HIV INTEGRATED

BIOLOGICAL AND BEHAVIORAL SURVEILLANCE SURVEYS AMONG MEN WHO HAVE SEX WITH MEN IN BEIRUT, TRIPOLI, AND SAIDA

LEBANON - 2023

TECHNICAL ASSISTANCE AND ACKNOWLEDGEMENTS

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ABBREVIATIONS/ACRONYMS

ART	Antiretroviral therapy
CRD	Connecting Research to Development
HIV	Human Immunodeficiency Virus
IBBS	Integrated behavioral and biological surveillance
MSM	Men who have sex with men
NAP	National AIDS Program
NGO	Non-Governmental Organization
PLHIV	People living with HIV
RDS	Respondent Driven Sampling
PEP	Post-exposure prophylaxis
PrEP	Pre-exposure prophylaxis
STI	Sexually Transmitted Infection
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNICEF	United Nations Children's Fund
UNHCR	United Nations High Commission for Refugees
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

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EXECUTIVE SUMMARY

INTRODUCTION

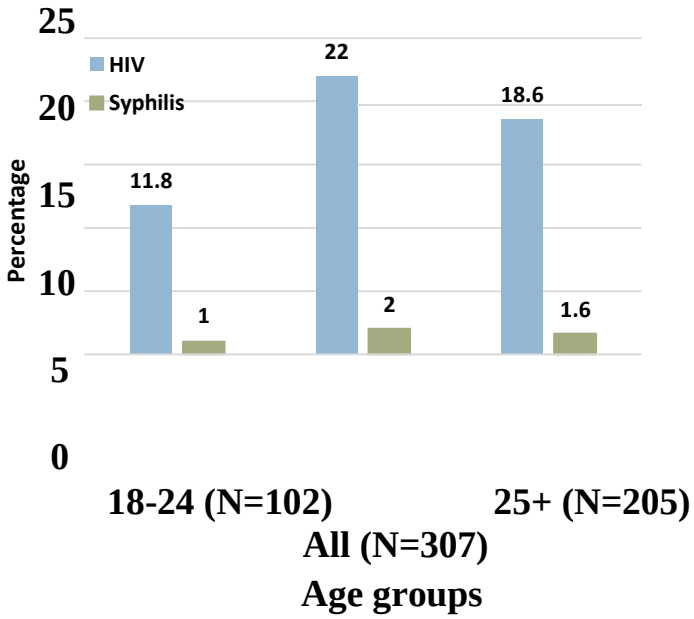
This report presents the findings of an HIV integrated biological and behavioral surveillance (IBBS) study conducted in 2023 among men who have sex with men (MSM) in Beirut, Tripoli, and Saida, Lebanon. These cities together comprise roughly 2.5 million inhabitants, or almost half of the total population of Lebanon. The primary objective of this survey was to measure HIV seroprevalence and associated risk factors among MSM in order to inform programmatic and policy responses and to monitor epidemic trends. Other objectives included measuring Syphilis infection and estimating the population size of MSM in Beirut, Tripoli, and Saida. Survey participants were defined as men who were aged 18 and older, reported having anal sex with men in the last six months, and live and/or work in Beirut, Tripoli, or Saida, regardless of nationality. This survey initially used respondent-driven sampling (RDS) to sample MSM, however, due to heightened levels of community stigma and harassment towards MSM and the sites in which the surveys were conducted, this survey had to convert to a convenience sampling method.

Therefore, the data presented in this report is subject to numerous biases and should be interpreted with caution. Enrolling participants were screened for eligibility, provided informed consent, completed a face-to-face interview, and provided blood specimens to be tested for the detection of HIV and syphilis. The data were analyzed with no sampling adjustments.

FINDINGS

HIV AND SYPHILIS PREVALENCE

The prevalence of HIV was 18.6% among all MSM participants. HIV prevalence was 11.8% among young (18-24 years) and 22% among adult (>24 years) participants. The prevalence of syphilis was 1.6% among all MSM participants. Syphilis prevalence was 1% among young and 2% among adult participants. Non-Lebanese participants had higher HIV (23%) and syphilis (4%) prevalences compared to Lebanese participants (17% and 0.9%, respectively).



SEXUAL BEHAVIORS

MSM have multiple partner types and use condoms inconsistently. Despite most participants knowing where to obtain condoms, only 52% of participants used a condom with their last regular partner, 63% with their last casual partner, and only 37% with their last paying partner.

HIV TESTING

Most MSM participants know where to get an HIV test, and high percentages of participants have ever had an HIV test, although HIV testing is lower among young (87%), compared to adult (92%), participants. Among those ever tested, 14% of young and 22% of adult participants received positive HIV test results.

PREP AND PEP

Only 8% of young participants and 26% of adult participants have ever used PrEP (Pre-exposure prophylaxis). In addition, under half of participants have ever heard of PEP (Post-exposure prophylaxis), among which only 6% of young and 12% of adult participants have ever used PEP.

STIGMA, DISCRIMINATION AND ABUSE

Roughly 10% of young participants reported that they were refused police assistance, housing, and employment because someone thought they had sex with men. Higher percentages of young, compared to adult, participants experienced being hit, kicked, or beaten or receiving verbal insults in the past 12 months because they were perceived by others as being sexually attracted to men, and higher percentages of young, compared to adult, participants were ever blackmailed, scolded, verbally abused, or excluded from family events because of their sexual attraction to men.

SUMMARY OF KEY RECOMMENDATIONS

This study was conducted under difficult conditions where Lebanon is experiencing high levels of stigma, discrimination, and abuse again MSM. Although these findings are not representative and should be interpreted with caution, there are indications that MSM practice numerous high-risk behaviors, including inconsistent condom use and multiple sexual partners, that put them at risk of HIV transmission. Although HIV testing is high, this may be related to overrepresenting MSM, who are more connected to non-governmental organizations that provide HIV testing. Biological testing of participants indicates high levels of HIV among MSM participants and an increase since 2018 (19% in 2023 and 12% in 2018). Once Lebanon is able to contain the high level of stigma, discrimination, and abuse towards MSM, follow up IBBS surveys using a probability-based sampling method should be conducted every three years to monitor trends. Specific recommendations to strengthen health services, improve access to HIV related services,

address alcohol and drug use, decrease stigma and discrimination, and take policy actions are listed at the end of the report.

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BACKGROUND

The Republic of Lebanon is located in Western Asia, bordered by Syria to the north and east, the Occupied Palestinian Territories to the south, and the Mediterranean Sea to the west (Figure 1). Lebanon is divided into nine governorates, which are further subdivided into twenty-six districts.

Figure 1. Map of Lebanon

Lebanon has a total population in 2023 of just over 5 million people. Lebanon's capital and largest city is Beirut (pop. 1.9 million), followed by Tripoli (pop. 229,000). Beirut is Lebanon's seat of government, an important seaport for the country and region, and has a

central role in the Lebanese economy, with many banks and corporations. Tripoli is located in the north of the country.

Lebanon is classified by the World Bank as a lower-middle income country, rated down from upper middle-income status in July 2022. Lebanon has been mired in numerous economic and political crises that have resulted in political instability, widespread resource shortages, high unemployment, and poverty. Lebanon is a major country of emigration, hosting a sizable population of displaced Palestinian, Syrian, and Iraqi communities.

Lebanon is estimated to be a country with one of the highest numbers of refugees per capita, with about one refugee for every four nationals.

OVERVIEW OF HIV/AIDS SITUATION IN LEBANON

Available evidence suggests that HIV prevalence remains low in Lebanon, with less than 0.1% of the general population living with HIV (PLHIV). The first HIV case in Lebanon was diagnosed in 1984. Since then, the number of cases has steadily increased. In 1989, the Ministry of Public Health established the National AIDS Control Program (NAP) in an effort to limit the spread of HIV, gather statistics on reported HIV and AIDS cases, coordinate with NGOs, ministries, the media, religious leaders, international organizations, and other key stakeholders, and support people living with HIV. According to UNAIDS, as of 2022, there are 2600 people living with HIV (PLHIV) in Lebanon, among which the majority are men. Of those, an estimated 2100 (86%) PLHIV are receiving Antiretroviral treatment (ARV), which is provided free of charge by the Ministry of Public Health.

MEN WHO HAVE SEX WITH MEN

While HIV prevalence in Lebanon remains low (less than 0.1%) in the general adult population, prevalence is expected to be higher among key populations, including MSM.

Many MSM in most countries exhibit unique structural and behavioral risk factors, which put MSM at heightened risk for HIV infection from and transmission to members of their sexual networks. These include participating in group sex, having sex with multiple partners, not using protection during sexual intercourse, and concomitant drug use and/or injection[1]. In addition, extreme levels of discrimination and stigma towards populations at higher risk of transmission and people living with HIV (PLHIV) lead to HIV infection underestimation, underreporting, and low testing rates[2].

Most HIV transmission in Lebanon is spread through sexual activity. Available data currently relies heavily on passive HIV case reporting, which likely provides an underestimation, particularly for Key Populations, including MSM. Weakness in combining sero-prevalence with socio-behavior trends further prevents accurate identification of the in-depth characteristics and dynamics of the HIV epidemic, particularly with those who are most vulnerable to infection. There is consensus that unprotected sexual intercourse between men, coupled with broader vulnerability factors such as large-scale mobility due to labor and/or regional conflict, a high influx of migrants and refugees, and severe stigma and discrimination, have implications for the capacity to halt the epidemic.

However, the lack of information on HIV prevalence and behaviors among MSM complicates efforts to discern the trend and dynamics of the HIV epidemic in Lebanon.

[1] Mahfoud, Z, Afifi, R, Ramia, S, et al. 2010. HIV/AIDS among female sex workers, injecting drug users and men who have sex with men in Lebanon: results of the first biobehavioral surveys. AIDS, 24, S45-S54; Wagner, G., Tohme, J, Hoover, M, et al. 2014. HIV prevalence and demographic determinants of unprotected anal sex and HIV testing among men who have sex with men in Beirut, Lebanon. Archives of Sexual Behavior, 43(4), 779-788; Heimer R, Khoshnood K. Crossroads: Population Size Estimation and Integrated bio-behavioral survey of People Who Inject drugs & Men who Have Sex with Men in Lebanon. Presentation; 2015. presented at the Order of Nurses in Lebanon.

[2] Afifi, R, Dejong, J, El-Barbir, F, et al. 2008. Mishwar: An integrated bio-behavioral surveillance study among most at risk populations in Lebanon: Female sex workers, injections drug users, men who have sex with men, and prisoners. Final Report. Ministry of Public Health: Beirut, Lebanon; Mokhbat, J, Heimer, R, Khoshnood, K,et al. 2015. Crossroads: Population size estimation and integrated bio-behavioral survey of people who inject drugs and men who have sex with men in Lebanon. The Middle East and North Africa Harm Reduction Association: Beirut, Lebanon.

Failing to address these factors could lead to increased HIV prevalence in the future.

