



Pregnancy Decisions and HIV Testing among Adolescent Girls and Young Women Enrolled in the DREAMS Initiative in Northern Uganda

Qualitative Report

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Irit Sinai, PhD, MEASURE Evaluation, Palladium

Danielle Stein, MSc, Consultant

Eve Namisango, MSc, Consultant

Ismael Ddumba-Nyanzi, MSc, MEASURE Evaluation, Palladium

Lisa Marie Albert, MS, MPH, MEASURE Evaluation, Palladium

Michelle Li, MS, MEASURE Evaluation, Palladium

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MEASURE Evaluation

University of North Carolina at Chapel Hill
123 West Franklin Street Building C, Suite 330
Chapel Hill, North Carolina, USA 27516
Phone: +1 919-445-9350
measure@unc.edu
www.measureevaluation.org

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Cover: An adolescent girl in Uganda enjoys the fresh air. Photo: © 2010 courtesy of Lisa Marie Albert, MEASURE Evaluation, Palladium.

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ABBREVIATIONS

AGYW	adolescent girls and young women
ARV	antiretroviral
ASSIST	Applying Science to Strengthen and Improve Systems
DREAMS	Determined, Resilient, Empowered, AIDS-free, Mentored, Safe
IDI	in-depth interview
IUD	intrauterine device
MOH	Ministry of Health
PEPFAR	United States President's Emergency Fund for AIDS Relief
SDS	Strengthening Decentralization for Sustainability
STI	sexually transmitted infection
UDHS	Uganda Demographic and Health Survey
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

Adolescent reproductive health is a major social issue in Uganda. According to the 2016 Uganda Demographic and Health Survey, 25 percent of adolescents ages 15–19 are already mothers or pregnant with their first child, leading to substantial negative consequences for the health, education, and economic development of these young mothers, their children, and their communities. Adolescent girls and young women (AGYW) are also at a particularly high risk for acquiring HIV. The Determined, Resilient, Empowered, AIDS-free, Mentored, Safe (DREAMS) initiative in Uganda attempts to change these dynamics, by educating AGYW and empowering them to delay their first pregnancy, space subsequent pregnancies, and avoid risky behaviors that can lead to early pregnancy and HIV acquisition.

DREAMS is a global health initiative funded by the United States President’s Emergency Plan for AIDS Relief (PEPFAR) and implemented by private implementing partners in 10 countries in sub-Saharan Africa, including Uganda. This study assessed the effects of DREAMS program interventions on decisions relating to the timing of pregnancies and sexual and reproductive health-related behaviors. Because of the interaction between HIV and pregnancy risk, we also looked at the effects of DREAMS on HIV prevention and testing, and on risky behaviors that can lead both to early pregnancy and contracting HIV.

The DREAMS initiative delivers a core integrated package of life skills and economic strengthening interventions addressing health, social, and structural factors associated with AGYW’s HIV risk. The initiative also seeks to prevent unplanned pregnancies. DREAMS began work in Uganda in 2015 and as of 2018 operates in 11 districts. The objective of this qualitative study by MEASURE Evaluation—funded by the United States Agency for International Development (USAID) and PEPFAR—was to examine the influence of DREAMS interventions on perceptions and behaviors of AGYW in northern Uganda.

Methods

We undertook the study in Gulu and Lira districts, selecting one urban and one rural subcounty from each district, for a total of four subcounties.

A team of experienced qualitative interviewers undertook data collection in August–October 2018, conducting 86 in-depth interviews (IDIs), as follows:

- 55 IDIs with actively-participating program beneficiaries representing six segments by age (10–14, 15–19, 20–24), marital status, and school attendance. Beneficiaries were classified according to their information in the DREAMS enrollment database. DREAMS coordinators and peer leaders identified from the database beneficiaries who were still active in the programs.
- 16 peer leaders for the DREAMS initiative, identified with the help of DREAMS coordinators
- 15 stakeholders at the district, community, and facility levels, identified based on their positions

Results

DREAMS does not work in isolation. Our findings must be interpreted in the context of the study area and keeping in mind that only active participants were interviewed. Poverty emerged as the dominant theme characterizing life in the study areas. Extreme poverty results in many vulnerabilities, including dropping out of school, transactional sex to afford basic necessities, and other risky behaviors that can result in pregnancy and HIV acquisition.

I stopped [school] in primary five, so when I was to go to primary six, I got pregnant and stopped going to school. First, it was about lack of school fees; there was no one to pay my fees. Gulu, rural, out of school, unmarried, age 20–24

She might want money to buy [sanitary] pads, but because she doesn't have any, she may be forced to go and ask from a boyfriend who may end up using her for sex. Gulu, rural, out of school, unmarried age 20–24

Poverty has made most of them leave their village, and they are now in town, and in order for them to survive, they risk themselves into unsafe sex. Lira, district-level stakeholder

Interviews revealed social conventions and expectations that form some of the barriers DREAMS aims to influence. The social expectation in our study settings is that girls marry young, especially in very poor households, where parents can benefit financially from a daughter's marriage. Our findings show that this convention invades all aspects of an AGYW's life. Her family, friends, potential suiters, and others in the community all expect her to marry young. Once married, she is pressured to have her first child immediately. Girls who do not follow this convention are stigmatized. Stigma also is associated with family planning use, and a married woman is expected to obtain her husband's permission before she can use family planning. These factors are significant contributors to early childbearing.

If you don't have a child yet, they can put you under pressure, especially when you are just there at home; even men start to force you into having children when you are not ready. Lira, rural, out of school, married, age 20–24

If you are married and you have stayed for two months without getting pregnant, people will talk a lot, even if you do not plan to conceive yet. So with that pressure, you can get pregnant. Gulu, urban, peer leader

DREAMS Influence

Beneficiaries reported participating in or being exposed to a variety of DREAMS interventions. Of the beneficiaries ages 15–24 whom we interviewed, 41 (of 47) reported exposure to DREAMS HIV counseling or testing; 37 reported family planning counseling; 32 reported condom counseling or distribution, and 19 (mostly in school) reported abstinence promotion. Most reported participation in more than one DREAMS activity. However, stakeholders perceived that the DREAMS “layering” approach (all beneficiaries are expected to be provided with HIV testing in combination with other services, depending on their age, marital status, and school attendance) is not equitable, with some geographic areas benefitting more than others. Also, not all activities are promoted consistently; lack of follow-up is reported as an occasional problem by beneficiaries and peer leaders.

I just want them to do follow-up. You cannot put us in a group which you don't even come to. Gulu, rural, out of school, married age 20–24

That brought us a lot of issues, like when they heard that their colleagues in other subcounties, other divisions were getting [...] that] other help, others were being trained on tailoring and being supported. So they were like, 'Why not us?' So you realize that the partners that were doing that in other divisions, those partners are not in our subcounty. So ours was actually purely on HIV testing up to the last moment, up to around February, if I can remember, when we did the last tests. Lira, urban, stakeholder

DREAMS elements that target poverty, such as savings and loans schemes, financial help in paying school fees or attending vocational schools, and training on income-generating activities, were considered important by both beneficiaries and stakeholders.

Overall, our interview results show that DREAMS beneficiaries in Uganda feel that their motivation, either to delay pregnancy or have fewer children, was enhanced by their participation in DREAMS. Both married and unmarried girls frequently reported that messages related to the benefits of delaying pregnancy, such as those about the challenges of supporting children at a young age, made them more aware of the consequences of having children when young. Messages about the link between pregnancy and leaving school also resonated with them. For married girls, messages about the health and economic benefits of spacing children were more relevant.

Our data also show that DREAMS interventions contributed to beneficiaries' knowledge about fertility awareness and pregnancy risk, and their understanding of how to delay pregnancy, including information about a variety of contraceptive methods and awareness of the service delivery centers where the methods could be obtained. Results further indicate that DREAMS interventions may have also contributed to the improved ability of married beneficiaries to access family planning. In addition, our findings show that as a result of their DREAMS participation, unmarried beneficiaries have taken steps to delay pregnancy through abstinence or the use of condoms. Although married beneficiaries rarely indicated a desire to delay their first pregnancy, we found that DREAMS supported them in spacing their pregnancies and reducing their overall number of children.

[DREAMS] is helping me. It has made me not to get pregnant because I listened to what my peer leader talked about, how challenging it is to get pregnant when you are still young. This project has helped us to protect ourselves by not having live sex with men when it is not the right time that you can easily get pregnant when you are not ready. Lira, rural, in school, unmarried, age 15–19

Because right now DREAMS educated me a lot. I didn't believe I would be like this, these days I know how to avoid pregnancy and where to get the services, that's why I won't get pregnant anyhow. Gulu, rural, out of school, age 20–24

Regarding HIV prevention, it is clear from our findings that DREAMS interventions provide beneficiaries with a good understanding of what HIV is, how it is contracted, what can be done to prevent contracting it (if negative) or prevent transmitting it to others (if positive), and the importance of regular testing.

[DREAMS] said HIV is contracted through unprotected sex, sharing sharp objects like razor blades, needles, or even through body contact after an accident. Gulu, urban, out of school, unmarried, age 20–24

You should not allow having sex without a condom. At times, maybe one of your partners has HIV, which may infect the other with it if you have sex without a condom. It's a disease that someone can infect you through sex, sharing sharp needle [razor] blades, blood transfusion. Lira, urban, out of school, married, age 15–19

We also found that active DREAMS participation influences fertility decisions and behaviors and reduces risky behaviors. DREAMS imparts knowledge to beneficiaries, allowing them to relate that knowledge to their own lives; gives them decision-making tools; and empowers them to take action. The pathway of influence is direct, through elements of the interventions designed to delay pregnancy and prevent HIV acquisition; and indirect, through elements that influence the environment in which AGYW live in Uganda. While the project is not changing their environment, beneficiaries reported that DREAMS counseling gave them the skill to better deal with family pressure and poverty. These effects are not universal—some girls benefit more than others—yet, the link is clear.

However, our findings also make clear that beneficiaries who decide to act on the information they have learned from DREAMS—for example by delaying pregnancy and using family planning—are faced with significant challenges. The parents of unmarried AGYW are gatekeepers who often oppose family planning use. DREAMS trains beneficiaries to be polite to their parents to avoid conflict. Similarly, for married beneficiaries, their husbands are the gatekeepers whose permission they must have for contraceptive use. DREAMS messages encourage married beneficiaries to be subservient to their husbands and have sex with them, even if they do not want to do so, to reduce the risk of the husband having sexual relations with other women.

They said if you are a married woman and your husband wants to have sex with you, you [do] not refuse because this can annoy the man and can make him go and look for sexual satisfaction somewhere [else]. This can lead to HIV and domestic violence at home. Gulu, urban, out of school, married, age 20–24

Discussion and Recommendations

Overall, program results seem positive. DREAMS messages hit their targets. Beneficiaries listen, learn, get more access to services, and try to act on what they learn to delay pregnancy and avoid HIV, despite significant social pressures that hinder them. Because of other influences in the community, our positive findings cannot be attributed solely to DREAMS, but it is safe to conclude that DREAMS reinforces and expands knowledge and contributes to positive behavior change: pregnancy delay, avoidance of HIV, and reduction in risky behaviors that can lead to pregnancy and HIV.

When asked how they would improve the programs, beneficiaries suggested additional economic support, such as paying their school fees or providing them with vocational training. Although these supports are part of the current program, they should be implemented more consistently and equitably. Respondents also emphasized the need to improve consistency and follow-up. We recommend that the economic programs of the DREAMS initiative be expanded in scope and across geographical areas, with increased attention to continued follow-up.

Our findings suggest that a limitation of the current DREAMS umbrella of interventions is that they reinforce social norms that limit AGYW's agency. We recommend that DREAMS interventions also be expanded to the partners of married beneficiaries and the parents of unmarried ones, to enhance the benefits of the initiative by facilitating the ability of beneficiaries to act on what they learn during training. We also note a methodological caveat, that our findings are based exclusively on interviews with DREAMS beneficiaries still participating in the program a year or more after enrollment and who have received multiple program services. The results of this study cannot be extrapolated to beneficiaries who have dropped out of DREAMS or who have received only one or two program interventions.

INTRODUCTION

This study was designed to assess the effects of Determined, Resilient, Empowered, AIDS-free, Mentored, Safe (DREAMS) program interventions on decisions relating to the timing of pregnancies and sexual and reproductive health-related behaviors. The information generated by this study will have direct programmatic implications.

Early Pregnancy among AGYW in Uganda

Adolescent pregnancy is a major social issue in Uganda, with substantial negative consequences for the health, education, and economic development of young mothers, their children, and their communities. Globally, complications from pregnancy and childbirth are the leading cause of death among adolescent girls ages 15–19 (Save the Children, 2016). Childbearing at a young age is associated with higher rates of neonatal and child mortality and morbidity, including low birth weight, developmental and behavioral difficulties, and increased risks of sickness and death (Case, et al., 2015; Ganchimeg, et al., 2014; Kawakita, et al., 2016; Timur, et al., 2016). Adolescent pregnancy also increases school dropout, thus leading to lower levels of educational attainment and decreasing the likelihood of the adolescent becoming gainfully employed, in turn leading to lower socioeconomic status compared to peers who delay childbearing (USAID, 2016).

According to the 2016 Uganda Demographic and Health Survey (UBOS & ICF, 2017), 25 percent of adolescent girls ages 15–19 are already mothers or pregnant with their first child; also, pregnancy and childbearing for women younger than age 20 are more prevalent in rural areas compared to urban (27% and 19%, respectively). The mean age at first birth was 19 years for surveyed women ages 15–49.

The literature suggests several key factors that contribute to early pregnancy among adolescent and young women (AGYW) in Uganda:

- **Sexual debut occurs at a young age.** The most recent Uganda Demographic and Health Survey (UDHS) showed that nearly half of girls ages 15–19 are already sexually active (10% of girls age 15) (UBOS & ICF, 2017).
- **Gender-based violence is prevalent.** More than 40 percent of girls ages 15–19 and 50 percent of women ages 20–24 have experienced some form of physical violence since the age of 15. More than 80 percent of females who experienced physical violence said the perpetrator was their former or current husband or partner (UBOS & ICF, 2017). Nearly 10 percent of girls ages 15–19 and close to 20 percent of women ages 20–24 reported ever experiencing sexual assault, with more than half of these women experiencing it in the year preceding the survey.

First sexual encounters often happen in relation to coercion or violence. Data from the recent National Violence Against Children Survey showed that nearly a quarter of girls ages 13–17 who had ever had sex reported that their first sexual encounter was forced, pressured, tricked, or threatened (MGLSD, et al., 2017).

- **Unmet need for family planning.** The high rate of adolescent pregnancy is accompanied by an unmet need for family planning, with about a third of AGYW reporting unmet need (UBOS & ICF, 2017). Many AGYW lack access to sexual and reproductive healthcare services, including information on family planning and comprehensive sex education (MGLSD & UNICEF, 2015).
- **Educational attainment is low.** Less than 60 percent of AGYW younger than age 25 have completed primary school. More than 20 percent of AGYW ages 15–24 cannot read at all (UBOS & ICF, 2017). Low literacy and dropping out of school early are highly correlated with negative health and economic outcomes, as well as HIV risk (Schenker, 2005). Adolescent childbearing is higher with decreased education; 35 percent of young women with no formal education have begun childbearing by age 19, compared to 11 percent with secondary education or higher (UBOS & ICF, 2017).

- **High economic vulnerability.** Poverty and deprivation in Uganda strongly influence reproductive choices (Lundgren, et al., 2018). Adolescent women in poor households are more than twice as likely to have begun childbearing by age 19, compared to those in the wealthiest households (34% vs. 15%) (UBOS & ICF, 2017). A qualitative study conducted in rural Uganda found that economic insecurity within young people's households and the lack of opportunities for dependable and regular income-generating activities may encourage girls to have transactional sex to gain financial and material support from partners. Sexual activity also is linked to being idle, such as when adolescents are out of school and not engaged in any income-generating activities (Bell & Aggleton, 2013).

HIV Risk and Pregnancy among AGYW in Uganda

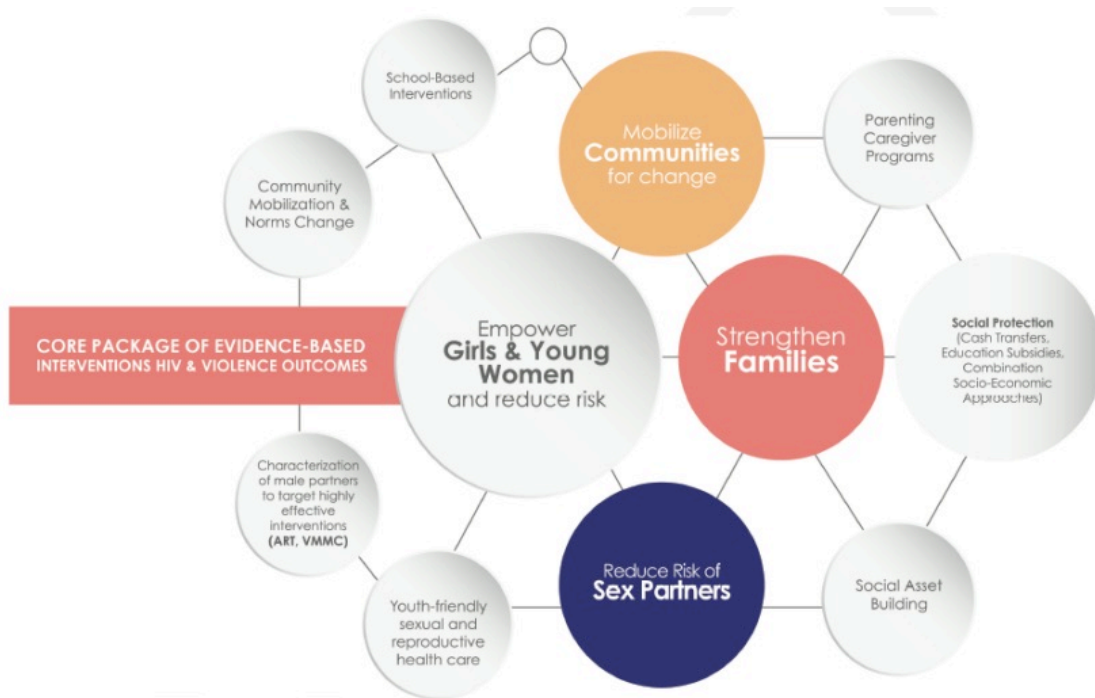
Findings from the Uganda Population-Based HIV Impact Assessment 2016–17 indicate a decrease in HIV prevalence in the country, from 7.3 percent in 2011 to 6 percent in 2016. However, prevalence is not equally distributed between gender and age segments; it is higher in females compared to males (7.5% and 4.3%, respectively). AGYW are at particularly high risk for acquisition of HIV infection; nearly two-thirds of all new HIV infections occur among adolescent girls (MOH, 2017a). HIV prevalence is nearly 4 times higher among females than males ages 15 to 19 (1.8% in girls compared to 0.5% in boys) and ages 20–24 (5.1% in young women compared to 1.3% in young men) (MOH, 2017b).

Many risk factors for early pregnancy overlap with risks for HIV infection. Early sexual debut has been posited as an important risk factor for sexually transmitted infections (STIs), including HIV (Stock, et al., 2013). In particular, sexual initiation at a younger age has been associated with sexual risk-taking behaviors, including having multiple sexual partners (Zuma, et al., 2010) and a more negative attitude toward condom use (Sandfort, et al., 2008).

Transactional sex has been cited as an important factor driving AGYW's increased risk for acquiring HIV (Jewkes, et al., 2012; Dellar, Dlamini, & Karim, 2015). Qualitative studies suggest that transactional sex is influenced by both the economic and social dimensions of gender inequality (Hunter, 2010); epidemiological studies find it to be associated with other HIV risk behaviors, such as multiple concurrent partners and partner violence and abuse (Moore, Biddlecom, & Zulu, 2007; Steffenson, et al., 2011; Cluver, et al., 2011). DREAMS Initiative

DREAMS is part of the United States Global Health Initiative, funded by President's Emergency Fund for AIDS Relief (PEPFAR) agencies and implemented by private implementing partners in 10 countries in sub-Saharan Africa, including Uganda. The goal of DREAMS is to reduce new HIV infections and teenage pregnancies in AGYW ages 10–24. The DREAMS theory of change is grounded in evidence on the need for prevention approaches that are evidence based; multisectoral; and simultaneously address the behavioral, biomedical, and structural drivers of HIV (Parkhurst, 2013; Hargreaves, 2013). The DREAMS initiative delivers a core integrated package of life skills and economic strengthening interventions addressing health, social, and structural factors that directly and indirectly increase girls' HIV risk, such as poverty, gender inequality, sexual violence, and lack of education (PEPFAR). In addition to addressing HIV risk among AGYW, DREAMS also responds to the need for contraception to prevent unplanned pregnancies. Figure 1 shows the full package of interventions encompassed under the DREAMS umbrella.

