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Research report: Exploring the beliefs, attitudes, and behaviors of MSM engaged in substance use and transactional sex in Ghana

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Exploring the beliefs, attitudes, and behaviors of MSM engaged in substance use and transactional sex in Ghana

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Acronyms

AED Academy of Educational Development

ART antiretroviral therapy BU Boston University

CGHD Center for Global Health and Development (BU)

CHRAJ Commission on Human Rights and Administrative Justice

FGD focus group discussion
GAC Ghana AIDS Commission

GHC Ghana cedis

GMS Ghana Men's Health/MSM IBBSS Study

IDI in-depth interview IDU injection drug use

IRB institutional review board

KATH Komfo Anokye Teaching Hospital

KNUST Kwame Nkrumah University of Science and Technology

MSM men who have sex with men
NACP National AIDS Control Program
NGO non-governmental organization
NHIA National Health Insurance Authority

OBL oil-based lubricant(s)
PLHIV people living with HIV

PPAG Planned Parenthood Association of Ghana

PrEP post-exposure prophylaxis

SHS senior high school

STD/STI sexually transmitted disease/sexually transmitted infection

TB tuberculosis

UNGASS United Nations General Assembly Special Session

VCT voluntary counseling and testing

USAID United States Agency for International Development

USD United States dollars
WBL water-based lubricant(s)
WHO World Health Organization

YA young adult

Executive Summary

Introduction and Rationale

In this report, we present the findings from a qualitative study examining the vulnerability to HIV of young men who have sex with men (MSM) in Kumasi, Ghana, and their prevention needs. The research was conducted in Kumasi, Ghana's second largest urban center, by a team of researchers from Boston University's Center for Global and Health and Development (CGHD) and the Kwame Nkrumah University of Science and Technology (KNUST). The study is a component of the Project SEARCH task order funded by the United States Agency for International Development (USAID). It was designed and carried out in collaboration with FHI 360, based in the capital of Accra, which operates programs targeting MSM and other key populations in Kumasi, and the Ghana AIDS Commission (GAC).

Preventing HIV among key populations in Ghana is a major goal for the National AIDS Control Program (NACP) and the GAC. MSM are a particularly stigmatized population in Ghana, in part because male-to-male sex has traditionally been viewed as illegal, making them a difficult yet critical to reach population with HIV/AIDS-related services. Until recently, data specific to MSM in Ghana have been limited. The Ghana Men's Study, which collected data from 1,302 MSM in five regions in 2011, contains the most recent detailed information on HIV/STI prevalence and risk behaviors among MSM. Like previous studies, the GMS found a continued low rate of HIV testing among MSM. Between 60-70% had never been tested, while 20-30% reported having been tested in the previous 12 months. The study's findings on alcohol and drug use suggest widespread alcohol consumption in MSM, with over 50% of MSM reporting alcohol use in the previous 12 months in each region. MSM in Kumasi reported the highest alcohol use before sex, at 65%. Marijuana use was reported by 15-30% across all regions. The study also indicates that MSM use condoms inconsistently—rates ranged from 50-70% at last anal sex.

We designed the current study to complement and add to information on MSM gained from the GMS. In particular, there are two important and possibly overlapping populations likely at heightened risk of HIV: 1) MSM who engage in transactional sex, and 2) MSM who use alcohol and illicit drugs. In each group, it is critical to gain a deeper understanding of the beliefs, attitudes, and behaviors of adolescent and young adult MSM in order to improve outreach to this population with needed information and services. The specific study objectives were to explore:

- 1) the types and extent of substance use by MSM;
- 2) the overlap between substance use and transactional sex among MSM;
- 3) the beliefs and attitudes related to substance use and transactional sex;
- 4) knowledge and risk behaviors of both subgroups.

The study's broader goal was to collect and analyze in-depth data that can be used to improve the outreach and effectiveness of local programs that aim to reach these groups with important HIV prevention and treatment information and with services appropriate to their needs.

Methods

We used in-depth interviews (IDIs) and focus group discussions (FGDs) to collect data from four participant groups. These encompassed two age groups, adolescent MSM (aged 15-17 years) and young adult MSM (aged 18-29 years), with each group including men who consume high levels of alcohol or drug use and men who engage in transactional sex. We used a snowball sampling approach to recruit participants, building on peer networks after initially recruiting small

groups of MSM who received services at a public clinic or participated in local HIV outreach programs.

During data collection, the IDIs focused on individual beliefs, attitudes, and behaviors. We asked about the types of substances used, the frequency of substance use, engagement in transactional sex, how such activities were perceived, and attitudes about substance use, transactional sex, and sexual risk taking. We also probed HIV/AIDS knowledge and asked about access to HIV/AIDS services in Kumasi. The FGDs covered similar topics, but questions were typically posed about peers or MSM in general. The BU team analyzed the data using a thematic approach.

Findings

A total of 99 MSM participated in the study, 44 in IDIs and 55 in one of the eight FGDs. The IDI participants included 19 adolescents and 25 young adults (YAs), while 29 adolescents along with 26 YAs participated in the FGDs. Participants' ages ranged from 15 to 29 years. Most participants were attending or had completed secondary school. Most (88%) were also single, while twelve were cohabitating with someone, mostly with other males. Six had children, and in each case had one child. Slightly less than one-half were employed, all in the informal sector.

In the IDIs, just over one-third of adolescents and YAs reported engaging in substance use and transactional sex, while remaining participants in both age groups were evenly divided between those who reported substance use only or engagement in transactional sex only. Among FGD participants, slightly more in both age groups were enrolled based on the criteria for substance use (17/29 adolescents and 14/26 YAs) than those enrolled based on the transactional sex criteria. From the later discussions, there was clearly substantial overlap in these behaviors, so these numbers represent a minimum level of engagement in substance use and transactional sex.

Knowledge of HIV/AIDS

<u>HIV transmission</u>: Most participants knew the basics of HIV and how it is transmitted. However, knowledge of some adolescents was quite poor. In one of the FGDs, adolescents revealed only rudimentary knowledge at best, essentially describing HIV as a severe sexually transmitted disease (STD). The YAs tended to have a higher degree of knowledge overall, with all FGD participants exhibiting at least a basic level of HIV-related knowledge. The most common gap in understanding of HIV transmission related to kissing as a form of transmission of HIV. A total of seven IDI participants (one adolescent and six YAs) and participants in three FGDs stated that one could become infected with HIV from kissing. However, some participants said that only 'deep kissing' could lead to HIV infection.

<u>Prevention of HIV</u>: Both adolescents and YAs were quite knowledgeable about HIV prevention. Nearly all mentioned condom use, while some brought up avoiding sharp objects such as knives and blades with an infected person, abstinence, being faithful to one's partner(s), and reducing the number of partners.

<u>HIV treatment</u>: Generally, participants exhibited poor knowledge about HIV treatment. Although many participants understood the need to go to a healthcare facility for care and treatment, only some were aware of the existence of antiretroviral therapy (ART), the only effective way to treat HIV. In the IDIs, 25% of participants knew about ART, while therapy was mentioned by one or more participants in only three of the FGDs. The participants in the other FGDs and nearly one-fourth of IDI participants appeared to be unaware of any treatment for HIV whatsoever.

Alcohol and drug use

Alcohol: (types and quantities consumed and rationale for consumption): Most participants drank alcohol, primarily beer, but some drank local gin, whiskey, and wine. The amounts consumed varied widely, though two to four bottles of beer per day was typical. Of those who gave specific reasons for consuming alcohol, the main motivation given was to

make sex with other men more enjoyable. Some said that they always drank alcohol before having sex with another man.

Attitudes regarding alcohol use: Most participants agreed that alcohol increased sexual pleasure by reducing inhibitions, pain, and embarrassment. The most typical view (40% of participants) was that alcohol had no effect on condom use. Several believed that alcohol use increased the likelihood of condom use, mainly because it caused people to be extra wary, but also because it increased sexual pleasure, thereby reducing negative aspects of condom use. Yet some believed that alcohol use reduced the probability of condom use, noting that alcohol use fundamentally reduced inhibitions, impairing an assessment of risks and, ultimately, condom use.

Use of drugs and other substances (types and quantities consumed and rationale for using) A minority of participants used illegal substances. Marijuana was by far the most popular; only one YA participant claimed that he used cocaine occasionally, though some knew MSM who used cocaine. Two YAs said they occasionally used 'poppers' (Alkyl Nitrites) when they engaged in group sex. Most marijuana smokers did so 'frequently', and in one YA FGD, the majority said they smoked marijuana every day. Although no IDI participant revealed prior experience with sexual enhancement drugs, most participants in two FGDs (both adolescent) described having used such drugs. All said they did not combine them with other drugs, though some knew MSM who did. Of those who had used these drugs, the main rationale was: "it makes sex so nice."

<u>Attitudes regarding drug use</u>. Most participants who used drugs said that doing so made sex more enjoyable. This was because drugs gave them more energy, sexual drive, and stamina. However, for some, drug use was independent of sexual activity and had no effect on sexual pleasure. Similar to views on alcohol and condom use, most felt that drug use had little effect on condom use. However, a few believed that it reduced the chances of using condom during sex.

Transactional sex

How common is transactional sex? The vast majority of participants believed that transactional sex was common among MSM in Kumasi. Among IDI participants, 84% had engaged in transactional sex at least once in the prior year. Both adolescents and YAs reported typically receiving something in return for sex, as opposed to being the givers. Similarly, most FGD participants said that transactional sex was widespread, especially between older, affluent MSM and younger males such as students. As one participant replied: "[it is] very common especially (among) students." However, a few adolescents had a different view, that most MSM sought relationships based on affection, not as business transactions. In those who engaged in transactional sex, the frequency of encounters varied. Most IDI participants gave responses such as "often," "many times," and "quite often," while a few were more specific—"every day" or "twice a week"—suggesting very frequent engagement in these activities. Most participants reported meeting their transactional sex partners at parties, clubs, and bars, as well as through friends and the social media such as 'Facebook'.

<u>Views of transactional sex</u>: Most participants believed that transactional sex was acceptable. Many considered it just another job for some men. A common view was that earning money was a major motivation to engage in transactional sex. Several asserted that the ability to earn money was the primary reason some men had sex with other men. Six participants, however, believed that engaging in transactional sex was not a good thing to do, mainly due to the resulting increased chance of unprotected sex and HIV infection. A few felt it was shameful or felt guilty giving or receiving items for sex, but found the financial and other rewards too hard to resist.

One-third of IDI participants and most in five FGDs believed that transactional sex increased the likelihood of unprotected sex. Many said they had friends who could be persuaded by money to have sex without a condom. In

addition, 75% of IDI participants who engaged in transactional sex said their transactional sex partners included men who also had sex with other individuals, encounters which might not always involve condom use.

Overlap in transactional sex and alcohol and drug use: There was considerable overlap in transactional sex and use of alcohol and substances. Among all IDI participants, two-thirds engaged in both behaviors. FGD participants generally confirmed that alcohol use was common in men who engaged in transactional sex. Like IDI participants, those in FGDs typically believed it was common to consume alcohol or drugs before having sex. In general, those who engaged in transactional sex consumed more alcohol than those who did not. Of those with overlapping behaviors, one-fourth believed that alcohol or drug use reduced condom use. The others believed there was no relationship between the two, condom use might increase, or had no opinion at all.

Use of condoms and lubricants

Experience using condoms: While most participants had experience with condoms, just over one-half used them consistently, including 55% of IDI participants (47% of adolescents and 60% of YAs) and most participants in three FGDs. Regular condom users described their strategies to ensure use: persuading partners with information about HIV and the risk of infection, using endearments, being stubborn, and refusing sex without a condom. Participants who did not use condoms gave two typical explanations: condoms were unnecessary with trusted partners such as close friends and girlfriends and condoms reduced sexual enjoyment. Additional reasons were: lack of availability, being drunk, being with a handsome man or a paying client who preferred not to use one, and being coerced by partners.

<u>Challenges using condoms</u>: Most participants also described specific challenges using condoms aside from diminished sexual pleasure and not wanting to use them with trusted partners. These comprised four categories: 1) the need to negotiate with partners about condom use; 2) aspects of wearing condoms; 3) challenges obtaining condoms; and 4) challenges putting them on.

<u>Use of lubricants</u>: Lubricant use during sex was widespread, with all but six participants using them, mainly water-based lubricants. Lubricants made sex more enjoyable and less painful. Among the few who did not use them, the reasons were: condoms were already lubricated; lack of knowledge on where to get them and too ashamed to ask; saliva could be used instead. Most did not face challenges finding lubricants, though 18% of IDI participants did. The main barrier was lacking money to buy them, though some said they were too embarrassed to buy them.

Overlapping behaviors: alcohol/drug use and condom/lubricant use: We found little relationship between condom use and level of alcohol consumption, though did find that consistent condom use was much higher among those who said they did not use any drugs than those who did. There was little association between alcohol and drug use on the one hand and lubricant use on the other, mainly because nearly all participants used lubricants.

Overlapping behaviors: transactional sex and condom use: We found trends in condom use and transactional sex behaviors. Condom use was less consistent in participants who had engaged in transactional sex in the previous year compared to those who had not. It was also lower in those who had engaged in such sex frequently, compared to those who had done so less often.

Health problems and access to services

<u>Access to important services</u>: Most participants knew where to access HIV/AIDS services in Kumasi, with 75% able to name locations to access test services alone or a broader range of HIV/AIDS services. Suntreso Hospital was named most frequently. They also mentioned drop-in centers, including the one operated by MICDAK. However, 30% of IDI

participants had no idea where to obtain HIV/AIDS services, while 20% were aware that such places existed, but did not know their names. Most agreed that it was important to know where to access services.

<u>Barriers to obtaining services</u>: Nearly 33% of IDI participants, and most in five FGDs (including all four YA FGDs), described one or more challenges to health service access. By far the most common problem was stigmatization or ill treatment by providers, highlighted by participants who had experienced it and others who feared it. Additional barriers were: the poor quality of services; mistrust of test results; insufficient funds/no health insurance; inadequate time (with providers) at clinic visits; and shame in seeking services. Specifically with regard to HIV test services, a major barrier was lack of knowledge about locations offering these services, particularly among adolescents. Further barriers to these services were: fear of a positive HIV test result; mistrust of test results; lack of privacy and fear of breach of confidentiality; shame in seeking HIV test services; and long queues to be seen by a provider.

<u>Needed services</u>: Four themes emerged regarded needed services: 1) sexually transmitted infections (STI) services; 2) HIV/AIDS services, encompassing counseling, testing, and treatment; 3) a MSM-friendly, comprehensive clinic that would provide all services required by MSM; 4) shorter wait times at health facilities. Many responses indicated a need for services provided by caring health care staff who understood the health concerns of MSM.

Recommendations

The GAC has made reaching all key populations with HIV prevention information and materials a priority in its efforts to control the HIV epidemic. Various projects in Ghana are making a difference in providing these populations with information about HIV/AIDS and where to access services, materials to help prevent infection, and improved treatment. We offer the following recommendations to further reduce vulnerability to HIV among young MSM in Ghana.

- 1. **Enhance access to HIV testing and counseling.** FHI 360 is piloting a social network testing approach whereby MSM opinion leaders will refer MSM in their peer network to HIV testing and counseling services. SHARPER has also identified informal brothel structures and pimp networks among young MSM and will work with them to gain access to other young MSM. Finally, FHI 360 plans to do hotspot mapping in Accra, Western, and Ashanti regions to identify venues where MSM convene to better target its efforts and reach more MSM with HIV information and services. If these measures are effective, we recommend rapid scale up to reach broader communities of young MSM in Ghana.
- 2. **Continue to sensitize health care workers to the needs of MSM**. FHI 360 has conducted a number of targeted trainings of health care workers in providing MSM-friendly services. SHARPER should consider extending the training of health care workers once it completes hot spot mapping.
- 3. **Improve knowledge on the impact of drug and alcohol use on the risk of HIV acquisition**. We recommend the integration of alcohol and drug use counseling into peer education and drop-in center services, possibly making use of the drug and alcohol use training module for peer educators developed by FHI 360.
- 4. Engage MSM in the design and implementation of materials and services that would be appealing to them. Given that many in this population have strong views of the types of services they need, it may improve their access to essential services if they play a role in developing outreach materials and finding ways to provide health services in a more MSM-friendly way. We thus recommend that projects such as SHARPER invite MSM to collaborate more closely with project staff in the expansion of these efforts.

- 5. **Reinforce condom use with transactional and intimate partners in all education and outreach efforts.** Further deepen counseling via peers and drop-in center information distribution with case studies and examples that focus on condom use challenges when money is offered by clients for 'raw' sex. A similar process needs to be created and used to help MSM develop the skills to increase condom use with intimate partners.
- 6. Develop programs that reach young MSM through popular online social media (e.g 'Facebook') to share targeted HIV prevention information, and build confidence to visit convenient MSM-friendly sites for more information and services. Currently, this type of program is being implemented by FHI 360 with potential for further scale-up and special targeting to young MSM.
- 7. Retool existing programs for key populations in Ghana to address a key finding in this study: the overlap of high risk behaviors such as transactional sex, alcohol consumption, and use of illicit substances among MSM. This will involve modifying some of the messages currently disseminated among MSM to emphasize the risks of transactional sex and alcohol and substance use, as well as focusing on ways to handle the stigma that often impede access to essential HIV testing, prevention, and treatment services.
- 8. Explore and reach networks of men engaged in commercial sex work and enlist the support of the pimps and managers of the establishments where sex work takes place. This would involve major outreach into the networks of some of the most vulnerable young MSM in an effort to reach them with HIV-related information and services. In addition, the possibility of providing mobile services for HIV testing and counseling and STI screening on site could be explored.
- 9. **Ensure that MSM, along with other key populations, have health insurance.** Individuals working in the informal sector, like most of our participants, must pay premiums to buy into the insurance system. To remove financial barriers to essential health and HIV-related services among young MSM, we recommend intensive efforts to educate young MSM about available health insurance options, accompanied by actions to assist those who cannot afford to join on their own to purchase insurance.