Of major concern is the treatment and widespread stigma and discrimination towards MSM in Lebanon. Male homosexuality is illegal in Lebanon, with a maximum penalty of one year imprisonment[3]. Near the time of the initiation of the survey (In August 2023), two Lebanese officials introduced separate bills further criminalizing same-sex relations between consenting adults and punishing anyone who "promotes homosexuality" with up to three years' in prison[4]. The introduction follows a series of hostile incidents and an unlawful ministerial ban on events around homosexuality, which further exacerbates stigma towards MSM. Reaching MSM with HIV and other health information and services, therefore, remains a daunting challenge. Access to marginalized populations continues to be a difficult and complex task that requires wider collaboration with new partners, including NGOs. There is an urgent need to measure the extent of HIV prevalence and sexual risk behaviors among MSM to help the government and organizations allocate funding to develop targeted interventions.

[3] Human Dignity Trust. Lebanon. 2023. Accessed at: https://www.humandignitytrust.org/country-profile/lebanon/

[4] Human Rights Watch. Lebanon: Attack on Freedoms Targets LGBTI People. 2023. Accessed at: https://www.hrw.org/news/2023/09/05/lebanon-attack-freedoms-targets-lgbti-people

INTEGRATED BIOLOGICAL AND BEHAVIOURAL SURVEILLANCE 2023

Monitoring the HIV epidemic and assessing the impact of HIV prevention interventions is an intrinsically complex and multi-faceted process. This is due to the dynamics of the epidemic, the nature of interventions necessary to reduce the spread, and the inherent limitations of measuring the impact of multiple, mutually reinforcing interventions. HIV sentinel surveillance, the traditional basis of a country's HIV monitoring efforts, becomes less useful as an epidemic matures. This is because HIV prevalence changes slowly in response to behavioral changes in populations as a result of the chronic nature of HIV infection. Thus, HIV surveillance data cannot indicate whether prevention interventions are having any short-term effect on changing behaviors. Repeated behavioral surveys, on the other hand, can capture trends in behavioral change (e.g., access to prevention programs and education, access to condoms and clean needles, HIV testing, a reduced number of sexual partners, and increased condom use among non-regular partners), which lead to reduced HIV infection. These changes may be related to the effects of any number of interventions used to reduce high-risk behaviors, or they may be a function of naturally occurring responses to the epidemic. Nevertheless, the type of information produced by behavioral surveillance surveys can help guide intervention programs by providing a clearer picture of current risk behaviors in high-risk subgroups. At the same time, these data may be used to indicate how well the combined effects of a package of interventions are working.

Two of the most commonly used repeated behavioral survey designs are those that measure and track trends in representative samples of the general population and those that do the same in specific high-risk or vulnerable populations. Studies of MSM, with the intention of measuring trends over time, typically done outside of the household, are

frequently referred to as Integrated Biological-Behavioral Surveillance (IBBS). They are an important component of national monitoring systems because they focus on the most vulnerable and high-risk segments of the population, whose behaviors can have the most effect on the course of the epidemic. The last IBBS among MSM was conducted in Lebanon in 2018, with the support of the NAP and the International Organization for Migration. This survey found an HIV prevalence of 12% and a population size estimation ranging between 16,000 and 19,800.

Lebanon has a low-grade HIV epidemic, and therefore, following the guidelines of the IBBS issued by UNAIDS, IBBS surveys of high-risk groups should be conducted every three years to monitor trends in the HIV epidemic. With this in mind, Lebanon carried out an IBBS among MSM in 2023. Connecting Research to Development, a Beirut-based research organization, conducted the IBBS with funding from WHO, closely collaborating with the NAP, and receiving additional technical assistance supported by UNICEF. This report provides study findings and offers recommendations on how to use these data to improve HIV prevention and intervention needs in Lebanon.

OBJECTIVES

The key objective of the 2023 HIV IBBS study in Lebanon was to establish estimates of HIV prevalence and associated risk behaviors among MSM. Specifically, the study sought to measure:

- Sociodemographic profiles
- Prevalence of HIV infection
- Prevalence of Syphilis
- Sexual risk, including sexual partner types, condom use, and access to counseling and testing services for the prevention of HIV

- Stigma and discrimination
- HIV transmission knowledge
- Population size estimates

Data collected from the IBBS will be used to:

- Enhance advocacy and policy-making.
- Provide input for the NAP.
- Model HIV infection and incidence.
- To provide recommendations about HIV prevention priorities and care programming to public health officials and community groups in Lebanon based on the results of the study.

METHODS

QUALITATIVE SAMPLING

A formative assessment was conducted to inform the methodological and logistical requirements for the IBBS. The formative assessment was guided by the NAP. In addition to identifying the operational and logistical needs to conduct the quantitative sampling methodology, it also aimed to identify initial participants (i.e., seeds), sites to conduct survey operations, appropriate types and values of incentives for survey participation, survey staff, and potential barriers to the survey.

Formative research design

A semi-structured key informant interview (KII) guide (Appendix B) was used to gather information about the MSM community, learn about the venues identified from the secondary review, add new venues that had not yet been listed, and refine the list of gatekeepers who can assist in reaching MSM. Moreover, a focus group discussion (FGD)

guide (Appendix C) was created to provide quick information about general topics of interest or specific information on issues about which little was known. Information collected through these discussions was used to validate findings from other formative assessment activities. The guides were forward and back translated from English to Arabic by a certified translator. The instrument was reviewed by the NAP and study consultant during the protocol development phase. Pilot testing of the guides was carried out with two key informants and in one FGD before moving forward with the data collection.

The KII/FGD were conducted at a convenient time and place for the participants. After providing information about the objective of the KII/FGD and the overall research project, participants were asked to provide informed consent (Appendix D). Confidentiality and anonymity were assured throughout the interviews and discussions. To maintain anonymity, participants were asked to avoid using their names, the names of other participants, or the names of friends (however, they could use an alias or codename). All participants were asked if they agreed to be recorded using a tape recorder. If participants refused to be recorded, the facilitator did not record the interview/discussion but took notes on a sheet of paper. Personnel from Connecting Research to Development (CRD), specifically trained on the study protocol, carried out the interviews and discussions. All KIIs and FGDs were conducted in private locations and lasted approximately 40 minutes.

Nine KIIs were conducted online through Zoom or the Microsoft Teams platform, while only one KII was conducted face-to-face at a local NGO center in Beirut. As for the four FGDs, two were conducted in the Beirut area, one in Saida, and one in Tripoli, with a total of 39 participants.

Each FGD/KII was assigned a unique identifying number, written on the KII/FGD form, audio files, transcript documents, and note-taking sheets. The names of participants were

not used during the data collection process.

Thematic analysis was employed to analyze the data, utilizing a grounded theory methodology. Grounded theory is a qualitative data analysis approach that involves employing a constant comparative method to derive theories regarding human behavior.

First, all audiotapes were directly summarized after each interview. Then, the research team transcribed the generated data from KIIs and FGDs once receiving them, using a preset template once pilot-testing of the tools was completed. Furthermore, notes from the field were typed. All generated information was stored in a common word-processing format to ease analysis. The coding of the data used the main themes found in the KII/FGD guide as the analytical categories. Other emerging categories were also included in the analysis. Finally, themes uniting the categories were identified. The transcription and coding of the data were conducted using ATLAS.

QUANTITATIVE SAMPLING

Respondent Driven Sampling (RDS)

Respondent Driven Sampling (RDS) was initially used to sample MSM across Beirut, Tripoli and Saida. RDS is a type of chain referral sampling that, when implemented and analyzed properly, yields data representative of the populations from which the samples were gathered. For more information about the theoretical and mathematical underpinnings of RDS, please refer to the citations[5]. RDS is designed to sample populations considered "hidden" due to high levels of stigma, that are socially networked so that they recognize and can recruit peers, and that do not have sampling frames. RDS

[5] Heckathorn DD. 1997 Respondent-driven sampling: A new approach to the study of hidden populations. *Sociological Problems*. 44 (2), 174-199; Heckathorn, DD. 2002. Respondent driven sampling II: deriving valid population estimates from Chain-Referral samples of hidden populations. Sociological Problems, 49(1), 11-34; Gile KJ. 2011. Improved inference for respondent-driven sampling data with application to HIV prevalence estimation. J Am Stat Assoc. 106:135–146. doi: 10.1198/jasa.2011.ap09475.

recruitment starts with a few purposefully selected members of the study population, referred to as "seeds." After enrolling and completing the survey steps, each seed receives a fixed number (no more than three) of uniquely numbered coupons with which to recruit eligible peers into the survey. Recruited peers who enroll in and complete the study steps make up the first wave of respondents. Respondents in the first wave who enroll in and complete the study steps receive a fixed number of coupons with which to recruit their peers into the study. Successive waves of recruitment continue until the sample size is attained.

Normally, RDS works well in populations that face stigma. However, in Lebanon, the level of stigma, as well as outright harassment, was so heightened, that MSM were not comfortable enrolling in the IBBS. In fact, during the period of survey implementation, a campaign of incitement against the LGBTQ+ community was being spearheaded by political parties, religious leaders, and other government officials, which created fear and insecurity among MSM. Furthermore, the incentive may not have been sufficient to warrant the risk of enrolling in the survey. Finally, because the surveys were held in an existing NGO providing services to MSM, which were also being attacked, MSM feared going to the survey sites.

CONVENIENCE SAMPLING

Given the difficulties of reaching MSM through RDS and the diminishing resources and time to continue the survey, the decision was made to continue sampling MSM using convenience sampling. MSM were contacted directly by field staff or found at hot spots and enrolled in the survey.

SAMPLE SIZE

The original sample size calculation for the IBBS was calculated to be 598. However,

given difficulties in sampling, the minimum sample size was recalculated with a prevalence of 50%, a 15% expected change in prevalence over time, a design effect of 2, 80% power, and 95% confidence. The minimum required sample size decreased to 339 and was rounded down to 300. Though the findings are not representative, they may be useful for programmatic decisions.

CRITERIA FOR INCLUSION INTO THE SURVEY

Survey participants were defined as men who were aged 18 and older, reported having anal sex with men in the last six months, and live and/or work in Beirut, Tripoli, or Saida, regardless of nationality.

SURVEY STEPS

The survey instrument was developed in close collaboration with the NAP and study consultant and focused on understanding the characteristics and behaviors of MSM, HIV-related knowledge, attitudes, practices, stigma, discrimination, and risk perceptions (Appendix E). During the RDS phase, surveys were held in three NGO offices in Beirut. Seeds were selected with the help of the NGOs. Each seed received three uniquely coded coupons, which were used to recruit their peers into the survey. Respondents who presented a valid recruitment coupon to the study sites were screened for eligibility and provided informed consent (Appendix F) for an interview and a finger prick for HIV and syphilis. Interviews were conducted in Arabic by trained interviewers and took approximately 30 minutes to complete. Responses to questions were entered directly by the interviewer into a tablet. Respondents were able to receive their rapid test results along with post-test counseling and, for those with positive test results, a referral for care and treatment. The last step of the study consisted of each respondent receiving an incentive for their participation and recruitment coupons (no more than three coupons) to use in recruiting eligible peers. Respondents were eligible to receive a secondary

incentive for each eligible peer who completed the study. Respondents provided no personal identifying information, and their questionnaires and biological tests were linked using the unique numbers on their recruitment coupons. When the survey was conducted as a convenience sample, the survey's steps no longer included the use of coupons for MSM to use in recruiting other MSM. Survey participants were contacted directly, interviewed, and tested by field staff.