Figure 1. DREAMS core package of evidence-based interventions



Source: Saul, et al., 2018

DREAMS began work in Uganda in 2015 and operates in 11 districts: Rakai, Bukomansimbi, Ssembabule, Mukono, Mubende, Lira, Mityana, Gulu, Omoro, Gomba, and Oyam. The project concentrates its effort on those segments of the AGYW population most at risk: high-risk girls who are still at school, girls who are pregnant, married girls, those who have given birth before age 15, and those involved in transactional sex.

DREAMS employs a “layering” approach (see Table 1). All beneficiaries are expected to be provided with HIV testing in combination with other services, depending on their age, marital status, and school attendance. These services include condom promotion and provision, social asset building and caregiver programs, combined socioeconomic services (financial literacy, entrepreneurial skills, apprenticeship, and savings and loans groups), and contraceptive mix counseling and provision. The program also offers gender-based violence care for victims following violent incidents. In Uganda the DREAMS projects works with AGYW through level-3 healthcare facilities¹ and safe spaces. In addition, it offers a special program for AGYW who attend school, consisting of a minimum package of services that includes HIV prevention, violence prevention in school, and referral to the DREAMS safe spaces for other services not offered by the in-school implementing partner (Ministry of Sports and Education, 2016).

1. Level-3 health facility should be found in every sub-county in [Uganda](#). These facilities generally have staff of about 18, led by a senior clinical office, who runs a general outpatient clinic and a maternity ward (Kavuma, 2009).

Table 1. Uganda DREAMS layering

		Population Segments				
		In school	Pregnant	Married	Given birth by 15 years	AGYW in transactional sex
INDIVIDUAL	Primary individual interventions	<ul style="list-style-type: none"> • Social asset building • School-based HIV & violence prevention • parenting 	<ul style="list-style-type: none"> • HTS • Condoms • Social asset building • Combination of socioeconomic approaches 	<ul style="list-style-type: none"> • HTS • Condoms • Social asset building • Combination of socioeconomic approaches 	<ul style="list-style-type: none"> • HTS • Condoms • Social asset building • Combination of socioeconomic approaches 	<ul style="list-style-type: none"> • HTS • Condoms • Social asset building • Combination of socioeconomic approaches
	Secondary individual interventions	<ul style="list-style-type: none"> • HIV testing services • Condoms • Contraceptive mix • Post-violence care • Cash transfers 	<ul style="list-style-type: none"> • Post-violence care • Parenting • Contraceptive mix 	<ul style="list-style-type: none"> • Contraceptive mix • Post-violence care 	<ul style="list-style-type: none"> • Contraceptive mix • Post-violence care • Parenting 	<ul style="list-style-type: none"> • Pre-exposure prophylaxis (PrEP) • Contraceptive mix • Post-violence care
	Range individual-level interventions	3–7	4–7	4–6	4–7	4–7

Source: DREAMS, 2017

METHODS

Study Objective and Research Questions

Given these dynamics of Ugandan society, the objective of this qualitative study was to examine the influence of the various DREAMS interventions on perceptions and behaviors of AGYW in northern Uganda to assess the influence of the program on pregnancy delay. The following are the research questions that guided this study:

- Did DREAMS beneficiaries find that any of the services they received made it easier to access contraception, postpone pregnancy, or postpone marriage?
- Did in-school beneficiaries feel that the services they received helped them stay in school or delay sexual activity?
- Did out-of-school beneficiaries feel that the services they received helped them manage their fertility intentions? Did the services help them return to school or postpone pregnancy?
- Did married beneficiaries and those who had already had a pregnancy feel that the services they received helped them deal with the social pressures to have children and delay future pregnancies?

The information generated by this study will be used by the DREAMS initiative in Uganda, the USAID/Uganda Family Health Team, and other DREAMS implementers to inform the design of future programmatic interventions supporting AGYW.

Study Setting

The study was conducted in Gulu and Lira, two districts in the Acholi subregion of northern Uganda (see Figure 2), which were selected, in consultation with USAID/Uganda, because they have a relatively large number of DREAMS beneficiaries in both urban and rural areas. Two subcounties were selected from each district using the following eligibility criteria :

- The subcounty rolled out at least three DREAMS services for a period of at least 12 months before June 30, 2017
- The services rolled out included the sexual and reproductive health component
- AGYW were enrolled in the DREAMS initiative on or before June 30, 2017

Based on these criteria, and in consultation with Applying Science to Strengthen and Improve Systems (ASSIST)—the largest DREAMS implementing partner in both districts—we selected four subcounties in the two districts:

- Lira: Amach (rural) and Bar-dege (urban)
- Gulu: Bungatira (rural) and Adekokwok (urban)

Figure 2. Study districts on Uganda map



Study Population

DREAMS Beneficiaries

In each study district, we conducted in-depth interviews (IDIs) with beneficiaries, peer leaders, and other stakeholders to understand the experiences of AGYW ages 10–24 enrolled in the DREAMS program. Using the DREAMS enrollment database, we stratified the sample of AGYW into six mutually exclusive segments:

- In school, unmarried, ages 10–14
- In school, unmarried, ages 15–19²
- Out of school, married, ages 15–19
- Out of school, unmarried, ages 15–19
- Out of school, married, ages 20–24
- Out of school, unmarried, ages 20–24

We aimed to select two beneficiaries from each subcounty within each of the six segments in each subcounty (2 beneficiaries x 6 segments x 4 subcounties = 48 beneficiaries), to capture the widest range of program experience.

DREAMS Peer Leaders

In addition, we interviewed four DREAMS peer leaders in each selected subcounty, for a total of 16 peer leaders—girls who started as DREAMS beneficiaries and were selected by their peers to become peer leaders. They receive special training, then help with mobilization and training of beneficiaries.

2. According to DREAMS enrollment data, there are virtually no married AGYW still in school among DREAMS beneficiaries.

Other DREAMS Stakeholders

Finally, we also interviewed other stakeholders at the district, subcounty, and facility levels (planned $n = 14$) to explore their perceptions of how the DREAMS initiative influences AGYW health decisions and behaviors. Our total estimated sample to reach saturation was 78 interviews. Because of opportunities and constraints in the field, our final sample was somewhat larger ($n = 86$):³

- 55 beneficiaries (across the 6 segments)
- 16 peer team leaders
- 15 additional stakeholders

Sampling and Recruitment

To support recruitment and general stakeholder engagement, we worked with local PEPFAR-funded DREAMS initiative implementing partners. The study team sent out formal communications to the implementing partners in Gulu and Lira districts. We asked them to provide contact information for peer leaders and stakeholders at the district, subcounty, and health facility levels. We used data from the enrollment tracking database of the Uganda DREAMS Tracker System, in which all girls who join the DREAMS project are registered and tracked. The system includes a unique DREAMS identification number for each beneficiary enrolled in the program, along with the DREAMS segment to which she was assigned based on her information in the database.

The sampling frame consisted of AGYW ages 10–24 who were enrolled in the DREAMS initiative before June 30, 2017 and thus had participated in the project for at least one year by the time of data collection. For each subcounty, the list of enrollees in each of the six segment was randomized using a random number generator. The project's DREAMS coordinator reviewed the randomized lists, identified girls from the top of each list who were active in the DREAMS program (based on trainings in which they participated), and eliminated girls from the list who were inactive. Starting at the top of the randomly sorted list of active beneficiaries, the coordinator invited the beneficiaries to participate in the study until we reached the desired sample size.

This beneficiary selection procedure ensured that we interviewed beneficiaries who had had the most opportunity to benefit from program interventions. Recognizing that their experiences would not necessarily be generalizable to those of other beneficiaries who had entered DREAMS more recently or who had received fewer services, we selected beneficiaries who could tell us most about how DREAMS influences AGYW.

The DREAMS coordinator identified peer leaders in each subregion for an interview. We selected other stakeholders based on their availability and position in the district, subcounty, or level-3 healthcare facility affiliated with the DREAMS project in the subcounties, and included the district community development officers, parish coordinators, senior project officers, parasocial workers, district education officers, and facility DREAMS focal persons.

Data Collection

MEASURE Evaluation hired Reveal Research Centre, a Ugandan data collection firm, to collect the data. The firm undertook field work during August–October 2018. The study team for each interview consisted of an interviewer and a note taker. Both were fluent in the local languages (Acoli in Gulu and Langi in Lira) and were experienced in conducting qualitative interviews with adolescents. The research team conducted the

3. The increase in the number of beneficiaries from what originally had been planned occurred when more girls than anticipated for some segments were invited to participate because of confusion about their ages. We interviewed them and only then realized their actual age, but still completed and kept their interviews. The number of interviews per district from each segment is shown in Table 2 in the results section below.

interviews in the respondents' language of choice and followed a semi-structured question guide (see Appendix A). The question guides were developed in English and translated into Acholi and Langi. This translation was validated and pilot tested by the full group of interviewers and note takers during interviewer training. A total of six questions guides were developed, guided by the research objective and research questions:

1. Beneficiaries ages 10–14
2. Beneficiaries ages 15–24 (5 of the beneficiary segments)
3. Peer leaders
4. Stakeholders at the district level
5. Stakeholders at the community level
6. Stakeholders at the facility level

In addition to being interviewed themselves, the peer leaders helped to introduce the research team to the beneficiaries (but were not present at the actual interview). Before interviews began, the interviewers reminded respondents about the voluntary nature of participation and sought and documented respondent informed consent for both participation and audio recording. For minors, they sought informed consent from parents or guardians and obtained informed assent from the respondent herself (see the section on ethical considerations below for more details).

Interviews with AGYW and peer leaders took place in a location convenient to the respondent, such as a room in a health facility, in the car that conveyed the research team, or under a secluded mango tree. The interview team selected locations where the conversation could not be overheard or observed, and interruptions could be minimized. Girls ages 10–14 were interviewed in or near their homes. The team undertook interviews with other stakeholders in their place of work or another location convenient to them that offered auditory and visual privacy.

Data Management and Analysis

The interviews were digitally recorded. Following each interview, the interviewer or note taker transcribed all interview recordings while simultaneously translating them into English, and then expanded the transcriptions with field notes. To maintain confidentiality, any information that could identify the beneficiaries, their families, or anyone else to whom they referred during the interview was not included in the transcripts, nor was any information that identified specific locations.

The research team imported the transcripts into QSR NVivo (version 11). Study investigators read the transcripts multiple times for data content and quality, and to identify preliminary emergent themes. They developed an initial analysis guide and draft codebook with topical codes, based on questions from the interview guides. Using this draft codebook, three independent coders coded the same transcripts to test the reliability of the coding scheme and identify additional themes and codes, until they felt that the codebook was comprehensive. The team revised the codebook to include emerging themes identified during this review and then used the revised version to code the remaining transcripts.

After coding, the research team undertook an interactive process for synthesizing the findings and arriving at conclusions. This process involved several rounds of synthesis, brainstorming, further analysis, and further discussion until the team was satisfied that analysis was comprehensive.

Ethical Considerations

This study adhered strictly to U.S. and international research ethical guidelines for conducting research with human subjects, including 45 CFR 46 and the Council for International Organizations of Medical Sciences. The study protocol, instruments, and procedures were approved by Health Media Labs in the United States and the Mildmay Uganda Ethics Review Committee in Uganda. We also received authorization to conduct the study from the Uganda National Council for Science and Technology. The study team took many precautions to safeguard study participants and ensure data confidentiality.

Before each interview, the prospective respondent received information about the study, including its purpose, what participation involved, its completely voluntary nature, how data would be handled, steps undertaken to ensure privacy and confidentiality, their rights as research subjects, and more. The interviewers also made clear to them that the services they received from the DREAMS project or the health facility would not be influenced in any way by their agreement or refusal to participate in the study. They then had the opportunity to ask questions. The interviewers then asked those who agreed to participate to sign an informed consent form if they were older than age 18 or if they were considered emancipated adults (married women younger than 18). The interviewers asked those younger than 18 who were not considered emancipated adults to sign an assent form; before they could participate, however, their parent or guardian also had to consent.

Data Security

The study team took significant precautions to ensure that the data remained confidential. The team uploaded digital recordings of qualitative interviews onto password-protected files on encrypted laptops at the end of data collection each day and backed them up to encrypted hard drives. They transcribed audio files on computers that faced away from others. Transcribers used head phones, so anyone not affiliated with the study was unable to hear the recordings. Any information in the transcripts that included personal information about the respondents or others was not transcribed; instead, the study team shared the transcripts in a directory on OneDrive, a secure cloud-based information-sharing site; only the study team had access to the directory. The team destroyed the audio recordings after transcription was completed. The transcripts will be kept in a secure location for seven years and then destroyed.

RESULTS

Our goal is to present findings related to the contribution of DREAMS to pregnancy delay and HIV prevention. To do so, we first present contextual respondents' perceptions of factors that put AGYW at risk of early pregnancy and HIV. These factors form the backdrop against which we can qualitatively evaluate DREAMS' contributions to pregnancy delay in the study areas. We then assess beneficiaries' exposure to DREAMS interventions and key messages and sources of information on family planning and HIV. Finally, we present findings related to the contribution of DREAMS interventions to pregnancy delay and HIV prevention.

Study Respondents

This study presents findings from interviews with 86 respondents, including 55 (64%) program beneficiaries; 16 (19%) peer leaders; and 15 (17%) subnational, community, and program-level stakeholders, as shown in Table 2.

Table 2. Sample, by type of respondent and district

Type of respondent (n = 86)	District		Total
	Gulu	Lira	
Beneficiaries, by segment			
In school, unmarried, age < 15	4	4	8
In school, unmarried, age 15–19	3	5	8
Out of school, married, age 15–19	4	4	8
Out of school, unmarried, age 15–19	4	5	9
Out of school, married, age 20–24	4	8	12
Out of school, unmarried, age 20–24	5	5	10
Peer leaders, age 15–24	8	8	16
Subtotal beneficiaries	32	39	71
Stakeholders			
District level			
DREAMS focal person	1	1	2
District education officers	1	1	2
District community development officers	1	1	2
Subcounty level			
Health facility DREAMS focal person	1	1	2
Community development officers	1	1	2
DREAMS focal person at subcounty level	1	1	2
Community level			
DREAMS parish-level supervisors	0	1	1
Para or community social workers	1	1	2
Subtotal stakeholders	7	8	15
Totals (beneficiaries + stakeholders)	39	47	86

Contextual Framework of Factors that Put AGYW at Risk of Pregnancy and HIV

Program influence does not happen in isolation. To assess the effect the DREAMS program had on the lives of beneficiaries, we first need to understand the context. Our data identified a number of social conventions and expectations relevant to the aims of DREAMS, interacting across several levels of environment, community and peers, family and partner, and the individual. Therefore, we approached the data analysis using the ecological framework (World Health Organization, 2019), which lays out social, community, relationship, and individual aspects of one's life that may contribute to risky behaviors. These risk factors and the interactions among them influence the behaviors of DREAMS beneficiaries. Each level is outlined below, along with the forms of vulnerability it manifests.

Social Factors

Poverty was the dominant theme that characterized the environment of the study respondents. Nearly all of them referred to poverty or financial constraints when discussing the factors influencing their sexual choices and behaviors, including leaving school, transactional sex, becoming pregnant, and engaging in risky behaviors.

Poverty and Dropping Out of School

More than half of the respondents concurred that poverty was a frequent driver of the decision to drop out of school.⁴ Respondents explained that dropping out of school was sometimes associated with financial shocks to the family, including loss of a breadwinner or income, as well as the end of scholarships or other external support. Poverty is not the only driver of school dropout. Respondents within each segment made a direct connection between leaving school and pregnancy—either dropping out of school because of pregnancy, or pregnancy leading to leaving school. Of 72 beneficiary respondents, 39 reported having dropped out of school. Thirty (of 39) also had had at least one pregnancy by the time of the interview. In some cases, beneficiaries explained that pregnancy happened inadvertently after dropping out of school.

I stopped [school] in primary five, so when I was to go to primary six, I got pregnant and stopped going to school. First, it was about lack of school fees; there was no one to pay my fees because by then I had lost my dad in 2009. Life became so difficult for my mother to get money to pay [for] us in school. Gulu, rural, out of school, unmarried, age 20–24

In a small number of cases, beneficiaries reported dropping out of school following an early pregnancy.

The reason why I stopped school in senior four is that you know girls are said are always disturb[ed] by adolescence; then when I studied and reached the middle of the term, I had a boyfriend that I was moving out with. So, then the process of our moving out, by the time I was sitting for exams I was already pregnant, then after my papers, when we were waiting for results in between that, I gave birth. Gulu, urban, peer leader

Others explained that once they left school, the next step was to marry and have a child.

After finishing my O-level [ordinary level] I wasn't able to continue with my studies when my dad passed on, and marriage was the only solution to rescue me from suffering, so I got a man and gave birth to my first child four years ago. Gulu, urban, out of school, married, age 20–24

These beneficiaries said that family caregivers and community members sometimes exerted pressure on them to marry and become pregnant once they dropped out of school because they believed that marriage and children should follow soon after.

4. In Uganda, secondary school comprises lower secondary school (four years of "O-level" [ordinary level]), followed by upper secondary school (two years of "A-level" [advanced level]). At the end of O-level, students must pass O-level exams to proceed to A-level.

Overall, then, our findings show that early pregnancy exacerbates poverty (because pregnant AGYW drop out of school), and poverty sometimes drives early pregnancy. Stakeholders confirmed that a combination of poverty and early pregnancy were common factors driving AGYW to leave school.

Some dropped out because [...] the parents could not afford schools fees, and some leave schools because of pregnancies and some leave schools because they can't handle the school demands; their backgrounds could not allow them to learn things clearly. Lira, district stakeholder

Despite these dropout rates, beneficiaries overwhelmingly discussed school positively and commonly expressed a desire either to remain in school or re-enroll. Beneficiaries explained that positive school experiences include opportunities for peer interaction and play, subjects they enjoy, availability of amenities like water, and a way to achieve ambitions or goals. Beneficiaries in school also connected staying in school to achieving their future career and lifestyle aims.

When you study, you can become a nurse. I like to study; studies can help you develop [your] home. When you are educated, you get money and build houses for your parents. Lira, rural, unmarried, age 10–14

Beneficiaries who discussed school negatively commonly referenced the incompetence of teachers, dislike for certain subjects, or low grades that resulted in harsh punishments. However, when discussing these factors, beneficiaries did not often report that these downsides alone were the reasons they left school.

Poverty and Cost of Basic Needs

Although poverty emerged as a factor driving AGYW to leave school, findings indicate that living with extreme financial constraints also made beneficiaries vulnerable in other ways. Beneficiaries and stakeholders both noted that living in an environment characterized by poverty led beneficiaries to seek out alternative ways to meet their basic needs when their caregivers could not do so. In the case of unmarried beneficiaries, they sometimes opted for transactional sex. This theme was more dominant in Gulu district, a more urban location than Lira.

The reason why teenagers are at high risk [of pregnancy and HIV] is material things. Some girls go to men because they want money and others because they have seen good things from her friends and also feel like having them, so they end up going for sex [...] You find a girl from a poor family, when she looks at the friends having certain things the family cannot afford, she starts saying that I should also have that thing. Then [she] ends up going to sleep with the boys for those things. Gulu, rural, peer leader

Beneficiaries often cited the example of the cost of disposable sanitary products when considering this topic because these products often were unaffordable for many of them. They explained that AGYW sometimes turned to transactional sex as a way to afford these products, because having “poor” hygiene practices (i.e., using cloth rather than disposable products or having clothing soiled with blood) is stigmatized. Both beneficiaries and stakeholders expressed this sentiment.

She might want money to buy pads, but because she doesn't have any, she may be forced to go and ask from a boyfriend who may end up using her for sex. Gulu, rural, out of school, unmarried, age 20–24

Another thing that can put them at high risk of getting pregnant is admiring things that they don't have, and yet their friends have. For example, a girl is in school and has no pads and then maybe her cloth[es] soil up with blood and boys begin to make fun of her. So this girl will think about it and then, later on, will not come to school the next day. Lira, urban, stakeholder

Community Factors

Our data show community expectations to marry young. There is a common belief that delaying marriage is not desirable because it increases the risk that an AGYW will not find a partner. Even though males are also

expected to get married, respondents did not indicate that it was important for men to do so at a young age. Some beneficiaries implied that having children young would help AGYW avoid potential challenges with fertility. However, beneficiaries more commonly framed this decision in terms of community expectations and the resulting pressure. This pressure begins when girls are young and is expected to increase as they get older.

If you don't have a child yet, they can put you under pressure, especially when you are just there at home; even men start to force you into having children when you are not ready. Lira, rural, out of school, married, age 20–24

Like when a girl is 26–27 years old, people will begin talking that, when are you getting children, you must have children because you are now getting old. Gulu, urban, peer leader

Given the priority placed on having children, respondents in all segments commonly noted a stigma associated with contraceptive use. They explained that AGYW who use family planning face the risk that those in the wider community would consider them to be promiscuous or unfaithful in the context of marriage. Moreover, respondents in all segments commonly said that such stigma is reinforced by the common belief that using family planning will lead unmarried AGYW to begin having sex at an early age.

