights of adolescent girls: Evidence from low- and middle-income countries." Global Public Health. (Feb 2015).
[28] Lindberg, LD., Maddow-Zimet, I. "Consequences of Sex Education on Teen and Young Adult Sexual Behaviors and Outcomes." Journal of Adolescent Health. (2012).
[29] Haberland, N. "Sexuality Education: Emerging Trends in Evidence and Practice." Journal of Adolescent Health. (Jan 2015).
[30] Svanemyr, J., Amin, A., Robles, O. "Creating an Enabling Environment for Adolescent Sexual and Reproductive Health: A Framework and Promising Approaches." Journal of Adolescent Health (2015).
[31] Atuyambe, LM, Kibira, SP, Bukenya J, Muhumuza C, Apolot RR, Mulogo E. "Understanding sexual and reproductive health needs of adolescents: evidence from a formative evaluation in Wakiso district, Uganda." Reproductive Health. (April 2015).