TRAINING AND STAFFING

All staff members received four formal days of training, as well as a refresher training, consisting of their roles and responsibilities, seed selection, respondent recruitment, the ethical consent process, the tracking of coupons and respondents, incentive compensation, and administration of the behavioral questionnaire, biological sample collection, processing, transport, and provision of biological test results and referrals. Each study team had a screener, interviewers, a counselor or nurse for post-test counseling and blood drawing, a coupon manager, and a study coordinator.

DATA MANAGEMENT AND ANALYSIS

Data were entered directly onto tablets during an interview. The final datasets underwent consistency checks. Frequencies were performed to check the validity and logic of the variables in the datasets. The data were formatted and coded in Microsoft Excel before being transferred to STATA for analysis. Data were disaggregated for young (18- to 24-year-olds) and adults (25+ year olds).

DATA PRESENTATION

Data are presented in tables and figures (bars and pie charts) in the report. All tables with category size (n), sample statistics, and 95% confidence intervals are provided in Appendix

A. Although 95% confidence intervals are not always presented in the analysis of convenience sampling, we present them here for reference. These findings are not representative of MSM in Beirut, Tripoli, and Saida and should be interpreted with caution.

POPULATION SIZE ESTIMATION

The IBBS in Lebanon intended to use three methods[6] to estimate the population sizes of MSM: 1) service multipliers; 2) unique object multipliers; and 3) the SSPSE. However, given that these methods rely on a probability-based sampling method, they could not be included in this IBBS.

ETHICAL CONSIDERATIONS

Ethical approval was received by the Transforming Research to Development Institutional Review Board, the CHU Notre Dame des Secours Hospital, and the WHO EM-Research Ethics Review Committee. Study participation was voluntary, and respondents were informed that they were free to withdraw at any time during the survey process.

After potential participants were screened, they received verbal information about the survey and were either asked to read or, if necessaryhad the consent form read to them by a staff member. All respondents either signed or verbally stated that they understood and agreed to all items contained in the consent form before enrolling in the study. All participants had to agree to complete the behavioral interview as well as the biological testing. To minimize any

[6] UNAIDS. Guidelines on Estimating the Size of Populations Most at Risk to HIV. Geneva, Switzerland; 2010. Available from: http://www.unaids.org/en/resources/documents/2011/2011_Estimating_Populations; Sabin K, Zhao J, Garcia Calleja JM, et al. Availability and Quality of Size Estimations of Female Sex Workers, Men Who Have Sex with Men, People Who Inject Drugs and Transgender Women in Low- and Middle-Income Countries. Sandstrom P, editor. PLoS One. 2016;11(5):e0155150. Available from: http://dx.plos.org/10.1371/journal.pone.0155150

discomfort due to the sensitive nature of the questions asked, a trained interviewer administered the questionnaire in a private and confidential setting. Respondents could refuse to answer any specific question. Respondents received the name and mobile number of the local survey coordinator in case they had questions about the survey or believed they had been injured or mistreated as a result of their involvement in the survey. No names, addresses, or other personal identifiers were collected. Coupon identification numbers were assigned to each respondent and used to link questionnaire responses to management forms and laboratory test results. After data collection, questionnaires, forms, and test results were kept in a secure location in the interview offices in each of the survey cities.

FORMATIVE RESEARCH FINDINGS

Nine KIIs were conducted online through Zoom or the Microsoft Teams platform, while only one KII was conducted face to-face at a local NGO center in Beirut. As for the four FGDs, two were conducted in the Beirut area, one in Saida, and one in Tripoli, with a total of 39 participants.

"MSM COMMUNITY" IN LEBANON

KIIs reinforced how marginalized MSM are in Lebanon and the challenges they face in accessing sexual health services as a result of societal stigma and discrimination. In a question asking how the "MSM community" can be described, one participant stated, they are: *"A marginalized community, a community that does not have access to sexual health services, a community that lacks information due to stigma and discrimination…" (KII).*

Participants mentioned that the "MSM community" has evolved into a Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) community, encompassing individuals who

experience common challenges and share common preferences and interests.

"Before, there were individuals who were gay only, and we used the term MSM. However, with time, this community enlarged, and we started talking about the LGBTQ community…The gay community commonly experiences shared challenges and obstacles throughout their lives, as well as common preferences and interests" (KII).

Moreover, with the arrival of Syrian refugees, the "MSM community" has grown even larger, leading to increased engagement in risky behaviors, and an observable increase in sex work.

"Many MSM people came from Iraq and Syria. Thus, the community expanded, the number increased, the needs increased, and the risk behavior became different because there are a lot of people engaged in sex work…" (KII).

Some FGD participants highlighted the lack of clear identity within the MSM community, with the need to conceal their identity due to societal rejection, especially outside Beirut, to avoid negative consequences, societal rejection, or even governmental abuse. This observation persists despite their significant presence in diverse sectors of society, such as employment, healthcare, politics, and the military:

"I am not sure that in the Lebanese community, we, as LGBTQ or MSM, do not know how much we have an identity…I even do not know what this community is called" (FGD, Saida).

"You have to live with a mask on and hide yourself because no one will give you a break in society, especially if you work in an institution. You have to worry about how you talk, how you walk,how you treat your colleagues. And even at home, you can't be yourself 100%..." (FGD, Beirut).

MSM in Lebanon feel a lack of safety and protection, and that their rights are denied. KII participants highlighted the extensive discrimination and stigmatization, deprivation of their human rights, and access to essential services:

"What doesn't help is that we don't have our rights, we do not feel safe because we are notprotected" (FGD, Beirut).

"There might be instances where they do not have access to their rights and the services that theyneed, because of these barriers that are related to stigma, criminalization, and in certain communities, the environment does not accept them" (KII).

The stigma and discrimination faced by MSM also restrict their access to employment and education, leavingsome with few income earning alternatives:

"Moreover, not being accepted, being harassed by the community, and maybe even getting expelled from school at a young age. All these aspects, depending on one's degree of vulnerability, may lead them to go down to the streets and maybe become sex workers." (KII)

Negative experiences can be attributed to the disapproving portrayal of MSM by the Lebanese media, which has subsequently amplified public criticism and hostility about MSM. This is in addition to the role of politics and religion, whereby a participant reported that *"politicians and religious leaders are using the gay topic to deviatepeople's*

attention towards something else." (FGD, Beirut). In particular, FGDs found MSM to face significant religious opposition and their behavior to be sinful:

> *"…it's as if it is blasphemy if I pray and I am gay at the same time" (FGD, Beirut).*

This adverse situation is notably observed in areas outside of Beirut, such as in Saida and Tripoli, where there is a higher level of hostility and opposition towards MSM. One FGD participant described Saida as a *"homophobic area"*, where residents "*criticize gay people*" *(FGD, Saida).* Another participant added:

> *"It depends on the area, of course, for example, in Tripoli and the South, they do not have the same rights as people living in Beirut. There is much more freedom, and people are more open-minded there than here" (FGD, Tripoli).*

These geographic differences are highlighted by the fact that most services provided to MSM are available only in Beirut:

> *"The largest number of NGOs is available in Beirut, most services are provided in Beirut, in terms of outreach…Therefore, this creates a difference in the community." (KII)*

Despite the negative experiences cited above, KIIs have unveiled some notable recent improvements. Particularly noteworthy is the emergence of NGOs that actively safeguard the rights of MSM and facilitate access to essential services. NGOs contribute to an increased acceptance of the community within society.

"Over the years, the MSM community, if I want to speak about my experience in the center, has developed a lot. They were marginalized and did not have their full rights, but in my opinion, a remarkable development has been made on this matter. The NGOs did and are still doing a great job for LGBT rights" (KII).

"In Lebanon, it wasn't like that before, but currently they are being more and more accepted and the proof is that they have NGOs, some are regional, and some are national" (KII).

MSM SUBGROUPS

KIIs and FGDs identified diverse subgroups among MSM, each categorized into distinct classifications. One classification is how MSM express their sexual identity in public settings.

"The two most prevalent or obvious groups are those who do not mind showing it [their sexuality] and others who prefer being with partners who are more discreet in their lives." (FGD, Beirut).

"You either have the people who are completely and extremely out of the closet or the ones who are extremely still in it. You have the people who are MSM but homophobes and still not accepting themselves…" (KII).

Some FGD participants noted that MSM subgroups can be classified based on their socioeconomic status, area of residence, educational level, and age group. Religion was not perceived as a factor that classifies MSM subgroups. KII participants highlighted that MSM from higher socioeconomic backgrounds tend to hold more positions of power compared to those from lower socioeconomic backgrounds.

"It's a community like every community. The different subgroups are more related to financial classes, social classes, and education level. The only thing not present is the religious aspect..." (FGD, Beirut)

"People don't focus on religion or other factors; it is mostly age that is the dividing factor between MSM." (FGD, Beirut)

"As a community, it is diverse. There are people who have a high level of education, people who have jobs and high salaries, and there are people in return who do not receive information and do not have access to work." (KII)

Additional subgroups were identified by FGD participants, including those who identify as 'drag queens', and those who adopt Western cultures and conform to Westernized standards of being queer. However, it was reported that such Westernized subgroups do not accurately represent the MSM community in Lebanon.

"Drag queens are a subgroup that supposedly stays together because each one has a performance and all have common interests, which are make-up, fashion design…" (FGD, Saida) "Westernized people follow western cultures and the standards of being queer; however, these standards are not reflective of our own community" (FGD, Beirut).

MSM can be further grouped into those who are selling sex, have drug dependencies, engage in chemsex, and have established careers and lead independent lives.

"…People who engage in chem sex and people who don't engage in chem

sex, people who have steady relationships, people who don't have steady relationships, people who have developed careers and economic independence and empowerment versus others who are still dependent on either aid or support" (KII).

"…it depends firstly on the socio-economic factor. This leads them to be involved in sex work or sex services, and the people who have more money are their clients" (KII).

An additional MSM subgroup are refugees of diverse nationalities residing in Lebanon: *"we have refugees from Syria, Iraq, Yemen, Egypt, Jordan (Palestinian), and all who flee to Lebanon to be able to travel from here" (KII)*. KII participants further mentioned that the MSM refugee subgroup often needs to sell sex to secure a living due to the limited employment opportunities available to them in Lebanon.

INTERACTIONS BETWEEN MSM SUBGROUPS

CONNECTIVITY ACROSS AREAS

One key question in preparing for the IBBS survey was to identify whether MSM are connected across Beirut, Tripoli, and Saida. Findings revealed contradictory perspectives regarding the level of connectivity among MSM across different geographic areas. Some participants indicated a significant amount of interaction and connectivity, given that Lebanon is a small country, while others reported that interactions primarily take place in Beirut, where the MSM community is largely concentrated. High transportation costs inhibit connectivity between those who reside in distant areas of the country. When asked about the connectedness of MSM across different governorates, participants responded:

"Mostly in Beirut because the MSM community is concentrated. Yet, this does not limit the communication with other governorates in Lebanon, however, access to transportation is limiting this communication" (FGD, Beirut).

"Anyone outside of my area that I might meet online, I wouldn't go to meet them because there is a distance between us…I prefer to be with someone from my own area" (FGD, Tripoli).

"I believe that people who are from the same area communicate more with each other…If someone from Beirut and someone from Tripoli are going on a one-night stand, they won't communicate with each other again" (KII).