I. Introduction

This report presents findings from a qualitative study examining the vulnerability to HIV of young men who have sex with men (MSM) in Kumasi, Ghana, and their prevention needs. The study was jointly conducted in Kumasi, Ghana's second largest urban center, by Boston University's Center for Global and Health and Development (CGHD) and the Kwame Nkrumah University of Science and Technology (KNUST). It was carried out as a component of Project SEARCH funded by the United States Agency for International Development. The study was designed and conducted in collaboration with FHI 360 (formerly Family Health International (FHI)), an international non-governmental organization based in the capital city of Accra which operates programs targeting MSM and other key populations in Kumasi, and the Ghana AIDS Commission (GAC).

Preventing HIV among key populations in Ghana is a major goal for the National AIDS Control Program (NACP) and the GAC. MSM are a particularly stigmatized population in Ghana, in part because male-to-male sex has traditionally been viewed as illegal, making them a difficult yet critical to reach population with HIV/AIDS-related services. This qualitative study was conducted in order to enhance understanding of the beliefs, attitudes, and behaviors of adolescent and young MSM (aged 15-29). In this population, we particularly sought to focus on two sub-groups: MSM who engage in transactional sex and those who use alcohol or illicit substances (hereinafter "substances"). The specific objectives were to explore:

- 5) the types and extent of substance use by MSM;
- 6) the overlap between substance use and transactional sex among MSM;
- 7) the beliefs and attitudes related to substance use and transactional sex;
- 8) knowledge and risk behaviors of both subgroups.

The study's broader goal was to collect and analyze in-depth data that can be used to improve the outreach and effectiveness of local programs that aim to reach these groups with important HIV prevention and treatment information and with services appropriate to their needs.

II. Background

Since the beginning of the HIV/AIDS pandemic, the high infection rate among MSM has been a major concern worldwide. Although statistics have shown a global decline of HIV infection among the general population, MSM continue to be disproportionately affected.² A variety of steps have been taken in different countries to expand HIV prevention and treatment programs for MSM. However, in many areas, MSM continue to have poor access to HIV prevention services, a problem which inhibits effective prevention outreach in this population. Indeed, Baral et al. found that MSM in low- and middle-income countries are 19 times more susceptible to HIV infection than the general population.² This pattern is marked in sub-Saharan Africa, where studies indicate a high prevalence of HIV among MSM. In Coastal Kenya, for instance, the HIV infection rate among MSM was recorded at 43% in 2008, while the national prevalence was 6.1%.³ In Ghana, where HIV prevalence countrywide is estimated at 1.3% ⁴ data from the Ghana Men's Health/MSM IBBSS study (GMS) indicates a nationwide average prevalence rate of 17.5% among MSM. However, these rates vary considerably from region to region, with prevalence among MSM in Accra—the national capital and largest city—estimated at 34.3%, nearly twice the national average. Infection rates among MSM are estimated to be 13.7% in Kumasi, and 4.7% in the Cape Coast/Takoradi region along the southern coast.⁵

MSM in Ghana

Until recently, data specific to MSM in Ghana have been limited. Ghana's government has provided only three or fewer of five United Nations General Assembly Special Session (UNGASS) indicators relating to MSM. These did not include the percentage of MSM who received an HIV test in the last 12 months and who know their HIV status, or the percentage of MSM who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission.³

However, several recent studies have added to our understanding of attitudes and practices among MSM in Ghana, and of the impact of services aimed at this population. In 2005, the Academy of Educational Development (AED) (which subsequently merged with FHI as FHI 360) conducted a participatory community mapping exercise and participatory community assessment sessions with MSM to guide intervention strategies for MSM in the Accra-Tema metropolitan area. This project revealed that MSM were reluctant to seek care from providers for fear of being treated badly, and preferred to go directly to pharmacies to self-medicate if they suspected STIs.⁶ It also found low reported condom use among most categories of MSM. The project identified seven categories of MSM, as explained by MSM themselves: bisexuals, masculine gays, feminine gays, married men, commercial sex workers (both effeminate and masculine), male pimps, and drag queens.⁶ Another AED study conducted at about the same time used qualitative research methods to examine reasons for non-use of condoms among MSM in Accra. It found that MSM tend to use condoms with new partners but not regular or long-term partners.⁷ The results also indicated that of a sample of 385 MSM in Accra, 90% knew of a place to be tested for HIV, although only 26% had ever been tested prior to enrolling in the study. When tested as part of the study, 25% were HIV-positive.⁷

In 2008, further AED research found that MSM in Ghana lacked access to basic information about HIV, including signs of infection, transmission, and prevention. In addition to barriers to information, MSM reported experiencing verbal abuse, police harassment, arrest, stigmatization, and social isolation. More recently, researchers conducted a mixed methods study among young MSM in Accra, which found that a large proportion were engaged in transactional sex, had sex with multiple partners each week, but did not perceive themselves to be at high risk of HIV. Over 80% of participants reported engaging in sex with another man for money or gifts. Young MSM also reported substantial consumption of alcohol and use of 'party-drugs' that are associated with unsafe sex and multiple sex partners.

The GMS, which collected data from 1,302 MSM in five regions in 2011, contains the most recent detailed information on HIV/STI prevalence and risk behaviors among MSM. The study found a continued low rate of HIV testing among MSM. Between 60-70% had never been tested, while 20-30% reported having been tested in the previous 12 months. MSM in Kumasi had the highest test rate, at 32%.⁵ The study's findings on alcohol and drug use indicate widespread alcohol consumption in MSM, with over 50% of MSM reporting alcohol use in the previous 12 months in each region. Rates varied considerably for alcohol consumption before sex; MSM in Kumasi reported the highest alcohol use before sex, at 65%. Marijuana use was reported by 15-30% across all regions. Regarding condom use, the GMS indicates that MSM continue to use condoms inconsistently—rates ranged from 50-70% at last anal sex.⁵

We designed the current study to complement and add to information on MSM obtained from the GMS. In particular, there are two important and possibly overlapping populations likely at heightened risk of HIV: 1) MSM who engage in transactional sex, and 2) MSM who use substances (including alcohol and drugs, especially marijuana). Within each of these groups, gaining a deeper understanding of the beliefs, attitudes, and behaviors of both adolescent and young adult MSM is urgently needed. The goal of the study was to contribute information to strengthen the knowledge base regarding these populations. By so doing, the findings are intended to support HIV prevention efforts that involve reaching out to each of these populations with services that will enable them to adopt more protective behaviors.

It is important to understand the context within which this study was conducted and in which its results will be utilized. Ghana's criminal code bans 'unnatural carnal knowledge,' defined as 'sexual knowledge with a person in an unnatural manner or with an animal'. Although the law does not explicitly criminalize homosexual sex, male-to-male sex has traditionally been viewed as 'unnatural' and therefore illegal in Ghana. As a result, carrying out this research required special care and discretion. Using the findings to support efforts to prevent HIV transmission via male-to-male sex may present challenges given that some people will see such activities as encouraging illegal activity. Ultimately, finding effective ways to reach MSM with services that will enable them to adopt more protective behaviors is critically important in preventing the spread of HIV in this population.

III. Methods

Overall design

We conducted the study in Kumasi. Employing qualitative research methods, we used both in-depth interviews (IDIs) and focus group discussions (FGDs) to collect data from four participant groups. Among both adolescent and young adult MSM, we recruited participants with high levels of alcohol and drug use and participants who engaged in transactional sex. The IDIs were designed to illuminate individual attitudes and practices, whereas we included the FGDs to collect information regarding group or community norms. Conducting both activities also allowed us to triangulate our findings. We aimed to conduct IDIs with 8-12 individuals in each participant group. For the FGDs, our goal was to carry out two FGDs in every participant group, each with 6-10 individuals.

Sampling approach and participation criteria

We utilized a snowball sampling approach to identify and recruit study participants. Initially, 8-10 MSM aged 15-29 years in Kumasi who received services at a public medical clinic, and another 8-10 MSM in the same age range who participated in programs provided by the FHI 360-administered project 'Strengthening HIV/AIDS Response Partnership and Evidence-based Response

Target participant populations

- In-depth interviews (8-12 in each of 4 groups)
 - Adolescent MSM (15-17 years) who selfreported male-to-male sex and:
 - Used alcohol or illicit drugs
 - Engaged in transactional sex
 - Young adult MSM (18-29 years) who selfreported male-to-male sex and:
 - Used alcohol or illicit drugs
 - o Engaged in transactional sex
- Focus group discussions (2 with each group)
 - Adolescent MSM (15-17 years) who selfreported male-to-male sex and:
 - Used alcohol or illicit drugs
 - Engaged in transactional sex
 - Young adult MSM (18-29 years) who selfreported male-to-male sex and:
 - Used alcohol or illicit drugs
 - o Engaged in transactional sex

(SHARPER)ⁱ and who met the study criteria for participation (described below) were recruited. We asked each of these initially enrolled participants ("index participants") to introduce the study to up to 3 of their peers, meaning other MSM with whom they were acquainted. Those enrolled from these introductions were also asked to introduce the study to up to 3 of their peers. In this way, we aimed to reach our sample size in 4-5 rounds of introductions.

There were two sets of entry criteria for study participation in each of the two age groups. For both adolescents (aged 15-17 years) and young adults (aged 18-29 years), males who self-reported male-to-male sex in the previous 12 months were eligible to participate if they either:

ⁱ SHARPER is a project funded by USAID and operated by FHI 360 that focuses on HIV/AIDS prevention for key populations and prevention and care for people living with HIV (PLHIV).

- 1) used considerable amounts of alcohol or illicit drugs, as defined by self-reported use of: a) an average of 2 or more drinks per day, for at least 2 days per week, in the most recent month; or b) any amount of an illicit drug or substance such as wee (marijuana), cocaine, methadone, crack, amphetamines, and glue, in the most recent month or
- 2) engaged in transactional sex, as defined by self-reported sex with another male in exchange for money, gifts, or favors in the previous 6 months.

Both categories were deliberately broad to facilitate recruitment. The definition of transactional sex encompassed sex work as well as small favors, unlike a companion study which focused on distinctive behaviors along a transactional sex continuum. We allowed participants who met both the substance use and transactional sex criteria to select the one by which they would be enrolled. This approach helped ensure enrollment of an adequate number of participants who met each set of criteria, while allowing participants to self-identify as they were most comfortable. If a given potential participant had no preference, he was allocated to one set of criteria or the other as needed to meet the sample size goal. Individuals who participated in one activity (IDI or FGD) were excluded from participating in the other activity. All participants received a small incentive to help cover inconvenience and any costs associated with participation in the study.

Data collection

Data were collected in June-July 2012. Each IDI and FGD was conducted by a team of two trained interviewers in a location deemed safe and convenient and agreed upon by the participant(s) in advance. Interviewers included researchers from KNUST as well as MSM who had been trained to work as interviewers among their MSM peers (see further training information below). At each IDI or FGD, one interviewer posed initial and follow-up questions to the participant(s) while the second interviewer took detailed notes of questions and answers. The interviewer who posed questions was bi-lingual in English and Twi, and conducted the interview or discussion in whichever language was most comfortable for the participant(s). We utilized two semi-structured English-language question guides (one per activity), each of which was pilot-tested before being finalized. Each IDI and FGD lasted 60-90 minutes and was audio-recorded to allow verification of responses, and for transcription and translation into English. At the end of each day, a local field supervisor checked that day's interview and discussion notes to provide input and feedback to the interview teams for subsequent data collection.

In the IDIs, questions focused on individual beliefs, attitudes, and behaviors. They addressed the ways MSM self-identified and what they called themselves. Queries covered types of substances used, the frequency and context of use, attitudes and beliefs around substance use, and the link between substance use and sexual risk taking. We also asked about the extent and context of transactional sex, how such sex was perceived, attitudes regarding transactional sex and HIV risk, and specific risk behaviors such as condom and lubricant use and substance use. We probed IDI participants for their knowledge of HIV and about access to HIV/AIDS services in Kumasi..

The FGDs covered most of the same topics described above, but questions were typically posed about participants' peers or MSM in general. For example, while the IDIs asked about the amount of alcohol an individual had recently consumed, the FGDs covered what was typical among MSM who were 'peers', or friends and acquaintances. We collected basic background information such as age, extent of schooling, and marital status from all participants.

Ethical considerations and training activities

The study was approved by the institutional review boards of Boston University Medical Center and KNUST. Prior to beginning an IDI or FGD, each participant provided informed verbal consent (young adults) or verbal assent

(adolescents). To help ensure the confidentiality of adolescent participants, we sought and received a waiver of parental consent for these participants. We gave utmost attention to maintaining participants' confidentiality during data collection and analysis. We conducted all activities in a private room at the collaborating medical clinic or FHI360 offices, unless the participant preferred an alternative venue. We collected no names or identifying information that might link participants with research notes. We kept all written materials and audio recordings in locked cabinets in locked offices at KNUST.

Prior to beginning data collection, the BU and KNUST teams, along with collaborators from FHI 360, held a week-long training workshop for interviewers in Kumasi. The workshop included a review of the purpose and objectives of the study, facilitation techniques, and ethical issues, including detailed discussions of study participant recruitment, the informed consent process, confidentiality, and privacy matters. We reviewed question guides to ensure clarity and accuracy. We employed extensive role-playing to sensitize the local team to working with MSM and to issues that might arise during data collection. We also equipped interviewers with materials on where and how services could be accessed, which they could distribute to participants.

Data analysis

The written transcriptions of IDIs and FGDs were transferred to Boston in electronic files, while the audio tapes remained in Ghana in the event confirmation of data was needed. The BU-based team coded and analyzed the English-version transcriptions in QSR NVivo 10.0 software. We developed codes based on the questions of interest and also in response to patterns that emerged in the data. We compared the responses across different categories of participants (older vs. younger MSM; whether using substances or engaging in transactional sex, or both). Where appropriate, we quantified responses to indicate proportions who shared similar views on key questions, though the variety of responses and divergent views were explored. We identified illustrative statements by participants to present in both the text and accompanying tables.

Study limitations

The study has several important limitations. First, the snowball sampling represents a convenience sample and does not ensure that participants are representative of the broader MSM community in Kumasi. Second, social desirability bias may have led some respondents to say what they believed interviewers wanted to hear. Third, some FGD participants may have felt a degree of peer pressure or otherwise uncomfortable revealing personal details in front of other participants, leading them to refrain from speaking honestly.

IV. Findings

This section begins with an overview of the demographic backgrounds of participants, followed by some additional pertinent information on the previous experiences of participants, including their first sexual experience, gathering places in Kumasi, where they go for sex, how they self-identify, engagement in group sex and violence associated with male-to-male sex. These descriptions are deliberately succinct. We have added illustrative statements in the appendices for interested readers (Glossary & Table 1). Next we present the findings on knowledge of HIV/AIDS. This is followed by our core study topics: alcohol and substance use; transactional sex; risky behaviors; overlapping behaviors; perception of risk; and health problems and access to services. Finally, we provide the results regarding major challenges for MSM in Ghana and suggestions for ways of mitigating them. Illustrative statements are provided, with additional statements included in the appendices (Table 2).

When presenting qualitative data findings, we sought to balance the twin goals of brevity and clarity. For IDI participants, when the denominator is the full group of 44, we provide the proportion only—rather than including numbers—of participants that gave a particular response. Separate proportions for the adolescents and YAs are given only where they differ substantially. When a sub-group of IDI participants is discussed (e.g. the denominator is less than 44), we also indicate the relevant numbers in order to avoid confusion. For FGD participants, we indicate a rough proportion (all, most, or only a few) participants joined in a particular response. As with the IDIs, we only refer to specific adolescent or YA FGDs when their responses diverged. We also highlight any major differences in responses between IDI and FGD participants.

Demographic characteristics of participants

A total of 99 MSM participated in the study. Forty-four engaged in an IDI, while another 55 took part in one of the eight FGDs that were conducted. The IDI participants included 19 adolescents and 25 young adults (YAs), while 29 adolescents along with 26 YAs participated in the FGDs. Participants' ages ranged from 15 to 29 years (see Figure 1). The median ages for participants in the IDIs and FGDs were 18 and 17, respectively.

The vast majority of participants (92%, including all but one adolescent and all but seven YAs) were attending or had completed secondary school. One adolescent and one YA reported that they had never attended school, while two YAs said they had completed primary school only. Four YAs had attained some degree of tertiary education.

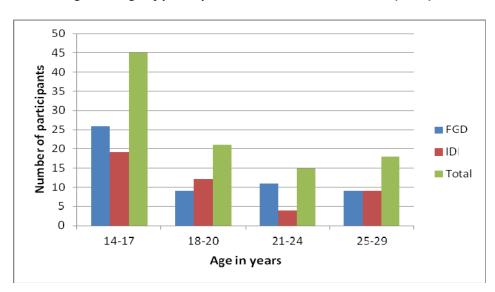


Figure 1. Age of participants enrolled in IDIs and FGDs (n=99)

A total of 87 participants (88%) were single. None were married, though five adolescents and seven YAs reported cohabitating with someone, mostly with other males. One adolescent said he lived with three other men, while another said he lived with another male and a female. Six participants reported having children, and in each case had one child.

We collected employment information on the IDI participants, among whom just under one-half (19/44, or 43%) were employed, all in the informal sector. The majority of these were among the YA group (15/25), as most of the adolescents were high school students. Jobs of participants included shop assistants, event decorators, hairdressers, apprentices, business entrepreneurs, caterers, cobblers, peer educators, cloth dealers, traders, and waiters.