This is not possible because no parent will allow her daughter who is not married to use these methods because this would encourage the young girls to misbehave because you will be free to have sex knowing that you are already safe. So there is really not any brilliant woman who can accept her child to go for family planning, especially if you are not married.

Gulu, rural, peer leader

When discussing this stigma, beneficiaries noted that it is acceptable for AGYW to engage in sex only inside the bonds of matrimony. Although relatively few respondents referenced examples of marriage occurring as young as age 13 or 14, many acknowledged that this belief is so strong that it can sometimes drive AGYW into early marriage.

These days, girls just get married because they are excited to have sex. You can find a girl of 13 years or 14 years married and they drop out of school. When you ask them why they did that, they answer you that “if you have tried, why not me?” But after two years, they will leave and go back to their parents after failing in their marriages. Gulu, rural, out of school, married, age 20–24

Relationship Factors: Family, Partner and Peers

Respondents from all segments noted that families play an important role in AGYW's decisions. These dynamics correspond to AGYW's marital status—married AGYW are affected by their relationship with their husbands and unmarried ones by their parents.

Many respondents noted that the social convention of marrying and having children at a young age means that it is common for families to push AGYW into early marriage, or at time even force them to marry early. Beneficiaries explained that parents often use biological readiness indicators, such as breast development or menarche, as yardsticks to determine whether AGYW are ready for marriage.

Some parents actually put their children [under] pressure [...] some parents encourage their daughters to get married once they are a certain age [...] when they start seeing their period [...] between 12 and 14 years. Lira, rural, out of school, unmarried, age 15–19

Parents also sometimes push their daughters into early marriage as a financial benefit for the family.

I think it's just an economic problem. Like maybe when they don't have money [...] the parents were pushing girls when they see the breast has started coming they just push you, you go and marry this man so that they bring us money. Actually, there is no parent who wants her daughter to get pregnant at an early age, but sometimes it is the poverty of the parents. Gulu, rural, peer leader

Once an AGYW is married, she is expected to have children—so much so that there is stigma associated not only with any AGYW who violates this expectation, but also her parents. This possibility leads parents to go to great lengths to ensure that their daughters conform and become pregnant immediately after marriage.

Poor Parenting and Gender-Based Violence Leads to Risky Sexual Behaviors

The interview results show an interesting relationship between the home environment and risks of early pregnancy and HIV among unmarried AGYW. Both beneficiaries and other stakeholders noted that unsafe environments, characterized by violence, family pressure to leave home, pressure to help the family, and social distance between the AGYW and their guardians, are more likely to push AGYW out of homes and into sexual relationships or marriage at a young age. Beneficiaries and peer leaders explained that this is the case in circumstances of actual violence in the home and other instances that make home life challenging, including when parents or other family members do not get along.

Gender-based violence in homes also forces young girls to run away from home and later involve [themselves] in sexual activities. Lira, rural, in school, unmarried, age 15–19

It is not also easy for some girls who come from [a] very strict family because they are trained and talked to about the problems that they can get if they engage in early sex, like getting pregnant, HIV. Gulu, rural, peer leader

DREAMS stakeholders reflected on these risk factors when considering the vulnerable state of many DREAMS beneficiaries.

We have also tried to dig out the family background of these girls, how they came to the streets, and we discovered that some of these girls are orphans, [or had] single parents leadership, when maybe it was only the mother that was caring for them and now they have reached a state that the mother can't, so they tend to leave the parent. Another thing is [. . .] divorce. Divorce in the family is also a huge challenge, and what we have discovered, too, the gender-based violence between parents also chase[s] children away from home, and that is the family background [and] why these girls were included into the DREAMS initiatives. Lira, urban, stakeholder

Stakeholders and peer leaders also identified a reluctance to take advice from their parents as exacerbating the risk of early pregnancy and HIV infection for unmarried AGYW. They argued that these AGYW are particularly uninterested in advice on behaviors that can “keep them safe” from pregnancy and HIV, including avoiding walking out alone at night and going to clubs.

You understand that these children are undisciplined and their parents fear talking to them. These girls even escape from home, and their parents aren't aware, and when the parents get to know, they disappear away from home to a friend's home and stay there for some time. Lira, urban, stakeholder

However, in other cases, peer leaders and program stakeholders noted that many parents and guardians also do not give guidance to AGYW on these issues, leaving them vulnerable.

To me, I think they get pregnant because the problem is from home where they live. The problem is the parents didn't have time to groom and talk to the children at an early stage, telling them the good and bad things, and how to conduct themselves. And also, at times maybe there is someone at home who doesn't conduct themselves well, so these young girls copy from them and also say if so-and-so does this, how about me. Lira, urban, stakeholder

Some peer leaders attributed risky behavior, such as walking alone at night or hanging out with boys, to poor parenting skills or lack of awareness.

Decision Making Regarding Family Planning

Respondents from all segments consistently referenced the social expectation that AGYW must seek approval to use family planning. Unmarried AGYW are expected to seek their parents' consent, whereas married ones are expected to obtain their husband's permission.

Beneficiaries and stakeholders further explained that the stigma associated with family planning use means that parents often reject their daughters' request to use a contraceptive method. One district stakeholder explained that he does not even support his own daughters in using family planning for these same reasons.

Personally, I don't promote it [family planning] [...] I have girls, four daughters, and I have five boys [...] Maybe the bigger one now uses it; of course, now she's big [so] she can do whatever she wants, and the rest who are still under my support, no, I don't encourage that. Gulu, district-level stakeholder

A peer leader also explained this dynamic.

Because if you have your parents you should first start from them [...], And they ask you why you want it [...] If it's understanding parents, they will agree, but parents who don't understand will refuse. Most of them refuse. Gulu, rural, peer leader

Married beneficiaries commonly said that their husbands do not approve of using contraception. Therefore, they prefer using methods like injections and intrauterine devices (IUDs) because they can have the latter inserted without permission from their husbands. However, they also noted that they would face the consequences of this decision if their husbands found out. One young woman in Gulu explained this::

For me, the injectable is still safer because the implant can bring out scars on the arm, so if you put it without your husband's knowledge, it can bring quarrels between a man and a woman once he sees it. While with injectable, no one can notice. Gulu, rural, out of school, married, age 20–24

A peer leader in Gulu made a similar observation:

The most used family planning method used by the girls is [a] condom, because most of the girls who are not married like using them. And then some girls who are married, their husbands don't want them to put the implant in their bodies, and also the implant and Sayana Press [a hormonal birth control shot], which is not seen by their husbands, especially for those who are married. Because if you are married and decide to use [...] the implant if the man gets it, he will fight you and this [will] bring about domestic violence in the family. Gulu, rural, peer leader

Health workers associated with DREAMS explained how these social expectations influence their services.

Like most girls who are married, they feel if they were to use condoms, their husbands will harass them [...] And also, to some extent, some families [...] feel when the wife is going in for family planning the husband should be aware. So sometimes we seek the consent of both. Lira, urban, health worker

Marriage Removes Desire for Pregnancy Delay

The social priority placed on having children soon after marriage means that once married, AGYW face significant pressure from their partners, in-laws, and their own parents to have children as quickly as possible. Delaying pregnancy in marriage is often interpreted as wasting time; in such cases, interviewees explained that in-laws might suggest that husbands leave the marriage and find another wife who would have children.

If you are married and you have stayed for two months without getting pregnant, people will talk a lot, even if you do not plan to conceive yet. So with that pressure, you can get pregnant. Gulu, urban, peer leader

As for my in-laws, they say that I am just wasting their son's time and that their son should marry another wife if I don't want to produce. Gulu, rural, in school, unmarried, age 15–19

Beneficiaries explained that expectations for women to have children once they are married are so strong that men would leave the marriage in instances where it does not happen.

I used to have [a husband] in 2010, I tried to get married but then it did not work out; then I came back home in 2015. The man chased me away because I was not getting pregnant. Lira, urban, out of school, unmarried, age 20–24

The interview results show that being married is associated with an elevated likelihood of frequent pregnancies. This finding is linked to expectations for having a child, an increase in the frequency of sexual encounters with their husbands, and eliminating family planning use.

Peers

Our findings suggest that peers also shape and reinforce expectations of both positive and negative behaviors. Respondents noted that peers can convince AGYW to have sex, get pregnant, and avoid the use of family planning.

Some girls may be pushed to engage in early sex [and] have early pregnancies for the sake of pleasing their peers. Gulu, rural, out of school, unmarried, age 20–24

This pressure can also influence choices to stay in school, which can further affect pregnancy decisions.

Another one could also be [...] bad peer influence; for instance, young girls who like I said they are not in school [because] sometimes they mix with other [...] girls around, and sometimes they end up making wrong decisions. Gulu, rural, out of school, unmarried, age 20–24

Some peer leaders also highlighted the role of peer pressure in discouraging the use of family planning.

Some friends discourage it by saying that it can cause complications, especially to young girls, when you use it at an early stage. Lira, rural, peer leader

Other respondents also mentioned that boys of the same age could also exert pressure on girls to have children.

Like the girl staying in our home, she used to stay well until adolescents began disturbing her, and she could go and stay among boys, and those boys kept on mocking her and making fun of her that she will die impotent and childless, and they kept the pressure on until she finally had a baby with one of the boys that pressure[d] [her] to give birth. Gulu, urban, out of school, unmarried, age 15–19

Boys also face pressure by their peers to behave in ways that can affect girls' behaviors.

I haven't heard of young women, but it's common among adolescent[s], especially boys. Usually, they are encouraged by their peers to start having sex early. Lira, out of school, unmarried, age 15–19

Individual Factors

We asked beneficiaries when women are most likely to become pregnant if they have sex, as well as a series of scenario-based questions to assess their awareness of their fertility. Overall, beneficiaries had a good knowledge of fertility and when a girl can get pregnant. All beneficiaries commonly identified menarche as the beginning of a girl's fertile period, rather than age.

It is nothing [to do with age]. When you have started menstruation, and then you start sleeping with boys, you can easily get pregnant. Lira, rural, in school, unmarried, age 10–14

Beneficiaries learn about their fertility from training, their friends, their own experience, and the experience of others they know. They often referenced the concept of “safe days” and “danger days” when answering questions related to fertility. Though many beneficiaries applied these concepts confidently, in some cases they expressed doubt as to how to determine fertility:

I am trying to remember how we were taught. That there is a way one should count after a certain number of days from day one to the fourteenth day or fifteenth day, am not certain, but there is a way you count your safe days if you do not want to get pregnant. Lira, urban, out of school, married, age 20–24

The majority of beneficiaries realized that they could become pregnant even if they have sex very infrequently, as this response to the specific scenario indicates.

I: Marta has a boyfriend who keeps coming back to her every six or seven weeks because he works far [away]; do you think that if she had sex with him, she could get pregnant?

R: Yes, she can become pregnant.

I: Why do you say so?

R: If she has started her period, then she can get pregnant.

Lira, rural, in school, unmarried, age 15–19

The only common fertility-awareness misconception was the belief that “breastfeeding” protects against pregnancy in all situations (the question did not ask about exclusive breastfeeding).

Although beneficiaries’ fertility awareness was relatively good, they were less aware of risk factors for pregnancy and HIV. Combined with the challenges of refusing sex, this finding translates into having “weak” self-efficacy. Peer leaders commonly identified it as a problem. In most cases, this “weakness” manifested itself by AGYW placing themselves in risky situations. Peer leaders framed AGYW’s vulnerability as their lack of awareness of how to avoid dangerous situations, as well as how to prevent pregnancy or HIV.

Some girls also like to move at night; in this way, you can easily be raped by drunkards. When you also have sex without protection, it can also lead to early pregnancy. Some girls do not know how to protect themselves. Lira, urban, peer leader

Respondents most commonly referenced this idea in the context of transactional sex.

In [Name] community, there are soldiers, and if these soldiers give them [a] little money, they can go in for sex with [the girls]. Sometimes [the girls] have no knowledge of how to protect themselves from those men and how to say no for sex. Gulu, urban, peer leader

Transactional Sex

The findings suggest that the contextual factors detailed in this section together contribute to high-risk behaviors, including transactional sex. Some beneficiaries drew a direct link between poverty and engaging in transactional sex to meet their basic needs. In some instances, it takes the form of one-time interactions with men.

Poverty has made most of them leave their village, and they are now in town, and in order for them to survive, they risk themselves into unsafe sex. So poverty is one of the serious issues that makes them have a high risk. Lira, district-level stakeholder

Sometimes, people who are HIV positive and are older, influence and trick small girls of 10–12 years old into having sex with them. Men who are rich always attract young girls to them by giving them money in exchange for sex. Lira, rural, peer leader

Beneficiaries more commonly explained that AGYW become involved with a man, typically older, with the understanding that he will provide for them and their families.

The girls lack certain basic needs and it is men who can provide for them; [when] the parents fail to provide for them [it] means girls are forced to exchange it with sex. Lira, rural, in school, unmarried, age 15–19

Another beneficiary explained that AGYW with caregiving responsibilities are particularly vulnerable.

Girls these days don't listen to their elders, they start clubbing at an earlier age and some end up being persuaded for sex in the night, but majorly some young girls have heavy responsibilities to take care of their siblings due to loss of parents, which forces [them] to prostitution. Gulu, urban, out of school, unmarried, age 20–24

Beneficiaries often noted that transactional sex happens when AGYW place themselves in risky situations, such as going to bars or nightclubs, as well as when they cannot say “no” to men who approach them. A health assistant working with DREAMS summarized the situation when she observed that AGYW engage in transactional sex both because of economic deprivation and a lack of empowerment. This health assistant also pointed out that providing income-generating activities to young women would reduce the chances that they might seek out sexual relationships with men to gain things.

We looked at poverty elevation as one of the critical factors leading to getting new HIV/AIDS. When someone is poor, she will opt to go in for a man who actually can give her something, but if this woman is actually in a position to know that if I wake up in a day and I am in a position to earn 10,000 UGX out of maybe my business or whatever I am doing, this young girl will look at this other man who comes in to lure them into sex, unprotected sex, as being useless, because after all I have [. . .] something that can keep [me] or my child that I have given birth to. Lira, urban, stakeholder

Peer leaders and other stakeholders expressed concern that AGYW engaging in transactional sex are at particular risk of early pregnancy and increased risk of HIV infection.

Overall, social conventions and extreme poverty in the study areas drive AGYW to become pregnant early and engage in risky behaviors. These elements form the backdrop against which DREAMS is committed to reduce early pregnancy and HIV infection, and effect social change.

Exposure to DREAMS Interventions

Beneficiaries reported participating in or being exposed to a variety of DREAMS interventions. In this section, we present details of beneficiary interaction with DREAMS. Peer leaders are excluded from this discussion. They were not asked about their exposure to the various DREAMS programs but are more likely to be exposed to more elements of DREAMS as part of their DREAMS peer-leader training.

Girls ages 10–14 receive a different set of interventions than older beneficiaries under the school health program. These interventions include HIV prevention interventions, primarily focused on abstinence. They also encompass education sessions on care and treatment, adolescent relationships, gender and vulnerability, sexual abuse, teenage pregnancy, cross-generational and transactional sex, alcohol and drug abuse, adolescents with special needs, skills for knowing and living with oneself and with others, and skills for making safe choices. All but one of the eight girls ages 10–14 we interviewed reported having been exposed to HIV counseling and/or testing, and to savings and loans or other economic programs. Four (of eight) reported receiving family planning information. Interestingly, only three (of eight) mentioned abstinence information.

DREAMS provides a wider range of interventions for older beneficiaries. Table 3 shows the broad categories of DREAMS programs to which beneficiaries ages 15–24 reported being exposed. The most commonly mentioned were HIV counseling and/or testing, family planning counseling, and condom promotion and/or distribution. The least commonly received services were parenting counseling, followed by rape or violence counseling (combination of violence-prevention and post-violence strategies). Exposure varied by age, marital status, and school attendance.

Table 3. Self-report on services received, by types of beneficiaries*

Category	n	HIV counseling and testing	Family planning counseling	Condom promotion or distribution	Abstinence promotion	Savings and loans or income-generating and financial skills	Parenting counseling	Rape or violence counseling
Total	47	41	37	32	19	26	13	15
District								
Gulu	25	22	22	16	10	18	7	5
Lira	22	19	15	16	9	8	6	10
Region								
Urban	23	22	16	16	11	14	7	5
Rural	24	19	21	16	8	12	6	10
Age								
15–19	25	21	17	15	12	10	7	7
20–24	22	19	20	17	7	16	6	9
Marital status								
Married	22	20	19	19	6	18	4	7
Unmarried	25	21	18	13	13	8	9	8
School status								
In school	8	6	3	4	6	2	2	2
Out of school	39	35	34	28	13	24	11	13
Parity								
No children	14	12	7	8	10	5	2	5
1 child	21	19	19	15	6	13	8	7
2+ children	12	10	11	9	3	8	3	3

* Excluding girls ages 10–14 and peer leaders

Key Messages and Sources of Information on Family Planning and HIV

DREAMS Sources of Messages

In addition to specific program interventions, the DREAMS initiatives mainstreamed behavior-change communication messages throughout. Messages cited encompassed five broad domains: HIV transmission and prevention, pregnancy prevention, family strengthening, social approaches to preventing HIV and early pregnancies, and self-efficacy.

HIV transmission and prevention messages considered what sex is and how it predisposes people to HIV; benefits of sex for married couples; STIs (including HIV) and their modes of transmission; risks associated with transactional sex; risks of sex with HIV-infected people; and approaches to stopping transactional sex, including making use of village savings and loan credit options, and learning other income-generating skills to meet basic needs.

Messages related to **social approaches to preventing HIV and early pregnancies** included staying in school, not walking alone at night, avoiding boys, avoiding multiple partners, not engaging in sexual relationships before marriage, knowing the dangers of early sex, making connections between early sex and school dropout, and understanding the link between rape and pregnancy and HIV.

Pregnancy prevention messages included information about timing, approaches to and benefits of child spacing, how to avoid unwanted pregnancies, family planning service availability, information about modern contraceptive methods, and approaches to accessing care.

Family strengthening messages included how to relate to partners (for married beneficiaries) and how to relate to parents (for unmarried beneficiaries).

Self-efficacy messages included economic and other skills, self-confidence, public communication skills, the importance of making informed decisions, managing pressure, protecting and valuing oneself, staying safe, and having good friends.

One stakeholder described how these messages are used in combination to encompass both risk factors and approaches to prevention.

The behavioral change counseling we do, there are those [. . .] who are like commercial sex workers, when we get them, we tell them about the risk they are going through, yeah. We tell them about contracting HIV, getting STIs, and going with some man whom you don't know, whereby you can even easily be killed. Lira, rural, stakeholder

Non-DREAMS Sources of Messaging

Results indicate that beneficiaries receive information on family planning, reproductive health, and HIV prevention from a variety of sources external to the DREAMS initiatives. Both married and unmarried beneficiaries noted that messages communicated by DREAMS, such as family planning, reproductive health, and HIV, are common points of discussion throughout the community in general.

Family planning is always spoken about, even on burial grounds, in parties [...] these people speak even on radios and on television. Lira, urban, out of school, married, age 15–19

Beneficiaries in school most commonly cited school as their primary source of information and to a lesser extent their peers. In contrast, beneficiaries out of school depended primarily on health providers, other organizations, and peers for information. Most beneficiaries noted receiving some information from their families on these topics, though they seldom mentioned family members as their primary source of information. Details on each source of information are presented below.

School Programs

The Ugandan school health curriculum integrates social preventative approaches to mitigating risks for early pregnancy and HIV infection. These messages focus on abstinence and self-efficacy but also include the role of condoms in preventing HIV.

Girls in the 10–14 age segment reported learning general information on what sex is, the dangers of acquiring HIV, the importance of avoiding early pregnancies and concentrating on their education, and manipulative tactics that men use to lure AGYW into early sex. Respondents said that these messages commonly came from school health programs led by science teachers and senior women.

Sex is when a man sleeps with a woman, [heard this from] school. They told me to put all my interest in studies, that boys will not disturb me and take us for granted, by having sex with us [...] so I have not been having sex. Gulu, urban, in school, unmarried, age 10–14

An older beneficiary explained how schools teach these topics.

At school, the teachers tell us during class lessons because it is part of our curriculum and the senior woman teacher also tell[s] girls during her sessions. At home also, my mother, grandmother, and aunty are always telling us not to get into sexual activities with older boys, which can make us pregnant. Lira, rural, in school, unmarried, age 15–19

Peers

Although school was the most important source of information for beneficiaries in school, the interview results indicate that out-of-school beneficiaries may have also come into contact with these messages, either from in-school peers or family members. One peer leader explained these dynamics.

Yes, it's different because often people are still at school. So we are in a group, we always advise each other in case of need to use condoms. Even those who are out of school, we also tell them to use condoms as long as they have a boyfriend.
Gulu, rural, peer leader

Results also suggest that AGYW share information about sex and sexual health with other AGYW at school. In many cases, beneficiaries provided examples of information they learned from peers that was accurate or promoted positive health practices; however, in other cases, beneficiaries said that peers at school would share inaccurate information based on hearsay or rumors.