Other findings indicate that MSM prefer going out on dinner dates and attending party events only in Beirut, as they perceive it to be a safer environment compared to other areas, like Saida.

"We are very present in Saida; however, we feel safer in Beirut. I would never go on a date for dinner or a party in Saida, I would go only for a cruise next to the corniche..." (FGD, Beirut). "What we see is more comfort in Beirut and surrounding areas…" (KII).

Some FGD participants indicated that it has become relatively easy to connect with MSM from different areas, such as Tripoli and Saida, with the availability of dating applications and social media. Furthermore, a KII participant emphasized that if an individual developed an interest in someone, they would be willing to travel to distant areas to meet them. Few MSM would travel to countries like Syria and Jordan to meet individuals they had connected with online.

"It is easy to meet people from Sour, Saida, Beirut, and Tripoli through dating apps and social media" (FGD, Beirut)

"If you like someone living on the moon, you will go there to meet this person. Before the war in Syria, we knew people who knew a person via the website, Manjam or Gaydar, as there were no applications, and they went to Syria to meet this person. People might visit Jordan also" (KII).

"They have their own ways, and they are strongly connected, especially on social media and the applications that they use like Grindr" (KII).

MSM traveling from areas like Tripoli to Beirut reported often meeting other MSM whom they were unaware who also resided in Tripoli.

"As you know, Lebanon is not big, so a person who's in Tripoli, Akkar, or the South and travels to Beirut will have connections there" (KII).

"When these people travel from Tripoli to Beirut, they meet many people they know who are living in Tripoli but didn't know they are from the LGBT community unless they saw them partying in Beirut" (KII).

TIMING AND FREQUENCY OF TRAVEL TO OTHER AREAS

Although traveling to other areas can occur at any time, it is more frequent during holiday seasons or to fulfill sexual desires. In addition, summer is generally the time when MSM engage in more sexual encounters due to parties, beach activities, and the convenience of travel. NGOs observe an increased number of MSM seeking testing during the summer.

"But currently there are more festivals outside Beirut, so people go out of Beirut as well" (FGD, Tripoli).

"During the summer, mostly, and during holidays…Before Christmas or before the beginning of the year, we see a lot of people coming to the center to get tested because, during that period between January and February, there are a lot of outings and parties, therefore, a lot of people come during that period to get tested at [NGO], especially MSM" (KII).

MSM LIVING AND/OR WORKING IN BEIRUT/TRIPOLI/SAIDA

Participants were asked about the number of MSM aged 18 and above, whom they know, and who resided or worked in Beirut, Tripoli, and Saida. Some participants indicated knowing MSM from all three areas, while others reported knowing MSM from only one specific area. Some claimed that they know numerous MSM from all three areas using social media and dating applications, stating that *"We know a lot on social media, and they might be from Saida, Beirut, or Tripoli" (FGD, Saida)*. Others mentioned that they also meet MSM through chance encounters at specific locations or clubs and subsequently establish communication on various social media platforms.

"Now I know around 10 [MSM] from Saida, not even from dating applications. We might see each other, at a certain place, get to know each other and add each other on Instagram" (FGD,Saida).

"Yes, we know a lot of people. I do not interact a lot with the [MSM] community, and I do not have a lot of friends, but I know many people who I saw at clubs." (FGD, Saida)

"Everyone knows everyone, whether in Beirut, Tripoli or Saida." (FGD, Beirut)

"I personally know three people from Tripoli. From Beirut, not above 20. From Saida…I know 10, the ones I know face-to-face" (FGD, Tripoli).

"I am assured that the number of people in Beirut is similar to the number in Tripoli and Bekaa, if not higher. Plenty of people in Beirut are originally from Saida and Tyre but live in Beirut for work" (KII).

Count of MSM Living and/or working in Beirut

Participants were asked to report the number of MSM they knew in each area. The highest numbers reported were in Beirut, ranging from 100 to 450 MSM living and/or working in Beirut. Findings indicated that the majority of known MSM reside in Beirut, with one KII participant reporting numbers as high as 20,000. Additionally, another participant working at an NGO reported that out of the 2,000 MSM who visit their center for testing purposes, approximately 1,500 live in Beirut, while the remaining 500 reside outside of Beirut in areas such as Saida and Tripoli *(KII)*. When asked about the percentage of MSM they know who live in Beirut, versus other locations, participants stated that it was between 50 and 80%.

Count of MSM Living and/or Working in Saida

In response to the question of the number of known MSM who reside and/or work in Saida, participants reported knowing between two and 100 MSM. However, some FGD participants reported knowing no MSM from Saida. One key informant reported knowing about 5,000 MSM in Saida, including "*Ghaziyeh and the areas that are part of Saida's scope" (KII).*

Count of MSM Living and/or working in Tripoli

In response to the question of the number of known MSM who reside and/or work in Tripoli, participants reported knowing between seven and 100—fewer, compared to the numbers reported for Beirut. Some FGD participants said that they did not know any MSM from Tripoli. Key informants stated that the number of MSM in Tripoli exceeds that of Saida, estimating a total of 7,000 MSM in Tripoli *(KII)*.

Number of MSM from Beirut/Tripoli/Saida Seen in the Last Month

Participants were asked the number of MSM they knew and had seen in the past month. Some FGD participants reported seeing MSM from all three areas, whereas others provided specific counts of MSM they have seen in each respective area within the past month. In general, participants reported a higher number of MSM from Beirut, followed by Tripoli and then Saida.

FREQUENCY OF TRAVEL BETWEEN BEIRUT, SAIDA AND TRIPOLI

Participants were also asked to report the frequency with which MSM travel between Beirut, Tripoli, and Saida.

Travel From Saida and/or Tripoli to Beirut

MSM mostly travels from Saida and Tripoli to Beirut. The primary reason behind this is that Beirut is widely perceived as the safest area for MSM, compared to Saida and Tripoli, and allows for open expression and nighttime activities during weekends. KII participants added that travelling from Tripoli to Beirut occurs *"once or twice a week"*, while others who live in Saida and work in Beirut might travel daily *(KII)*.

FGD participants stated that specific behaviors, such as dressing in a particular manner, are

deemed less socially acceptable in Saida and Tripoli compared to Beirut. Participants reported feeling safer in Beirut and having more opportunities to connect in Beirut compared to Tripoli or Saida. KII participants also highlighted that MSM living in Saida or Tripoli would rather have sexual encounters with men from outside their areas.

> *"Sorry, what we can do in Beirut we cannot do in Saida, Tripoli, or other areas…In Saida, I cannot go out with a torn short and chemise, gum in my mouth, and long hair…There is respect for each area." (FGD, Saida)*

Travel from Beirut to Saida and/or Tripoli

Travel from Beirut to Saida is more frequent than from Beirut to Tripoli, often for summer beach visits due to proximity and ease of travel. Some MSM reported up to three trips per week from Beirut to Saida, while others traveled twice a month. Conversely, travel from Beirut to Tripoli is less frequent, occurring about once a week, primarily for touristic purposes.

> *"Maybe two to three times per month since the distance is closer, especially at night." (FGD, Saida)*

> *"To Tripoli, very few. Let's say once a week. Like one or two specific people that love to go for touristic purposes, but very few." (KII)*

One FGD participant reported living between Saida and Beirut and enjoying socializing with MSM from both areas:

> *"I spend my time walking, going out, and meeting my friends in Saida and Beirut. I live in Saida, and I do have a house in Beirut" (FGD, Saida).*

KII findings indicated that MSM residing in Tripoli, but working in Beirut, allocate specific days for each city, mainly during weekends. Another FGD participant stated that for travel from Beirut to Saida,

"not many people do that, since there are not many gay friendly places there" (FGD, Saida).

Other participants disagreed, noting the presence of gay-friendly places in Saida, mainly in cafes *(FGD, Saida)*. Other participants stated that travel from Tripoli to Beirut is more frequent than travel from Beirut to Tripoli, as there are fewer activities in Tripoli.

"It's more from Tripoli to Beirut. In Tripoli, there is nothing" (FGD, Tripoli).

Travel from Saida to Tripoli

Findings indicate that travel between Saida and Tripoli is infrequent. This is primarily due to the high transportation costs and the considerable distance between the two areas. Beirut is the primary hub for meetings and social interactions:

"Very difficult now, and even in the past since it is far, it will take 3 hours driving. We can meet in Beirut. Friends from Tripoli and those from Saida gather and meet in Beirut." (FGD, Saida)

Participants frequently mentioned the challenges of high transportation costs and fuel shortages, which are exacerbated by the ongoing economic crisis. Traveling from Beirut to Tripoli and Saida has been reduced to once a month, primarily due to the escalating transportation expenses:

"Honestly, the economic crisis mostly affected meeting other people. Transportation fees are expensive, so maybe once a month" (FGD, Beirut).

VENUES FOR MSM GATHERINGS

Participants were asked about venues where MSM gather to meet other men. MSM gather in nightclubs, bars, coffee shops, public beaches, hotels, drag shows, Turkish baths, and in private homes. One KII participant highlighted that MSM gather

"in concerts for some celebrities like "Mashrou3 Leila" previously and Adonis currently. These bands' concerts can be attended by straight people and LGBT as well…" (KII).

Other gathering events included community-organized activities, such as storytelling sessions and awareness events by NGOs:

"There are activities the community organizes for their members for awareness, and they include social activities like storytelling, or someone shares what they are currently suffering from stigmatization and discrimination and how they are overcoming this. These are small events that may happen by NGOs or people who arrange for them." (KII)

Gatherings can occur in the areas of Raouche, Mar Mikhael, Dawra, Bourj Hammoud, Saida's seaside, and Tripoli's Garden and Turkish bath (KII). For MSM who are less open about their sexual identity, they mostly gather at homes, cars, private parties, and in *"cinemas and toilets in Bourj Hammoud" (FGD, Saida)*. There are also hidden locations in Aamchit where MSM can have sex *(FGD, Saida)*. In addition, it is common for MSM to

use dating applications, which are considered a safe platform for those who prefer to keep their identity concealed.

"Instagram is somewhat of a safe place, especially since you have the disappearing option in direct messages." (KII)

"They use Tinder because it is discreet, they put a black profile picture." (FGD, Beirut)

"Through dating applications…they are cautious, and they do not send pictures. So, they might meet at a place where everyone meets there normally in order not to be suspicious or at risk." (KII)

Names of Venues in Beirut

MSM mostly gather in areas like Gemmayze, Mar Mikhael, Badaro, and Hamra. The coffee shops they visit include Neighborhood, Sip Café in Gemmayze, Em Nazih, Cantina Sociale in Achrafieh, Kissproof in Badaro, and Café Younes in Hamra. They also spend the night in specific nightclubs and bars, including POSH club, Recess in Seaside Arena, Madam Om, Projekt nightclub, Milk Club, Tota Om, UFO, Molo, and AHM. MSM also gather on public beaches such as Raouche, Marina Dbayeh, Tyre, Byblos Beach, or Ramleh El Baida and on private beaches such as Rocca Marina. MSM often meet in hotels in Beirut, or Turkish baths such as "Hammam Al Bakawat" in Hamra, as well as in events such as "Project X".

Names of Venues in Saida

MSM gather at the "Corniche", in theaters, and malls, as well as in local café shops such as "Drop" and "Blend", which were reported to be gay friendly.