Figure 2 provides data on the experience of participants with substance use and transactional sex (according to the enrollment criteria definitions, described above). In the IDIs, just over one-third of both adolescents and YAs reported engaging in frequent substance use and transactional sex, while remaining participants in both age groups were fairly evenly divided between those who reported substance use only (six adolescents and seven YAs) or engagement in transactional sex only (six adolescents and eight YAs). When the definitions of both behaviors are relaxed – for instance, to include any amount of alcohol or drug use – the majority of IDI participants (27/44) had engaged in both some degree of substance use as well as transactional sex.

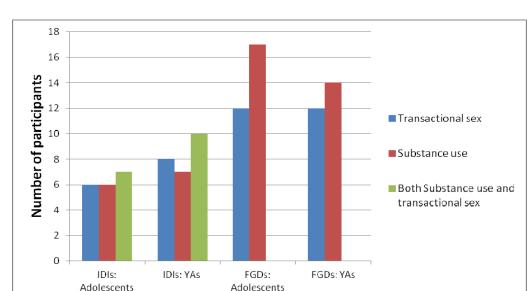


Figure 2. Engagement of adolescent and YA study participants in transactional sex and substance use, by IDI and FGD (n=99)

In the FGDs, we did not ask participants to report their personal behaviors, so we can only report them based on the criteria they met to participate in the study. Among these participants, slightly more in both age groups were enrolled based on the criteria for substance use (17/29 adolescents and 14/26 YAs) than those enrolled based on the transactional sex criteria. From the later discussions, there was clearly a substantial overlap in these behaviors, so these numbers should be taken as a minimum level of engagement in both substance use and transactional sex.

Background and behaviors

Hometown of participants

Most (84%) of IDI participants had grown up in Kumasi, though several had spent time elsewhere. Besides Kumasi, places where IDI participants had grown up or spent substantial time included: Tema, Mampong, Banoma, Obuasi, Northern Region, Western Region, Oda, Takoradi, Accra, and Apromase. In the FGDs, participants were asked where most of their peers were from. As with IDI participants, the majority (50% or more of participants in six FGDs) indicated that their friends were from Kumasi. The remaining participants had peers from a wide range of domestic locations, including Accra, Cape Coast, Obuasi, Tema, Takoradi, Takyiman, Sunyani, Bolatanga, and Wa. Participants also had peers from other countries, including Nigeria, Niger Republic, Burkina Faso, Mali, Senegal, Togo, U.S.A, Germany, and other European countries.

First sexual experience

The 'first sex' experiences recounted by adolescents and YAs were similar. Two-thirds had first had sex with another male, at ages ranging from 9-23 years. In all cases except for two YAs, both of whom had had sex with a male partner of the same age, the partners were older males. For 50% of these participants (n=29), this first sexual experience was someone they knew from school. Of these, some of the partners were older students (all in their senior year), some were teachers, and two were classmates. The next most common partner was a male friend, reported by 38% of participants. The remaining partners were strangers (three) and a neighbor.

One-third of participants had their first sexual experience with a female, their ages ranging from 6-19 years at the time. In contrast with participants whose first sexual experience was with a male, only four (27%) had had sex with an older woman. The most typical encounter, for 40% of participants, was with a female partner of the same age. The remaining partners were younger females. For nearly 50%, the partner was a friend, including three who were girlfriends at the time. Other partners were neighbors (four), classmates (three), and an older family friend staying in the participant's home (one). See Table 1 for illustrative statements on these experiences.

Of all IDI participants, just over 20% (nine total, three adolescents and six YAs) said that sex had been forced on them (see Table 1 for personal statements). In each of these encounters, the partner was an older male. They included three teachers, three older schoolmates, two friends, and a neighbor. Alcohol was a factor in several of these instances. Two adolescents described being given alcohol and then being forced into sex. One said he could not remember his age, but that he was in Class 6 of primary school and had gone to the home of his teacher, who then gave him a drink, and had sex with him while he was asleep. The teacher had not used a condom. He also warned the participant not to tell anyone about it (which he did not). The second was 10 years old when he was raped by his neighbor, after being given alcohol. Again, no condom was used. A third, a YA, related his experience at the age of 9 years, when he had fallen asleep after his teacher induced him to drink alcohol and he became drunk. The teacher had sex with him while he was asleep. He described waking up and finding a used condom on the bed.

Alcohol or marijuana, as well as financial enticements, were often the impetus when the sex was not coerced. Over 25% of participants whose first sexual experience was consensual (n=35, including male and female partners) had been drinking. Two-thirds of those whose first sex partner was a male (n=29) were given money or gifts subsequently, while only one whose first partner was a female received money. There were also cases of both alcohol or drug use and gift-giving. One adolescent described being given alcohol by an older student, though he was only persuaded to have sex with the boy after being promised money. He was 11 years old at the time.

If an IDI participant's first sexual experience was with a female, we asked about the first time he had had sex with a male. These participants' first sexual encounter with a male partner took place when they were 14 to 20 years of age, and from several months to many years after their first sexual experience. Most (80%, n=15) of these male partners were older. They encompassed friends (seven), schoolmates (three), and strangers (three). The remaining partners were of the same age, two friends and one classmate. One-third said that they had been forced to have sex. Of these, three partners were older and two were the same age. In three of these instances, alcohol was a factor. Most (73%) were given money or a gift after the sexual encounter.

Gathering locations in Kumasi

According to participants, MSM gather frequently in many Kumasi locales, including bars, restaurants, clubs, guesthouses, and hotels. They get together for recreation as well as to seek out potential partners and/or clients. Many participants spoke of places such as 'spots,' 'drinking bars,' and 'chop bars.' Similar to clubhouses but not as large, 'spots' often have recreational activities such as pool and tennis, offer food, snacks, and drinks where people meet for small parties, meetings, and other social activities. As used by participants, 'spots' conveyed a broad meaning, covering anything from a kiosk on the street to a restaurant or bar with room to sit and socialize. Participants explained that 'drinking bars' are places where alcoholic drinks are served, with or without snacks. 'Chop bars,' on the other hand, are small establishments where food is served. These bars are typically smaller, with less expensive food, than typical restaurants.

When asked where they and their peers meet before having sex, most participants said that they convene in a variety of clubs, hotels, 'spots,' restaurants, bars, and market places. A number of FGD participants said they linked up with

partners using networks of friends, including via the internet. 'Facebook' was named by one IDI participant and participants in five FGDs. Several said they met partners at parties and funerals, while others mentioned their homes because they avoided going out. Some explained that they met potential partners anywhere, even on the street. As one YA noted: "As we move, someone will just scratch you [and] then you know that there is a market for you." Another stated: "When I meet someone who is a gay, I can read [it] from the person's forehead as we talk a lot with eye movement."

Companionship and sex partners

When asked about their peers, including friends and MSM generally, most FGD participants, particularly adolescents, said that their peers were about the same age as themselves. Some said they had peers who were both older and younger than they were, while a few, mostly YAs, had peers who were older than themselves. The reasons given for spending time with 'older' MSM were because participants: 1) looked up to older men and liked receiving advice and guidance on daily activities and in living as a MSM in Ghana; 2) believed older MSM were more trustworthy and could keep secrets more reliably; and 3) felt that older MSM were more likely to offer forms of financial and other incentives and help. For participants who did not associate with older MSM, the main reason was due to fear. (Illustrative statements are provided in Table 1.)

When asked specifically about their sex partners, about one-half of IDI participants said that they had sex with both male and female partners. All others had male sex partners only. FGD participants, when queried about their peers, were similarly split in half, with some claiming that their peers were bisexual, and the other half describing their peers as having only male partners.

Where young MSM have male-to-male sex

We asked IDI participants where they have sex with other men. Their most common replies were their own homes, partner's houses, and hotels, though replies varied between the adolescents and YAs. Among all participants (n=44), the most common place for sex was hotels and guest houses (45%), but especially for adolescents (58%). Just over one-third (34%) overall, but 44% among YAs, reported having sex in their own homes, while 27% went to their partners' homes (32% among YAs). Other places were mentioned by two YAs: inside cars and at the homes of friends. The main reason given for going to these places was safety (61%). As a 20 year old participant put it: "[in] the hotels, nobody knows you so it is safe." Five participants (11%) said it was to meet new partners. Additional explanations (mentioned by one to three participants in each case) were: to meet new partners, because the partner requested it, to ensure privacy or confidentiality, to avoid embarrassment, to meet and chat, and because it was a 'normal place' to have fun.

When asked who decided where to go, participants were closely divided. One-half said they decided, while the other half said their partner usually decided where to go. Two adolescents explained that the person who was paying for sex decided. As one, a 16 year old, explained: "The one who has the money decides where he wants to go."

Experience with group sex

Twenty-three percent of IDI participants had engaged in group sex, though only four had had group sex more than once. Group size was typically three to five men, but two adolescents said that they had had group sex in which thirteen men had taken part. A much higher proportion of FGD participants, nearly 50%, said that they had engaged in group sex, with three to ten men taking part in these encounters. In general, participants believed that group sex was not very common among MSM. Several participants claimed that they did not like group sex. They included both those who had engaged in group sex previously and some who had not. They tended to voice negative views such as the increased risk of infection (see Table 1).

Alcohol appeared to play an important role in these experiences. One-half of IDI participants said that they had been drinking alcohol when they had group sex, while two had been using 'poppers'. In the FGDs, participants indicated that alcohol consumption in conjunction with group sex was the norm. Many also mentioned that, in their experience, marijuana was commonly used when group sex took place.

Experience with violence related to male-to-male sex

When asked whether they had ever experienced or inflicted violence on a sex partner, or with anyone else, 36% of IDI participants responded that they had. Three-fourths (n=16) said that they had experienced violence, while one-fourth had inflicted violence on someone. A similar proportion of FGD participants said that they had been involved in violent exchanges with sex partners or with others in instances related to MSM.

Situations involving transactional sex were more prone than others to lead to violence. Sixty-three percent of those who had been involved in violent interactions (n=16) claimed that these had been with transactional sex partners. In comparison, one-fourth had violent exchanges with regular partners and only one with a casual partner. Moreover, as participants described these experiences, many appeared to have taken place in situations where money, gifts, or favors were not provided after being promised. (See Table 1 for personal statements.)

Alcohol and drugs were also a factor in some of these exchanges. One-fourth of IDI participants, and several FGD participants said that they or their partners had been drinking or using marijuana during these encounters. Drug use and violence was a particular issue for one of the YA FGD participants, who attributed his frequent outbursts of violence to marijuana use. He admitted to repeatedly inflicting violence on his partners when he used marijuana.

From participants' descriptions, typical scenarios in which violence erupted involved suspected infidelity. More than one-half of IDI participants who had been involved in violent exchanges (n=16) described such situations, along with most of the FGD participants who described their personal experiences. Other common explanations for violent interactions were because: 1) one partner refused to use a condom; 2) a disagreement arose regarding sexual preferences (often positions) in a specific encounter; 3) one partner became drunk and unreasonable; and 4) other people insulted MSM or picked fights with them.

Special terms and self-identification

Before we queried participants on their self-identification, we asked whether they were familiar with various terms used to describe MSM, such as: bisexuals, masculine gays, feminine gays, married men, commercial sex workers, male pimps, and drag queens. We found that most participants in both the IDIs and FGDs had heard of some but not all of the terms before. Nearly all the participants recognized the term, 'bisexual.' Among the IDI participants, 84% recognized one or more terms. YA participants had heard of a wider range of terms than the adolescent participants. For example, four YAs had heard of all the terms, whereas none of the adolescents recognized all the terms and two had not heard of any of them (see Table 2 for definitions).

Participants also explained that they use a cryptic form of communication, a secret language that only MSM in Ghana understand. This language is known by 'Merry-go-round' and 'Shinoli.' There is a variation of the language in Twi, known as 'Keshiew,' in which some changes have been made so that only MSM in Ghana can understand it. Related to the language are a variety of special terms MSM use to describe themselves and their peers. The most common special term mentioned was 'Saso,' which had a number of variations, including: 'Seso,' 'Sasoni,' and 'Suaso.' Participants also mentioned 'Queen,' 'King,' 'Zay,' 'Vee,' 'Boora,' 'Kwadwo basia,' 'Yag' ('gay' turned around), 'Zain,' 'Wonim so,' 'Wani sly,' 'Booristeeka wa register,' 'Shi wonga' 'Owo number,' Baasiza baawe,' Booso,' 'Bootse,' 'Boofa,' 'Bootia,' and 'Dwa.' In addition to special terms for themselves, they also mentioned various slang, code words, and greetings which MSM in

Ghana have developed to recognize and greet each other in both English and Twi (see Table 2 for terms and definitions of some of these terms).

When given a list of possible terms that included 'gay,' 'bisexual,' 'MSM,' and 'heterosexual' and asked which they identified with, most participants said they were 'gay' or 'bisexual.' 'Gay' was slightly more frequently mentioned than 'bisexual' by adolescents than the YAs, who were more likely to identify as 'bisexual.' After discussing various special terms and which they could identify with, some participants added some of these expressions to those terms with which they identified. Most noticeably, one-fourth of all adolescent participants (n=48) said that they identified with the term 'masculine gay'. Among YAs, 'bisexual' remained the most common way to describe participants' sexual identity, though several added special terms to those with which they identified. For example, two said they identified with 'commercial sex worker' and one stated that he acted as a 'male pimp.' (See Table 2 for personal statements.)

Knowledge of HIV/AIDS

General knowledge of HIV and HIV transmission

Most participants knew the basics of HIV and how it is transmitted. However, adolescents and YAs differed in their level of understanding of HIV. Roughly one-half of adolescents demonstrated substantial knowledge, identifying multiple routes of transmission and sometimes describing the biologic basis of HIV infection and how it attacks the immune system. However, knowledge of some adolescents was quite poor. In one of the FGDs, adolescents revealed only rudimentary knowledge, describing HIV as a severe sexually transmitted disease (STD).

The YAs tended to have a higher degree of knowledge overall, with all FGD participants exhibiting at least a basic level of HIV-related knowledge. As with the adolescents, about one-half of YA IDI participants exhibited substantial understanding of HIV/AIDS. After being asked, "What are the ways that you can become infected?" one YA participant, aged 29 years, replied, "One can be infected during unprotected sex with an infected person, sharing sharp object with an infected person such as blade, syringe and needle, through blood transfusion, and blood covenants" (binding agreements sealed by an exchange of blood).

The most common gap in understanding related to kissing as a form of transmission of HIV. A total of seven IDI participants (one adolescent and six YAs) and participants in three FGDs stated that one could become infected with HIV from kissing. Some participants said that only 'deep kissing' could lead to HIV infection. An illustrative statement was made by a 16 year old adolescent in an IDI: "HIV is a germ transmitted through sex, exchange of body fluids through deep kissing and sharing a blade with infected person." A 20 year-old IDI participant employed as a peer educator said: "... If you have deep kissing, too, you can get it. Again the use of sharp objects can cause HIV/AIDS." Two of the YAs correctly said the risk of HIV when kissing was limited to instances where someone had cuts or open sores on their lips or in their mouths.

A few other participants revealed additional gaps in basic HIV knowledge. One IDI participant explained that HIV could be transmitted through "accidents' but did not specify any exchange of body fluids that might actually result in a new infection. In several FGDs, participants made statements that may not be erroneous but were somewhat misleading, including: "HIV is a group of diseases;" "Ladies can get it from a salon with infected combs and instruments;" "[you can become infected] "from family;" and "HIV used to frighten people but now it is no [longer] ... that serious." One participant insisted that "HIV can be acquired through witchcraft."

Those with the greatest knowledge typically acquired it from mass media sources or from courses in school. Close to one-half of participants had learned about HIV/AIDS at school, while more than one-third (53% of adolescents and 24%).

of YAs) had learned about it through the mass media, particularly TV. Other sources mentioned were peer educators, staff at various NGOs (MICDAK, WAPCAS, SHARPER, FHI), family members, friends, and hospital staff.

Prevention of HIV

Both adolescents and YAs were quite knowledgeable about HIV prevention. Nearly all participants mentioned condom use, while some brought up avoiding 'sharing of sharps' (sharp objects such as knives or blades) with an infected person, abstinence, being faithful to one's partner(s), and reducing the number of partners. In response to the question: "What are the ways that HIV infection can be prevented?" a number of participants not only mentioned condoms but volunteered that they always used them. Several illustrative statements on HIV prevention were:

Prevention is difficult but it is advisable to use condoms always. My policy is to abstain or use condoms anytime I want to have sex. —IDI participant, aged 17 years.

One should be faithful to his/her partner and should use condom during sex or have protected sex. —IDI participant, aged 16 years.

Avoid using the used blade or needle by somebody. Have protected sex by using condom. –IDI participant, aged 17 years.

It can be prevented through the use of condoms, reducing casual sex partners, and being faithful to your partner. —IDI participant, aged 25 years.

Through education, the use of condom during sex, and avoiding the use of already used sharp objects. —IDI participant, aged 20 years.

HIV treatment

Generally, participants were not very knowledgeable about HIV treatment. This was by far the largest gap in their understanding of the basics of HIV/AIDS. Although many participants understood the need to go to a healthcare facility for care and treatment, only some were aware of the existence of antiretroviral therapy (ART), the only effective way to treat HIV. In the IDIs, 25% of participants knew about ART, while therapy was mentioned by one or more participants in only three of the FGDs. The participants in the other FGDs and nearly one-fourth of IDI participants appeared to be unaware of any treatment for HIV whatsoever. When asked, "What are the ways that HIV/AIDS can be managed and treated?" typical responses included:

I believe that AIDS is inevitable. It has no cure but now there are drugs that control the signs and symptoms. —IDI participant, aged 26 years.

There is no treatment. –FGD participant, aged 17 years.

There is no remedy. -FGD participant, aged 16 years, in response to his peer (above).

I do not have an idea about treatment. –IDI participant, aged 17 years.