I hear some of them tell their friends that these methods cause some women to pour blood, others that it makes them thin, or even that they may not get pregnant in [the] future. Lira, rural, peer leader

Many beneficiaries who were not in school also noted that they discussed sex and sexual health topics with their peers while socializing.

Maybe when I am seated with friends? Yes, I have a friend, she tells me my friend, let's not love anyhow, things aren't good. Once you have one husband, stay with him. Don't have many; there are diseases; be with only him. Lira, rural, out of school, married, age 15–19

Health Facilities and Other Organizations

Some beneficiaries of all age segments reported receiving information on the need for family planning and the available options from organizations not affiliated with DREAMS, such as Marie Stopes Uganda, and other public health facilities or hospitals. Beneficiaries explained that they commonly seek family planning services from facilities that provide maternal and child health services.

The girls also get services from where they immunize children, from [for example] Gulu hospital and Marie Stopes. Gulu, rural, out of school, married, age 20–24

In addition, the beneficiaries commonly received information on HIV counseling, testing, and prevention from nongovernmental organization initiatives, such as Straight Talk and TASO.

People here mostly go to [name of level-3 health center], because it is a government facility. However, if your condition is bad, they refer you to [name of hospital]. Those who have the money go to private facilities, because they don't want to make lines and wait in the lines. To tell you the truth, I'm HIV-positive, and I regularly visit this facility, because it's where I pick up my medication. The last I was here was on the 28th. Yes, on every visit they always advise us to use family planning and always avoid having too many children, because it's not healthy for our condition. They also advise us to use condoms to reduce on the infections. Gulu, rural, out of school, married, age 20–24

Other beneficiaries also noted that they use services provided by other organizations for HIV testing.

I like going to [the] Straight Talk youth center clinic for HIV testing. They start by health education given to everyone and telling us the dangers of HIV and how to protect ourselves against it. Gulu, urban, out of school, unmarried, age 15–19

Moreover, beneficiaries noted that health centers and hospitals often provided HIV testing and counseling, and circumcision for male partners, during visits for routine health checks or other ailments, such as malaria. The beneficiaries noted that the latter was a service available for their male partners as part of the HIV

prevention strategy. Beneficiaries also indicated that HIV and family planning counseling often were provided as integrated services, though not always.

I went to [name] Health Centre II; it was okay, I didn't pay for it. I went for malaria treatment but was also introduced to family planning. I was also introduced to circumcision for men. The doctor told me it reduces the rate of HIV infection for men. I was also asked to test. Yes, but I didn't test, because I had just tested soon [sic]. Gulu, rural, out of school, married, age 20–24

Though beneficiaries from all segments mentioned using services from health centers and other organizations, these facilities were particularly influential sources of information for beneficiaries who were no longer in school.

Family

Many beneficiaries did not recall ever discussing sex with a family member. For those who did, it was often with an older female relative, such as a mother or aunt. Beneficiaries said that discussions with these family members often focused on the basics of puberty and menstruation. Those whose families did discuss sex and pregnancy with them explained that their parents tended to encourage abstinence and rarely discussed family planning.

Some beneficiaries recalled that their family members encouraged them to prioritize education over pregnancy to allow them to become skilled, achieve higher earning power, and be able to participate meaningfully in society.

My mother always talked to me a lot on delaying pregnancy. Her major concern was education. She always advised me to first study, then the rest will follow. But [...] as an adolescent, I never took her words seriously. I messed up with my life, and now I have to pay for my deeds. Gulu, rural, out of school, married, age 20-24

Other beneficiaries who received information from family members on family planning and HIV noted that the advice was often vague and focused on living and raising children, rather than specifics related to contraceptive methods.

Contribution of DREAMS interventions

Pregnancy Delay

In making fertility decisions and acting on them, an AGYW must be motivated and empowered to delay a pregnancy, know how to do so, be able to access family planning, and translate this knowledge into pregnancy-delaying behavior. She must first ask herself, “Do I want to become pregnant now?” If she decides that she does not want a pregnancy, she needs to understand what she can do to prevent or delay it and have access to contraceptive methods. She then needs to feel empowered to either avoid having sex or use a family planning method. In this section, we follow beneficiaries through this process and assess DREAMS’ contribution to beneficiaries’ behaviors and perceptions as they relate to pregnancy delay.

Motivation to Delay Pregnancy

Overall, results show that beneficiaries from all segments cited changes in motivation to either delay pregnancy or have fewer children, as a result of their participation in DREAMS (34 of 47 beneficiaries, ages 15–24). Messages related to staying in school and the challenges of supporting children at a young age especially resonated with them. To motivate beneficiaries to delay pregnancy, DREAMS activities often include messages on the benefits of doing so. Both married and unmarried beneficiaries frequently reported that these messages had a particular impact and made them more aware of the consequences of having children at an early age, thus linking the concept of delaying pregnancy with staying in school.

It helped me; the reason why I said it helped me is because they taught how if in case you got pregnant when at school it may spoil your education, and you may drop out of school. Gulu, urban, in school, unmarried, age 15–19

Unmarried beneficiaries referenced these messages more often than married ones. Stakeholders confirmed that these messages motivated beneficiaries to delay pregnancy and remain in school.

Most of them are in school, especially after joining DREAMS; this is because they are always encouraged to concentrate on education before they get involved in other things like early marriages and involved in sex when you are still young.
Lira, rural stakeholder

Girls often discussed school and education in very favorable terms, and highlighted that either staying in or going back to school was a priority.

I love to continue studying in the school because I find that the school is good [...] I must first finish with school and when I am ready to get pregnant, then it is okay. Lira, urban, in school, unmarried, age 15–19

Stakeholders argued that messages from DREAMS contribute to beneficiaries' positive views on education.

Most of them are not conceiving anyhow, and even those in schools have managed to stay in school. Sometimes when it is a camp and you go to the communities, [...] you find them in schools. It has really made them understand that it's good to be in school. Gulu, urban, stakeholder

Many out-of-school beneficiaries hoped to return to school in the future. Messages on the link between pregnancy and leaving school resonated among all segments.

I think a girl must complete her studies if she has the opportunity to, get a job and a home, then she can now get pregnant to avoid many challenges in taking care of the baby and her family. Gulu, urban, out of school, married, age 20–24

In several instances, beneficiaries received financial or material support to enroll or stay in school from DREAMS-led interventions and their families. Some beneficiaries reported receiving support to take vocational courses, whereas others remained in traditional schooling.

The teaching of education is the one [thing] that made me more happy [...] I like the education part, because they even helped us to pay school fees. Gulu, urban, in school, unmarried, age 10–14

Beyond staying in school, unmarried beneficiaries also explained that messages related to the challenges of supporting children at a young age also increased their desire to wait and not become pregnant until they were more financially stable. In particular, those in school and unmarried factored in timelines for school completion when considering the best time to get pregnant. Some married beneficiaries also expressed similar views.

That some girls are pregnant when they are still young; they need to first finish their studies before getting pregnant [...] they say a girl should first finish her education, then later she can get married. Gulu, urban, in school, unmarried, age 10–14

For me, I think it's about when she has a source of income to sustain herself. Whether she is educated or not, she has to be able to make some money for herself and the child. She should also be of age. Her body should be developed. At least 18 years and above. Lira, rural, out of school, married, age 15–19

Other beneficiaries also noted that having children at a young age can present physiological challenges. Based on a consideration of these consequences, most beneficiaries believed that AGYW should wait until at least age 18 before getting pregnant; some beneficiaries believed women should wait until even later.

They told us to avoid getting pregnant early, like when you have not yet reached 18 years. That your body may not be ready to take care of the child and it gives you complications on your body, like a complication on your birth canal. Any time after 19 years. Lira, urban, out of school, married, age 20–24

The right time for the girls to get pregnant is [...] 25 years and above. I say from 25 years and above because at this time, the girl is old enough and can choose the right man to settle with. In addition, if she is still studying, then by this time, she will have completed school and could be looking for a job. Gulu, urban, in school, unmarried, age 15–19

These messages resonated with married beneficiaries differently. Per the social conventions described above, they often still wished to become pregnant soon after marriage. However, married beneficiaries more commonly interpreted DREAMS messages in the context of spacing their children and having a smaller number of children overall.

Fertility Awareness and Knowledge of Family Planning

Overall, our data show that DREAMS interventions contributed to improved knowledge of when they can become pregnant and of how to delay pregnancy for beneficiaries across segments. Many beneficiaries reported that DREAMS family planning and abstinence counseling improved their knowledge of how to delay pregnancy. Results show that beneficiaries in different segments learned different ways to do so, including abstinence; family planning use; and social approaches, such as avoiding “risky” situations that could lead to pregnancy.

Beneficiaries in school spoke about the information they gained from teachers and others in school as part of the health curriculum (to which DREAMS messages are added). Many unmarried beneficiaries specifically referenced improved understanding of abstinence. Respondents in the in-school and unmarried segment often recounted messages related to both abstinence and condom use.

I: What did [the senior woman teacher] tell you?

R: Not to have sex with a boy and also use a condom during sex.

I: Where was that said?

R: At the school.

I: Is it helpful to you?

R: Yes, I have learned that if you don't want to get pregnant, you can use condoms.

Lira, urban, in school, unmarried, ages 15–19

Other beneficiaries in school cited learning about condoms as a way to prevent pregnancy.

We have learned that we can use condoms and other family planning methods to prevent one from getting pregnant or HIV. Gulu, rural, in school, unmarried, age 15–19

Out-of-school beneficiaries also reported improved knowledge of how to prevent pregnancy, often receiving the information directly from peer leaders. Unlike beneficiaries in school, beneficiaries out of school reported learning not only about condoms, but also about other family planning methods.

She said if you want family planning, it's available like the one they inject, the one they sow in your arms (implant). It helped me to know methods of family planning, especially the injection. Gulu, rural, out of school, unmarried, age 15–19

Many married beneficiaries also learned about a range of family planning methods.

That we should always use condoms to prevent HIV and unwanted pregnancies, and also use other family planning methods. They also said one is called MoonBeads, if I remember very well, and said men should get circumcised. Gulu, urban, out of school, married, age 15–19

In addition to improving awareness among beneficiaries, peer leaders also noted that DREAMS had developed their own understanding of details related to different family planning methods sufficiently to allow them to advise others. In the following quotation, a peer leader indicated what she liked about teaching these issues to her peers.

DREAMS trained us on things that we didn't know [...] I can pick on family planning, then I talk to them about it, like to encourage them to continue with the methods so that they give birth to the children that they can take care of, and you know they all appreciate it. Lira, urban, peer leader

Overall, beneficiaries had a good knowledge of family planning approaches. Nearly all could cite at least one modern contraceptive method, and many mentioned three methods or more. Table 4 shows how many beneficiaries referenced using, having used, or knew that others used a specific modern contraceptive method.

Table 4. Contraceptive methods mentioned by beneficiaries ages 15-24 years

Method mentioned	Number of beneficiaries (n = 47*)
Injectables	28
Condoms	20
Implants	9
Pills	10
MoonBeads**	5
IUDs	6
Mentioned 3 or more methods	7
Mentioned 2 methods	18
Mentioned 1 method	15
Mentioned no method	7

* Excluding girls ages 10–14, because DREAMS does not educate this group on contraceptive methods

** MoonBeads is the Ugandan name for Standard Days Method.

Many beneficiaries spoke clearly about the differences between contraceptive approaches, including the duration of coverage, convenience, and cost. For example, injections can be used without a husband's knowledge; condoms can be obtained free of charge; and implants reduce bleeding.

Many methods were discussed, which depends on an individual, because [in] most cases we married people, our men don't want to use condoms so we choose other methods, like me; I use implants now days. It's easier to use and I have less bleeding in my menstruation period besides. I feel more normal and health[ier] with it. Gulu, urban, out of school, married, age 20–23

Results indicate that beneficiaries mostly have correct information on these topics. However, they tended to be less informed on the side effects of various methods, which they often learn about informally through friends or hearsay, which can lead to misinformation. Misconceptions often link the use of family planning to birth defects.

With [...] childbirth, these people have said the family planning methods are making the mothers to deliver children with disabilities. Gulu, rural, stakeholder, midwife

They say [family planning] makes you give birth to babies with some missing body parts, like for example [...] locally in our culture those children are called Ojok and they are born with cleft lips, and [it] is believed that it is the result of using family planning. That's the belief people have. Gulu, rural, peer leader

Others link the use of family planning methods to primary or secondary infertility and health problems.

That if you swallow [birth control pills] for a long time, it can bring a problem to your womb and can cause infertility. Gulu, rural, out of school, married, age 10–19

The reason why I stopped using it is that I heard a rumor that the oil on the condom can cause cancer of the cervix. That's why I stopped using it. Gulu, rural, out of school, unmarried, age 15–19

Results indicate that these misconceptions sometimes deterred beneficiaries from using family planning altogether. In other cases, these misconceptions influenced the method beneficiaries chose to use, with many raising concerns about long-acting methods.

Access to Modern Contraceptives

Results indicate that DREAMS interventions may have also contributed to married beneficiaries having better access to family planning. The effect of DREAMSs on unmarried beneficiaries' access to family planning is less clear; some noted increased access to condoms, whereas many chose abstinence as a way to delay pregnancy.

Overall, beneficiaries rarely mentioned encountering practical barriers to accessing family planning commodities. They commonly noted that family planning products were available at local health centers, which were often located conveniently and provided family planning at low or no cost. One beneficiary explained that health facilities provide these products in a socially accessible atmosphere.

Family planning is [available] almost in all health centers, including ours. And there is also another facility down there, but people like going where they are welcomed well by the health workers. Gulu, rural, out of school, unmarried, age 15–19

Although contraceptive commodities were generally widely available, 32 (of 47) respondents over age 14 reported obtaining condoms through the DREAMS intervention. One beneficiary explained that messages on the importance of condom use accompanied condom distribution.

DREAMS trained us [...] They said that first if you want to have sex, you should use a condom. Then after the training, they also distributed condoms to the people. Gulu, urban, in school, unmarried, age 15–19

Some beneficiaries also noted that DREAMS helped them obtain other family planning methods through health facilities affiliated with DREAMS.

[DREAMS] also gave us family planning. Yes, I used condoms. I started this month with the injections. I got it from [nearby trading center] from the DREAMS partners. Gulu, rural, out of school, unmarried, age 15–19

Empowerment to Delay Pregnancy

Once AGYW are motivated to delay pregnancy, they must then be empowered to do so. DREAMS activities include interventions related to self-efficacy, which aim to empower AGYW to make this decision and then enact it in their lives. When reflecting on changes in their lives following DREAMS, beneficiaries identified a number of new behaviors. Unmarried beneficiaries and those younger than age 20 have improved their ability to say no to sex and make other choices in their sexual lives. Although this change was more common for beneficiaries in school, some unmarried beneficiaries out of school also mentioned it.

I have stayed away from boys and sex; I do not take offers from men for sex. Lira, rural, in school, unmarried, age 15–19

There were a lot of boys who used to disturb me and even come up to my home, but when I started listening to those teachings, I started reasoning and found that those teachings are good and it will help my future. I refused all of them. Gulu, urban, out of school, unmarried, age 10–19

Results for married beneficiaries were less clear. However, some did report an improved ability to discuss child spacing and family planning with their husbands.

Though unmarried beneficiaries tended to focus on the messages related to abstinence, some also cited improved respect for themselves and their parents as being linked to these activities.

One stakeholder reflected on the changes witnessed in DREAMS beneficiaries, noting a shift in empowerment.

[DREAMS girls] can choose the kind of partner they should have, and also decide when to conceive. So they are different; in fact, even now their markets are high, the men want them like nothing. They are now empowered and can discuss freely with men. Gulu, district-level stakeholder

Other stakeholders commented on the importance of group support in empowering AGYW.

Some girls, when they are outside [...] they don't know how to talk to people; they are shy; they cannot communicate. So in DREAMS, you get empowered so that you can see things and say "I don't know." They are able to say no, yes; they make an informed decision. But now that the girls are not there, the factors out there are a challenge [...] in DREAMS you can consult, share experience, then you can get out of the problem. Lira, district-level stakeholder

When reflecting on these changes, peer leaders linked an increase in self-respect to a decrease in risky behavior. One peer leader explained how DREAMS beneficiaries have begun to protect themselves from risk.

Previously, before DREAMS, young girls would go clubbing, dancing, [and] drinking in bars, so it would be easy for them to indulge in sex, but with [the] DREAMS program, there is awareness. Gulu, rural, peer leader

Though this respondent did not make a specific reference to married or unmarried beneficiaries, findings suggest that changes in self-efficacy for married beneficiaries were less consistent than for unmarried ones. Married respondents explained that the information they received to protect themselves was not always focused on “saying no” to sex.

They said if you are a married woman and your husband wants to have sex with you, you [should] not refuse, because this can annoy the man and can make him go and look for sexual satisfaction somewhere. This can lead to HIV and domestic violence at home. Gulu, urban, out of school, married, age 20–24

Though these messages tended to portray consenting to a husband's demands for sex as a means of HIV prevention, they reinforce men's role as power holders in sexual relationships. However, there are some indications that communication training for women may have built married beneficiaries' skills to communicate with their husbands on matters related to family planning, even though the results do not suggest that they have become more empowered overall. Some married beneficiaries explained that though their husbands had previously been gatekeepers, the DREAMS interventions helped them gain their husband's support in using family planning.

That happened during our discussion under the DREAMS program. An example is that when I have a baby this year, I should only then have another one after agreeing with my husband. This helps us to space our children. Gulu, rural, out of school, married, age 20–24

Those in active relationships also noted that their partners were more tolerant toward the use of modern family planning methods to delay pregnancies. On reflection, a peer leader explained that this change had been driven by providing married women with information to share with their husbands.

I had some married DREAMS girls who complained that their husbands did not want them to use any family planning. Since we gave them information, they went back and shared with their husbands, and now they came back and told me the men have accepted, and now they are using the methods. Lira, urban, peer leader

In other cases, beneficiaries also noted that this change came about by involving their husbands directly in family planning counseling. However, despite the progress noted by some beneficiaries, many other married beneficiaries reported that their husbands still did not allow them to use family planning. One beneficiary explained that this issue was related to perceived health risks.

So many people advised me to get family planning, but when I asked my husband, he refused because he said family planning has bad side effects [...] [I] told my husband that I wanted to use family planning, but he also doesn't want me to use family planning, that it is bad and can cause cancer. Gulu, rural, out of school, married, age 20–24

Translating Knowledge into Behavior—Delaying Pregnancy

The findings suggest that overall, unmarried and married beneficiaries are more motivated to delay pregnancy, unmarried beneficiaries are more empowered to do so, and both married and unmarried beneficiaries are aware of how to do it. Results indicate that many beneficiaries had access to family planning, which also has improved for some married beneficiaries. Though these results varied by age and segment, they provide the basis for understanding the changes in behavior that DREAMS may have supported.

Our data show that since they became active in DREAMS, many beneficiaries have taken steps to delay pregnancy. One beneficiary in school cited a combination of increased motivation and understanding of abstinence as key to delaying pregnancy.

[DREAMS] is helping me. It has made me not to get pregnant because I listened to what my peer leader talked about, how challenging it is to get pregnant when you are still young. This project has helped us to protect ourselves by not having live sex with men when it is not the right time, that you can easily get pregnant when you are not ready. Lira, rural, in school, unmarried, age 15–19

Another beneficiary in school explained that these activities had also contributed to changes in her life.

Our madam in DREAMS [...] advises us on using family planning methods and to young girls to abstain from sex or use a condom, and to us who are now married [...] it has helped me since I started using it, [I] am relaxed and not worried about getting pregnant at any time. Gulu, urban, out of school, married, age 20–24

Many out-of-school beneficiaries reported that they had started using family planning methods after participating in DREAMS.

Because right now, DREAMS educated me a lot. I didn't believe I would be like this; these days, I know how to avoid pregnancy and where to get the services, that's why I won't get pregnant anyhow. Gulu, rural, out of school, age 20–24

Although unmarried beneficiaries without children noted that they used family planning to delay their first pregnancy, some unmarried beneficiaries with children also said that these approaches had helped them delay another pregnancy.

Then someone would have children without spacing, like you would find a woman with two children who are like twins, but now people are embracing family planning and are now trying to space their children. Yes, it has, because up to now I still have only one child. Lira, urban, out of school, unmarried, age 20–24

In contrast to unmarried beneficiaries, married beneficiaries rarely indicated a desire to delay their first pregnancy. However, findings suggest that instead DREAMS has supported these beneficiaries to space their pregnancies and reduce their overall number of children.

[DREAMS] has helped me improve on my pregnancy and birth spacing, and it has made me free in my marriage. Gulu, urban, out of school, married, age 20–24

Another married respondent highlighted the importance of her new knowledge of family planning methods in supporting spacing.

Since then, I have controlled birth or pregnancy by using condoms to reduce the number of children so that I can care for them. The training on family planning use has helped me space my children. I now know which methods to use if I want. They have helped me a lot [so] that I got methods that has [sic] helped in child spacing. Lira, rural, out of school, married, age 20–24

These respondents also linked this change to the advice provided by their peer leader.