Names of Venues in Tripoli

MSM gather in coffee shops such as “Warshe 13” and “Eleven Eleven”, in addition to resto pubs as “Timmy’s”. MSM engage in sexual encounters at a beach in Kfar Abida. To a lesser extent, MSM also meet in Jounieh, Batroun and Jbeil. One participant noted that the only place where the MSM community faces limited opportunities is Baabda due to the presence of the Army *(FGD, Saida)*.

DATING APPLICATIONS USED BY MSM

MSM frequently use dating applications to connect with other men. Multiple applications were mentioned, including Tinder, Bumble, Instagram, Grindr, TikTok, GROWLR, SCRUFF, Hornet, Romeo, Blued, Suggr, and, to a lesser extent, Facebook.

“The most common thing I heard is that they meet each other through dating applications, and then they agree to meet or have sex together.” (KII)

“These applications are the primary way to meet people because lots of people intend to be in gay places, but they don't know how to approach another man, so they prefer to do it via applications.” (KII)

DRUG USE AMONG MSM

Some MSM meet for drug-related purposes, primarily in private gatherings at homes, Airbnb, and specific Beirut areas like Mar Mikhael and Hamra. KII participants identified venues associated with chemsex in Faraya, frequented by MSM after nightclub visits.

“They can rent Chalets in Faraya or similar areas, or hotels they visit after staying up at Posh and there is a venue above Posh, called Nach, this venue is known for chemsex. The party ends at 10 AM, and since the effect of the drug lasts a long time, they go to

the beach chalets, houses, and suites and they continue their sex until Sunday evening, when the effect of the drug goes." (KII)

KII participants highlighted a significant rise in drug abuse within the MSM community, mentioning the increased discussion of drug use in awareness programs held by NGOs and a growing number of MSM seeking drug treatment at these organizations.

"Also, we are spotting cases [of MSM] who are taking drugs, and the incidence of drug abuse is increasing in this community. This is what I am seeing either in awareness programs or from NGOs that are dealing with this community, or the people who are coming to us for treatment." (KII)

Drugs to increase sexual arousal are more accessible in Beirut than in Tripoli. One participant noted:

"I guess it's easier for them to find someone giving them sexual drugs in Beirut rather than getting it in Tripoli or Bekaa. Certainly, they are available in these areas and everywhere, but I guess it's easier for them to get from Beirut" (KII).

Prevalent substances for chemsex among MSM include Crystal, Tina, GHB, XTC derivatives, and ND.

QUANTITATIVE STUDY FINDINGS

From August to December 2023, 307 MSM were enrolled in the HIV IBBS in Beirut, Saida, and Tripoli. The vast majority of MSM participants were from Beirut. MSM participants from ages 18 to 24 (young) made up 33.2% (N=102) of the sample, and

those above the age of 24 (adults) made up 66.7% (N=205) of the sample.

AGE, EDUCATION, AND LIVING SITUATION

The sampled MSM had a median age of 27.6. Almost all participants were single, never married (see tables in Appendix A), the majority were Lebanese and had a university education, and half lived with their parents. A higher percentage of young (compared to adult) participants were Lebanese compared to being non-Lebanese (Figure 2a) and lived with their parents (Figure 2c). Twice as many young participants had a secondary school education compared to adult participants (20% vs. 8%, respectively), whereas a higher percentage of adult participants had a university education compared to young participants (66% vs. 53%) (Figure 2b).

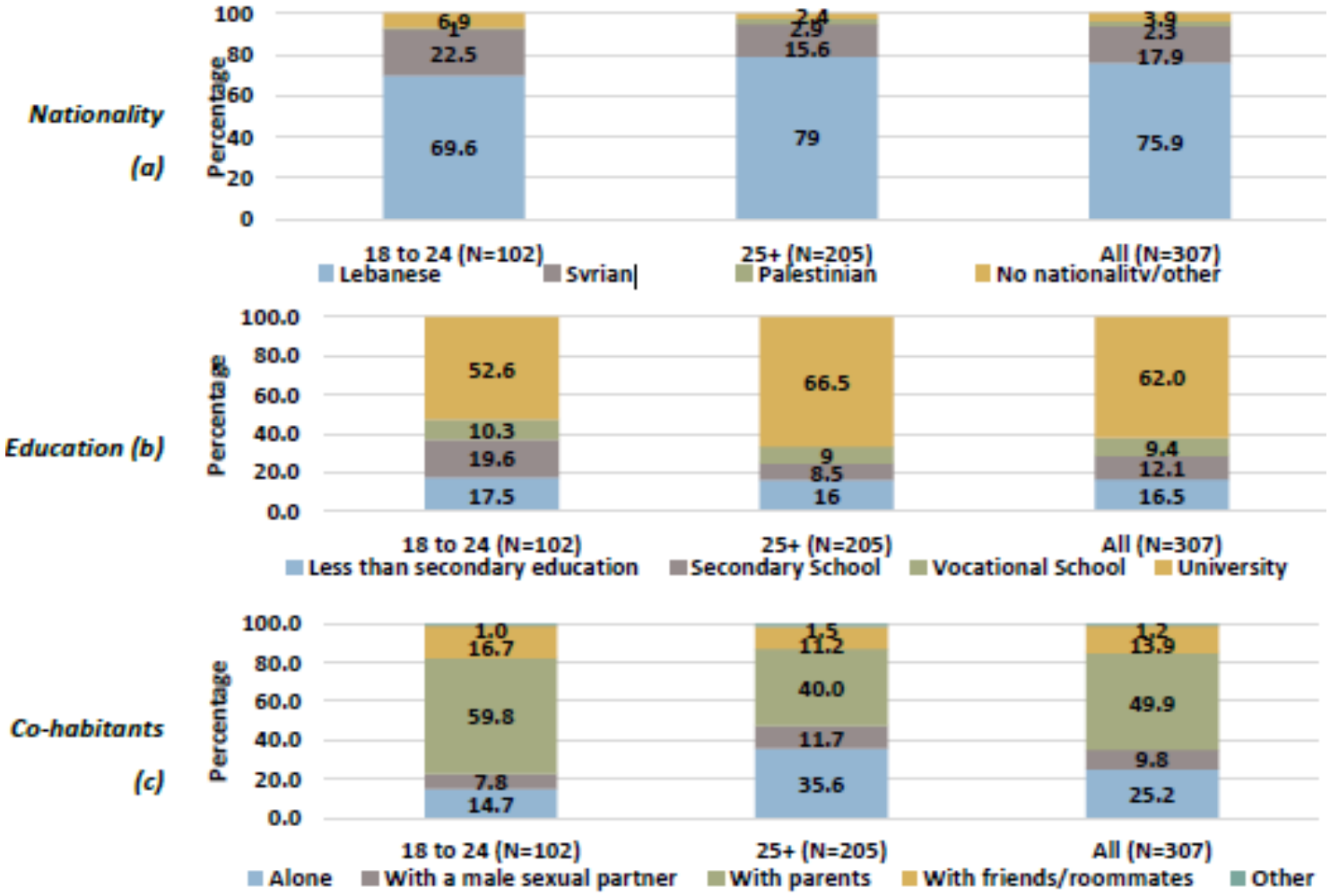


Figure 2 a-c. Age, education, and living situation among young and adult MSM, Lebanon 2023

EMPLOYMENT AND SELF-PERCEIVED SOCIOECONOMIC STATUS

Whereas the majority of all participants were currently employed, a higher percentage of adults (70%), compared to young participants (53%), had current employment (Figure 3a). Just under 50% of participants, including young and adult participants, perceived themselves to have moderate socioeconomic status. However, a slightly higher percentage of young (35%) compared to adult (31%) participants perceived themselves to have poor socioeconomic status (Figure 3b).

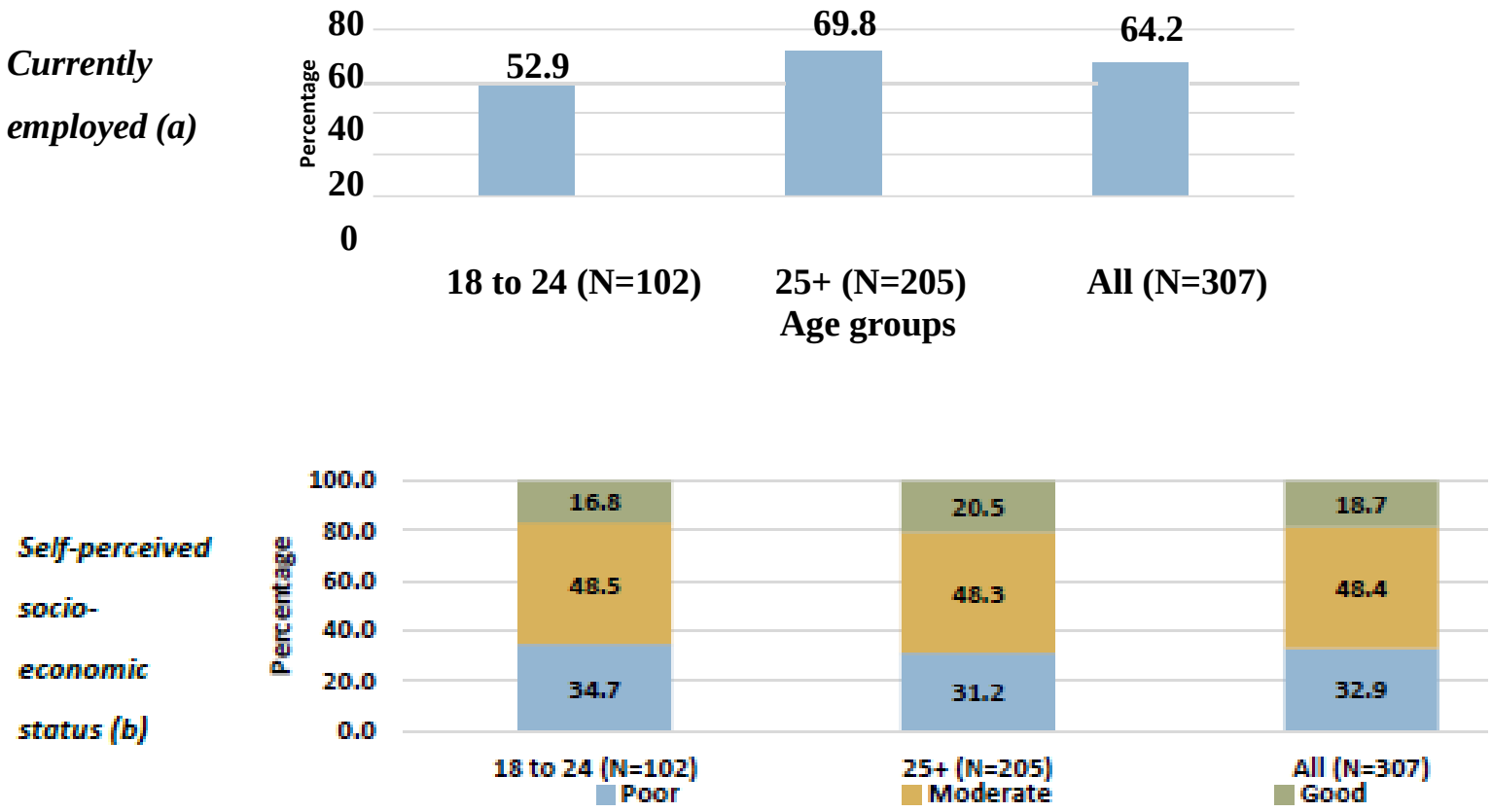


Figure 3 a-b. Employment and self-perceived socioeconomic status among young and adult MSM, Lebanon 2023

OVERVIEW OF SEX LIFE

Almost all participants classified their sexual orientation as homosexual (Figure 4a). Seventy percent of all (young and adult) participants had anal sex in the top position in the past six months (Figure 4b). A higher percentage of young (71%), compared to adult (55%), participants had anal sex in the bottom position, and a higher percentage of adult (64%), compared to young (55%), and participants had oral sex in the past six months. Less than half of participants reported having had manual sex in the past six months.