It can be managed by going to hospital(s) for treatment when one test(s) positive. When one sees signs and symptoms of HIV [such as] rashes etc. the person should go to the hospital for treatment. —IDI participant, aged 28 years.

What I have learnt from my friend from Takoradi is that HIV does not kill, but when it gets to AIDS, then nothing can be done about it. –FGD participant, aged 17 years.

Alcohol and drug use

Here we provide our general findings on alcohol and drug use. The next section focuses on transactional sex, which includes behavioral overlaps among participants regarding alcohol and drug use and transactional sex. Next, we present the findings on risky behaviors, encompassing both condom and lubricant use, as well as overlaps between risky behaviors and both substance use and transactional sex. Selected statements are provided, with further quotes in Table 3.

Alcohol: types and quantities consumed

The majority of participants said that they and their peers drank alcohol, including nearly 80% of IDI participants and most members of seven FGDs. Most also said that they consumed mainly beer, but some participants also reported drinking local gin (also known locally as *akpeteshie*), whiskey, and wine. The amount of alcohol consumed by participants varied widely, though participants typically said that they and their peers consumed two to four bottles per day. The greatest quantity of alcohol consumed by YAs in a 24-hour period was twenty bottles of beer. Among the adolescents, the most consumed in the same period of time was seven bottles of beer.

Rationale for and attitudes regarding alcohol consumption

Participants described drinking alcohol at a variety of times and in a wide range of settings—in the company of friends, before having sex, or whenever they felt like it. Not all gave specific reasons for consuming alcohol, but of those who did (52% of IDI participants and participants in seven FGDs), the main motivation given for drinking alcohol was to make sex with other men more enjoyable. As a 27 year-old FGD participant explained: "When you drink before having sex it makes you enjoy the sex, because it increases your sexual drive or feelings." Some participants (seven in IDIs and most in five FGDs) said that they always drank alcohol before having sex with another man. Additional reasons for drinking alcohol were: to reduce inhibitions and enable exploring different sexual positions and preferences (four IDI participants); to increase libido (two IDI participants and a small number of FGD participants); and for mood improvement, in case of unhappiness or shame (three IDI participants).

Aside from being motivated to drink alcohol in order to make sex more enjoyable, most participants agreed that when alcohol was consumed before sex, sexual pleasure was increased because inhibitions, pain, and embarrassment were reduced. This opinion was more common among adolescents (58%) than YAs (40%). However, several participants believed that too much alcohol could numb the senses. They noted the risk that, in order to regain sensation, some men would compromise on condom use and even pull off the condom during sex.

We asked participants: "Does drinking alcohol make people more or less likely to use a condom during sex?" The most typical response, made by about 40% of IDI participants and most participants in two FGDs, was that alcohol use had no effect on the likelihood of using condoms during sex. Particularly among YAs, participants voiced the opinion that if one was truly committed to condom use, what mattered most was the availability of a condom, not the effect of alcohol on the will to use it. Alcohol use among those who felt this way varied from twelve bottles of beer in a 24-hour period to less than one bottle of beer a day. As one participant stated:

No, I always use a condom to have sex. Drinking alcohol cannot prevent me from using a condom. I always have my senses when I drink alcohol. –FGD participant, aged 29 years.

Several IDI participants believed that alcohol use actually increased the likelihood of condom use, mainly because it caused people to be extra wary, but also because it increased sexual pleasure and thereby reduced negative aspects of using condoms. As participants explained:

I am aware it [drinking alcohol] can impair my judgment, so I am always condom ready. I have my condoms all the time. —IDI participant, aged 20 years.

It makes it more likely to use condoms because drinking makes even the condom use enjoyable. –IDI participant, aged 19 years.

Yet some participants believed that alcohol use could reduce the probability of condom use. This view was expressed by 18% of IDI participants and by most participants in two FGDs. The main reasons for this belief were: 1) if someone became very drunk, he would be irrational and not care or be able to put on a condom; and 2) if alcohol numbed a man's senses, in order to enjoy sex more, he might refuse to use a condom. They noted that alcohol consumption fundamentally reduced inhibitions, thereby impairing the ability to correctly assess risks and make good decisions about condom use. These views are represented by the following statements:

One of my partners refuses to use a condom whenever he is drunk. I prefer he smokes to drinking alcohol. –FGD participant, aged 24 years.

Less likely to use condoms... I once got drunk and so didn't really feel my partner, so I asked him to take the condom off but he insisted we use it. –IDI participant, aged 17 years (when asked whether drinking alcohol made condom use more or less likely).

Use of drugs and other substances: types and quantities consumed

A minority of participants revealed that they and their peers used illegal substances. They included 15% of IDI participants and most participants in three FGDs (along with some participants in the other FGDs). Marijuana was by far the most popular drug, with five of the six IDI participants who used drugs choosing marijuana ('wee'). Only one participant, a YA, claimed that he used cocaine occasionally, though some YA FGD participants knew other MSM who used cocaine. Two other YAs who participated in IDIs said that they occasionally used 'poppers' (Alkyl Nitrites) when they engaged in group sex.

Most of those who smoked marijuana said that they did so 'frequently', although without defining clearly what this meant. In one YA FGD, the majority of participants claimed to smoke marijuana every day, while one said that he smoked up to five to eight joints per day. In the remaining FGDs in which a majority of participants smoked marijuana (two), most said they smoked "frequently" or "often." The remaining participants (including most of those in the IDIs) said that they or their peers smoked only occasionally.

Only a few participants who used drugs admitted to combining drug and alcohol use. When they did, they mixed marijuana and alcohol. Some participants, including most in two adolescent FGDs, frowned on this practice, agreeing that mixing drugs and alcohol was a bad idea.

Rationale for and attitudes regarding drug use

As with alcohol, most participants who smoked marijuana often (all three of the adolescents and one YA) said they did so before having sex, for the purpose of making sex with another man more enjoyable. Another YA said he used marijuana whenever he felt like it. The participant who used cocaine did so whenever he wanted to. For him, drug use

was not associated with having sex. Rather, he only took it when he was in bad mood, and wanted to feel better.

Most participants who used drugs said that substance use made sex more enjoyable. This was because drugs gave participants more energy, sexual drive, and stamina. These were typical responses by participants when asked: "Do drugs make it easier or more enjoyable to have sex with another man? Why is that?"

[Sex is] more enjoyable. You get the energy to do whatever. -IDI participant, aged 17 years.

Yes, more enjoyable... It makes me happy during sex. -IDI participant, aged 18 years.

It makes you enjoy the sex, because it increases your sexual drive. -FGD participant, aged 25 years.

Yes, easier., we are able to have sex for a longer period ... It gives us both enough energy. –IDI participant, aged 17 years.

Participants who felt this way included all the adolescent IDI participants, some of the YA IDI participants, and most participants in three FGDs. However, for some, including several YAs in the IDIs and some FGD participants, drug use was independent of sexual activity and had no effect on sexual pleasure. Similar to participants' views on the link between alcohol and condom use, most felt that drug use had little effect on condom use. However, a few believed that it reduced the chances of using condom during sex.

Although none of the IDI participants revealed prior experience with sexual enhancement drugs, most participants in two FGDs (both adolescent) described having taken such drugs previously. All said that they did not combine them with other substances, although a few knew other MSM who did. The general consensus was that this would be dangerous. These were typical replies when participants were asked whether they or their peers took sexual enhancing drugs such as Viagra, whether or not combined with other drugs:

I prefer to use sex enhancing drugs because it makes sex so nice. -FGD participant, aged 17 years.

My partner puts some of those into malt and when I take [it]... it makes [me] feel great. -FGD participant, aged 16 years.

Many of my friends say Viagra is expensive so they do not use it. I had a white man who gave [me] some at one point and I liked it. –FGD participant, aged 16 years.

No. I am a strong man. -IDI participant, aged 18 years.

Transactional sex

How common is transactional sex?

The vast majority of participants indicated that, based on their experience and knowledge, transactional sex was common among MSM in Kumasi. Among IDI participants, 84% disclosed that they had engaged in transactional sex at least once in the prior year. YAs were somewhat more likely than adolescents to have engaged in transactional sex (88% vs. 79%). Although both groups reported typically receiving something in return for sex, as opposed to being the givers, YAs were also more likely to be on the giving end than adolescents. Just over 40% of YAs said they both gave and

This one-year period is longer than the six-month timeframe used for participant recruitment, thus these findings differ slightly from those reported in the demographic background section.

received money, gifts, or favors, compared to 21% of adolescents (four). Illustrative statements among those who viewed transactional sex as common in MSM were:

I have sex for money at all times. –IDI participant, aged 17 years.

Most young adults receive money from adults who are rich and [are] MSM. -IDI participant, aged 17 years.

Similarly, most participants in six FGDs said that transactional sex was widespread, especially between older, affluent MSM and younger males such as students. Typical responses included:

[It is] very common especially (among) students. -FGD participant, aged 16 years.

I do that [have sex] for money and favors and am sure that is the reason why most of us are involved. So it happens most often. –FGD participant, aged 16 years.

Some pointed out that it was 'feminine gays' who typically paid for sex. A 23-year old participant in a FGD had a different opinion, claiming that 'kings' usually paid: "We have 'king' or 'queen' to describe our sexual identity, i.e. a 'king' is the one who plays the top and gives money out to the queen. A 'queen' plays the bottom and receives money from the 'king'."

However, a contrasting view was expressed by all participants in one adolescent FGD, who did not believe transactional sex was common. Rather, they felt that most MSM sought relationships based on affection, and not as business transactions. As one 16 year-old participant explained: "For me, I don't do it [transactional sex] for any such things but I do it because I want to feel it, especially when I am [in the mood for sex]....and this happens a lot [being in the mood for sex]."

Among those who engaged in transactional sex, the frequency of these encounters varied. Most IDI participants (roughly 33%) gave responses such as "often," "many times," and "quite often," which indicated regular involvement in transactional sex. A few were more specific—"every day" or "twice a week"—suggesting very frequent engagement in such activities.

Regarding what they typically exchanged for sex, responses varied, but money was mentioned most often (by over two-thirds of participants) as the item given or received. Few mentioned specific amounts that were exchanged, but in one YA FGD, typical rates cited were 100 to 150 Ghana cedis (US\$ 50-80). One YA participant in a FGD noted that he knew "guys who actually charge, usually white guys for a night, [about] \$50." About 20% had traded a gift of some sort, including mobile phones, ipads, clothes, shoes, transportation for shopping, and call credit. Only one IDI participant mentioned exchanging a favor for sex.

Finding transactional sex partners

When asked how they made contact with their transactional sex partners, the most common responses by participants who engaged in transactional sex were that they met partners at parties, clubs, and bars, and through their friends. However, responses varied between adolescents and YAs and also between IDI and FGD participants. Among the IDI participants, a total of 47% (n=34) identified parties, clubs, and bars, but the proportions were 58% among the IDI adolescents (n=12) and 41% among IDI YAs. Making connections through friends was mentioned by a total of 41% of IDI participants, but by far more YAs (55%) than adolescents (17%). Additional ways of making contact, named by one or

two adolescents or YAs were: meeting someone on the street, at the beach, on the phone, or at various evening meeting places (presumably restaurants or other gathering places). Statements by participants included:

I met one at the road side and other person at the restaurant. We were with a couple of friends. He came there and we exchanged numbers. –IDI participant, aged 17 years.

I contact them at night clubs and during interschool games. —IDI participant, aged 17 years.

This is not difficult. You can always make contact if you want to. You could meet some in the streets, at the beach, many places. It all depends on you. –IDI participant, aged 19 years.

FGD participants mentioned all the same places and strategies as IDI participants, but also highlighted the role of the social media in making contact with partners. While most participants in two FGDs said they met partners at parties, clubs, and bars, most or half of those in three FGDs met them via 'Facebook', wasap, and similar internet-based avenues. They also described meeting partners through their churches, via the telephone, in hotels, on the streets, and through other personal contacts. The following were responses from one adolescent FGD:

I make contact at clubs. -FGD participant a.

Bars and hotels. -FGD participant b.

Sometimes at the church. -FGD participant c.

'Spots'. -FGD participant d.

Through the social media like the internet and 'Facebook'. –FGD participant e.

Bars and restaurants. -FGD participant f.

Views of transactional sex

Most participants had positive things to say about transactional sex. Almost two-thirds of IDI participants, along with most participants in seven FGDs, believed that engaging in transactional sex, whether on the giving or receiving end, was an acceptable activity. Many considered it to be just another form of employment for some men. Most IDI participants felt comfortable engaging in transactional sex, as long as condoms were used, though some were concerned that transactional sex increased the risk of HIV infection (more on this below). The following were typical statements in response to the question: "How common is this (transactional sex)?"

Most of my peers are unemployed so it is a good source of income. -FGD participant, aged 20 years.

[It is] quite common among my friends. It is a good way of making money, especially from foreigners and Ghanaians living abroad. —IDI participant, aged 26 years.

For many participants, the need for money was a major motivation to engage in transactional sex. As two FGD participants explained:

I collect money because I pick(ed) a car, (and) because I was in school and I needed money for living. —FGD participant (YA, age unspecified).

The problem of unemployment made me enter into gay for pay. -FGD participant (YA, age unspecified).

Several participants asserted that the ability to earn money was the primary or even the only reason that some men had sex with other men. One 24-year old IDI participant elaborated: "Sometimes some guys are only looking for money and other things—that is why they enjoy being gay." One FGD participant, aged 23 years, said he felt that many MSM expected to always pay for sex: "Some people think that if they do not give money, you will not agree." Another, a 17-year old IDI participant, confirmed that he had sex for money "at all times," elaborating that: "It doesn't matter whether I am in need of the money at that time or not."

Some participants (five adolescents and one YA) expressed a different opinion —that engaging in transactional sex was not a good thing to do. The main explanation for this view was that transactional sex increased the risk of HIV infection. As two YA participants expressed it:

It has happened to me before. Some guys know very well that they are infected with HIV, but they use huge sum(s) of money such as GH ¢ 1000.00 to lure their partners to have sex with them just to infect them with the disease. Thus, such guys normally don't use condom [when they have] sex because their partners don't know their HIV status.—IDI participant, aged 28 years.

Most people are interested in the money and so they don't care if they have sex without protection. —IDI participant, aged 25 years.

A few participants said that it was shameful or that they felt guilty giving or receiving money or items in exchange for sex. These participants revealed that they sometimes reflected on their involvement in transactional sex and would become unhappy. However, the attraction of financial and other rewards were difficult to resist. These views are illustrated in the following statements, in response to "How do you feel when you do this (engage in transactional sex)?"

I feel bad, because it is a situation I wish I could have avoided. It is bad having sex in exchange for money. If the person is infected with HIV you might end up contracted the disease as well.—IDI participant, aged 17 years.

Sometimes I ask how I got this far as I wish I had not been doing it. But the money and trips to expensive hotels can be exciting. —IDI participant, aged 19 years.

One-third of IDI participants and most in five FGDs believed that engaging in transactional sex increased the likelihood of unprotected sex. While only one IDI participant admitted that he would compromise on condom use when offered a large sum of money, many others in both IDIs and FGDs said they had friends who could be persuaded by money to have sex without a condom. In addition, 75% of IDI participants who engaged in transactional sex (n=37) said that their transactional sex partners included men who also had sex with other individuals, encounters which might not always involve condom use. (See Table 3 for statements by participants.)

Overlap in transactional sex and alcohol and drug use

There was considerable overlap in transactional sex and use of alcohol, drugs, or other substances. Among IDI participants who reported engaging in transactional sex in the previous year (n=37), two-thirds drank alcohol, while two used marijuana. Thus, among all IDI participants (n=44), about two-thirds engaged in both behaviors. In this group with

overlapping behaviors (n=29), 72% said that they generally drank alcohol or used drugs before having sex. FGD participants tended to confirm that alcohol consumption was common in men who engaged in transactional sex. Most participants in five FGDs (one adolescent and all four YA FGDs) believed that most men who engage in transactional sex drink substantial amounts of alcohol. Most also believed it was common to consume alcohol or drugs before engaging in sex.

As described above, the amount of alcohol consumed by participants varied widely. However, in general, those who engaged in transactional sex consumed more alcohol than those who did not. Among those who professed to transactional sex activities, the most typical amount of alcohol consumed was 3-5 bottles of beer per day, with quantities as high as twenty bottles among YAs and seven bottles among the adolescents. In contrast, among participants who did not engage in transactional sex, the most typical amount of alcohol consumed was two bottles of beer per day. The greatest amount was five bottles of beer per day, reported by a 16 year-old adolescent.

In this group of participants with overlapping transactional sex and alcohol and/or drug use behaviors (n=29), we examined attitudes toward condom use, and specifically whether participants thought that alcohol and/or drug use affected the likelihood of condom use. We found that about one-fourth believed that consuming alcohol or drugs would reduce condom use, and thereby increase the risk of transmission of HIV. The others either believed that there was no relationship between the two, condom use might be increased, or had no opinion at all.

Use of condoms and lubricants

In this section, we present the findings on use of condoms and lubricants. After the basic results on use of these items, we move to overlapping behaviors, including condom and lubricant use and substance use, as well as condom and lubricant use and engagement in transactional sex.

General experience using condoms

Most participants had experience using condoms. Every IDI participant and nearly all of those in the FGDs confirmed that they used condoms when they had sex, either always or sometimes. However, four FGD participants (two adolescents and two YAs) did not use condoms. One YA, aged 24 years, knew nothing of condoms: 'I haven't heard of or used condoms before." A fifth participant, an adolescent in a FGD, stressed his dislike for currently-produced condoms. He explained that he no longer used them because they gave him cuts whenever he used them.