[The peer leader] told me that after giving birth, you need to stay for about four to five years before producing another child. This gives you the opportunity to pay school fees, and when you produce very fast, you become old and weak. It helped, [and] I have stopped producing very fast. Gulu, urban, out of school, married, age 20–24

Peer leaders and other stakeholders argued that DREAMS had contributed to several changes: an increase in the use of contraception, a declining trend in early pregnancies, an increased uptake for healthy child spacing practices for the married beneficiaries, and a stronger level of control of when to get pregnant.

[DREAMS is] also helping the girls. They are working; they are using family planning methods. It's helping them because now I can see the spacing is now good. Those in DREAMS now know how to control themselves from getting pregnant compared to those not in DREAMS programs who do not know how to control themselves. They are also able to take care of the few children they have, not just giving birth like goats. Gulu, rural, peer leader

[...] at some point because since the project started, we have not yet registered those ones who conceived because we started when they were still at school, not pregnant, not given birth, even others [...] have managed to maintain up to now. They are keeping themselves because they know I need to use the family planning method, I need to use the condom and other

methods. So, it had reduced, even with those ones who are married, they really conceived when they want. Gulu, rural, stakeholder

However, results show that not all DREAMS beneficiaries avoided teen-age pregnancy. Five (of 25) respondents ages 15–19 reported a pregnancy after joining DREAMS. All were out of school and two were married. In addition, two (of 22) respondents ages 20–24 reported a pregnancy after joining DREAMS. Both were out of school, married, and had a pregnancy prior to enrolling in DREAMS. They said that they did not listen to the messages shared by the program or were compromised by pressure from their partners to stop using family planning.

It didn't help me, because I didn't listen to them; I got pregnant. DREAMS never helped me. I never listened. Lira, rural, out of school, married, age 15–19

My husband told me to stop using family planning, because it not good for my health. So I got pregnant. Gulu, rural, out of school, married, age 15–19

In other cases, beneficiaries who became pregnant after joining DREAMS noted that no one talked to them about how to delay pregnancy, indicating that DREAMS services may not have reached them. This finding was consistent with the experiences of beneficiaries who became pregnant at a young age before joining DREAMS, which was commonly attributed to a lack of knowledge on how to delay pregnancy or the advantages of doing so.

Some respondents noted that social expectations related to pregnancy and childbearing might mean that many beneficiaries continue to be vulnerable to early pregnancy. One stakeholder explained it this way when reflecting on the level of risk facing DREAMS beneficiaries after the program.

The girls in DREAMS are I think [at medium risk for early pregnancy], because there are conditions that make them pregnant and not of their own making. Sometimes you feel like, "Abhaa, I want to protect myself, I don't want to be pregnant. I want to maybe engage in family planning." But you sometimes see when you get a man, a man will tell you "For me to stay with you, I want a child." And then after feeling that may be okay, this man can be a good person, let me give him a child, as soon as you are pregnant the man runs away. So [the girls] know they don't want it—they [feel they] can protect themselves, they can prevent it because they have been sensitized and know what they can do. But sometimes some conditions make them go for that. Lira, district-level stakeholder

Another reason beneficiaries may become pregnant after joining DREAMS is that some of them discontinue family planning use—when they experience side effects, they do not switch to another method but instead stop contraceptive use altogether.

After giving birth to my first child, I decided to use [an] implant [...], But after some months, the implant started reacting badly to my body, and I went, and it was removed. As for now, I am not on any family planning method. Gulu, rural, out of school, married, age 20–24

Last year I put the implant in my arm, but it was aching my body. I felt pain in my whole body, so I went and removed it. Gulu, urban, out of school, unmarried age 20–24

HIV Prevention

Before an AGYW can adopt HIV-prevention strategies, she needs to know what HIV is, how it is transmitted, and what can be done to avoid being infected (and if already infected, as some beneficiaries interviewed were, what needs to be done to avoid transmitting it to others). Only then can she act to avoid being infected with HIV. She also needs to learn the importance of regular testing to monitor her HIV status. In this section, we present findings on DREAMS interventions' contribution to HIV knowledge and related behaviors.

Awareness of HIV and How it Is Transmitted

Our data show that DREAMS contributed to improved awareness of HIV and how it is transmitted across all segments of respondents. Beneficiaries reported that participating in DREAMS increased their access to information, knowledge, and awareness about HIV prevention and transmission. Examples of prevention measures cited included avoiding multiple sexual partners, not hanging out with boys, not sharing certain sharp objects, testing with a new partner before engaging in sex, and abstinence or use of condoms to prevent the transmission of STIs.

[DREAMS] said HIV is contracted through unprotected sex; sharing sharp objects like razor blades [and] needles; or even through body contact after an accident. Gulu, urban, out of school, unmarried, age 20–24

Another respondent provided more details on what she had learned.

You should not allow having sex without a condom. At times maybe one of your partners has HIV, which may infect the other with it if you have sex without a condom. It's a disease that someone can infect you through sex, sharing sharp needle [razor] blades, [or a] blood transfusion. Lira, urban, out of school, married, age 15–19

Many unmarried beneficiaries also highlighted their understanding of the risk of having multiple sexual partners.

Peer leaders explained how DREAMS activities had contributed to these changes in awareness.

After joining DREAMS, we started knowing how HIV is transmitted, that is through having unprotected sex, accidents, [or] during delivery if the person giving birth is positive. It can also be transmitted through kissing, although in a smaller percentage, only if you both have wounds and the kissing is deep during enjoyment time. Gulu, rural, peer leader

Although transmission during birth is referenced in the above quotation, it was rarely cited when beneficiaries discussed the information they learned from DREAMS interventions.

Avoiding Infection

Many beneficiaries indicated that DREAMS also improved their understanding of how to protect themselves from HIV.

If you want to have a sexual relationship, you must first go and check your blood [HIV testing] to know if you are free from HIV. That HIV is transmitted through having live sex and sharing sharp instruments. Lira, rural, in school, unmarried, age 15–19

Many other beneficiaries, both in and out of school, reported learning about the importance of condom use to prevent HIV infection.

We were told how to prevent HIV [...] that you can use a condom or abstain from sex. Lira, rural, out of school, unmarried, age 20–24

Our data suggest that beneficiaries also internalized the DREAMS messages regarding the importance of regular HIV testing in preventing infection.

[The peer leader] said that we should keep testing after every other three months to confirm that you don't have HIV; that is why you must test after every three months. That if you only test once, you may not catch it, so you must test after three months. Lira, rural, out of school, unmarried, age 20–24

In addition, many unmarried beneficiaries mentioned learning about the risks of having multiple sexual partners.

[The peer leader said] not to have multiple sexual partners. That one partner could be HIV positive. If you have sex with the one who is positive and again have sex with others, you end up spreading HIV to these other partners. Lira, rural, out of school, unmarried, age 15–19

Though many married beneficiaries also referenced learning about the dangers of having multiple partners, some also cited receiving advice on how to reduce their male partner's risky behavior by placing themselves in a submissive role in their relationships.

Our data suggest that DREAMS also shared information on how to avoid transmitting HIV to others once infected.

The DREAMS project says that, for mothers living positively, they were also advised on how to protect their young ones from getting exposed. Lira, urban, in school, unmarried, age 15–19

One beneficiary who disclosed her status as HIV positive also detailed the advice she received.

They tell us always to have protected sex to avoid reinfections. You know those of us who are positive and are on medication, if you continue sleeping with other people, you can become sicker. So, it's better to stick with your partner. Gulu, rural, out of school, married, age 20–24

She indicated she had received information from the health center, but that her facility worked closely with DREAMS. Beneficiaries also explained that many of these messages included the importance of seeking treatment.

The same peer leader said that if you find out that you are positive, you shouldn't hide, but go for treatment. Lira, rural, out of school, married, age 15–19

He said it is good to test for HIV so that you know your status so that when you are positive, you are started on antiretrovirals [ARVs] to prolong your life. Gulu, urban, out of school, married, age 20–24

Other beneficiaries identified the increase in the uptake of antiretroviral therapy as a change resulting from DREAMS.

It has given people courage to be strong. If DREAMS were not there, some people's lives would be at stake or even many would be dead by now. So DREAMS has given those who are sick courage to go and start taking their drugs and now they are doing well and attend the trainings, so their life has totally changed. Gulu, rural, out of school, unmarried, age 20–24

One stakeholder provided an example of the support offered to DREAMS participants.

I make sure they never [are in] default on the medication for those who are HIV positive; for example, I have five girls, and three of them are from DREAMS who had stopped taking ARVs, but after I talked to them, they accepted [they needed] to start on ARVs again. Lira, rural, stakeholder

Our respondents were not asked to disclose their HIV status, yet two beneficiaries we interviewed disclosed their status as HIV-positive. Both acquired HIV before joining DREAMS. One explained that DREAMS activities had shifted her perceptions of stigma associated with HIV, allowing her to discuss the issue with others. This may serve as additional evidence that DREAMS messages related to reducing the stigma surrounding HIV have resonated with this group.

Like I told you earlier that when I tested positive, I had refused to start my treatment. I was so annoyed with my husband, because he infected me as a result of his reckless lifestyle. So these people from DREAMS talked to me, and I'm now confident and so open with my status. I am no longer afraid, and I also share with my friends who are also going through what I went through. Gulu, rural, married, age 20–24

Testing

DREAMS seeks to test all new enrollees for HIV and encourages regular repeat testing, especially for those with high risk factors for HIV acquisition. Our data suggest that many beneficiaries learned their HIV status as a result of participating in DREAMS. Beneficiaries internalized the importance of testing, though they did not always follow up on their initial test.

Overall, 45 of 47 beneficiaries interviewed had ever tested for HIV. Of the 44 respondents who provided the date of their most recent HIV test, 43 had their test within the six months following enrollment in DREAMS. Many beneficiaries cited learning their HIV status in this initial test as a particularly important result of their experience with DREAMS. One peer leader explained:

Before joining the DREAMS program, we did not know our HIV status. But after joining the program, we started testing for HIV, and in my group, all the girls have tested and know their HIV status, and know what they should do so that they don't get the HIV virus. Gulu, rural, peer leader

Results show that, via DREAMS interventions, many beneficiaries also became aware of the importance of frequent testing. Beneficiaries mentioned that testing should be done every three months, after having sex with a new partner, or both.

[DREAMS] has encouraged me always to test for my status once every three months with the man that [I] am sexually active [with]. We are still negative. Lira, rural, out of school, married, age 20–24

In some instances, beneficiaries in active sexual relationships noted that they returned to the health center frequently for testing.

[DREAMS] helped in very many ways [...] the man I live with does not want to hear anything about HIV testing, but [...] every three months I come to find out how I am. Gulu, rural, out of school, unmarried, age 20–24

However, many other beneficiaries explained that they had intended to go for testing regularly but had not managed to do so since their first test. Most sexually active beneficiaries did not provide a specific reason why they did not go back for retesting and noted that they intended to do so in the future. The exception was married beneficiaries who suspected that their husbands had more than one sexual and explained that this suspicion triggered testing.

My husband does not do a stable job, so sometimes he goes for a month or more before returning home [...] maybe he could be having some other women. That is why I find it necessary to keep testing. Lira, urban, out of school, married, age 15–19

Yes, I will, because I would love to know my status since I can't trust my man completely. Gulu, urban, out of school, married, age 20–24

Translating Knowledge into Behavior—HIV Prevention

Beneficiaries reported changes in behavior related to reducing their risk of HIV. These changes included abstaining from sex, using condoms for protection, and reducing risky behaviors. Unmarried beneficiaries across segments noted that following DREAMS, they have begun to abstain from sex as a way to protect themselves from HIV.

Another beneficiary in school also explained that she was abstaining from sex to avoid contracting HIV now that she was aware of how it is transmitted.

It's now in my mind that I should not have sex when I am still young because I will get infected with HIV and am abstaining. Yes, they said [...] last year that engaging in sexual activities at an early stage can make you get infected with HIV. Also, our senior woman said we should not have sex with a boy and [we should] use a condom during sex. Lira, urban, in school, unmarried, age 15–19

A girl in the 10–14 age segment provided an example of how she abstains to keep herself safe.

If some boy is talking to me and [it] is about love affairs, I can remember, and I say no. Because if I say yes, I fear that I will get a disease. Like the last term, a boy wrote me a letter, [saying] that I should be his lover and me, I went to the teacher and the teacher asked me what I responded. I told the teacher that the main reason why I am here is to study, and they punished the boy. Lira, rural, in school, unmarried, age 10–14

As in the excerpt above, respondents in school often noted drawing on the support of their teachers for information and to help them make positive choices.

Beneficiaries also explained that they have begun to use condoms, which was the case for many married beneficiaries and some unmarried ones.

[DREAMS] has helped me in a way that I am not HIV-positive and we use condoms sometimes. Gulu, urban, out of school, married, age 20–24

Our findings also indicate that some beneficiaries also engage less in risky behaviors subsequent to being involved in DREAMS. For unmarried beneficiaries, this change was primarily related to avoiding situations in which they would come into contact with alcohol, older men, or men seeking transactional sex.

It has helped me avoid bad men's company around me and also to stay away from wrong advice. This has really changed me because I have even stopped sitting at the road sides and clubbing at night. Gulu, urban, out of school, unmarried, age 20–24

Many respondents explained that knowing their negative status made them more likely to reduce risky behavior going forward, knowing that they are starting with a clean slate.

[DREAMS] is helping [...], because the last time I tested, my blood is still clean and now I know my status, [I] am not engaged [with] multiple sex partners. Lira, rural, out of school, unmarried, age 20–24

This HIV information has helped me, because now I am protecting myself by not involving myself in sex with many partners. I have also learned that if I'm getting sexually involved with someone, I should test them and know their status so that I don't get exposed. Lira, urban, in school, unmarried, age 15–19

Because you get to know how your life is if you are infected or not, you have to know your status and how to take care. I used to have a lot of boyfriends, but now I stopped. Gulu, urban, out of school, unmarried, age 20–24

Several beneficiaries implied that they had stopped having sex with men other than their husbands.

Yes, right now [I] am not allowing [myself] to sleep with anyone other than my husband. Lira, rural, out of school, married, age 20–24

However, most married beneficiaries remained more concerned about the risk posed by their husband's multiple partners.

Overall, peer leaders and stakeholders asserted that DREAMS has made a significant contribution to protecting beneficiaries against HIV.

These HIV services have kept [the girls] safe. They now know what to do because most of the girls we were screening were negative and had remained negative, apart from those who keep moving from village to village. [These girls] are the ones contracting this [disease], but most of them have remained negative. You can only find one or two who are positive, but the rest are negative. Gulu, urban, stakeholder

Their HIV prevention behavior also, it has worked because if I compare the uptake of condoms, I can say that they are protecting themselves, though they are going for sex. So they are having sex, but protected sex. Lira, rural, stakeholder

A peer leader explained how these factors together supported beneficiaries in protecting themselves against HIV.

We stay safe to prevent HIV because before we joined DREAMS, we did not know our HIV status, how to prevent ourselves from getting HIV, how it is being transmitted, and we did not also have communication skills, so we could have domestic violence at all times. Gulu, rural, peer leader

Strengths and Limitations of DREAMS Uganda

Opinions of Beneficiaries and Stakeholders

Most beneficiaries viewed DREAMS positively. When considering the positive aspects of the program, they often focused on the program's person-centered approach to both service provision and peer support. They also highlighted the importance of the peer leaders, whom they found more approachable than service providers and able to share advice based on life experiences. They also identified peer support platforms as a positive aspect of the program, as they provided an opportunity to share challenges and learn from others.

...most of the time when they come to meet us, they train us and then give us something to drink, and if you are in the group, you can have time with the group leaders and share your problems with them, and they will advise you on how to go about with them. I remember at one point I had a lot in my mind and almost committed suicide, but staying in the group has really helped me overcome those challenges. Gulu, urban, out of school, unmarried, age 15–19

“When we stay in that group meeting, we talk and discuss among ourselves how we should live because we are still young girls with a bright future, and we still have the ability to do good thing[s] if we unite. Gulu, urban, peer leader

When considering the positive aspects of DREAMS, both beneficiaries and stakeholders tended to focus on the value of providing free services at the local level, including HIV testing, family planning provision, and other services. They noted that this approach reduces transport costs for beneficiaries while also addressing their health holistically.

The fact that the services are free and are provided at [the] primary level makes a difference. I like them most because they have helped in reducing the expenses of transport cost, which we used to meet if we want[ed] these services. In addition, by them bring the services to us, they have also reduced on the fear of going for the test. Gulu, urban, out of school, age 20–24

What I have seen is good. They are able to get these girls tested all the time. These girls are able to get the methods they need, these girls are easily attended to, because at least in all these places they know, okay there is this and this project [and] I must make sure these things are there and really for the health workers. They know what they should do for these girls. Gulu, rural, facility-level stakeholder

Some stakeholders identified approaches to addressing poverty as a particularly important aspect of the program; a number of them highlighted the central- and district-level government support for DREAMS as an additional benefit because it is likely to enhance the sustainability of the initiative.

The strength is that the district is fully behind the DREAMS initiative, and the Ministry of Health is fully behind the DREAMS project. So the DREAMS initiative is seen as [a] model that can change the shape of our girls. Gulu, district-level stakeholder

The districts have embraced it. We are now even working towards making sure it is in our workplan and also at [the] school level. And with all the strategies that we want to take, like bringing parents to be part of it, I think that is the strength. Gulu, district-level stakeholder

Despite the largely positive views on DREAMS, beneficiaries and stakeholders also identified several weaknesses of the program. They noted that DREAMS services have been irregular, probably because of changes in implementing partners. They said that as a result, follow-up mechanisms are poor, and noted that some beneficiary groups were dissolved because of a lack of connection with the program. One peer leader described the irregular nature of the support from the program.

They just decided to keep quiet about the whole project—even up to now, there is nothing taking place here. They trained us and they just disappeared from us. We didn't get any report from them from that time 'til now. Lira, rural, peer leader

Another peer leader highlighted similar challenges related to follow-up.

We are now in a group, but up to now we have not got[ten] any information to say the reason why they mobilized us [...] We tell them that after the training that we peer leaders do, they should also do follow-up. They should also follow up to see what they train peer leaders [on], if [anyone] went back and finish[ed] that training in the community, how was the training done, did the people we sent them to train understand. But most [of the] time when they send peer leaders, they don't follow up [to see] whether you finished the training. Gulu, urban, peer leader

One beneficiary also highlighted the challenges that occur when follow-ups do not occur frequently.

I just want them to do follow-up. You cannot put us in a group which you don't even come to. You see most of the girls are now scattered because there is nothing serious to do in the group. The group members are no longer interested in the group activities. Gulu, rural, out of school, married age 20–24

Additionally, peer leaders and stakeholders also mentioned challenges related to inconsistency in the services offered across subcounties. Several services were rolled out in some subcounties, whereas others received only one service or none. Respondents with access to fewer services felt less privileged, which created tension between beneficiaries and services providers. In the words of one stakeholder:

That brought us a lot of issues, like when they heard that their colleagues in other subcounties, other divisions were getting [...] that] other help, others were being trained on tailoring and being supported. So they were like, "Why not us?" So you realize that the partners that were doing that in other divisions, those partners are not in our subcounty. So ours was actually purely on HIV testing up to the last moment, up to around February, if I can remember, when we did the last tests. Lira, urban, stakeholder

Peer leaders also cited poor communication between peer leaders and service providers as an additional negative aspect of the program.

Both beneficiaries and stakeholders also cited the program's lack of engagement with male partners as a weakness. Beneficiaries explained that this issue created tension and conflict in their households, because husbands would question why their wives were leaving home but not returning to it with income. Others said their husbands were jealous of not receiving income-generating support like their wives. In the following quote, the peer leader explained how beneficiaries complain to their husbands about the training, not because they did not find the training useful, but so that their husbands would not be jealous.

They complained that they didn't find the training beneficial and their husbands would complain that they are wasting time, that they could be doing other farm work. Lira, rural, peer leader

Healthcare providers explained that stockouts of family planning commodities also affected DREAMS. Although this issue was noted by healthcare providers in both districts, it was more pressing in Lira.

[Being] out of stock of family planning commodities can hinder DREAMS [...] For example, if I come to you as a girl to get family planning and you have not offered me [...] family planning automatically, if I am in my ovulation, and I am going to meet my man, I will conceive. But if they were in stock, you would give me the family planning, then I would go and have sex, but not conceive. Lira, rural, stakeholder

Stakeholders, particularly healthcare providers, consistently cited a lack of remuneration and support for transport costs as detracting from both their morale and overall program implementation. In addition, both beneficiaries and stakeholders often cited DREAMS' failure to meet expectations as a program weakness. These expectations most commonly related to future financial support, either through income-generating activities or support to stay in school.

ASSIST lied to us that they will give us sewing machines after training, but up to now there is nothing. Provide us with [the] sewing machines that they promised before. Lira, rural, out of school, married, age 20–24

Another stakeholder made a similar point.