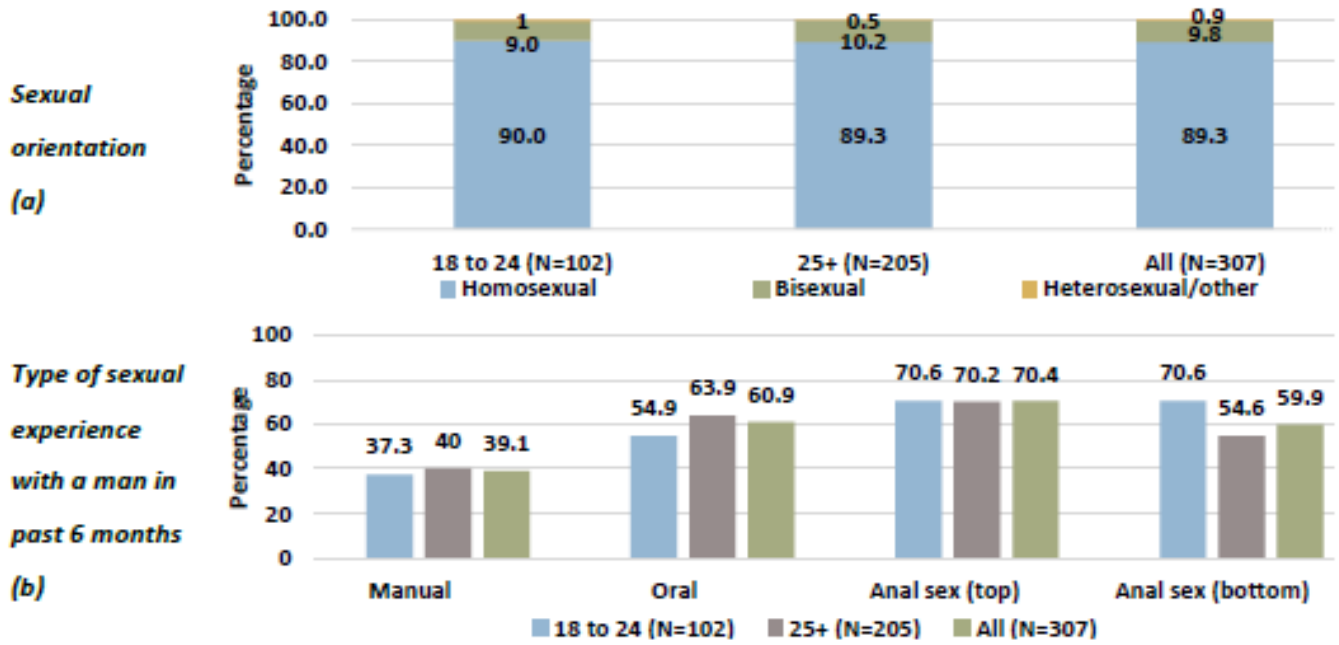


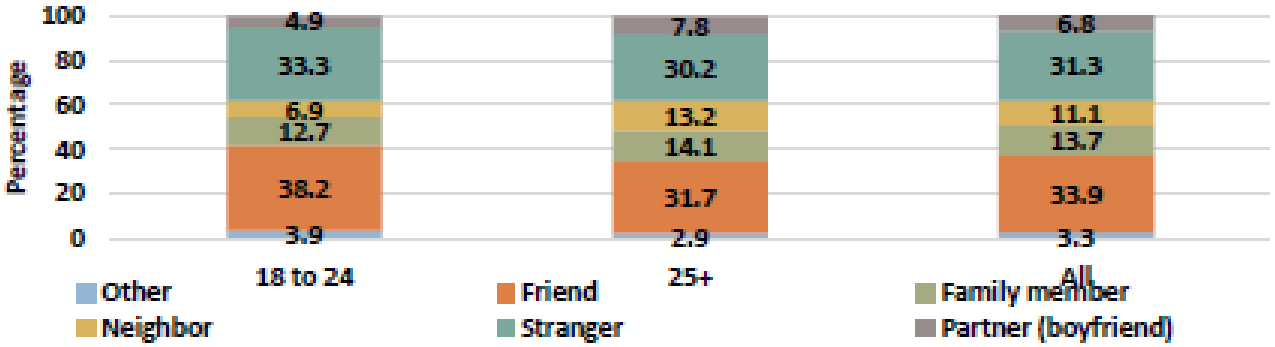
Figure 4 a-b Sexual orientation and experience among young and adult MSM, Lebanon 2023

SEXUAL RISK

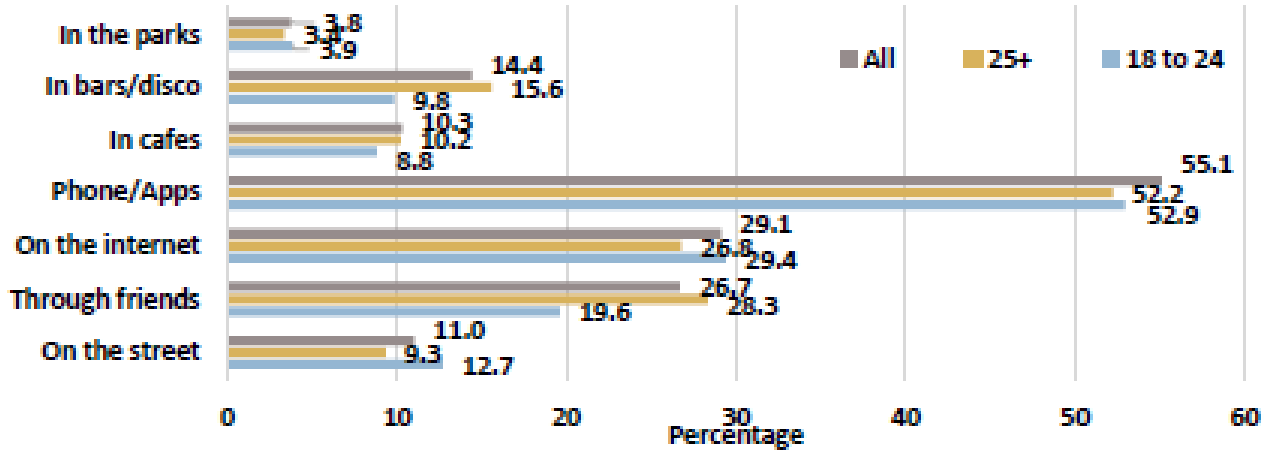
FIRST SEXUAL PARTNER AND WAYS OF MEETING PARTNERS

The median age of first anal sex with a man was 17 (range: 9-23) for young participants and 18 (range 6-50) for adult participants (see tables in Appendix A). Roughly one third of all participants (young and adult) had their first anal sex experience with a stranger or with a friend (Figure 5a). Few participants had their first anal sex with someone they considered a boyfriend, and around 14% had their first anal sex with a family member. Of all the venues used for meeting men for sex in the past six months, the highest percentages of young and adult MSM used phones and apps (53% vs. 52%, respectively) (Figure 5b). Of all the social media or internet methods used to meet men for sex in the last 6 months, the highest percentages of young and adult MSM used Grindr (60% vs. 57%, respectively), followed by Instagram (43% vs. 34%) (Figure 5c).

Relation to first anal sex partner (a)



Venue most used for sex with male partners in last 6 months (b)



Social media or internet used to meet men for sex in last 6 months (c)

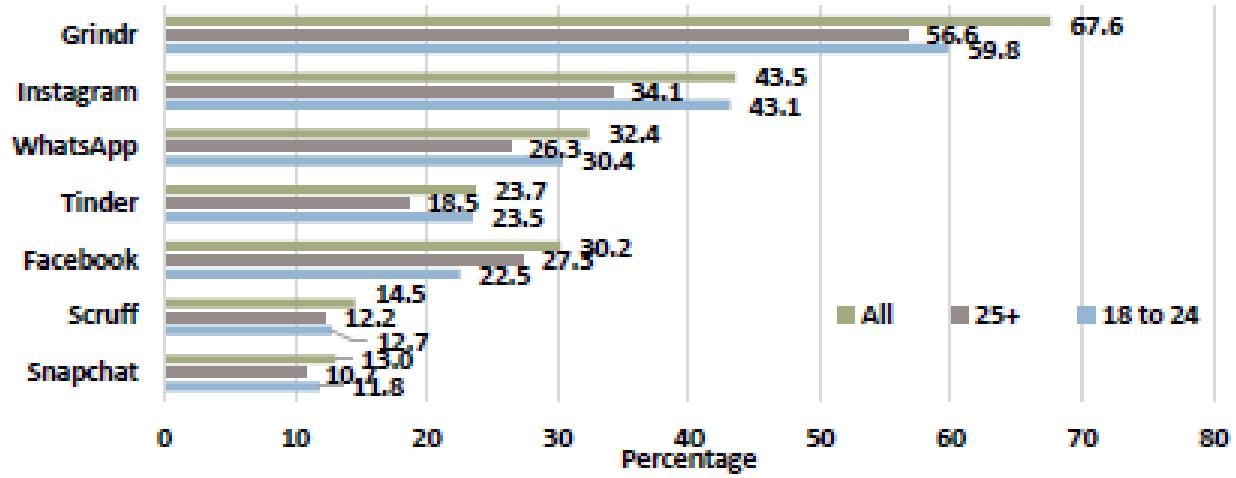


Figure 5 a-c. First sex partner and ways of meeting MSM, Lebanon 2023

TYPE OF PARTNERS AND CONDOM USE AT LAST ANAL SEX

Among all participants, the majority reported having casual male sex partners (59%) and regular male sex partners (54%) in the past six months. A lower percentage of young (44%), compared to adults (58%), participants had regular partners (Figure 6a). Although low percentages of participants had partners who paid them for sex or partners from whom they bought sex, a slightly higher percentage of young participants (13%), compared to adults (9%), had partners who paid them for anal sex. A higher percentage of all participants used condoms at last anal sex with their causal partners (63%), compared to regular (52%) and paying (40%) partners (Figure 6b).