Frequency of condom use and reasons for inconsistent use

Just over one-half of participants used condoms consistently, including 55% of IDI participants (47% of adolescents and 60% of YAs) and most participants in three FGDs. Two additional IDI participants said they used condoms regularly except for a few occasions when they had 'slipped,' the main reason for non-use being that condoms had been unavailable when needed. Typical responses regarding regular condom use were:

I felt okay and since my first experience I have always used condoms. If there is no condom, I have oral sex with my partner. –IDI participant, aged 25 years

I have been using them for a year now. My school father and my first partner taught me... I use them always. —IDI participant, aged 17 years.

Although the use of condom cannot be compared with having raw sex, I always use it to protect myself. –FGD participant, aged 17 years.

You see, whether they enjoy sex with it or not, they will wear the condom because everybody is protecting himself from AIDS and even STIs. –FGD participant, aged 16 years.

Those who used condoms regularly described utilizing the following strategies to ensure consistent use: persuading partners with information about HIV/AIDS and the risk of infection, using endearments, being stubborn and refusing to have sex without a condom. If these approaches failed, some would perform oral sex instead of penetrative sex, help partners masturbate, or have 'thigh sex.' These compromises were more common when the partner was paying for sex. The following are illustrative statements on these instances:

When you meet a nice man who has a lot of money to spare, if he insists on doing it raw then it's a challenge. Because even without the money, you like him and he is ready to top it up with a lot of money. So rather than have sex, I suck him. —IDI participant, aged 20 years.

When you meet someone who has the desire to have sex and there is no condom available with any of us, we don't practice penetration sex. Rather we masturbate in order to satisfy ourselves. —IDI participant, aged 17 years.

Some say sex feels artificial with condoms. So they can use thigh sex and go raw. –FGD participant, aged 17 years.

Inconsistent condom users gave two main rationales, which differed by participant activity. In the IDIs (n=20), the most common reason (50% of inconsistent users) was that condoms were unnecessary with trusted partners, including long-term partners, close friends, and girlfriends. They generally claimed or implied they would use a condom with others. In participants' words:

No, I don't use it with my serious girlfriend. –IDI participant, aged 17 years.

No, I don't use condom always. I only use condom to have sex if I don't know you. –FGD participant, aged 20 years.

Yeah. I use them always except with my serious partner. -IDI participant, aged 18 years.

I don't always use it. I usually use it on those I don't know. -IDI participant, aged 17 years.

In contrast, the most common reason for inconsistent condom use given by FGD participants was that condoms reduced sexual enjoyment. Participants in six of the eight FGDs gave this rationale when directly asked about condom use, while those in the other two FGDs mentioned it indirectly as explaining why MSM dislike using condoms. These were illustrative statements:

Some prefer raw sex because it makes them enjoy sex without using condom. They say they want to feel the warmth of their guys. –FGD participants (YA, age unspecified).

We actually don't use condoms because it gives less pleasure. -FGD participant (YA, age unspecified).

Additional reasons for non-use of condoms were: they were unavailable when needed, forgetting due to being drunk, being with a handsome man who did not want to use one, agreeing not to use one with a paying client, and being coerced by partners. One adolescent FGD participant offered his theory: "The reason for not using it always is that it can be likened to food that we eat. When you eat one type of food for a long time, you feel like changing for a different taste. So when you use a condom for some time, it is good to go raw for a change of taste."

Challenges using condoms

When asked about challenges faced using condoms, 61% of IDI participants (68% of adolescents and 56% of YAs) described challenges, as did those in six FGDs. In only two FGDs (both YA) were no challenges raised. Supporting their reasons for inconsistent condom use, participants' typical challenges were a dislike of condom use with trusted partners and diminished sexual pleasure associated with condom use. Participants also described numerous other challenges and

Reasons for inconsistent condom use in young MSM

- Common reasons for deliberate non-use
 - Condom use unnecessary with trusted partners, including long-standing partners, girl friends, and close friends
 - Condoms reduce sexual pleasure
- Challenges that inhibit condom use
 - the need to negotiate with partners
 - too hard to say 'no' or being coerced into not using one by large sums of money
 - o partners refusing to use one
 - partners becoming angry/feeling insulted if suspected of having an STI or of being unfaithful
 - o risking loss of desirable partners
 - not wanting to use condoms with trusted partners
 - aspects of wearing/using condoms
 - o disliking the smell of condoms
 - o condoms prevent ejaculation
 - o forgetting after drinking alcohol
 - condoms not available when needed
 - o shame or embarrassment when buying condoms in drug stores
 - o lack of money to buy condoms
 - challenges putting on condoms
 - o difficulty putting them on
 - o too much time to put on
 - putting them on improperly, leading to bruising or condom breaks

issues regarding condom use. These can be grouped into the following categories:

- 1) the need to negotiate with partners about condom use, including: finding it hard to say 'no' or being coerced into not using a condom by large sums of money; partners refusing to use a condom; partners becoming angry because they felt insulted if suspected of having an STI or of being unfaithful; potentially or actually losing desirable partners; and not wanting to use condoms with trusted partners. These reasons were noted by one-half of all IDI participants who mentioned a challenge (n=27), 30% of the adolescents and 69% of the YAs, and by participants in four FGDs.
- 2) aspects of wearing and using condoms, including: disliking the smell of condoms; feeling that condoms prevent ejaculation or reduce sexual pleasure; and forgetting to use a condom after drinking alcohol. Such challenges were raised particularly by adolescents, including in six IDIs and all four adolescent FGDs, as well as by YAs in one FGD.
- 3) challenges obtaining condoms and lack of availability of condoms, including: shame or embarrassment when buying condoms in drug stores; lack of money to buy condoms; and simple unavailability of condoms when needed. These issues were raised by 40% of IDI participants with condom use challenges and by participants in one YA FGD.
- 4) challenges putting on condoms, including: difficulty putting them on; the amount of time it takes to put one (some men lose their erections while waiting); and putting them on improperly, which sometimes led to bruising or condom breaks. Adolescents were most likely to raise these challenges, including one IDI participant and adolescents in three FGDs.

YAs in one FGD also mentioned these challenges.

Though the numbers are small, some differences emerged between adolescents and YAs and between IDI and FGD participants on some of these issues. More YA participants mentioned the challenge of not giving in to coercion with money compared to adolescents (one adolescent vs. three YAs). Only YAs mentioned 'thigh sex' as a compromise to condom use, in order to have sex while still staying safe. In general, participants in the FGDs provided a wider variety of challenges to condom use than IDI participants. Moreover, FGD participants were more likely to bring up difficulties putting on condoms, including the lengthy time it could take to put one on.

Use of lubricants

Participants discussed using two different types of lubricants: water-based lubricants (WBL) such as 'K-Y jelly' and 'sachet lubricant' (not a brand name, but a popular water-based lubricant often sold in little plastic tubes with enough lubricant for one encounter); and oil-based lubricants (OBL), including an item known as 'Pomades,' petroleum jelly, body creams, lotions, and baby oil. Lubricant use during sex was widespread among participants. Among those in IDIs, the vast majority said that they used some form of lubricant, including all YAs and all but four adolescents. Similarly, all but two FGD participants in the seven FGDs in which lubricant use was discussed said that they used lubricants. Ninety percent of IDI participants (n=40) and between one-half to all participants in six FGDs said they used WBL. However, all would use an OBL if a WBL was not available.

Among IDI participants who used lubricants (n=40), their reasons for using them usually related to the role of lubricants in making sex more enjoyable and less painful. Most commented that lubricants made penetration easier (83%), while others noted that they helped to: prevent cuts (three), ease withdrawal (one); prevent condom breaks (one), make condom use easier (one), and speeded up ejaculation (one). Among the six participants who did not use lubricants, four gave reasons, which were: condoms were already lubricated (two); lack of knowledge on where to get them and too ashamed to ask (one); saliva could be used instead (one).

Most participants did not face challenges obtaining lubricants, though 18% of IDI participants, particularly YAs (28%), and several participants in an adolescent FGD did. The main barrier was lacking money to purchase them. Several participants said that they were too embarrassed to buy lubricants at a drug store. One adolescent who did not know where to purchase lubricants noted that he sometimes, but not always, could obtain them from peer educators. The following were typical responses to the question: "What are the problems obtaining lubricants?"

I have used it once. It was given to me by my friend at school. However, I haven't used it again since he completed school. I feel shy to ask people about lubricants... I think it is good if I know where to get it... I don't know where to get lubricants. —IDI participant, aged 17 years.

If you have money then there is no problem. –IDI participant, aged 18 years.

When I buy it from the pharmacy shop, the counter seller sometimes ask(s) why I want it and this makes me feel bad. —IDI participant, aged 23 years.

The lubricants sold at the drug stores are quite expensive. The ones being sold by the peer educators are very cheap... The convenient place to buy condoms is the drug store, but with lubricants, I get them from the peer educators because going to buy it from the drug store as a man is something else. They know it is mostly women who use them. So if a man goes to a drug store to buy a gel he is looked at in certain way. —IDI participant, aged 25 years.

Overlapping behaviors: alcohol/drug use, transactional sex, and condom/lubricant use

Alcohol consumption and condom use

We examined condom use by level of alcohol consumption and found little relationship between the two behaviors. We grouped IDI participants into 3 categories, based on the amount of alcohol they said they usually consumed, as follows:

1) heavy drinkers (defined as roughly three or more bottles of beer per day), with 45% of participants; 2) moderate drinkers (some consumption but less than heavy drinkers), with 32%; and 3) non-drinkers (23%). Analyzing condom use within each group, we found that consistent condom use was roughly 55% among the heavy drinkers, 50% among moderate drinkers, and 60% in non-drinkers, with no trends between adolescents and YAs. Similarly, no differences emerged between IDI and FGD participants.

Drug use and condom use

There was a more noticeable trend in overlapping drug use and condom use, though few participants said that they used drugs or other substances. Among the six IDI participants who reported using drugs, only two used condoms consistently—one was the YA who used cocaine and the other was an adolescent who used marijuana. Consistent condom use was much higher among those who said they did not use any drugs (60%). There was no clear pattern in the FGDs.

Lubricant use and alcohol and drug consumption

There was little association between alcohol and drug use on the one hand and lubricant use on the other, mainly because nearly all participants used lubricants. Using the same alcohol use categories described above, we found that all the heavy drinkers, all but two of the moderate drinkers, and all but two of the non-drinkers used lubricants. However, participants who described difficulties obtaining lubricants tended to be disproportionately in the heavy drinker group. Five of the eight IDI participants who claimed to face challenges procuring lubricants were heavy drinkers. These were relevant statements by heavy drinkers:

If only you have money then it is not a problem. –IDI participant, aged 19 years.

I wish lubricants could be given to us free of charge so that we can keep more lubricants in our homes. –IDI participant, aged 28 years.

A similar pattern emerged in the FGDs, at least among those participants who spoke about both their own alcohol consumption and use of lubricants, with all heavy drinkers and nearly all moderate drinkers affirming that they used lubricants. Little was said on lubricant use in the one FGD in which most participants were non-drinkers.

Among IDI participants who used drugs (n=6), all used lubricants. However, two, including one who used cocaine, were among those who had difficulty obtaining lubricants. For both, the issue was lack of money to purchase them. Among FGD participants, there was no clear relationship between drug use and use of lubricants, with all those who used drugs also using lubricants. Among those who said they faced challenges accessing lubricants, none admitted to drug use.

Transactional sex and condom use

When we examined condom use by engagement in transactional sex, we found a clearer trend between these two behaviors. First, comparing participants who said that they had engaged in transactional sex in the previous year and those who had not, 51% of the former (n=37) claimed to use condoms consistently, whereas the proportion was 86% in those who had not engaged in transactional sex (n=7). YAs were more likely in both groups to use condoms, so the

overlap in behaviors was more pronounced among the adolescents. The following were descriptions given by adolescents when asked to tell of a time when a partner had refused to use a condom:

One partner told me he prefers raw sex and if I allowed him he would give me enough money. I accepted it and we had raw sex. —IDI participant, aged 17 years.

When people want to pay more for the raw sex [then I will agree to no condom]. But I tell them it is dangerous because by that you could contract a disease. —IDI participant, aged 16 years.

Second, we regrouped IDI participants into those who engaged in transactional sex frequently (defined as those who did so "often" or "frequently") and compared their condom use with those who engaged in no transactional sex or did so infrequently (defined as those who did so "rarely" or "infrequently"). The same trend emerged, suggesting that condom use declines as engagement in transactional sex increases. Of participants who engaged frequently in transactional sex, 48% used condoms consistently, compared to 73% in those who never or rarely did so. There was little evidence of any trend among the FGD participants.

Perceived risk of HIV infection

The vast majority of participants believed that they were at some risk of contracting HIV. They comprised 80% of IDI participants and all or most participants in six FGDs. Most stated that they or their peers were at risk due to having unprotected sex, either in the past or at present. The reasons for having unprotected sex included the challenges with condom use discussed above, as well as simply forgetting to use a condom, being drunk, or using a condom that then broke. However, most participants in a YA FGD and some in an adolescent FGD stressed that only people who engaged in unprotected sex were at risk, and thus they felt their own risk was low. Typical statements regarding the risk of infection from unprotected sex were:

Yes. [I believe I am at high risk of infection.] This is because I sometimes don't protect myself when I have sex with my partner because I trust him, even though I do not know what he can do behind [my back]. —IDI participant, aged 16 years.

Yes, we are at risk because of the way we have sex and change partners, and other behaviors put as at more risk. –FGD participant, aged 17 years.

Yes, because we do have sex without protecting ourselves. –FGD participant, aged 29 years.

A number of participants felt at risk of HIV infection for reasons besides having unprotected sex. These reasons included: kissing (three YAs), sharing blades (two adolescents and one YA); visiting barber shops (one adolescent); and general MSM status (two YAs). One adolescent participating in a FGD considered everyone at risk of infection irrespective of condom use or other measures of protection due to his belief that HIV could be transmitted by witchcraft. Statements on perceived risk for reasons other than unprotected sex included:

Nobody can exempt him or herself from contracting the disease because there are so many ways of contracting the disease. –FGD participant aged 16 years.

AIDS is blood related and since it is blood that flows through us, we are all at great risk. We can get it through sex, barber shops, and cuts. –FGD participant, aged 17 years.

We are at risk because it is very easy to contract [HIV] from on infected partner. I once tried to test my partner for HIV. When I pricked the finger and saw the blood coming, I licked the blood as a sign of openness and love for him. These are some of the ways we can be infected. –FGD participant (YA, age unspecified).

It is risky ... because if one protects [oneself] by using condoms, you can still contract [HIV] through kissing. –FGD participant (YA, age unspecified).

Health problems and access to services

Health concerns and challenges staying healthy

When asked whether they or their peers had health concerns, relatively few participants mentioned specific problems. In the IDIs, only two adolescents (n=19) and five YAs (n=25) mentioned problems, while the majority in every FGD either indicated that they themselves felt healthy and had no health problems, or that they knew of none among their peers. Typical responses were: "I don't have any health problems at the moment" (IDI participant, aged 24 years) or "No, I am fit and well, without any health problems" (IDI participant, aged 26 years).

Of those that mentioned a concern, the most common complaint was worrying about weakness or headaches after sex (mentioned by three YAs in IDIs) and STIs (mentioned by two YAs in IDIs and by participants in two YA FGDs). Other concerns were: pain during urination, genital rashes, genital discharge, anal warts, anal pain, anal bleeding after sex, fear of infection (presumably HIV) after exposure to a partner's blood during an accident, and gonorrhea.

We also asked participants about the challenges they faced staying healthy. The most common challenge mentioned (by five IDI participants) was worrying about staying healthy due to having unprotected sex. In all of the adolescent FGDs, one or more participants brought up unprotected sex or condom use as a challenge. In many of the FGDs, if participants failed to mention condom use in response to a direct question about challenges, they revealed such concerns in response to other questions. Thus, directly or indirectly, concerns about the risks associated with unprotected sex were raised by about one-half of FGD participants.

Some participants also referred to "too much sex" as a challenge, without specifying why this was a problem. A few also brought up alcohol use as a challenge. In one FGD with adolescents, when queried, "What would you say are the three greatest difficulties or challenges your peers face in staying healthy and free of illness?" participants responded as follows:

Too much sex and alcohol. -FGD participant a.

Too much sex. -FGD participant b.

If you do not practice personal hygiene and do not sleep with ITNs. -FGD participant c.

Too much unprotected sex. [Also] too much drugs and alcohol, and a lack of exercise. -FGD participant d.

Too many outings and too much alcoholism. [Also]... bites from mosquitoes. –FGD participant e.

Having unprotected sex. [Also]... engaging in strenuous work and alcoholism. If you reduce the frequency of sex, rest the body, and use condoms and lubricants, you can stay healthy. –FGD participant f.

Another relatively common challenge was mosquito bites and avoiding malaria, mentioned by four IDI participants (two adolescents and two YAs) and one FGD participant. Additional challenges included: unfaithful partners (or remaining faithful oneself), drinking alcohol, drug use or abuse, group sex, knowing one's HIV status, lack of knowledge on where to find testing services, poor access to testing services (particularly related to stigma, and the shame involved in seeking these services), general body pains, stress, cigarette smoking, and poor nutrition.

Access to health services

When asked, "Can you tell me about the health and HIV/AIDS services in Kumasi?" most participants knew where to access HIV/AIDS services. Seventy-five percent of IDI participants, along with most in six FGDs, named locations to access test services alone or a broader range of HIV/AIDS services, including: Suntreso government hospital, Komfo Anokye Teaching Hospital (KATH), Bekwai government hospital, Asanti Bekwai hospital, Sewua hospital, and the NGO, MICDAK. They also noted drop-in centers, in particular the one operated by MICDAK. The most frequently named location was Suntreso (mentioned by nearly one-half of participants). This typical reply came from a 16 year-old IDI participant: "Yes, I know from MICDAK that they can give me a note to visit Suntreso and the MCHH [Maternal and Child Health Hospital] for HIV/AIDS services." However, 30% of IDI participants had no idea where to find HIV/AIDS services, while 20% knew such places existed, but did not know their names (see Table 3).