Some of the weaknesses I have seen is the other one I told you, making empty promises. Gulu, rural, stakeholder

Beneficiaries and stakeholders both explained that community perceptions of broken promises led some beneficiaries to stop participating in DREAMS.

Stakeholders also cited a number of coordination challenges that negatively affected the efficacy of DREAMS. These challenges were driven by the large number of and frequent changes in implementing partners, and were felt particularly acutely by district-level stakeholders.

With the implementing partners, the challenge is coordination. Because we have about four to five partners in DREAMS, how they meet to share what they are doing through learning from each other is the challenge. Lira, district-level stakeholder

Another stakeholder described the realities of working with such a large number of partners.

The limitations that we are having at the district is that DREAMS would have taken off and been sustained. But because of many changes in IPs [implementing partners], we started with SDS [Strengthening Decentralization for Sustainability], then ASSIST came in, SUSTAIN came and almost denied the whole thing [...], and then now we have RHITES [Regional Health Integration to Enhance Services]. That change alone is making the program unstable and is a very big limitation to sustainability. Then we have the VSLA supported by world education, BANTWANA. After training these girls with life skills, we expected the girls to come out with their work plans. So we are not seeing it being done as it is required. You find that the children that we trained them on stepping stones [...] up to now they have not been supported to start their VSLA, so this is causing a lot of problems. Lira, district-level stakeholder

Beneficiaries also cited a number of weaknesses of the DREAMS training materials, including that many materials were not translated into local languages, making them particularly difficult to understand for the large portion of beneficiaries who had dropped out of school. Beneficiaries also noted a number of aspects of the training that they did not fully grasp.

I did not understand it properly. They should come and teach again because there are many questions that they did not answer. And they should also bring for us medical personnel to teach us. Gulu, rural, out of school, married, age 20–24

Another beneficiary found the content of the training materials offensive.

I didn't like one of the pictures that I saw with them during the training. The picture showed a man raping a very young girl and I did not like it, because that man was raping a child, and nothing was done to put that man behind bars. Lira rural, in school, unmarried, age 15–19

Suggested Improvements by Beneficiaries and Stakeholders

Respondents suggested several actions that could improve the quality of DREAMS.

1. Adopt a holistic approach.

Linking DREAMS' clinical aspects to income-generating activities was among the most commonly cited improvements suggested by respondents. Because of the link between poverty and early pregnancy and HIV, beneficiaries proposed that providing initial capital or equipment, vocational training, or other support to develop small-scale enterprises may address this issue.

Now that people are in the group, they should give money for the group so that the members in the group can borrow to help support their family. Gulu, rural, out of school, married, age 15–19

What I can tell them is like for us who have given birth at an early stage, if they can give us support bit by bit or bring us some trainings like on tailoring, hair dressing, plaiting, bakery, and hotel management, that would help us to get away to look for money, which is very important. Gulu, rural, out of school, unmarried, age 20–24

Respondents had several other suggestions for integrating various types of aid. Some suggested that providing funds to cover school fees would help beneficiaries remain (or return to) school; others proposed adding training in the prevention and management of gender-based violence. Moreover, respondents emphasized the need to layer services more equitably across geographic areas.

2. Address human resource concerns.

Respondents emphasized the need to address the inadequate number of healthcare providers. They also cited the need to improve poor remuneration practices.

I think [DREAMS] can maybe increase [...] the [number of] health providers so that [the] services [...] can be] given any time. Aabhb, so you know sometimes you might come, you don't find the health providers around. So they tell you come back next week, come back this day. So that thing is also discouraging. Gulu, rural, peer leader

3. Improve family and stakeholder engagement.

Some respondents felt that the services should be broadened to include the parents of unmarried beneficiaries and husbands of married ones. Others argued that DREAMS services also should be given to male children because they also experience vulnerabilities associated with the early initiation of sex. Yet others suggested that DREAMS work with teachers as well. They suggested that this strategy would enhance the benefits of the programs by facilitating the ability of beneficiaries to act on what they learn in training.

So I feel at least if they are having a project [...] they should check on where these health facilities are and in case of a nearby school they involve a teacher for the meeting [...] So that when you go to a school you find the teacher is there, [and] for her, she knows her children best so when we go there she will be with us [...] and these students will be friendly to her, and we really coordinate and we solve out things in a better way. Gulu, rural, stakeholder

DREAMS should target families; current[ly] DREAMS doesn't target families. Family support to the adolescent girls will make them avoid pregnancy. Gulu, district-level stakeholder

They should tell them to go with their husbands, but they go alone so it is hard to help them. At least if they could go with their husbands, they can counsel them together. Gulu, urban, peer leader

4. Address negative norms.

Respondents noted the need for the program to make deliberate efforts to target and change negative social norms, such as pressure to marry young and have children early, or stigma against family planning use.

If you are to see our politicians now, they think [that by] talking to girls about sex education [and] family planning, we are encouraging them to have sex. But these girls have sex whether we like it or not, so we need to change the perception[s] of our leaders. Because they think these policies are from [the] Western world, because they want to spoil [us], yet our girls are suffering. Gulu, district-level stakeholder

DISCUSSION

This qualitative study was designed to assess the “how” and “why” of the effects of DREAMS interventions on decisions relating to the timing of pregnancies and sexual and reproductive health-related behaviors. Because of the interaction between HIV and pregnancy risk, we also looked at the effects of DREAMS on HIV prevention and testing, and risky behaviors that can lead both to early pregnancy and contracting HIV. We undertook 86 IDIs that explored beneficiaries’ perceptions, past behaviors, and changes since their enrollment in DREAMS.

The study provides a snapshot of how DREAMS programs influence pregnancy and risky behaviors among actively participating beneficiaries. Respondents, all of whom were active DREAMS beneficiaries, reported participating in or being exposed to a variety of DREAMS programs. The high exposure of respondents to DREAMS services does not imply, however, that the services are broadly available to all or most AGYW in the study areas, because we interviewed only beneficiaries who were active in the program.

In making and acting on fertility decisions, an adolescent girl must be motivated and empowered to delay a pregnancy, know how to do so, be able to access family planning, and translate this knowledge into pregnancy-delaying behaviors. Similarly, before she can adopt HIV-prevention strategies, she needs to know what HIV is, how it is transmitted, and what can be done to avoid being infected; she then must be empowered to take action.

We found that active DREAMS participation influences fertility decisions and behaviors and reduces risky behaviors at all these levels. DREAMS aims to impart knowledge to AGYW that they can relate to themselves; gives them decision-making tools; and empowers them to take action. The pathway of influence is direct, through elements of the interventions designed to delay pregnancy and prevent HIV acquisition, and indirect, through elements of the initiative designed to help beneficiaries improve their economic well-being in an environment characterized by extreme poverty. These effects are not universal—some beneficiaries benefit more than others—yet the link is clear for those AGYW who are active beneficiaries.

Beneficiaries’ Knowledge of Pregnancy and HIV Issues

Beneficiaries reported learning and understanding important messages imparted by DREAMS. Both married and unmarried beneficiaries frequently reported that messages related to the benefits of delaying pregnancy, such as information about the challenges of supporting children at a young age, made them more aware of the consequences of having children at an early age. Messages about the link between pregnancy and leaving school also resonated with them. Married beneficiaries related more to messages about the health and economic benefits of spacing children.

In addition, our data show that DREAMS interventions contributed to beneficiaries’ knowledge of pregnancy risk, and to their understanding of how to delay pregnancies, including information about a variety of contraceptive methods and knowledge of service delivery centers where these methods could be obtained. This effect is true of beneficiaries of all age, schooling, and marital segments. This finding, however, should be interpreted in the context of the 2016 UDHS, which showed that nationwide, 99.5 percent of all adolescents ages 15–19 could name at least one modern contraceptive method (UBOS & ICF, 2017). The UDHS also showed that a substantial proportion of AGYW reported seeing or hearing a mass media message about family planning in the months before the survey (UBOS & ICF, 2017). We can therefore conclude that DREAMS reinforces and expands knowledge of family planning and reproductive health.

One difference between segments was the clear emphasis of DREAMS on abstinence until marriage in the information gained by beneficiaries who attend school, compared to family planning information for older and out-of-school beneficiaries. Also, even though beneficiaries received information about a variety of contraceptive methods and how to use them, they had many fears and misconceptions about the side effects and health risks of contraceptive use, which may have limited their use.

As for HIV prevention, it is clear from our findings that DREAMS interventions provide beneficiaries with a good understanding of what HIV is, how it is contracted, what can be done to prevent contracting it (if negative) or prevent transmitting it to others and living positively (if positive), and the importance of regular testing. These findings, too, should be compared to UDHS data, that showed that 99 percent of AGYW had heard of HIV, and the majority knew that condoms can prevent HIV acquisition (UBOS & ICF, 2017). We conclude that DREAMS enhances and expands beneficiaries' understanding of HIV risk and related health behaviors, and that knowledge is more comprehensive as a result of DREAMS participation.

Behavior Change Related to Pregnancy and HIV

Overall, results show that AGYW in Uganda feel that their motivation either to delay pregnancy or have fewer children was enhanced by their participation in DREAMS. Because DREAMS is a relatively new program in Uganda, there is insufficient evidence of a direct link between DEAMS participation and pregnancy delays. However, beneficiaries we interviewed attributed behavior change—taking steps to delay pregnancy through abstinence or use of family planning—to their DREAMS participation. Although married beneficiaries rarely indicated a desire to delay their first pregnancy, they felt that DREAMS supported them in spacing their pregnancies and reducing their overall number of children.

Nationally, in 2016, 44 percent of women ages 15–19 had never been tested for HIV (UBOS & ICF, 2017); however, almost all respondents in this study had been tested for HIV at least once. Although we did not find much evidence of repeated testing, this fact should be interpreted in the context of the recently revised testing policy, which requires an HIV risk assessment (MOH Uganda, 2016). If the risk is low or nonexistent, there is no need for repeated testing. Beneficiaries reported changes in behavior related to reducing their risk of contracting HIV, including abstaining from sex; using condoms for protection; and reducing risky behaviors, such as walking alone at night, hanging out with boys, and having multiple partners.

DREAMS' Indirect Influence on Pregnancy Delay and HIV Prevention

The literature demonstrates several key factors that contribute to early pregnancies among AGYW in Uganda, including poverty, gender-based violence, social norms such as early marriage, and stigma of contraceptive use, which are confirmed by our data.

Poverty is first and foremost among them. Lundgren, et al. (2018) found that high economic vulnerability in Uganda greatly influences reproductive choices. We found that respondents living in poverty are in search for economic stability, which leads them to partake in risky behaviors, such as transactional sex, and early marriage, which increase rates of early pregnancy. Poverty is also linked to pregnancy through the pathway of dropping out of school. Being out of school is associated with more sexual activity, especially if the AGYW are idle and not engaged in income-generating activities (Bell & Aggleton, 2016). Beneficiaries reported dropping out of school because of pregnancy as well as becoming pregnant as a result of dropping out of school. Our findings show that DREAMS economic activities, such as savings and loans groups and counseling on ways to earn and manage money while remaining at school, are beneficial to AGYW, owing to reinforced emphasis on the importance of staying in school and the risks of dropping out of school. Obviously, these programs cannot eliminate the effect of poverty on AGYW's lives. However, they help beneficiaries remain in school and avoid at least some instances of transactional sex. Given the overwhelmingly positive perceptions of these economic interventions on the part of beneficiaries who received them, we must pay attention to the finding that the interventions are not offered equally across geographic regions, and where offered are inconsistent. For example, several beneficiaries reported that when they were trained, they were promised financial assistance and additional training, which then did not materialize.

Our findings confirm the importance of working with young girls who are still in school, so they can remain there. Keeping young girls in school and not pregnant is much more consistent with social expectations than trying to keep girls who are out of school from getting pregnant (whether married or unmarried). When asked how they would improve the programs, beneficiaries suggested additional economic support, such as paying

their school fees or providing them with vocational training. As discussed above, although these supports are part of the current program, they should be implemented more consistently and equitably.

The literature also shows a high prevalence of gender-based violence in Uganda, with half of women ages 20–24 reporting that they had experienced some form of physical violence (UBOS & ICF, 2017). For as many as a quarter of AGYW in Uganda, first sexual encounters happen through coercion or violence, and are unwanted (MGLSD, et al., 2017). Although we did not ask respondents specifically about gender-based violence, we saw evidence that beneficiaries are aware of the risk—for example, when they use family planning secretly for fear of their husbands’ reactions. DREAMS messages explicitly target risky behaviors and emphasizes the need to reduce risk of rape (don’t walk alone at night), as well as how to communicate with partners and handle unwanted advances by men.

The social expectation in northern Uganda, our study setting, is for girls to marry young, especially in very poor households, where parents can benefit financially from a daughter’s marriage (Green, 2009). Our findings show that this convention pervades all aspects of an AGYW’s life. Her family, friends, potential suiters, and others in the community all expect her to marry young. Once married, she is pressured to have her first child immediately. AGYW who do not follow this convention are stigmatized.

In addition, stigma also is associated with family planning use (Adams et al., 2013). Unmarried girls are advised to avoid contraception because it is believed it will encourage girls to participate in sex. Whereas, married women are expected to obtain their husband’s permission before they can use contraception. All of these factors are significant in the phenomenon of early childbearing in northern Uganda.

DREAMS tackles these conventions by empowering AGYW and giving them tools to resist early childbearing. Married beneficiaries report an improved ability to discuss child spacing and family planning with their husbands. Unmarried beneficiaries and those younger than age 20 report an improved ability to say no to sex and make other choices in their sexual lives. When planning a family, they are also more cognizant of the importance of staying in school, delaying pregnancy, and realizing their goals in life.

DREAMS Messages: Agency of AGYW and Gender Dynamics

A limitation of the current DREAMS umbrella of interventions in northern Uganda is that the messages delivered to beneficiaries reinforce certain social norms that limit a girl’s agency. A repeated theme in our findings is the portrayal of men as dominant and predatory—sources of violence and risk. Men are generally the decision makers within the family; their wives often need their permission to use contraception. Husbands instigate violence within the household and often are unfaithful. The beneficiaries we interviewed did not always trust their husbands to act in the women’s best interests. This finding confirms the known literature on gender dynamics in Uganda (Lundgren, et al., 2018). Similarly, parents are controlling of their unmarried adolescent girls’ behaviors.

In general, DREAMS aims to teach beneficiaries how to communicate with their husbands and parents, which some beneficiaries find empowering. However, our findings from northern Uganda show that the communication tools that DREAMS provides to beneficiaries to deal with men’s power often exacerbate and promote male power dynamics in the relationship. For instance, to reduce the risk of a husband having sexual relations with other women, which is viewed correctly as a risky behavior, married beneficiaries are encouraged to be subservient to their husbands and have sex with them, even if they do not want to do so. Similarly, unmarried beneficiaries are taught always to listen to their parents to avoid conflict. DREAMS encourages married beneficiaries who suspect that their husbands are unfaithful to test themselves more frequently but not to confront their husbands. The beneficiaries assume the responsibility to protect themselves from their husbands, but they are not empowered to use family planning without the husbands’ permission. This combination of norms places a responsibility on the AGYW while removing their agency. In order to address power dynamics in relationships, DREAMS should consider extending its programming to include boys and men as well as parents of DREAMS beneficiaries.

Limitations of the Study

This study shows clear benefits of DREAMS interventions, but it has some limitations that should be considered when the results are interpreted. First, DREAMS messages were not the only source of information on pregnancy delay and HIV prevention in the study areas. Beneficiaries were all exposed to messages from family, friends, schools (not only the health program affiliated with DREAMS), and others in the community. As a result, it sometimes was challenging to attribute behavior change solely to DREAMS. Although our data clearly show that DREAMS reinforced and expanded knowledge, we cannot attribute these improvements to DREAMS alone.

Another limitation of the study is selection bias. As mentioned previously, all beneficiaries interviewed were active DREAMS participants. Therefore, they were not representative of all AGYW enrolled in the DREAMS program, nor of the population of AGYW in the study area. Similarly, the stakeholders we interviewed were all very invested in DREAMS, and thus more likely to provide positive feedback on the program. Also, our sample included few beneficiaries who became pregnant after joining DREAMS, making it difficult to assess the circumstances associated with subsequent pregnancies after DREAMS enrollment.

Despite these limitations, the study provides important in-depth information that shows clear indications that DREAMS is increasing knowledge on pregnancy delay and HIV prevention for active beneficiaries. The results we present can be used to tailor improvements to the DREAMS interventions.

RECOMMENDATIONS

The DREAMS program is relatively new in Uganda and has not been implemented long enough for a quantitative evaluation to provide meaningful results. The program will benefit from a population-level evaluation when it has been implemented more fully for another year or two. We recommend that planning for such an evaluation should start now. If possible, we recommend that baseline data collection include active districts as well as those where DREAMS has not yet been implemented but will be rolled out. If funding allows, it would be ideal to designate a control group(s) for which DREAMS is inactive and collect data in this group at each time point of data collection.

Our results have clear programmatic implications, leading to the following recommendations:

1. Consider adding family planning messages to the school-based program in addition to the focus on abstinence. Currently, sexually active school girls seemingly are at a disadvantage and at higher risk of becoming pregnant or contracting HIV because they are not exposed to knowledge about contraceptive methods and condom use.
2. Consider adding community mobilization and education programs for young boys and men (such as the ones advocated for by Sonke Gender Justice (2018), as well as parents of DREAMS beneficiaries, to gradually effect the following changes to social norms:
 - a. Reduce gender-based violence inside and outside of the home.
 - b. Reject rape as an acceptable behavior, even if it occurs in the home. Although AGYW should be taught to not walk at night, norms among men need to change such that men do not tolerate other men who rape.
 - c. Encourage parents to consider allowing their daughters to use family planning (a message that allowing family planning does not simply encourage a girl to have sex, but protects her from pregnancy and HIV).
 - d. Reduce pressure on daughters to marry early as an approach to reducing household poverty.
 - e. Encourage husbands (partners) to allow wives to use family planning to delay pregnancies. This approach can allow the family to increase savings and stability, finish education, and find gainful employment before starting a family so they can better afford to take care of their children.
3. Increase the focus on economic empowerment interventions including an expansion of school fee payments, vocational program scholarships, and more income-generating activities to help reduce the effect of poverty on early marriage, early pregnancy, dropping out of school, and risky behaviors.
4. Add information to DREAMS messages about HIV transmission from mother to child during births, because most beneficiaries were not aware of it.
5. Provide better teaching about the side effects and health risks of various contraceptive methods to allay misconceptions so AGYW know what to expect and what to do if they experience side effects.
6. Tailor message differently to married and unmarried beneficiaries (for example, spacing pregnancies versus delaying a first pregnancy) because there is an entirely different set of social norms that apply to the two groups.

CONCLUSIONS

The study focused on DREAMS interventions and pregnancy outcomes of AGYW enrolled in DREAMS in Gulu and Lira districts in northern Uganda. The research questions that guided this study are addressed below:

1. Did DREAMS beneficiaries find that any of the services they received made it easier to access contraception, postpone pregnancy, or postpone marriage?
Our findings show that our study respondents, who were active DREAMS beneficiaries, indeed perceived improved contraceptive access and greater empowerment to postpone pregnancy. Our findings are less clear about early marriage, as we did not ask about it in sufficient detail.
2. Did in-school beneficiaries feel the services they received helped them stay in school and delay sexual activity?
Many in-school beneficiaries felt quite strongly that they better understood the importance of staying in school and delaying sexual activities, and as a result were doing their best to achieve it. Similarly, beneficiaries already out of school were interested in obtaining additional vocational training. However, it is also clear that attitudes toward schooling were already positive before DREAMS. In some cases, delaying pregnancy as a result of what they learned through DREAMS did help girls stay in school, but the causes of leaving schools should be better addressed.
3. Did out-of-school beneficiaries feel the services they received helped them manage their fertility intentions? Did the services help them return to school or postpone pregnancy?
Unmarried out-of-school beneficiaries were better able to access and use contraception and delay pregnancy. For married beneficiaries, the results were less consistent because of strong social norms that demand childbearing soon after marriage.
4. Did married beneficiaries and those who had already had a pregnancy feel the services they received helped them deal with social pressures to have children and delay future pregnancies?
Only to some degree. Married beneficiaries better understood the advantages of child spacing. They now try to space their children, but it is difficult for them to ignore the social pressures to have children. In addition, husbands are major gatekeepers. Empowering AGYW is not sufficient to overcome this issue; programs are needed to engage men directly.

The results of this qualitative study show that DREAMS Uganda has great potential to effect real norms and behaviors that would result in fewer and delayed pregnancies and would slow the progression of HIV among AGYW. However, the interventions should be adjusted and expanded, as suggested in our recommendations, so that the initiative is more effective in the social context. In addition, DREAMS in northern Uganda should focus on equity in geographic coverage as well as following up with peer leaders and beneficiaries on a regular basis.