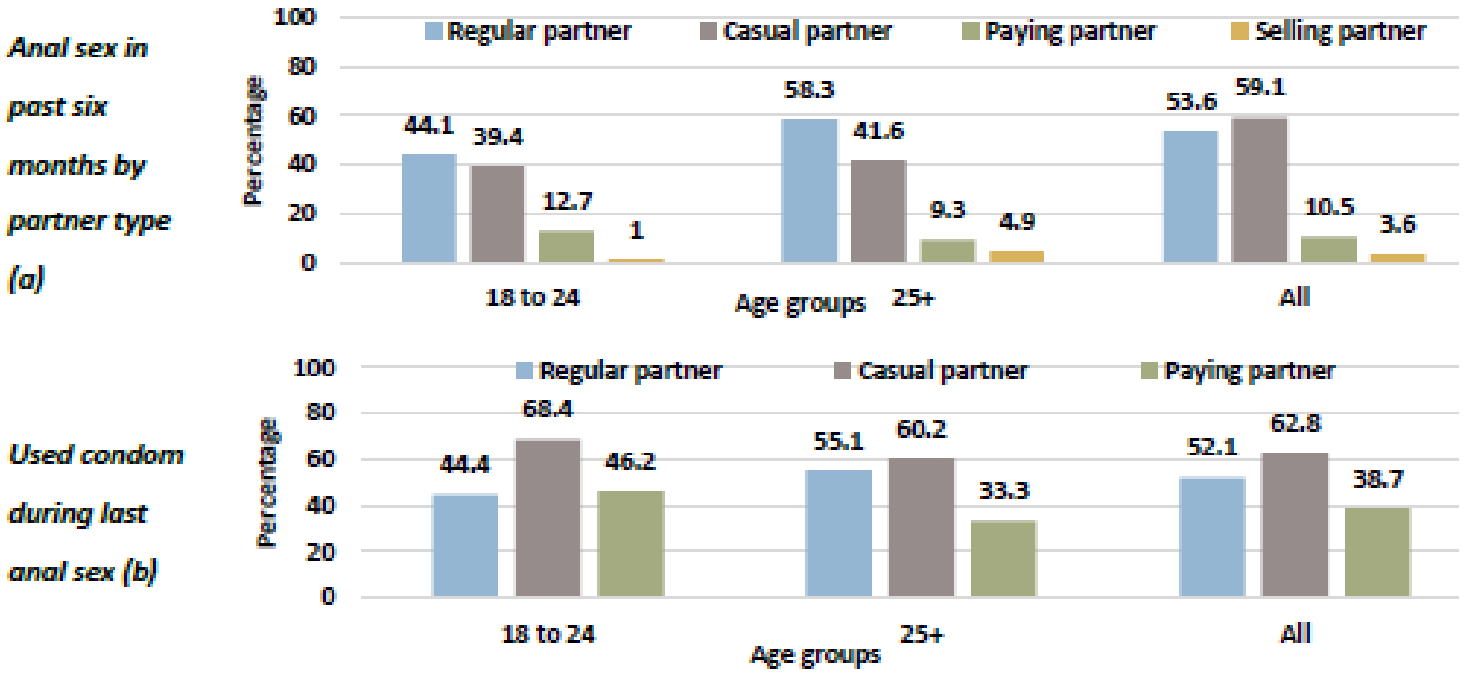


Figure 6 a-b. Partner types in last six months among young and adult MSM, Lebanon 2023

RELATIONSHIPS AND SEX WITH WOMEN

Only 11% of young participants and 26% of adult participants ever had sexual intercourse with a woman (Figure 7). Of those, a higher percentage of young (54%), compared to adults (45%), participants reported using a condom at the last anal or vaginal sex with a woman.

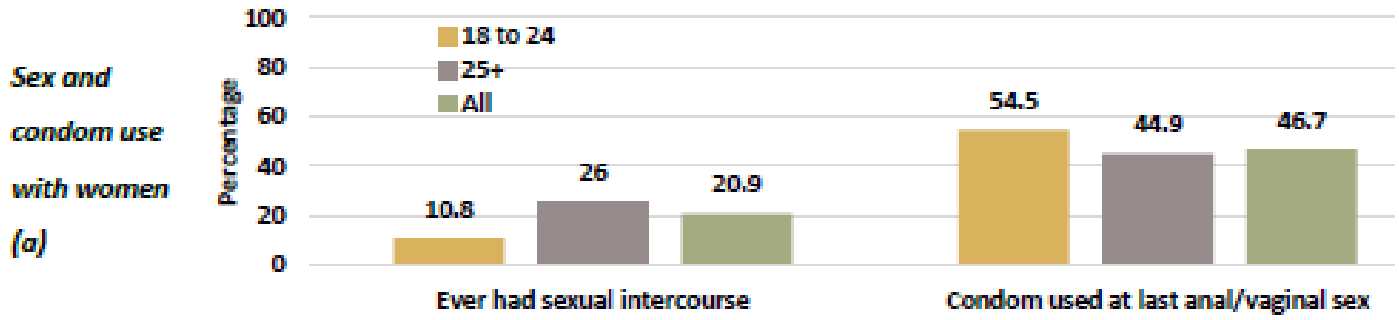


Figure 7. Sex with women and condom use among young and adult MSM, Lebanon 2023

FREQUENCY OF CONDOM USE BY PARTNER TYPE

Of those who had commercial sex partners, over 80% of participants (young and adult) reported *always* using condoms in the past six months (Figure 8a). Of those who had casual sex partners, lower percentages of young (59%), compared to adults (72%), and of those who had regular sex partners, lower percentages of young (60%), compared to adults (71%), *always* used condoms in the past six months (Figure 8b-c). Of those who had female sex partners, 17% of all participants (young and adult) never used condoms in the last six months (Figure 8d).

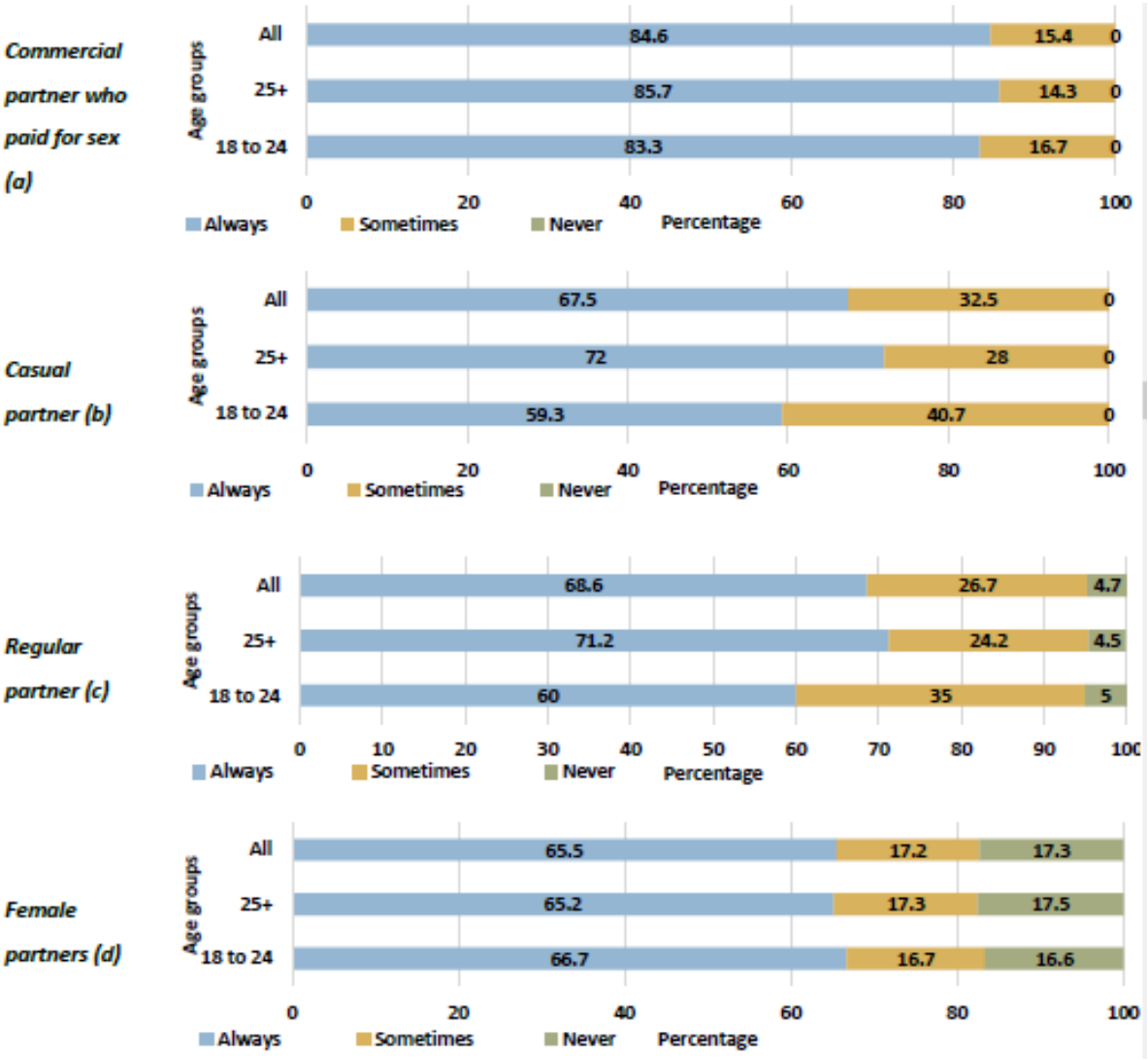
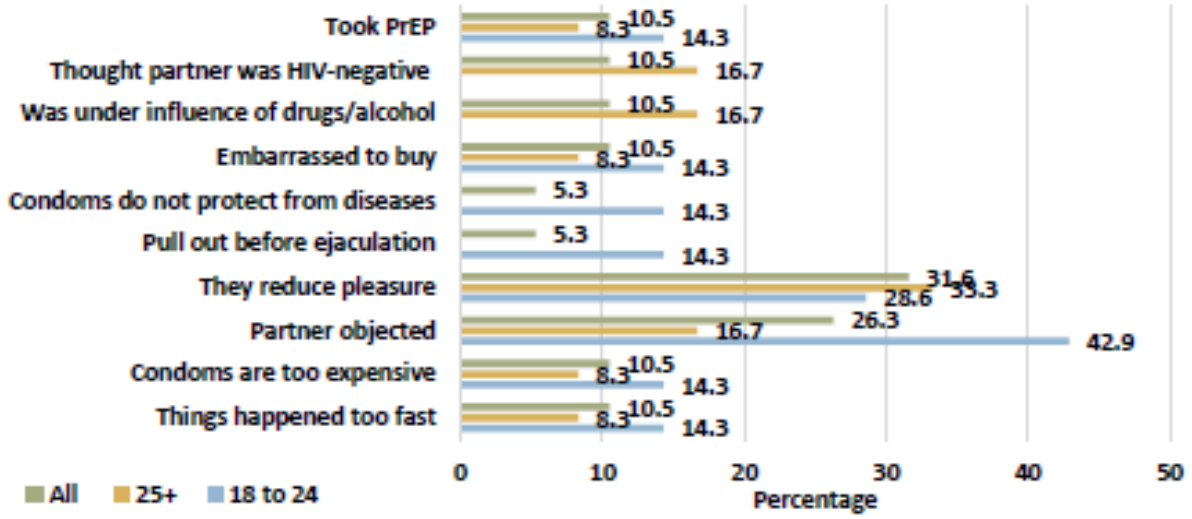