Of IDI participants who named places to be tested for HIV (n=31), 42% named MCHH, while 39% mentioned Suntreso. Others were Bekwai government hospital, KATH, Atonsu government hospital, Manhyia hospital, Mampong hospital, and Children's hospital. FGD participants also named Kumasi South Hospital. Fully 20% of all IDI participants did not know where to access HIV test services, while a few (four) maintained that most hospitals in Kumasi offered testing.

The vast majority of participants agreed that it was important to know where to access services, though one adolescent said it was not important. In addition, in one adolescent FGD, no one knew where to go for HIV services but the group agreed it did not matter since they were not infected with HIV. However, they were still keen to know where to access HIV test services.

Barriers to obtaining services

When we asked participants to tell us about any challenges or difficulties they faced accessing treatment and referral services, nearly 33% of IDI participants, and most participants in five FGDs (including all four YA FGDs), described one or more challenges. The most common problem was stigmatization or ill treatment by providers, which was highlighted by participants who had experienced it and others who feared it. Stigma created barriers to seeking general health services and to seeking HIV test services specifically. One-half of IDI participants who had experienced these challenges (n=13), including two adolescents and four YAs, as well as participants in four FGDs, cited stigma, without naming specific facilities where stigma was a problem. Typical comments, and the challenge stigma posed to service access, were:

I only have stigmatization as a problem because the ways the nurses look at me, it makes me feel uncomfortable. Again when I visit hospital with a health problem, the nurses don't tell me exactly what is wrong with me. They only give me an injection and medication and it just disappears, but the next day it would come again. –FGD participant, aged 29 years.

Because I do not want these service providers to annoy me with their unnecessary comments I don't attend clinic at all. –FGD participant, aged 17 years.

It is not easy at all. The way and manner a certain nurse talked to us, it was embarrassing so we felt uncomfortable. Because of that we left the hospital and went to a drug store for drugs. –FGD participant, aged 29 years. (In response to the question: Is it easy to get the services people need?)

Additional barriers (each mentioned by one or two participants) were: the poor quality of services; mistrust of test results; insufficient funds/no health insurance; inadequate time (with providers) at clinic visits; and shame in seeking services. One 18 year-old IDI participant explained his challenge: "It is quite difficult, because gayism is illegal. It is difficult, explaining what is wrong with you." Additional relevant statements included:

It is not easy to get these services because it is difficult to tell the doctor directly what may be wrong with you. So it is advisable to have some contacts at the hospital before you seek any service. –IDI participant, aged 25 years.

Sometimes you don't get your privacy. The nurses would be around whilst you are accessing treatment. –IDI participant, aged 28 years.

My only problem is that some of the prescribed drugs are very expensive and it becomes more challenging if you don't have the National Health Insurance Scheme card. –IDI participant, aged 28 years.

As suggested above, a major barrier to accessing HIV test services specifically was lack of knowledge about locations offering these services. Five IDI participants (all adolescents except for one) and participants in two FGDs did not know where they could be tested for HIV. Stigma was also a barrier, as highlighted by a 28 year-old IDI participant: "The nurses sometimes look at you as if you have acquired HIV and you are there to access VCT [voluntary counseling and testing]. This can lead to stigmatization." Further barriers (each noted by one-three participants) were: fear of a positive HIV test result; mistrust of test results; lack of privacy and fear of breach of confidentiality; shame in seeking HIV test services; and long queues to be seen by a provider.

There were differences between adolescents and YAs regarding service barriers. YAs were more likely to mention mistrust of test results, poor service delivery, and lack of funds or health insurance. In addition, only YAs expressed concerns about breaches of confidentiality, related to both general health services and HIV testing. One adolescent and two YAs felt too ashamed or nervous to seek these services. As a 19 year-old IDI participant admitted: "I am shy of my status as gay and feel shy accessing health services." Two adolescents feared that seeking health care would reveal their identities as MSM. When asked if it was easy to access needed services, a 16 year-old IDI participant replied: "If you don't expose yourself, then yes. Because if people realize who you are, you may be stigmatized."

Facilitators of service access

Participants identified several factors that facilitated access to HIV/AIDS and other health services for MSM. Just over one-half (52%) of IDI participants (42% of adolescents and 60% of YAs) and most participants in two adolescent FGDs mentioned one or more facilitators, with all but one mentioning the presence of helpful health facility staff. In particular, they noted that Suntreso and MCHH had friendly and empathetic providers. In the words of participants:

Formerly, the nurses were not friendly to us at all, but now Suntreso Hospital is a friendly STI clinic for us. –FGD participant (adolescent, age unspecified).

I used to have some misconception that the nurses at the VCT center may stigmatize me or discriminate [against me], but I have not come across such a situation before. In fact, they are MSM friendly. –IDI participant, aged 25 years.

Because we have built a strong relationship with the nurses, so they offer us the needed services we want whenever we go there. –IDI participant, aged 28 years, referring to MCHH.

Additional facilitators included: facility policies which either let certain physicians attend specifically to MSM or identified specific days of the week when providers attended to MSM (mentioned with respect to Suntreso, by seven IDI participants and participants in two FGDs); receiving referrals from support organizations and peer educators (mentioned by four IDI participants and participants in one FGD); the presence of specific, MSM-friendly contacts at these facilities (mentioned in one IDI and one FGD); and network referral systems that involve communication with nurses by phone who then set up referrals for MSM (mentioned by two YAs in IDIs). Regarding the latter, one YA described calling nurses who would arrange an appointment with colleagues at MICDAK. Positive statements about service provision were:

... But at Suntreso [hospital,] when you are known there, you are seen to quickly. -FGD participant aged 17 years.

Asanti Bekwai is good and takes care of us. -FGD participant (adolescent, age unspecified).

Problems may be fromthe MSM, if they do not keep their issues confidential. The nurses are good and confidential. —IDI participant, aged 19 years, in response to the question: Have you had any difficulties seeking referral services?

MICDAK was most frequently mentioned as the NGO that referred MSM to facilities for services (named by three participants). Some also noted that WAPCAS had peer educators who were helpful in making referrals. Regarding peer educators, an adolescent FGD participant remarked that because his friends who interacted with peer educators in Tarkoradi seemed better informed than he was, he believed that peer educators there were better than those in Kumasi. Others did not corroborate this point, however.

Needed services

In discussions of needed services, four major themes emerged. The first, STI services (including education, screening, and treatment), was expressed by almost one-half of IDI participants (48%) and strongly recommended in one of the adolescent FGDs. The second, voiced by 20% of IDI participants was for HIV/AIDS services, encompassing counseling, HIV testing, and treatment. Of these (n=9), five mentioned both STI and HIV/AIDS services.

A third theme was the desire for a clinic that would provide all the services required by MSM. In one adolescent FGD, five of seven participants agreed that MSM need such a special clinic—a comprehensive, MSM-friendly health facility. Part of the discussion unfolded as follows:

<u>Facilitator</u>: Do people know where to go to get treatment for STIs?

They should provide a special clinic for people like us. –FGD participant a.

I agree with number [a]. -FGD participant b.

iii Suntreso, Bekwai and Mampong hospitals are all SHARPER collaborative sites. Their STI clinic providers have all participated in SHARPER-provided capacity building in key population friendliness.

I agree [that] when they provide such a special place for us, it will help. -FGD participant c.

They should provide a special center. –FGD participant d.

A special center for gays will reduce a lot of the problems that we go through. -FGD participant e.

[A couple of questions later] <u>Facilitator</u>: What are some of the challenges or difficulties you and your peers face in accessing treatment and referral services?

I try as much as possible not to walk in a feminine [way] or show any mannerisms of female features. –FGD participant f.

I believe that whatever you do, you will be identified as gay. That is why I suggest a separate center for us. –FGD participant a.

The fourth expressed need was for shorter wait times at health facilities. With lengthy queues to see a provider (which are common at Kumasi health facilities), the majority of participants in an adolescent FGD (five out of seven participants) asked for shorter wait times/periods whenever they attended health facilities (as the long waits were typically a consequence of long queues).

Additional suggestions were made by some IDI and FGD participants that may be grouped into three categories: 1) expanded services, such as blood tests (for unspecified illnesses), malaria treatment, hospital-based check-ups, home visits by peer educators, promotion of regular meetings of MSM, and education on use of condoms and lubricants; 2) the provision of condoms and lubricants, including both free provision and offering these items for sale at specific STI clinics; and 3) enhancing the quality of health care services by increasing the attention and patience directed at MSM from nurses and other staff, and by improving confidentiality of services provided to MSM. A total of 14% of IDI participants (four adolescents and two YAs) and the participants of one YA FGD either had no suggestions or said that their needs were being met adequately at the health facilities they attended.

The range of views exhibited in the IDIs can be seen in the following responses to the question, "What kinds of services do you need or want?": "HIV and STIs services;" "I want STD screening and treatment;" "I'd like education on HIV such as protecting yourself by using condom, avoid sharing blades with others, etc.;" "I want the nurses to spend and have more time for us;" "I want the hospital staff to put up a clinic specifically to cater for STI services and to sell condom and lubricants as well;" "I want the Nurses to attend to us with love and patience."

Challenges faced by MSM and ways to mitigate them

We asked participants to tell us about the general challenges they faced. Their responses were similar regardless of age (adolescent vs. YA) and activity (IDI vs. FGD). By far the most common challenges described were stigma and discrimination. Most (57%) IDI participants and the majority of participants in five FGDs (along with some participants in the others) said these were challenges they faced in daily life. Stigma specifically was noted by nearly all participants (86%) who noted a specific challenge (n=29). Participants explained that 'masculine gays' were harder to identify than 'feminine gays,' and therefore much of the ridicule, insults, and violence targeted toward MSM was directed toward 'feminine gays.' As several participants explained:

We should not worry because we do this in secrecy. I, being a masculine gay, have no problem. The feminine gay most of the time suffer teasing and verbal assault but I defend them whenever it happens in my presence. –FGD participant (YA, age unspecified).

When I completed JHS [junior high school], I wanted to sell phone credit for someone. He told me I behaved like a girl so I am a gay and so [he] did not give me the job. It is one of my greatest challenges to the extent that it put some fear in me. –FGD participant, aged 17 years.

We experience violence from our partners and the public....People plan to beat us. They get annoyed by the way we make ourselves [look] like women and plan to beat us. –FGD participant, aged 15 years.

A number of participants described being rejected by their families once their MSM activities became known. Seven IDI participants (16%), of whom six were YAs, and most participants in an adolescent FGD had had this experience. Some said that they and their peers were afraid to reveal their sexual identities to their families. Those whose identities had been exposed were sometimes under pressure to stop having sex with men. However, a few families accepted family members who were MSM.

Other participants noted job difficulties, explaining that it was difficult to stay employed if one's status as an MSM became known. One FGD participant told of knowing colleagues who had graduated from universities and were well qualified for positions, but had trouble finding work on account of their sexual identity.

Ways to support MSM

Most participants offered their thoughts on ways to support MSM. The most popular suggestion was for government action to legalize male-to-male sex, made by 36% of IDI participants and most participants in six FGDs. Closely related, several participants proposed greater government protection of the rights of MSM. The second most common suggestion, made by 20% of IDI participants and most participants in three FGDs, was for more public education about MSM, with a goal of improving acceptance of and reducing stigma directed at MSM. A similar number asked for support via advocates who would plead their case with the government and the public, and who would listen to their unique challenges. These appeals were made as follows:

God has given everybody his or her own will, and we are also in a democratic world, and so I feel that the Government should help enact laws to back [up]MSM and the general public should be supportive. —IDI participant, aged 17 years.

[The] authorities should enact law to protect people like us. We are sometimes physically assaulted, and our phones [cancelled], so if a law is enacted it will go a long way toward protecting us. –FGD participant, aged 16 years.

The general public has to be supportive and there should be a law to allow men to marry men. Educate the public to accept us. –IDI participant, aged 27 years.

There should be punishment for those disturbing us. [Also], if the MICDAK people can organize Peer Educators, [they] should organize public education for the whole public to understand and accept MSM. –FGD participant, aged 16 years.

Other suggestions, each made by five or more participants, included providing jobs for MSM (several also mentioned having employers treat all employees equally) and provision of free condoms and lubricants. Other participants also suggested that more HIV/AIDS education be given to MSM and, related to issues of service access discussed above, organizing MSM-specific health facilities and MSM-specific health staff.

One recommendation was directed to the MSM community itself. Roughly 25% of participants appealed to MSM in Ghana to maintain a low profile in their neighborhoods and in work and entertainment locales because male-to-male sex was illegal and exposing identities would only lead to more problems.

Finally, participants noted the support they currently received from organizations by way of peer educators who educate MSM on a wide variety of important topics, including condom use, use of lubricants, and HIV/AIDS counseling. Supporting the views of participants regarding facilitators of service access (discussed above), they named agencies such as MICDAK, WAPCAS, and an agency from Cote d'Ivoire named COHI.

V. Discussion

These findings illuminate a number of important beliefs and behaviors among young MSM in Kumasi that bear on the vulnerability of this population to HIV infection and their need for interventions and services. First, general knowledge about HIV/AIDS was high, with most participants demonstrating that they understood the basics of HIV transmission and prevention, and the importance of condom use to prevent infection in particular. However, substantial gaps in their knowledge clearly emerged, especially among the adolescents. Some participants (roughly 16%) thought that kissing alone could transmit HIV; others believed HIV was merely a STD. The most blatant gap in understanding, however, related to treatment for HIV using ARV medications, with only 25% of participants having a solid grasp that treatment exists and how to access it. These findings suggest that, while substantial progress has been made in educating MSM about HIV/AIDS since 2008, when AED found poor knowledge regarding HIV/AIDS among MSM, yet substantial numbers of

Key vulnerabilities of young MSM

- Important knowledge gaps in HIV prevention & treatment using ARVs
- Extensive use of alcohol, with main view that commitment to condom use and having one when needed is critical, though some saw greater risk of unprotected sex from alcohol
- Widespread transactional sex in young MSM, with concern that this increases risk of unprotected sex, mainly due to clients' pressure for condom-less sex
- Substantial overlap in alcohol & drug use and engagement in transactional sex, and greater alcohol use in those engaging in transactional sex
- Low rate of consistent condom use (just over 50%); rationales included belief that condoms are not needed with trusted or long-term partners
- Lower consistent condom use in young MSM who use drugs and other intoxicating substances, and in those who engaged in transactional sex
- Perception of high risk of HIV in themselves and MSM peers, mainly stemming from having unprotected sex

Key challenges faced by young MSM

- Major barriers to health & HIV/AIDS- related services, largely due to stigma and ill treatment by staff, though some clinics perceived as 'MSM-friendly'
- Lack of knowledge about where to access HIV/AIDS related services
- Barriers to condom use, including negotiating with partners, unreliable access, and trouble putting them on

young MSM still lack access to basic information about HIV. This is especially true regarding the specifics of HIV treatment.

Second, we found that alcohol use was widespread among young MSM, while consumption of drugs and other intoxicating substances was limited to 15-20% of participants, and was mainly accounted for by use of marijuana. Here, it is important to remember that use of alcohol and drugs among this study's participants would be expected to be high given that criteria to participate for roughly one-half of participants was related to alcohol or substance use. However, alcohol and drug use was high even among those who met study criteria based on previous engagement in transactional sex rather than use of substances. This finding is similar to those of other studies, including the recent GMS, though alcohol use among young MSM in our study appears more common than the roughly 50% of MSM who reported alcohol use in the prior 12 months in the GMS. Both studies indicate that alcohol consumption is common among MSM before sex. Our study illuminates the role of alcohol and drug use in reducing inhibitions during sex (including group sex). It also sheds light on the views among MSM concerning alcohol and substance use on the one hand and condom use on the other. While some participants saw enhanced likelihood of not using a condom during sex, most participants believed that what matters most is the commitment to their use and availability of condoms, rather than blurred judgment resulting from alcohol or drug use. This underscores the importance of ensuring that MSM have condoms when needed.

Third, similar to previous research (Drah et al., 2009), we found that transactional sex was extremely common among young MSM. Most participants engaged in transaction sex and felt comfortable doing so, seeing the exchange of money, gifts, and favors for sex as natural and generally positive, with the caveat that condoms were used. A substantial proportion (one-third) expressed concern that transactional sex increased the risk of unprotected sex and therefore HIV transmission, mainly due to pressure or enticements from clients to have sex without a condom. Although few participants admitted that they would compromise on condom use by offers of more money, many more said that they had friends who would do so. Moreover, the majority of participants who engaged in transactional sex acknowledged that their sex partners included men who had other sex partners, and that condom use in these encounters was unknown.

Fourth, again partly due to the design of the study, we found substantial overlap—encompassing two-thirds of all participants—between alcohol and drug use on the one hand and engagement in transactional sex on the other. Interestingly, we found that participants who engaged in transactional sex tended to consume greater amounts of alcohol than those who did not, suggesting a possible higher risk of inconsistent condom use among young MSM who engage in transactional sex. In the group with overlapping behaviors, we found that about 25% believed that alcohol or drug consumption by MSM would reduce their condom use, highlighting the enhanced risk of vulnerability to HIV infection among this group.

Fifth, nearly one-half of participants (45%) revealed that they used condoms inconsistently or not at all. Although our sample size was much smaller, and the questions asked of participants were not analogous, these findings support the less than 100% condom use observed in previous research, and particularly the GMS. One of the main rationales given for this inconsistent use of condoms, in addition to the way condoms reduced sexual pleasure, was that a condom was unneeded during sex with a trusted, long-term partner (including male and female partners, as well as transactional sex partners), suggesting less than perfect understanding of HIV risk.