REFERENCES

- Adams, M. K., Salazar, E. & Lundgren, R. (2013). Tell them you are planning for the future: Gender norms and family planning among adolescents in northern Uganda. *International Journal of Gynecology and Obstetrics* 123, e7–e10. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/23992625>
- Bell, S. & Aggleton, P. (2013). Social influences on young people's sexual health in Uganda. *Health Education* 113(2), 102–114. Retrieved from <https://www.emeraldinsight.com/doi/full/10.1108/09654281311298795>
- Case, A. P., Hoyt, A. T., Canfield, M. A., & Wilkinson, A. V. (2015). Periconceptional risk factors for birth defects among younger and older teen mothers. *Journal of Pediatric & Adolescent Gynecology*, 28, 263–270. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/26049938>
- Cluver, L., et al. (2011). Transactional sex amongst AIDS-orphaned and AIDS-affected adolescents predicted by abuse and extreme poverty. *Journal of Acquired Immune Deficiency Syndromes*, 58 (3), 336–343. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/21857361>
- Dellar, R. C., Dlamini, S., & Karim, Q. Q. (2015). Adolescent girls and young women: Key populations for HIV epidemic control. *Journal of the International AIDS Society*, 18(Suppl1), 19408. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/25724504>
- DREAMS. (2017). DREAMS layering Uganda Quarter 4 report. Kampala, Uganda: DREAMS.
- Ganchimeg T., Ota, E., Morisaki, N., Laopaiboon, M., Lumbiganon, P., Zhang J., . . . WHO Multicountry Survey on Maternal Newborn Health Research Network. (2014). Pregnancy and childbirth outcomes among adolescent mothers: A World Health Organization multicountry study. *BJOG: An International Journal of Obstetrics & Gynaecology*, 121, 40–48. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/24641534>
- Green, C., A. Mukuria, & D. Rubin. 2009. Addressing early marriage in Uganda. Washington, DC, USA: Futures Group, Health Policy Initiative, Task Order 1. Retrieved from <http://www.culturalpractice.com/resources/addressing-early-marriage-in-uganda/>
- Hargreaves, R. (2013). Incorporating a structural approach within combination HIV prevention: An organising framework. Structural Approaches to HIV Prevention Position Paper Series. Arlington, VA, USA: USAID's AIDS Support and Technical Assistance Resources, AIDSTAR-One, Task Order 1; London: UKaid's STRIVE Research Consortium. Retrieved from https://aidsfree.usaid.gov/sites/default/files/incorporating_combination_hiv_prevention.pdf
- Hunter, M. (2010). Love in the time of AIDS: Inequality, gender, and rights in South Africa. Bloomington, Indiana, USA: Indiana University Press.
- Jewkes, R., Dunkle, K., Nduma, M., & Shai, N. J. (2012). Transactional sex and HIV incidence in a cohort of young women in the Stepping Stones trial. *AIDS and Clinical Research*, 3, 158. Retrieved from <http://strive.lshtm.ac.uk/resources/transactional-sex-and-hiv-incidence-cohort-young-women-stepping-stones-trial>
- Kavuma, R. (2016). Uganda's healthcare system explained. *The Guardian*. April 1 2009. Retrieved from <https://www.theguardian.com/katine/2009/apr/01/uganda-healthcare-system-explained>
- Kawakita, T., Wilson, K., Grantz, K. L., Landy, H. J., Huang, C., & Gomez-Lobo, V. (2016). Adverse maternal and neonatal outcomes in adolescent pregnancy. *Journal of Pediatric & Adolescent Gynecology*, 29, 130–136. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/26327561>
- Lundgren, R., Burgess, S., Chantelois, H., Oregede, S., Kerner, B., & Kågesten, A. E. (2018). Processing gender: Lived experiences of reproducing and transforming gender norms over the life course of young people in Northern Uganda. *Culture, Health & Sexuality*. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/29882476>

- Ministry of Gender, Labour and Social Development (MGLSD) & UNICEF. (2015). Situation analysis of children in Uganda, 2015. Kampala, Uganda: MGLSD and UNICEF Uganda. Retrieved from [https://www.unicef.org/uganda/UNICEF_SitAn_7_2015_\(Full_report\).pdf](https://www.unicef.org/uganda/UNICEF_SitAn_7_2015_(Full_report).pdf)
- Ministry of Gender, Labour and Social Development (MGLSD) & UNICEF, AfriChild Centre for Excellence, USAID, and the United States Centers for Disease Control and Prevention. (2017). Violence against children in Uganda: Findings from a national survey, 2015. Kampala, Uganda. Retrieved from https://www.unicef.org/uganda/VACS_Report_lores.pdf
- Ministry of Health (MOH). (2016). National HIV Testing Services Policy and Implementation guidelines, Uganda. 4th Edition. Kampala, Uganda: MOH. Retrieved from https://www.who.int/hiv/pub/guidelines/uganda_art.pdf
- Ministry of Health (MOH). (2017a). Uganda population-based HIV impact assessment (UPHIA), 2016–2017. Preliminary findings. Summary sheet, August 2017. Kampala, Uganda: MOH. Retrieved from <https://www.afro.who.int/sites/default/files/2017-08/UPHIA%20Uganda%20factsheet.pdf>
- Ministry of Health (MOH). (2017b). AIDS Control Program ART report for March 2017. Kampala, Uganda: MOH.
- Ministry of Sports and Education. (2016). *Enhanced PLASCY reference guide for primary school teachers*. Kampala, Uganda: Ministry of Sports and Education.
- Moore, A. M., Biddlecom, A. E., & Zulu, E. M. (2007). Prevalence and meanings of exchange of money or gifts for sex in unmarried adolescent sexual relationships in sub-Saharan Africa. *African Journal of Reproductive Health*, 11(3), 44–61. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2367111/>
- Parkhurst, J. (2013). Structural drivers, interventions, and approaches for prevention of sexually transmitted HIV in general populations: Definitions and an operational approach. Structural Approaches to HIV Prevention Position Paper Series. Arlington, VA: USAID's AIDS Support and Technical Assistance Resources, AIDSTAR-One, Task Order 1. London, England: UKaid's STRIVE Research Consortium. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4159948/>
- Sandfort, T. G., Orr, M., Hirsch, J. S., & Santelli, J. (2008). Long-term health correlates of timing of sexual debut: Results from a national US study. *American Journal of Public Health*, 98, 155–161. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2156059/>
- Save the Children (2016). Every last girl. London, England: Save the Children. Retrieved from <https://www.savethechildren.org.uk/content/dam/global/reports/advocacy/every-last-girl.pdf>
- Saul, J., Bachman, G., Allen, S., Toiv, N.F., Cooney, C., & Ta'Adhmeeka B. (2018.) The DREAMS core package of interventions: A comprehensive approach to preventing HIV among adolescent girls and young women. *PLOS ONE* 13(12): e0208167. Retrieved from <https://doi.org/10.1371/journal.pone.0208167>
- Schenker, I. (2006). HIV/AIDS and literacy: An essential component in education for all. EFA Global Monitoring Report. Background paper. Paris, France: UNESCO. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000146182>
- Sonke Gender Justice. (2018). Community education and mobilization. Retrieved from <https://genderjustice.org.za/project/community-education-mobilisation/>
- Steffenson, A. E., et al. (2011). Concurrent sexual partnerships and human immunodeficiency virus risk among South African youth. *Sexually Transmitted Diseases*, 38 (6), 459–466. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/21258268>
- Stöckl, H., Kalra, N., Jacobi, J., & Watts, C. (2013). Is early sexual debut a risk factor for HIV infection among women in sub-Saharan Africa? A systematic review. *American Journal of Reproductive Immunology*, 69 (Suppl. 1), 27–40. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/23176109>

- Timur, H., Kokanalı, M. K., Topçu, H. O., Topçu, S., Erkilinç, S., Uygur, D., . . . Yakut, H. I. (2016). Factors that affect perinatal outcomes of the second pregnancy of adolescents. *Journal of Pediatric & Adolescent Gynecology*, 29, 18–21. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/26428190>
- Uganda Bureau of Statistics & ICF. (2017). Uganda Demographic and Health Survey (UDHS), 2016: Key indicators report. Kampala, Uganda and Rockville, Maryland, USA: UBOS and ICF. Retrieved from https://www.ubos.org/onlinefiles/uploads/ubos/pdf%20documents/Uganda_DHS_2016_KIR.pdf
- United States Agency for International Development (USAID). (2016). Global strategy to empower adolescent girls. Retrieved from <https://www.state.gov/documents/organization/254904.pdf>.
- United States President’s Emergency Plan for AIDS Relief (PEPFAR), Johnson & Johnson, Bill & Melinda Gates Foundation, Girl Effect, Gilead Sciences, & ViiV Healthcare. (n.d.) DREAMS core package of interventions: Summary. Washington, DC, USA: PEPFAR. Retrieved from <https://www.pepfar.gov/documents/organization/269309.pdf>
- World Health Organization (2018). Violence Prevention Alliance: Global campaign for violence prevention. Retrieved from <https://www.who.int/violenceprevention/approach/ecology/en/>
- Zuma, K., Setswe, G., Ketye, T., Mzolo, T., Rehle, T., & Mbelle, N. (2010). Age at sexual debut: A determinant of multiple partnerships among South African youth. *African Journal of Reproductive Health*, 14, 47–54. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/21243918>

APPENDIX. STUDY INSTRUMENTS

The following instruments are presented here:

1. AGYW, ages 15–24
2. AGYW, ages 10–14
3. Peer leader
4. District-level stakeholder
5. Facility-level stakeholder

**Uganda DREAMS Evaluation
In-depth Interview Guide
AGYW, Ages 15–24**

[Interviewer]: *Please read aloud if there is a gap between the time respondent signed the informed consent form, and the time of the interview. If the interview starts immediately after consent, you can ignore the paragraphs in quotation marks, and start with the permission questions*

“Thank you so much for joining me today. I would like to talk with you about your experiences and some of the activities you may be engaged in here in your community. Our conversation today will last up to two hours. We will discuss topics such as school, health services, and your plans for the future.

There are no right or wrong answers to the questions I will ask. If a question makes you feel uncomfortable, or if you would rather not answer it, just tell me and we will move on. You can also stop the interview at any time and for any reason.

What you share with me today will be used to inform community programs, so that they can better serve girls who can benefit from them.”

“I have a recorder here and will turn it on with your permission. You don’t need to pay any attention to it, it will stay here during the interview. The recorder will help me capture all that you share with me today. What we discuss will remain confidential. We will not identify you by name, and no one in the community will hear the recording. Please try not to use names during the interview, to protect your privacy and the privacy of others. Remember that you do not need to respond to any question that makes you uncomfortable, and that you can stop the interview at any time.”

Do I have your permission to turn on the recorder?

Do I have your permission to start?

Speak aloud the participant code, provided enrollment date, and the start time of the interview.

Section 1: Background Information

First, tell me a little about yourself, so I can get to know you better.

1. How old are you? (How old were you at your last birthday?)
2. Have you always lived here, in [name of community]? If she has not always lived here – how old were you when you came to live here? Where did you live before?
3. Whom do you live with, that is, who else lives in the house where you live, or do you live alone?
Probe: Parents
 Siblings
 Other relatives
 Husband/boy-friend
 Friends
 Anyone else?

4. *If not at school, ask only the highlighted part of the question;*

[Term 2 school holiday runs from August 25-September 16, 2018] If interviewing during the holiday – Did you attend school last term, that is, the school term that ended in August?

If interviewing after September 16 - are you attending school this term?

If attended school in term 2 (holiday interview) - What grade/class are you in? How do you like school? Do you plan to return to school for term 3 in September? If she plans to return - Would you like to continue with school after this year?

If currently attending school (post-holiday interview) - What grade/class are you in? How do you like school? Would you like to continue with school after this year?

If not planning to return for term 3 or does not want to continue with school after this year – could you tell me a bit about why you are not planning to return for term 3/why you would not like to continue with school after this year?

If not attending school/did not attend in term 2 – When did you last attend school? What grade were you in at that time? Could you tell me a bit about why you stopped attending school?

5. Are you currently working for money? If yes, what kind of work do you do?
6. Do you have a boyfriend? Please tell me about him.
or
If Married, Please tell me about your husband
Probe: Age
Education
Job
How long they have been together

Section 2: Health services

Next, I'd like to talk about where people in this community go when they are sick or need services from a doctor or a nurse or another health provider.

7. Where in this community do you get health care if you need to?
Probe: Health facility (public, private)
Community health worker
8. When was the last time you saw and talked to a community health worker or visited a health center or a doctor or a nurse? If unsure, probe – would you say it was some time this year or before Christmas of last year?
9. What was the reason that you [visited ***]?
If does not spontaneously mention family planning – did they talk to you about family planning or offer you family planning services?
If does not spontaneously mention HIV – did they talk to you about HIV or offer you a test for HIV?

Section 3: DREAMS Program

We will next talk about programs/activities for girls and young women in this community related to staying in school, sex education, HIV, pregnancy and Family planning.

10. Did you ever receive a “passport” like this? (Demonstrate a blank DREAMS passport/ID card)
If yes – how long ago did you first receive a passport? Do you still have it? Have you received more than one?
Can I see your passport? If yes, check date against provided enrollment date.
Can you remember what month and year you received your first “passport”?
If she is not sure, help her remember using a calendar, asking about other important things that happened in her life at about the same time, to help jog her memory. *If has card, confirm with the card, and if the date is different ask her to explain.*

If no – Have you ever received any services from [names of local DREAMS partners]? How long ago did you start receiving services?

11. Over the last two years or so, did anyone outside your family offer or provide you help to enroll or stay in school? If yes – who was that [probe for names of local DREAMS partners or peer leader]? What kind of help did you get? Did it help you enroll or stay in school? In what way?
12. Over the last two years or so, did anyone outside your family speak with you about sex or did you attend or participate in any discussions about sex? For example, delaying sex, relationships with a partner, etc. If yes – who was that [probe for names of local DREAMS partners or peer leader]? Where was that? What was discussed? Did it help you personally? If yes, in what way? If not, why not?
13. Over the last two years or so, did anyone outside your family speak with you about HIV or did you attend or participate in any discussions about HIV? For example, what is HIV, how to protect yourself against getting HIV. If yes – who was that [probe for names of local DREAMS partners or peer leader]? Where was that? What was discussed? Did it help you personally? If yes, in what way? If not, why not?
14. Over the last two years or so, did anyone outside your family refer you to a health center to get tested for HIV? For each – who was that [names of local DREAMS partners or peer leader]? Did you go? Did you get [service]? If no, why not?
15. Over the last two years or so, did anyone outside your family speak with you about preventing or delaying pregnancy or did you attend or participate in any discussions about delaying pregnancy? If yes – who was that [probe for names of local DREAMS partners or peer leader]? Where was that? What methods for delaying pregnancy were discussed? Did it help you personally? If yes, in what way? If not, why not?
16. Over the last two years or so, did anyone outside your family refer you to a health center to get a family planning method? To get a condom? For each – who was that [names of local DREAMS partners or peer leader]? Did you go? Did you get [service]? If no, why not?
17. Over the past two years or so, have you attended or participated in any activity or service led or organized by [names of local DREAMS partners] or by a peer leader from [names of local DREAMS partners], that we did not already discuss? If yes
Probe: Type/topic of activities/services she received (probe only if does mention them spontaneously)

- Parenting sessions
- Economic help
- School health education
- Psychological counseling
- Social counseling

Where she received the services
 School
 Health facility
 Community center

When was the last time you participated in any of these activities?

18. Are you currently participating, or have ever participated in support groups organized by [names of local DREAMS partners].

If yes, please tell me about them. What type of topics are discussed? What activities are included?

Section 4: Fertility, pregnancy and family planning

19. In general, when do you think is the right time for girls to get pregnant? Why do you say that?
20. Do you have any children?
If yes: How many children do you have? Please tell me about them

Probe: ages, sex,

How old were you when you became pregnant with your first child?

If she has more than one child or is now pregnant with second child – how old was your first child when your second child was born

In what month and year was each child born?

If she is not sure, help her remember using a calendar, asking about other important things that happened in her life at about the same time, to help jog her memory.

If not: Have you ever been pregnant? If yes, what happened?

21.

A) Jane just had a baby 4 months ago. Can she get pregnant if she has sex?

Probe: she is breastfeeding or not

she has had her first period postpartum or not

B) Marta's boyfriend works far away, and he comes home every six or seven weeks. If she has sex with him only when he comes home, can she become pregnant?

C) Sarah is 15 years old. If she has sex now, can she become pregnant?

22. Please tell me what you know about family planning methods. Which methods have you heard about? How safe are they? What do you know about them?

Probe: Pill

Injections

IUD

Implants

Condoms

23. Please think of all the places that you have received information related to timing of pregnancies and family planning. Please tell me about these places, and tell me what you learned in each of them.

Probe: At home (from parent or other relative (Who?))

At school (in what context?)

At work (in what context?)

At a health facility

At community events

From [names of local DREAMS partners]

24. Do adolescents and young women in this community feel pressure to have children? If yes, please explain and give some examples. Do you think that [names of local DREAMS partners] help young women deal with the pressure? If so, how? Has it helped you? Please explain.

25. Do adolescents and young women in this community feel pressure to have sex early? If so, please explain and give some examples. Do you think that [names of local DREAMS partners] help young women deal with the pressure? If so, how? Has it helped you? Please explain

Section 5: Thinking about the future

26. Are you currently pregnant?

If yes, do feel ready for this child?

Before you became pregnant, were you worried or concerned that you might get pregnant before you are ready for it?

If not, are you worried or concerned that you might get pregnant before you are ready for it?

If yes, how worried are you about getting pregnant before you are ready?

If not, why is that?

27. Have you ever done anything or used any method to delay or avoid a pregnancy? Please tell me about it

Probe: Which method(s) she used

When she started, how long she used each method

Where she got the methods

Is she currently using a method? Which? How long has she been using it? Where did she get it?

Is there someone in particular who has helped you think about when to have children or how to avoid a pregnancy? Anyone else [names of local DREAMS partners]? How did they help? What help would you like, that you are not getting now?

28. To the best of your knowledge, have you ever been tested for HIV?

[If yes] When was the last time you were tested for HIV? [If unsure about last testing, probe: would you say that was within the last 6 months, or more than 6 months ago?

[If more than 6 months ago] Are you thinking about or planning to get tested again? Why/why not?

If never tested for HIV – has anyone ever suggested that you be tested for HIV or offered you a test for HIV? Why have you not been tested for HIV? Would you like to get a test for HIV?

29. Check answers to questions 11-17; ask only if she reports having participated in or received services from DREAMS. You told me that in the past two years or so you attended or participated in activities led or organized by [name of DREAMS peer leader] or [names of local DREAMS partners]. What did you like best about these activities? Why is that? What was less interesting or useful for you? Why is that? Are there other things you would have liked to get from [name of DREAMS peer leader] or [names of local DREAMS partners]? What might they do differently in the future?

Close of interview

30. What else haven't I asked you about the things we talked about today, that you think I should know?

[Interviewer]: *Please read aloud*

“Thank you very much for your time and for sharing your experiences and insights. We know you are busy and are very grateful for your time. Please be assured that everything you have shared with me today is completely confidential. “

Speak aloud end time of the interview and switch off the recorder.

**Uganda DREAMS Evaluation
In-Depth Interview Guide
Unmarried, In School, Ages 10–14**

[Interviewer]: *Please read aloud if there is a gap between the time respondent signed the informed assent form, and the time of the interview. If the interview starts immediately after assent, you can ignore the paragraphs in quotation marks, and start with the permission questions*

“Thank you so much for joining me today. I would like to talk with you about your experiences and some of the activities you may be engaged in here in your community. Our conversation today will last up to two hours. We will discuss topics such as school, health services, and your plans for the future.

There are no right or wrong answers to the questions I will ask. If a question makes you feel uncomfortable, or if you would rather not answer it, just tell me and we will move on. You can also stop the interview at any time and for any reason.

What you share with me today will be used to inform community programs, so that they can better serve girls who can benefit from them.”

“I have a recorder here and will turn it on with your permission. You don’t need to pay any attention to it, it will stay here during the interview. The recorder will help me capture all that you share with me today. What we discuss will remain confidential. We will not identify you by name, and no one in the community will hear the recording. Please try not to use names during the interview, to protect your privacy and the privacy of others. Remember that you do not need to respond to any question that makes you uncomfortable, and that you can stop the interview at any time.”

Do I have your permission to turn on the recorder?

Do I have your permission to start?

Speak aloud the participant code and the start time of the interview.

Section 1: Background Information

First, tell me a little about yourself, so I can get to know you better.

31. How old are you? (How old were you at your last birthday?)
32. Whom do you live with, that is, who else lives in the house where you live, or do you live alone?
Probe: Parents
 Siblings
 Other relatives
 Husband/boy-friend
 Friends
 Anyone else?
33. *If not at school, ask only the highlighted part of the question;*

[Term 2 school holiday runs from August 25-September 16, 2018] If interviewing during the holiday – Did you attend school last term, that is, the school term that ended in August?

If interviewing after September 16 - are you attending school this term?

If attended school in term 2 (holiday interview) - What grade/class are you in? How do you like school? Do you plan to return to school for term 3 in September? If she plans to return - Would you like to continue with school after this year?