We also found two behavioral trends that bear on the vulnerability of young MSM to HIV infection. One was the link between use of drugs and inconsistent condom use. Notwithstanding the relatively low use of illicit substances and thus the low numbers involved in this study, that only one-third of admitted drug users said they used condoms consistently is striking. This finding stands out all the more because we did not find any similar association between alcohol and

condom use. The second trend was lower consistent use of condoms in participants who engaged in transactional sex (51%) compared to those who did not (86%).

Participants revealed several other important challenges to consistent condom use, including the difficulty of negotiating with partners regarding condom use, lacking reliable access to condoms, and having trouble putting on condoms. Unlike the way that condoms may be perceived as reducing sexual pleasure, these all represent practical challenges for which training or education may be helpful.

In contrast, we found that use of lubricants was high and fairly consistent, though some participants indicated that they could not reliably access lubricants due to lack of money or feeling embarrassed when trying to buy them. This relates closely to the challenges MSM participants described when accessing services more generally—lack of funds and feeling embarrassed or ashamed, a problem discussed further below.

Six, we found that the vast majority of young MSM in the study (approximately 80%) perceived themselves at risk of HIV infection. This is not surprising given the challenges participants raised regarding condom use. Indeed, among most participants, their perceived risk directly stemmed from recognition that engaging in unprotected sex increased the likelihood of HIV infection. Although participants did not typically make the connection with their views that condoms were unnecessary (or at least unwanted) with trusted or regular partners, these beliefs may well be linked. At the same time, and related to poor knowledge of HIV transmission among some participants discussed above, about 10% of participants viewed their risk, incorrectly, as resulting from kissing, general MSM status, and even witchcraft.

Seventh, we found a number of major barriers to general health and HIV/AIDS-related services among young MSM. The most serious barrier raised related to stigmatization of MSM in various forms—actual stigma resulting in ill treatment or poor care, fear of stigma that drove them away, and being treated in a way that made them feel self-conscious ("the way the nurses look at me," they "annoy me with their questions," and "the way and manner a certain nurse talked to us"). At the same time, many participants (about 50%) also made very positive remarks regarding health providers and other staff at certain facilities, pointing out that, where once providers had been insensitive to the health issues of MSM, at present they were helpful and even kind. This is no doubt due to part to the work of various projects, including SHARPER (via MICDAK), that focus specifically on improving access to services for MSM and treatment of MSM clients at facilities, most notably Suntreso Hospital. Clearly, progress has been made, but major challenges remain.

A second major challenge, specific to HIV/AIDS-related services, including HIV testing, was lack of knowledge about where one could go to obtain these services. Nearly one-third did not know where to access HIV/AIDS services generally, while 20% lacked knowledge concerning HIV testing. Again, the work done by SHARPER has improved knowledge of where to obtain services and hence facilitated service access, since many participants named MICDAK specifically. Still, further education among MSM about the types of services available, and where to obtain them is needed.

Participants also noted a number of logistical barriers such as long wait times to see a provider. While frustration with such problems is understandable, it is important to keep in mind that everyone experiences long queues at public health facilities, so this is not an issue just for MSM, but for all individuals seeking services at these facilities.

Finally, when discussing the challenges they faced accessing health care services and the types of services they needed, participants emphasized STI services and HIV/AIDS-related services. For both, they highlighted the usefulness of comprehensive services located in one place encompassing education, testing, counseling, and treatment. We note, however, that it was not always clear whether 'needed services' related to existing services that participants needed and were able to access, or to services to which they were currently lacking access. The third strongly expressed need was

for a health clinic that could provide all the health services, including HIV information, testing, and counseling, required by MSM. The image they put forth was for a comprehensive, MSM-friendly and knowledgeable health facility. Since SHARPER currently operates a drop-in center in Kumasi that provides a broad range of services including STI screening, HIV testing and counseling, condoms, lubricants, etc., it is possible that many MSM lack information about this center, just as they do about other services available in Kumasi.

VI. Recommendations

The GAC has made reaching key populations, including MSM, with critical HIV prevention information and materials a priority as it seeks to reduce HIV transmission among key populations in Ghana. A number of projects and interventions underway in Ghana have made a difference in providing these populations with information about HIV/AIDS and where to access services, materials to help them prevent the spread of infection such as condoms and lubricants, and improved treatment once they do seek health and HIV/AIDS-related services. SHARPER is a clear example of such a project. In this section, we build on the study's findings, as well as the experience of FHI 360 (which operates SHARPER), in making recommendations to further reduce vulnerability to HIV among young MSM in Ghana by improving their knowledge of HIV/AIDS prevention and treatment, encouraging them to engage in safe sex behaviors, and enhancing their access to essential HIV prevention services.

Our recommendations include the following:

- 1. Enhance access to HIV testing and counseling. FHI 360 is piloting a social network testing (SNT) approach whereby MSM 'seeds,' or known MSM opinion leaders, will be selected to refer MSM in their peer network to HIV testing and counseling services. The aim is to reach MSM networks that currently are not tapped into by peer educators. This approach has had promising results in other countries and will be tested in Ghana for its utility. In addition, SHARPER has identified informal brothel structures and pimp networks within the young MSM community and will work through them to gain access to and approach young MSM. Finally, FHI 360 plans to do hotspot mapping in Accra, Western, and Ashanti regions to identify venues where MSM convene. This will enable the project to better target its efforts and reach additional MSM with HIV information and HIV testing and counseling services. If any or all of these measures prove effective, we recommend rapid scale up to reach broader communities of MSM in Ghana.
- 2. Continue to sensitize health care workers to the needs of MSM. FHI 360 has conducted a number of targeted trainings of health care workers in providing MSM-friendly services. SHARPER should consider extending the training of health care workers once it completes hot spot mapping. Such training should ideally facilitate access to services through the types of networking described by MSM in this report, including communication between MSM and health care providers in advance of clinic visits.
- 3. Engage MSM in the design and implementation of materials and services that would be appealing to them. Given that many in this population have strong views of the types of services they need, it may improve their access to essential services if they play a role in developing outreach materials and finding ways to provide health services in a more MSM-friendly way. We thus recommend that projects such as SHARPER invite MSM to collaborate more closely with project staff in the expansion of these efforts.
- 4. **Improve knowledge on the impact of drug and alcohol use on the risk of HIV acquisition**. We recommend the integration of alcohol and drug use counseling into peer education and drop-in center services. FHI 360 has

developed a drug and alcohol use training module for peer educators that will be piloted and then adapted and utilized across the project. A primary objective of the module is to increase self-perception of risk related to drug and alcohol use and unprotected sex.

- 5. **Reinforce condom use with transactional and intimate partners in all education and outreach efforts.** Further deepen counseling via peers and drop-in center information distribution with case studies and examples that focus on handling condom use challenges when money is offered by clients for 'raw' sex. A similar process needs to be created to help MSM develop the skills to increase condom use with intimate partners.
- 6. Develop programs that reach young MSM through popular online social media (e.g 'Facebook') to share targeted HIV prevention information, and build confidence to visit convenient MSM-friendly sites for more information and services. Currently, this type of program is being implemented by FHI 360 with potential for further scale-up and special targeting to young MSM.
- 7. Retool existing programs for key populations in Ghana to address a key finding in this study: the overlap of high risk behaviors such as transactional sex, alcohol consumption, and use of illicit substances among MSM. This will involve modifying some of the informational messages currently disseminated among MSM to emphasize the risks associated with transactional sex and alcohol and substance use, as well as focusing on ways to handle the stigma that often impede accessing essential HIV testing, prevention, and treatment services.
- 8. Explore and reach networks of men engaged in commercial sex work and enlist the support of the pimps and managers of the establishments where sex work takes place. This would involve outreach into the networks of some of the most vulnerable young MSM in an effort to reach them with HIV-related information and services. In addition, the possibility of providing mobile services for HIV testing and counseling and STI screening on site could be explored. The opportunity to provide such critical services directly and conveniently to young MSM has the potential to greatly expand understanding of HIV/AIDS and reduce vulnerability to HIV in this population.
- 9. **Ensure that MSM, along with other key populations, have health insurance.** The mission of Ghana's National Health Insurance Authority, established in 2003, is to "provide financial risk protection against the cost of quality basic health care for all residents of Ghana". Individuals working in the informal sector, like most of our participants, must pay premiums to buy into the insurance system. To remove financial barriers to essential health and HIV-related services among young MSM, we recommend intensive efforts to educate them about available health insurance options, accompanied by actions to assist those who cannot afford to join on their own to purchase insurance.

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Appendices

Glossary of Common and terms, and greetings for MSM in Kumasi, Ghana

Common terms, as described or used by participants in IDIs and FGDs

Bisexual: There was no consensus on the meaning of this term. While some participants said that 'bisexual' refers to a man who has sex with both males and females, others defined it as a man who has sex with other men, but who assumes either the role of a 'female' or a 'male' in the relationship.

Masculine gay: This term is used to describe a man who has sex with other men, and who displays no obvious external feminine features suggestive of homosexuality. He will often assume the 'top' position during sex with other men, which means that he will be the one wearing a condom. He does not 'scheme' (defined under 'feminine gays' below).

Feminine gay: This is a man who has sex with other men, and who displays feminine features and generally pretends to be a female in homosexual relationships. He will often assume the 'bottom' position during sex with other men. If condoms are used during sex, it would be worn by his partner. Feminine gays often display feminine features in order to attract 'masculine gays', an act called 'scheming'. These features are obvious to potential partners in their facial expressions, mannerisms, body language, and speech.

Married man: This is a man who is married to a woman, and who also has sex with other men. The participants in one adolescent FGD talked about these men, and the fact that some of them 'dated' other men while being married to a woman. One of the participants was himself a 'married man' and knew of two others like himself. In two other FGDs, participants noted that although there were some MSM who were married, most were actually single.

Commercial sex worker: This refers to a man who has sex with other men in exchange for money. Commercial sex workers include both masculine and feminine gays. They frequently visit strategic locations in search of clients.

Male pimp: This is a man who arranges meetings for men to have sex with other men. He essentially brokers transactional sex between men and other men for a fee.

Drag queen: This refers to a MSM who sometimes dresses like women for show at parties, carnivals, and other events.

Special terms and greetings

Saso (also 'Seso', 'Sasoni', and 'Suaso'): The literal translation in the context of MSM is "He is like us" or "He is one of us". When used in conversation, it typically refers to someone who has sex with individuals of the same sex. Most participants associated it with MSM, as opposed to females. It can also refer to the physical act of having sex.

Zay or Vee: Both refer to a MSM peer and can be used interchangeably with 'Saso'.

Kwadwo basia: Literally, this translates as 'man-woman.' However, it is used in conversation to describe feminine gays, as the effeminate gay individual is viewed as a man who is like a woman, hence 'man-woman'. 'Kwadwo' alone translates as 'King.'

Queen and **King:** These connote feminine gays and masculine gays, respectively. During sex, the 'Queen' takes the bottom role while the 'King' assumes the top role. The terms can also refer to the specific sex position assumed by someone. Since this may change with different sex partners, these terms do not always connote a consistent identity.

'Ante' and 'Papa': These also refer to 'Queen' and 'King' with the same potential to refer to an individual or a specific sex position.

'Obaasema' or 'obaasima': These mean a 'Queen,' or literally: 'an ideal woman'.

'Papalewa': This term refers to a masculine gay or 'macho man.'

'Ashawo': Also known as 'two-two,' 'shashasha,' or 'gay-for-pay,' this is an individual, generally a MSM, who exchanges sex for money, assuming a specific role during sex, depending on the orientation and preferences of the client. For example, an 'ashawo' may act as a 'King' or 'Queen.'

'Sugar daddy': This is a married man who also has sex with other men. 'Sugar daddies' may also be referred to as "old cargo."

'Wo maame': This means a male pimps. It literally means 'your mother.' Another name for 'wo maame' is 'watchmen.'

'Daedamude': This translates into 'your gay friend.'

'Edwa' or 'Eye Dwaa': This literally means: 'There is a market here.' As used by participants, it signals that there is a market for sex nearby, or that someone is willing to have sex. Thus, one MSM might call out "Eye dwaa" and if interested in learning about opportunities to have sex with another man (possibly for money), other MSM will approach that person to discuss it.

'50-50': This refers to bisexuals, men who have sex with males and with females, and to MSM who can play either the 'Queen' or 'King' role in a sexual encounter. The idea is that half the time, they are with female partners or play the 'Queen' role, and the other half of the time they have sex with males or are 'Kings.' This term applied to some participants, as they had girlfriends with whom they had regular sex, while also engaging in transactional sex with other males for financial benefit. These participants considered sex with other men to be 'jobs.' MSM tagged as '50-50' individuals can include both married men and unmarried bisexuals.

'Trumutrumu': This refers to anal sex.

"Poatwe oo": This is a greeting used by MSM. Response: "Yahwe oo."

"Poachoo": This is also a greeting used by MSM. Response: "Yahwe oo."

"Are you a South African?" This is another greeting used by MSM. Response: "I'm a Gaynian-gay (sic)."

"Boyawa": This means: "Money" or "Where there is money, don't go away." This implies that there may be opportunities for transactional sex, so one should not leave.

Table 1. Statements from participants on background experiences and self-identification.

Topic	Illustrative quotes: IDI and FGD participants
First sexual experience: with a female	No, I did not force her. She was my girlfriend and we had sex the first time when nobody was at home. –IDI participant, aged 22 years, about his experience at the age of 19 years.
	I was not forced. It all happened when both of us did not attend school that day. I was in my mum's room when she came there to watch movie. Whilst we watched the movie she told me she felt like doing something with me. In fact, she was interested in me. It was through conversation that we eventually engaged in sex act. —IDI participant, aged 25 years, about his experience at the age of 15 years.
First sexual experience: with a male and consensual	He acted as a woman by showing me a porn video which aroused me. I initially disapproved of it but he kept on pushing and eventually enticed me with money. I later agreed and it was because money was involved. —IDI participant, aged 17 years, describing his experience with a friend at the age of 14 years.
	He was a friend at school. I was 16 years old He did not force me. I needed money from himHe gave me 50 Ghana cedis. No [he was not drinking], but I smoked wee [marijuana] He was older than me. –IDI participant, aged 20 years.
First sexual experience: with a male and forced	Well he did not tell me about it. He took me to his house and gave me a drink. I didn't see anything but I woke up and realized he had had sex with me and he warned me not to tell anyone. —IDI participant, aged 17 years, who could not remember how old he was at the time, but was in Class 6 of primary school and had gone to the home of his teacher. The teacher had not used a condom.
	I don't really know the reason why, at that age. As far as I remember, I was known to be a good looking boy so he had turned me into his sender — to buy him anything he asked me to buy for him. It was a Monday, and he had sent me to buy food for him. After that, he asked me to sit down and handed me a cup of vimto drink. Unknown to me, he had mixed it with akpeteshie (a hard liquor). I didn't like the taste so I couldn't finish the entire cup. I left the cup on his table and told him I was going out to play, not knowing he had locked the door, and that was how he forced me. As young as I was, I couldn't fight back or resist him and I didn't tell anybody. —IDI participant, aged 16 years, describing his experience with a neighbor at the age of 10 years. The neighbor did not use a condom.
First sexual experience with a male, following	He drugged me. I saw it, but I was not able to control myself. –IDI participant, aged 18 years.
	When I was in SHS [senior high school], I was frequently reporting to school

initial sex with a	late and there was this particular senior who kept on punishing me until
female	one day I was saved by another senior The one who saved me became my friend and took [me] to his house where he showed [me a] pornographic movie and he started touching me. When I asked, "Why?" he said he liked me and wanted to have sex with me. I refused, but he threatened to order all the Form 3 students to punish me and that is how I gave in, because I was afraidHe did not give me anything because I was very angry and so left immediately for home. He apologized after two weeks and also bought some provisions for me. I accepted the provisions but was still upset with him. —IDI participant, aged 17 years.
	One day after I had alighted from a car, this gentleman was going the same direction though we did not know each other. He approached me and said he liked me. So I ask him, "How?" And he replied by saying he was interested in me. He promised me a lot of things, especially money. It was also a time that I needed money, so I had to agree when he [propositioned] me.—IDI participant, aged 17 years.
	It was a gentleman who used to shop at my mum's shop. I realized he liked me and he took my number, called me several times. When we became acquainted he broke the idea of gay to me [and]he promised to help me financially. That is how it happened.—IDI participant, aged 20 years.
	When I was young I preferred moving with older ones because the older ones teach the young ones about the business, but now the young ones do not want to be directed so it is young [with] young and older [with] older. – FGD participant (YA, age unspecified).
Companions	Between young and old they are able to keep secret so they prefer hanging out with older men. –FGD participant (YA, age unspecified).
	The young ones prefer the older ones because the older ones teach them and take them out. –FGD participant (YA, age unspecified).
	I am afraid of the older ones, so I move with my age group onlyFGD participant, aged 16 years.
Experience with group sex	I enjoy group sex because I have initiated a lot of young guys into becoming gay so occasionally we come together to have it. –FGD participant, aged 16 years.
	(No) I haven't done it before, but I have heard some of my friends [have done it] They were eleven in number. –FGD participant, aged 23 years.
	I have group sex with my French guys. I was linked to them by a friend and we meet at Vienna in Accra. We are four in a group. We do not drink but smoke marijuana at times before having sex. –FGD participant (YA, age unspecified).
	Group sex occurs once in a while. Sometimes two groups of 6 may meet and will be moving from one person to the other. I have experience(d) it

	before and I enjoyed it. –FGD participant, aged 16 years.
Experience with group sex (continued)	a friend who came from Accra [brought] his white friend [and] it was [him, the white man] who requested to have a group sex with us. We went to Mamponteng, to my friend's mother's house. After the group sex it dawned on me that [he, the white man] can transmit some diseases to us and since then I have never done it again. —IDI participant, aged 25 years.
	For me I do not like group sex. Even having sex with one person is not an easy thing how much more [difficult] would it be with] two or three people? –FGD participant, aged 16 years.
Experience with and views of violence related to male-to-male sex	Yes, I met one client who is older than me and after agreeing and having sex, he refused to pay because he wanted to go raw and I made him use condom[he] beat me in addition. —FGD participant, aged 15 years.
	Yes I do inflict violence with (on) my partners it does not happen often, it only happens when my partners refuse to do a particular style I have asked them to do drugs play a major role because whenever I smoke wee it makes me do unpleasant things such as beating up my partners. —FGD participant, aged 26 years.
	It is only once. It happens when my partner saw me with another partner and then received a call from him. It was in the night at a club this year in May. —IDI participant, aged 17 years, when asked if he had experienced or inflicted violence on a sex partner.
	People make fun of us at times and we retaliate with insults which sometimes result in fights. Sometimes people [pretend] to be MSM just to get us into a fight. When they [do this], we think that they are our customers, but their gang will then attack us with insults and hooting.—IDI participant, aged 17 years.
	We don't experience violence because we are normally with our age mates and there is always some mutual understanding so no violence is encountered.[It is] because of love we do not fight. The queens will not want to hurt themselves because they feel that they will be laughed at. – FGD participant, aged 16 years.
Self-identification	Ever since I started that, I described myself as gay. –IDI participant, aged 17 years.
	I will say that I am a bisexual because I have sex with men and womenIDI participant, aged 23 years.
	Sometimes I act (as) a male pimp for some colleagues. —IDI participant, aged 25 years.

Table 2. Illustrative statements on key topics by MSM participants **Key challenges Engagement in transactional sex** Substance use Attitudes towards transactional sex Details about and views of alcohol use Challenges accessing services "We feel good with it [transactional sex] just like normal "Mostly I drink on weekends because that is the time I "Some of the staff in these facilities girlfriends"- MSM aged 17 years, SHS student (FGD) normally have sex" - MSM aged 17 years, SHS student know clients who are gay and so they (FGD) stigmatize and criticize us when we "We feel happy and we spend without thinking about go there to seek for health care" the cost"- MSM aged 15 years, SHS student (FGD) "It (alcohol drinking) is part of the socializing when MSM aged 17 years, SHS student we meet at pubs or anywhere" - All MSM FGD (FGD) "Some people think that if they do not give money you participants in an adolescent FGD will not agree [to have sex with them]"- MSM aged 23 "No, I have no difficulties referring "I drink about three bottles of beer and alomo gin people and my friends [also] say so. years, SHS student (FGD) when I am out with friends; this is [usually happens] [This is] because [VCT services] are three to four nights in a week. Sometimes before sex, free in Ghana and anybody at all can "Sex is a tradable commodity so it should not be strange"- MSM aged 21 years, SHS student (FGD) I drink (alcohol) and it makes sex nice; but I don't access [them].- MSM adolescent FGD forget my condoms"- MSM aged 17 years, SHS participant (age and educational "We are all buying sex or paying for it one way or student status, unknown) another"- MSM aged 22 years, SHS student (FGD) "I drink three bottles of Guinness when I am out with "I cannot tell[I do not know] anything friends, [from] Monday to Saturday evening; I do not "Peers demand it so why not?" - MSM aged 27 years, about health and HIV/AIDS service" drink before sex because I want to have a clear head. SHS student (FGD) MSM aged 17 years; Completed JHS, All friends contribute to buying the beer. We all drink a decorator "People have money to pay for it, so if one needs [that is why] I am afraid it will make me compromise money... [then he might as well ask for payment]"on condom use"- MSM aged 17 years; SHS student "I do not know [anything] about VCT" MSM aged 25 years, SHS student (FGD) (FGD) - MSM aged 16 years, SHS student; unemployed "I have no quilt about this [transactional sex]" - MSM "Alcohol boosts your sex drive and makes sex aged 22 years, No education (FGD) enjoyable" - MSM aged 17 years, SHS student (FGD) "I do not know where I can go for HIV/AIDS education." - MSM aged 17

"It [alcohol] gives [one] more appetite for sex" - MSM

aged 17 years, SHS student (FGD)

"Sometimes in your quiet moments you wonder whether

you should go on like this"- MSM aged 25 years,

Completed secondary school (FGD)

years, SHS student; unemployed

"... Most of my peers are unemployed so it is a good source of income"- MSM aged 20 years, Completed secondary school (FGD)

"I like sex and as a man, I know that I have to pay them [other MSM]"- MSM YA FGD participant (age and educational status unknown)

"Whether people accept it or not that [being a MSM] is my right and I am okay [with it]"- MSM YA FGD participant, (age and educational status unknown)

"I love gayism [being gay] and [I] feel good with [about] it"- MSM YA FGD participant (age unknown)

"I feel good and satisfy(ied) because I have money and phone"- MSM aged 16 years, SHS student, unemployed

"Well, no shame really... It could increase your risk of HIV"- MSM aged 17 years, SHS student, unemployed

"No. I feel happy when I receive these things." - MSM aged 17 years, SHS dropout, shop assistant

"I feel bad, because it is a situation I wish, I could have avoided"- MSM aged 17 years, SHS student, unemployed

"I feel it's okay when I have sex for money to satisfy my financial needs"- MSM aged 17 years, SHS student, unemployed "It [alcohol] serves as an aphrodisiac" - MSM aged 17 years, SHS student (FGD)

"Alcohol makes me feel okay for sex" - MSM aged 17 years, SHS student (FGD)

"...yes [alcohol makes sex with another man] easier because it releases my mind from any other thing and I am able to do it well" - MSM aged 16 years, SHS student (FGD)

"I am able to do more styles when I take it [alcohol] in" - MSM aged 16 years, SHS student (FGD)

"Sex is always nice [with another man] when you are high with alcohol" - MSM aged 15 years, SHS student (FGD)

"if you are the man it [alcohol] gives you the strength to power on"... "But at the receiving end as the woman, it is sometimes tiring"- MSM both aged 17 years; and both SHS students (FGD)

"Sex after alcohol consumption is very common among gay persons..." - MSM YA FGD participant (age and educational status, unknown)

"Sex and alcohol are brothers; they sex themselves indiscriminately when they get drunk" - MSM YA FGD participant (age and educational status, unknown)

"It [alcohol] is not enjoyable actually, but it boosts your strength to have sex."- MSM aged 29 years (Secondary school education) (FGD)

"When we go to this organization for services they misbehave towards us" -MSM aged 16 years, SHS student (FGD)

"Unfriendly service providers" - MSM aged 17 years, SHS student; unemployed

"One of the major difficulties is stigmatization" - MSM aged 17 years, SHS student (FGD)

"It takes too long before you are seen" - MSM aged 16 years, SHS student (FGD)

"My challenge or difficulty is that are lots of people in the hospitals and this results in time wasting on my part" -MSM aged 16 year,; SHS student, unemployed

"I usually face these challenges: Discrimination, Mistrust, poor staff attitude and client relation(s) and [as well as] long waiting time." - MSM aged 17 years, SHS student, unemployed

"No, I do not know where to access

"I feel ok. No bad feelings"- MSM aged 22 years, a caterer

"I do not feel bad. My peers do it. I don't often do it." -MSM aged 20 years, a peer educator

"I think we are all helping each other because during valentine days we do exchange gifts. At times too if he don't have money I give him some." - MSM aged 28 years, a trader in used clothing

"I feel normal when I give out money or receive for sex."- MSM aged 28 years, unemployed

"I feel okay because I am also rendering a service." -MSM aged 18 years, a cobbler

"After a good job I feel good."- MSM aged19 years, unemployed

"This is service for money." - MSM aged 20 years, a peer educator

Use of condoms during transactional sex

"Some [transactional sex partners] want raw [unprotected] sex"- MSM aged 16 years, SHS student (FGD)

"Sometimes I do [use condoms], but other times I [do] not"- MSM aged 16 years, SHS student (FGD)

"They [transactional sex partners] use them [condoms]

"Alcohol makes sex more enjoyable for me because it prevents early ejaculation" - MSM aged 23 years (Secondary school education) (FGD)

"Alcohol makes you enjoy sex, because you don't feel any pain during sexual intercourse." - MSM aged 22 years, No education (FGD)

"[I drink] when I want to forget about stress at work and in life."- MSM aged 16 years; SHS student, unemployed

"[I drink] to release the shame people heap on us." -MSM aged 17 years, SHS student, unemployed

"Yes I sometimes drink before sex. It makes it fun when you are a bit tipsy. I don't always drink before sex."- MSM aged 17 years, SHS student, unemployed

"No, alcohol does not have any influence on my sexual act."- MSM aged 22 years; Completed SHS, a caterer

"It [alcohol] makes me happy and it enhances my sexual feelings when I take alcohol before sex."- MSM aged 25 years, Completed JHS, a trader

"When I have drunk too much, I don't enjoy sex. I seem not to know what is happening." - MSM aged 22 years, SHS dropout, Wedding/ Funeral decorator VCT services" - MSM aged 17 years, SHS student, unemployed

"No, I haven't heard of any [such] services." - MSM aged 23 years Completed secondary school (FGD)

"We do not know [where to access] HIV services in Kumasi"- MSM YA FGD participants

"They [MSM] are willing to go but are afraid of stigmatization; [because of this] they find it difficult to go there" - MSM YA FGD participant (age, educational status, and employment status – unknown)

"The services I need may not be easy to get since the health care workers have a lot to do at the facilities."-MSM aged 28 years, Completed secondary school, unemployed

"I want the place [health facility] to be free of people so I can feel comfortable to go there. I need confidentiality to be ensured in [places] providing health services." -MSM aged 23 years, Completed secondary school, unemployed for protection, but others do not like its use."- MSM aged 17 years, SHS student, unemployed

"I always use a condom."- MSM aged 17 years, SHS student, shop assistant (wine shop)
"Because of HIV I always have condom on me"- MSM aged 17 years; SHS student; (FGD) "Yes, I use condoms with my partners."- MSM aged 17 years, SHS student, unemployed

"I know he has sex with other women. I make sure we use condom anytime we have sex"- MSM aged 17 years, SHS dropout, Shop assistant (wine shop)

"Yes [I use condoms] because I don't know some of the partners and it is safe to protect myself"- MSM aged 17 years, SHS student (FGD)

"Yes [I use condoms] but not all [the]time" - MSM aged 17 years, SHS student, unemployed

Anybody who has raw sex finds it a bit difficult to use condom for the first time. But with time they get used to it"- MSM aged 17 years, SHS student, unemployed

"Yes I always use condom(s) because I don't know whether they are infected with HIV or not"- MSM aged 17 years, SHS student, unemployed

"Yes most persons take condoms with them"- MSM aged 22 years, Completed secondary school (FGD)

"Yes we use condoms with them because some of them

Attitudes towards drug use

"I don't think many gays use drugs, and if they use it I don't think it has anything to do with being gay."-MSM aged 16 years, SHS student (FGD)

"I agree. Those who use it would have used it anyway even if they were straight."- MSM aged 17 years, SHS student (FGD)

"It [using drugs] makes it less likely to use condoms" -MSM 17 years, SHS student, unemployed

"Yes [with drugs]... we are able to have sex for a long period"- MSM 17 years, SHS student, unemployed

"Oh no, I don't take drugs. Never in my life. So [I] hate guys who take drugs. I advise them to stop"- MSM aged 25 years, Completed junior secondary school, a trader

"I feel good [about taking drugs]."- MSM aged 20 years, SHS student, employed as a peer educator

"No, I don't use those drugs. You can become dependent on them and this could be dangerous" -MSM aged 23 years, Attended senior secondary school, unemployed "I do not have any idea [about HIV/AIDs Services in Kumasi]"- MSM aged 20 years, Completed secondary school, unemployed

"I will put stigmatization first, [followed by] poor service delivery, and mistrust"- MSM aged 22 years, Completed secondary school, a caterer

"Yes it is easy to get health services if you know the health personnel."-MSM aged 25 years, Completed junior secondary school, a trader

"... because there are often many people for the health workers to take care of, they don't really have time for us."- MSM aged 23 years, Completed secondary school unemployed

Challenges living as a MSM

"I feel a lot of challenges even at home because of my feminine features."- MSM aged 17 years, SHS student (FGD)

"My own brother threatened to poison me when he realized I was

will be the first time of meeting. Even if we know them, we still have to use condom because of infection"- MSM YA FGD (age and educational status unknown)

"Because of HIV, I use condom always" - MSM YA FGD (age and educational status unknown)

"I use condom a lot. If I love someone I go with him to do the test and if we are negative, we go raw"- MSM YA FGD (age and educational status unknown)

"Some people accept big money to go raw due to financial difficulties"- MSM YA FGD (age and educational status unknown)

"Well most think it [a condom] is important to use for protection. It is not a question of trust because even partners believe other partners are having sex with other people."- MSM aged 18 years, Primary school education, employed as an apprentice making sliding doors

"I don't take chances with my life"- MSM aged 18 years, SHS student, unemployed

"As for me, I will not sleep with you if you refuse to use condoms."- MSM aged 28 years; Completed junior secondary school; unemployed

"They dislike it [condoms] because they say it is not sweet, but they have no choice but to use it because they need it for protection."- MSM aged 18 years, Completed junior Secondary school, a cobbler

"I sniff cocaine sometimes... I feel so good and on top when I take a little"- MSM aged 29 years, Completed SHS, works as a caterer

Yes, I do [take drugs] and some of my friends smoke [wee] and rock cocaine sometimes"- MSM adolescent FGD (age, educational level and employment status, unknown)

"I don't like cigarette and marijuana, but when my partner takes in those stuff, I really enjoy sex with him"- MSM aged 16 years, SHS student (FGD)

"I don't smoke but my partner does. When he smokes both weed and cigarette, sex with him is very comfortable and nice"- MSM aged 16 years, SHS student (FGD)

"When I smoke cigarette and marijuana I am able to have sex for a long time without ejaculating quickly. That is why I prefer a little bit of it before sex"- MSM aged 17 years, SHS student (FGD)

Substance use and condom use

"Sometimes some guys get drunk such that they do not want to use condom" - MSM aged 17 years, SHS student (FGD)

"Insisting on condom use means you have to be

gay."- MSM aged 16 years, SHS student (FGD)

"Some [people] intentionally provoke you and when you give them the opportunity they will disgrace you in public"- MSM aged 17 years, SHS student (FGD)

"People normally laugh at me and don't want to employ me in their business"- MSM aged 16 years, SHS student, unemployed

"Our society does not approve of homosexual relationships and homosexuals are treated like they are not humans. Critics are always like 'why have you taken a different sex life which is un-acceptable?', 'why do you sleep with people of the same gender and not of the opposite sex?', and 'why does a man made to be a man behave like a woman?'- MSM aged 18 years, SHS student shop assistant

"In my area when they know you are gay, they can beat you up. A friend of mine was ejected from where he had been staying"- MSM YA FGD (age, educational level, and employment status, unknown)

Transactional sex & perception of risk

"You may get HIV if you do not use condom"- MSM aged 17 years, SHS student (FGD)

"Well, it [transactional sex] increases ones vulnerability." - MSM aged 19 years; Completed SHS; unemployed

"In fact, without condom you may contract HIV/AIDS. So all that one needs to do is to protect yourself with a condom before sex."- MSM adolescent (age, educational level, and employment status, unknown)

"It is serious especially when people do it [have sex] without the use of condoms and it usually happens when we are in need of money."- MSM ages 16 and 17 years, SHS students (FGD)

"It [transactional sex] could increase your risk of [acquiring] HIV [infection]"- MSM aged 17 years, SHS student, unemployed

"[Transactional sex] can make you more vulnerable to HIV"- MSM aged 17 years, SHS student, unemployed "Those who need money may go raw if it's the only option and that will put them at risk of contracting HIV"- MSM YA FGD (age, educational level, and employment status, unknown)

"We stand [a] very high risk [chance] of getting HIV because of unprotected sex"- MSM YA FGD (age, educational level, and employment status, unknown)

Ready with it whether you have taken alcohol or not"-MSM ages 16 and 17 years, SHS students (FGD)

"I do not care about condom use when I am drunk. This is bad." - MSM aged 16 years, no education (FGD)

"Alcohol douses your senses and can impair your condom use" - MSM aged 17 years, SHS student (FGD)

"I always use condom for protection even when I take alcohol."- MSM aged 16 years, SHS student, unemployed

"No, whether I have taken alcohol or not I will still put on condom to have sex."- MSM aged 23 years, Completed SHS (FGD)

"Drinking alcohol cannot prevent me from using condom. I always have my senses when I drink alcohol."- MSM aged 29 years, Completed SHS (FGD)

"If you are a regular condom user these drugs should not affect whether you use condoms or not" - MSM aged 16 years, SHS student (FGD)

"If these drugs enhance sex, then [they] could make you forget to use a condom, if you already have a problem with condom use"- MSM aged 17 years, SHS student (FGD) "People ridicule me at the job site because I look like a female."- MSM aged 28 years, Completed SHS, a shop assistant

"Looking for a job is not easy when one is identified as MSM"- MSM aged 27 years, Completed SHS, unemployed

"People have all sorts of bad impressions about me and about my sexual status as a homosexual. When you make the least mistake or when there is a robbery case, they easily accuse us."- MSM aged 26 years, Attended secondary school, sells clothes

"People just talk about us at drinking spots that we sleep with men. At times too, people just provoke us with sayings that we are gays, at funeral grounds, parties, etc. Again people attack us, mishandle us, etc. because they believe we have money so they do take away our belongings." MSM aged 28 years, Completed SHS, sells used clothes

"If you do not use a condom, [transactional sex] can put you at risk"- MSM aged 27 years, Completed SHS, unemployed

"I don't think drugs can influence my decision on condom use."- MSM aged 22 years, Attended SHS (FGD)

"One needs to use protection otherwise can be dangerous for HIV"- MSM aged 20 years, Attended secondary school, employed as a peer educator