If currently attending school (post-holiday interview) - What grade/class are you in? How do you like school? Would you like to continue with school after this year?

If not planning to return for term 3 or does not want to continue with school after this year – could you tell me a bit about why you are not planning to return for term 3/why you would not like to continue with school after this year?

If not attending school/did not attend in term 2 – When did you last attend school? What grade were you in at that time? Could you tell me a bit about why you stopped attending school?

34. Do you have a boyfriend? Please tell me about him.

Probe: Age

Education

Job

How long they have been together

Section 2: DREAMS Program

We will next talk about programs/activities for girls and young women in this community related to staying in school, sex education, HIV, pregnancy and Family planning.

35. Did you ever receive a “passport” like this? (Demonstrate a blank DREAMS passport/ID card)

If yes – how long ago did you first receive a passport? Do you still have it? Have you received more than one?

Can you remember what month and year you received your first “passport”?

If she is not sure, help her remember using a calendar, asking about other important things that happened in her life at about the same time, to help jog her memory.

If no – Have you ever received any services from [names of local DREAMS partners]? How long ago did you start receiving services?

36. Over the last two years or so, did anyone outside your family offer or provide you help to enroll or stay in school? If yes – who was that [probe for names of local DREAMS partners or peer leader]? What kind of help did you get? Did it help you enroll or stay in school? In what way?

37. Over the last two years or so, did anyone outside your family speak with you about sex or did you attend or participate in any discussions about sex? For example, delaying sex, relationships with a partner, etc. If yes – who was that [probe for names of local DREAMS partners or peer leader]? Where was that? What was discussed? Did it help you personally? If yes, in what way? If not, why not?

38. Over the last two years or so, did anyone outside your family speak with you about HIV or did you attend or participate in any discussions about HIV? For example, what is HIV, how to protect yourself against getting HIV. If yes – who was that [probe for names of local DREAMS partners or peer leader]? Where was that? What was discussed? Did it help you personally? If yes, in what way? If not, why not?

39. Over the last two years or so, did anyone outside your family refer or go with you to a health center to get tested for HIV? For each – who was that [names of local DREAMS partners or peer leader]? Did you go? Did you get [service]? If no, why not?

40. Over the last two years or so, did anyone outside your family speak with you about preventing or delaying pregnancy or did you attend or participate in any discussions about delaying pregnancy? If yes – who was that [probe for names of local DREAMS partners or peer leader]? Where was that? What methods for delaying pregnancy were discussed? Did it help you personally? If yes, in what way? If not, why not?

41. Over the last two years or so, did anyone outside your family refer or go with you to a health center to get a family planning method? To get condoms? For each – who was that [names of local DREAMS partners or peer leader]? Did you go? Did you get [service]? If no, why not?

42. Over the past two years or so, have you attended or participated in any activity or service led or organized by [names of local DREAMS partners] or by a peer leader from [names of local DREAMS partners], that we did not already discuss? If yes

Probe: Type/topic of activities/services she received (probe only if does mention them spontaneously)

- Parenting sessions
- Economic help
- School health education
- Psychological counseling
- Social counseling

Where she received the services

- School
- Health facility
- Community center

When was the last time you participated in any activity?

43. Are you currently participating, or have ever participated in support groups organized by [names of local DREAMS partners].

If yes, please tell me about them. What type of topics are discussed? What activities are included?

Section 4: Pregnancy and family planning

44. In general, when do you think is the right time for girls to get pregnant? Why do you say that?

45. Sarah is 15 years old. If she has sex now, can she become pregnant?

46. Please tell me what you know about family planning methods. Which methods have you heard about? How safe are they? What do you know about them?

Probe: Pill

Injections

IUD

Implants

Male condoms

Female condoms

MoonBeads

47. Please think of all the places that you have received information related to timing of pregnancies and family planning. Please tell me about these places, and tell me what you learned in each of them.

Probe: At home (from parent or other relative (Who?))

At school (in what context?)

At work (in what context?)

At a health facility

At community events

From [names of local DREAMS partners]

Section 3: Thinking about the future

48. Are you worried or concerned that you might get pregnant before you are ready for it?

If yes, how worried are you about getting pregnant before you are ready?

If not, why is that?

49. To the best of your knowledge, have you ever been tested for HIV?

[If yes] When was the last time you were tested for HIV? [If unsure about last testing, probe: would you say that was within the last 6 months, or more than 6 months ago?

[If more than 6 months ago] Are you thinking about or planning to get tested again? Why/why not?

If never tested for HIV – has anyone ever suggested that you be tested for HIV or offered you a test for HIV? Why have you not been tested for HIV? Would you like to get a test for HIV?

50. Check answers to questions 11-16; ask only if she reports having participated in or received services from DREAMS. You told me that in the past two years you attended or participated in activities led or organized by [name of DREAMS peer leader] or [names of local DREAMS partners]. What did you like best about these activities? Why is that? What was less interesting or useful for you? Why is that? Are there other things you would have liked to get from [name of DREAMS peer leader] or [names of local DREAMS partners]? What might they do differently in the future?

Close of interview

51. What else haven't I asked you about the things we talked about today, that you think I should know?

[Interviewer]: *Please read aloud*

“Thank you very much for your time and for sharing your experiences and insights. We know you are busy and are very grateful for your time. Please be assured that everything you have shared with me today is completely confidential. “

Speak aloud end time of the interview and switch off the recorder.

**Uganda DREAMS Evaluation
In-Depth Interview guide
DREAMS Peer Leader (Ages 15–24)**

[Interviewer]: *Please read aloud if there is a gap between the time respondent signed the informed consent form, and the time of the interview. If the interview starts immediately after consent, you can ignore the paragraphs in quotation marks, and start with the permission questions*

Thank you so much for joining me today. During the interview we will talk about issues relating to the DREAMS initiative and the services it provides. Our conversation today will last about one hour. We will discuss topics such as services provided by DREAMS initiative, your role as a team leader, and your thoughts about beneficiaries of the program and how they benefit from it. Some of the questions will be quick, others will lead to a conversation, so that we can learn more about your experiences and opinions. What you share with me today will be used to inform the DREAMS initiative, so that services provided in this area better serve girls who can benefit from them.

I have a recorder here and will turn it on with your permission. You don't need to pay any attention to it, it will stay here during the interview. The recorder will help me capture all that you share with me today. What we discuss will remain confidential and only the study team will listen to the recording. Please try not to use names during the interview, to protect your privacy and the privacy of others. Remember that you do not need to respond to any question you do not wish to, and that you can stop the interview at any time.

Do I have your permission to turn on the recorder?
Do I have your permission to start?

Speak aloud the participant code and the start time of the interview.

Section 1: Background Information

First, I would like to ask you about your background.

52. 1. How old are you? (How old were you at your last birthday?)

53. *If not at school, ask only the highlighted part of the question;*

[Term 2 school holiday runs from August 25-September 16, 2018] If interviewing during the holiday – Did you attend school last term, that is, the school term that ended in August?

If interviewing after September 16 - are you attending school this term?

If attended school in term 2 (holiday interview) - What grade/class are you in? How do you like school? Do you plan to return to school for term 3 in September? If she plans to return - Would you like to continue with school after this year?

If currently attending school (post-holiday interview) - What grade/class are you in? How do you like school? Would you like to continue with school after this year?

If not planning to return for term 3 or does not want to continue with school after this year – could you tell me a bit about why you are not planning to return for term 3/why you would not like to continue with school after this year?

If not attending school/did not attend in term 2 – When did you last attend school? What grade were you in at that time? Could you tell me a bit about why you stopped attending school?

54. I understand that you are a peer leader for the DREAMS project? How long have you been a peer leader for the DREAMS project? What motivated you to become a peer leader?

Section 2: Participation in the DREAMS project

55. Next, please tell me about the services that you, yourself, have received from the DREAMS project.

Probe: Type of services she received

Where she received the services (school, health clinic, community?)

Whether she found the services useful (in what way?)

How satisfied you were with the services

Were there any barriers to receiving these services? If so, what were they?

56. Why did you join the DREAMS project?

57. Please describe your role as a team leader for the DREAMS project. What exactly do you do?

How were you prepared for this role?

Probe: What is your role in educating or influencing adolescents to delay pregnancy?

Section 3: Family planning and pregnancy delay

58.

a) [Jane] just had a baby 4 months ago. Can she get pregnant if she has sex?

Probe: she is breastfeeding or not

she has had her first period postpartum or not

b) [Martha's] boyfriend works far away, and he comes home every six or seven weeks. If she has sex with him, can she become pregnant?

c) [Sarah] is 15 years old. If she has sex now, can she become pregnant?

59. Please tell me what you know about family planning methods. Which methods have you heard about? How safe are they? What do you know about them?

Probe: Pill

Injections

IUD

Implants

Male condoms

Female condoms

MoonBeads

Section 4: Perceptions on DREAMS beneficiaries

60. In your opinion, do you think the young girls in this community are at high, medium, or low risk of early child bearing?

61. Please describe some reasons why girls may be at an increased risk for getting pregnant as a teenager.

Why do you think they are at increased risk for getting pregnant early?

Probe: Economic means

HIV status

Education

Family background

Her parents (or caregivers) attitudes

Availability of social support

62. Think about when adolescents and young girls in this community get pregnant. Is it their decision whether or not to get pregnant? Can they delay getting pregnant if they wish? Do they know how?

63. What can they do to delay getting pregnant?
Probe: Family planning methods
64. Is it easier for some girls than others? to delay getting pregnant Why do you say that? Is it different for girls after they have joined the DREAMS initiative compared to before?
Probe: Life circumstance
Marital status, time since marriage
Parental support
Whether or not they have a child already
In/out of school
Does/does not have a job
Economic means
65. In your opinion, do many AGYW use family planning methods to prevent pregnancy?
If not many, why is that?
66. Which family planning methods are most commonly used by AGYW? Why do you think these methods are more commonly used?
Probe: Long acting vs. short acting methods
Dual protection (condom)
Female vs. male vs. couple methods
Characteristics of girl
67. What do girls need to do if they want to use a family planning method? How difficult is this?
Probe barriers: Parental/spousal permission
Perceptions of friends
Distance to facility
Cost
Availability of method
Socio-cultural beliefs and norms
68. Are HIV services (education, testing, treatment, etc.) integrated with family planning services in your community (provide examples of this)?
- If yes – has this integration been beneficial for AGYW? How? What can be done to further improve integration of these services?
69. Do adolescents and young women in this community feel pressure to have children? If so, please explain and give some examples. Do you think that the DREAMS program helps young women deal with the pressure? If so, how? Has it helped you?
70. Do adolescents and young women in this community feel pressure to have sex early? If so, please explain and give some examples. Do you think that the DREAMS program helps young women deal with the pressure? If so, how? Has it helped you?

Section 5: Opinions of DREAMS services

71. What DREAMS services can be most helpful to girls in delaying a pregnancy?
Probe:
- Economic empowerment
 - Sexual and reproductive health education
 - Family planning
 - Psychosocial help
 - Support groups
 - Health communication
 - Information on HIV prevention

72. Is there anything else the DREAMS project can do, that it is not currently doing, to support healthy timing and spacing of pregnancies? Is there anything the project is doing that it can do better?
73. What are some strength and some weakness of the DREAMS program, how it is implemented here, and how it assists adolescents and young women?
74. Do you know anyone who dropped out of the DREAMS program? Why did they drop out?
- Probe: pregnancy
75. Give me an example of where you have been an agent for change or a role model for young women in your area.

Close of interview

76. What else haven't I asked you about the things we talked about today, that you think I should know?

[Interviewer]: *Please read aloud*

“Thank you very much for your time and for sharing your experiences and insights. We know you are busy and are very grateful for your time. Please be assured that everything you have shared with me today is completely confidential. “

Speak aloud end time of the interview and switch off the recorder.

**Uganda DREAMS Evaluation
In-Depth Interview Guide
Stakeholder Interview (District & Community Levels)**

[Interviewer]: *Please read aloud if there is a gap between the time respondent signed the informed consent form, and the time of the interview. If the interview starts immediately after consent, you can ignore the paragraphs in quotation marks, and start with the permission questions*

“Thank you so much for joining me today. During the interview we will talk about issues relating to the DREAMS initiative. Our conversation today will last about one hour. We will discuss topics such as services provided by the DREAMS initiative, the program beneficiaries, and whether program services influence the decisions of adolescents and young women to delay pregnancies. Some of the questions will be quick, others will lead to a conversation, so that we can learn more about your experiences and opinions. What you share with me today will be used to inform the DREAMS initiative, so that services provided in this area better serve girls who can benefit from them.”

“I have a recorder here and will turn it on with your permission. You don’t need to pay any attention to it, it will stay here during the interview. The recorder will help me capture all that you share with me today. What we discuss will remain confidential and only the study team will listen to the recording. Please try not to use names during the interview, to protect your privacy and the privacy of others. Remember that you do not need to respond to any question you do not wish to, and that you can stop the interview at any time.”

Do I have your permission to turn on the recorder?

Do I have your permission to start?

Speak aloud the participant code and the start time of the interview.

Section 1: Background Information

77. To start, please tell me about your work. Can you please describe what it is that you do?

78. (if not mentioned in Q1) – can you describe your role in educating or influencing adolescents to delay pregnancy?

79. Now please tell me what it is that you do in your work that relates to the DREAMS initiative.

Probe: Target potential participants

Map areas where the need is more pressing

Oversee implementation of program activities

Oversee implementation of educational or school components of the program

Monitor program activities

Report to district council

Participate in planning activities

Section 2: DREAMS initiative beneficiaries

80. Please tell me about the beneficiaries of the DREAMS initiative. Can you describe them to me?

Probe: Economic background

Risk for HIV

Education – are they still in school?

Family background

Risk of GBV

81. In your opinion, do the beneficiaries of the DREAMS programs are at high, medium, or low risk of early child bearing? What are some reasons that girls may be at a high risk of early child bearing?

Probe: Economic background

HIV risk

Education
Family history
Victims of GBV

82. Are you aware of any AGYW who got pregnant after joining the DREAM program? Do you think that risk factors after enrollment in DREAMS would be different than those before?

Section 3: Contraception

83. Please tell me about family planning methods that are available to adolescents and young women in your district/community.

Probe: Available methods
Location of methods
Accessibility
Cost
Quality of services

84. In your opinion, do many AGYW use family planning methods to prevent pregnancy?
If not many, why is that?

85. Which family planning methods are most commonly used by AGYW? Why do you think these methods are more commonly used?

Probe: Long acting vs. short acting methods
Dual protection (condom)
Female vs. male vs. couple methods
Characteristics of girl

86. Are HIV services (education, testing, treatment, etc.) integrated with family planning services in your community (provide examples of this)?

- If yes – has this integration been beneficial for AGYW? How? What can be done to further improve integration of these services?

Section 4: DREAMS initiative impact

87. What are common beliefs in this community related to pregnancy, child birth, child spacing, and family planning use, especially of adolescents and young women? Do you think the DREAMS programs influences these? How?

88. In your opinion, does participation in the DREAMS initiative influence girls' health decisions and behaviors related to pregnancy: How?

Probe program influence on: Increased Self-confidence
Better Ability to negotiate with male partners
Staying in school
Sexual behavior (e.g., delaying sex, practicing safe sex)
Condom use
HIV prevention services
Number of sexual partners

89. One of the objectives of the DREAMS initiative is to reduce adolescent pregnancy. Do you think the program is successful in doing so? Why?

Which program activity has the greatest impact? Why?
Which program activities had the least impact? Why?

90. In your opinion what are the overarching strengths of the DREAMS initiative?

91. What are some of the limitations of the DREAMS initiative, with respect to reducing adolescent pregnancy?

Probe: Is there anything else the DREAMS project can do, that it is not currently doing, to support healthy timing and spacing of pregnancies?
Is there anything the project is doing that it can do better?

Close of interview

92. What else haven't I asked you about the things we talked about today, that you think I should know?

[Interviewer]: *Please read aloud*

“Thank you very much for your time and for sharing your experiences and insights. We know you are busy and are very grateful for your time. Please be assured that everything you have shared with me today is completely confidential. “

Speak aloud end time of the interview and switch off the recorder.

**Uganda DREAMS Evaluation
In-Depth Interview Guide
Stakeholder Interview (Health Facility Level)**

[Interviewer]: *Please read aloud if there is a gap between the time respondent signed the informed consent form, and the time of the interview. If the interview starts immediately after consent, you can ignore the paragraphs in quotation marks, and start with the permission questions*

“Thank you so much for joining me today. During the interview we will talk about issues relating to the DREAMS program. Our conversation today will last about one hour. We will discuss topics such as services provided by the DREAMS program, the program beneficiaries, and whether program services influence the decisions of adolescents and young women to delay pregnancies. Some of the questions will be quick, others will lead to a conversation, so that we can learn more about your experiences and opinions. What you share with me today will be used to inform the DREAMS program, so that services provided in this area better serve girls who can benefit from them.”

“I have a recorder here and will turn it on with your permission. You don’t need to pay any attention to it, it will stay here during the interview. The recorder will help me capture all that you share with me today. What we discuss will remain confidential and only the study team will listen to the recording. Please try not to use names during the interview, to protect your privacy and the privacy of others. Remember that you do not need to respond to any question you do not wish to, and that you can stop the interview at any time.”

Do I have your permission to turn on the recorder?

Do I have your permission to start?

Speak aloud the participant code and the start time of the interview.

Section 1: Background Information

First, I would like to ask you about your background.

1. How old are you? (How old were you at your last birthday?)
2. What is your education/training? Your highest diploma?
3. What is your role or position in the facility?
4. What experience do you have with counseling adolescents about contraception? How often do you counsel adolescents on contraceptive use?
5. Now please tell me what it is that you do in your work that relates to the DREAMS program.
Probe: Focal person or key contact for DREAMS girls
Manage DREAMS program commodity supply chain at this facility
Hands-on service delivery
Behavioral change counseling
Focal person for reducing Risk of Sex partners initiative [service access for DREAMS girls sex partners]

Section 2: DREAMS program beneficiaries

6. Please tell me about the beneficiaries of the DREAMS program. Can you describe them to me?

Probe: Economic background
Risk for HIV, HIV status or history of treatment
Education – are they still in school?
Familial background
Risk of GBV

7. In your opinion, are the beneficiaries of the DREAMS programs at high, medium, or low risk of early child bearing? What are some reasons that girls may be at a high risk of early child bearing?

Probe: Economic background
HIV risk, HIV status or history of treatment
Education
Family history
Victims of GBV

8. Are you aware of any AGYW who got pregnant after joining the DREAM program? Do you think that risk factors after enrollment in DREAMS would be different than those before?

Section 3: Contraception

9. Where do adolescents mostly access services to avoid pregnancy? How do they access services?

Probe for: Where they get the methods (health facility, school, community health workers, parents/family)

Attitudes of provider toward providing FP methods based on:

Age
Marital status
HIV status

10. Please tell me about family planning services that are available to adolescents and young women at this facility

Probe: Available methods

Cost
Uptake

11. Are family planning services integrated with HIV services at this facility? If yes, please provide some examples of how they are integrated

- How is this integration beneficial to AGYW?
- What can be further done to improve integration of these services?

12. How acceptable are the available methods to adolescent and young women? Are there types of girls that find contraceptive use (or specific methods) more acceptable?

Probe: Economic background
HIV status or history of treatment
Education
Familial history
Victims of GBV

Section 4: DREAMS program impact

13. What are common beliefs in this community related to pregnancy, child birth, child spacing, and family planning use, especially of adolescents and young women? Do you think the DREAMS programs influences these? How?

14. In your opinion, does participation in the DREAMS initiative influence girls' health decisions and behaviors related to pregnancy: How?

Probe program influence on:
Increased Self-confidence
Better Ability to negotiate with male partners

Staying in school
Sexual behavior (e.g., delaying sex, practicing safe sex)
Condom use
HIV prevention behavior
Number of sexual partners

15. One of the objectives of the DREAMS initiative is to reduce adolescent pregnancy. Do you think the program is successful in doing so? Why?
Which program activity has the greatest impact? Why?
Which program activities had the least impact? Why?
16. In your opinion what are the overarching strengths of the DREAMS initiative?
17. What are some of the limitations of the DREAMS initiative, with respect to reducing adolescent pregnancy?
Probe: Is there anything else the DREAMS project can do, that it is not currently doing, to support healthy timing and spacing of pregnancies?
Is there anything the project is doing that it can do better?

Close of interview

18. What else haven't I asked you about the things we talked about today, that you think I should know?

[Interviewer]: *Please read aloud*

“Thank you very much for your time and for sharing your experiences and insights. We know you are busy and are very grateful for your time. Please be assured that everything you have shared with me today is completely confidential. “

Speak aloud end time of the interview and switch off the recorder.

MEASURE Evaluation

University of North Carolina at Chapel Hill
123 West Franklin Street Building C, Suite 330
Chapel Hill, North Carolina, USA 27516
Phone: +1 919-445-9350
measure@unc.edu
www.measureevaluation.org

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