Figure 8 a-d. Frequency of condom use with different partner types among young and adult MSM, Lebanon 2023

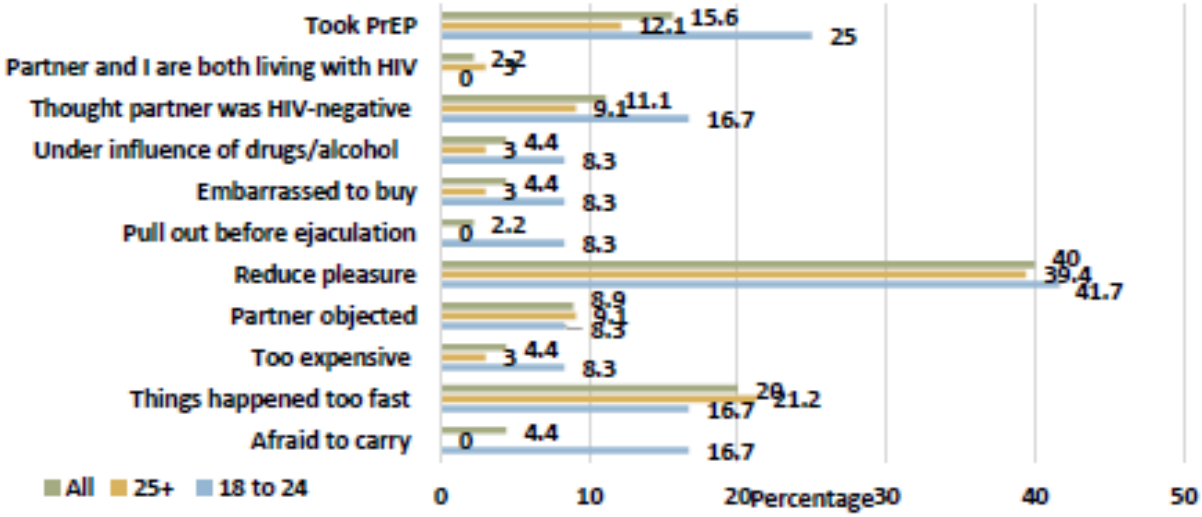
REASONS FOR NOT USING A CONDOM BY PARTNER TYPE

Of all the reasons why participants did not use a condom at last sex, the highest percentages of young participants reported not using a condom with commercial (43%) male sex partners because the partner objected, with casual (42%) male sex partners because condoms reduce pleasure, and with regular (24%) because they thought the partner was HIV negative (Figure9-c). Twenty percent of young participants did not use condoms with women at their last sexual intercourse because they thought the partner was HIV negative, the partner objected, condoms reduced pleasure, they pulled out before ejaculation, and/or things happened too fast (Figure 8d). The highest percentages of adult participants reported not using a condom with commercial (33%), casual (39%), regular (30%) male sex partners, or with women (37%) because condoms reduce pleasure (Figure 9a-d).

Commercial partner who paid for sex (a)



Casual partner (b)



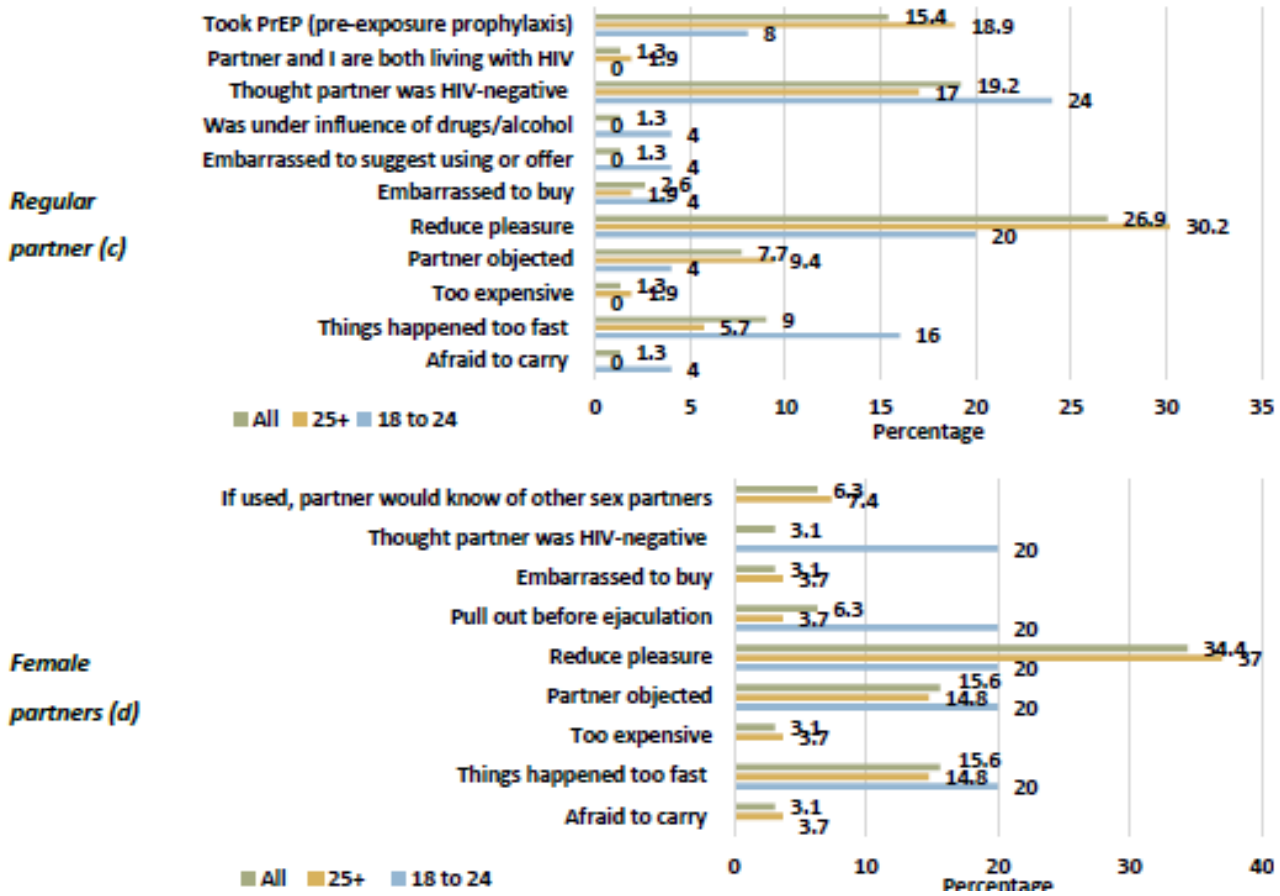


Figure 9 a-d. Why condoms were not used at last sexual intercourse among young and adult MSM, Lebanon 2023

DISCUSSING HIV OR STI WITH PARTNERS

Of those who ever had a commercial male sex partner, most (60%) participants (young [63%] and adults [58%]) *never* discussed HIV or STI with any of their commercial male sex partners; however, of those who ever had a regular male sex partner, the majority (57%) of participants (young [56%] and adults [58%]) did discuss HIV or STI with all of their regular male sex partners (Figure 10a-c). For those who ever had casual male sex partners, a larger percentage of young (51%), compared to adult (36%), participants did discuss HIV or STI with all of their casual male sex partners (Figure 10b).

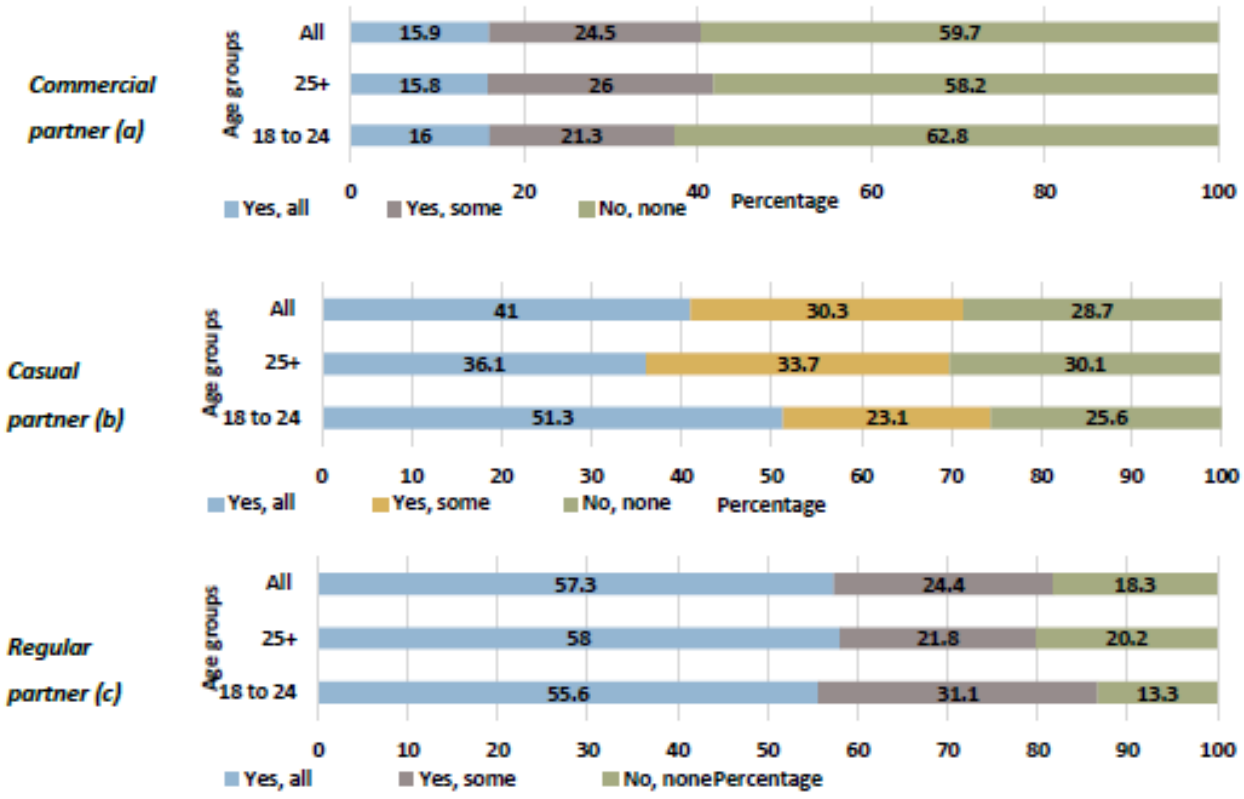


Figure 10 a-c. Discussing HIV or STI with partners among young and adult MSM, Lebanon 2023

ACCESS TO CONDOMS, LUBRICANTS

Most MSM participants know of any place or person from whom to obtain male condoms. Lower percentages of young (89%), compared to adult (93%), participants know where to obtain male condoms (Figure 11a), among which the majority of all, including young and adult, participants know of pharmacies (≥81%), followed by NGO (≥60%) (see tables in Appendix A). Two percent or less of participants obtained condoms from the National AIDS Program, a family planning center, a bar, guesthouse, hotel or sex partner. Lower percentages of young (30%), compared to adult (39%), participants received

counseling on condom use or safe sex in the past three months (Figure 11b). Just over one quarter of all participants *always* used water-based lubricant during anal sex with a male partner in the last 6 months (Figure 11c).

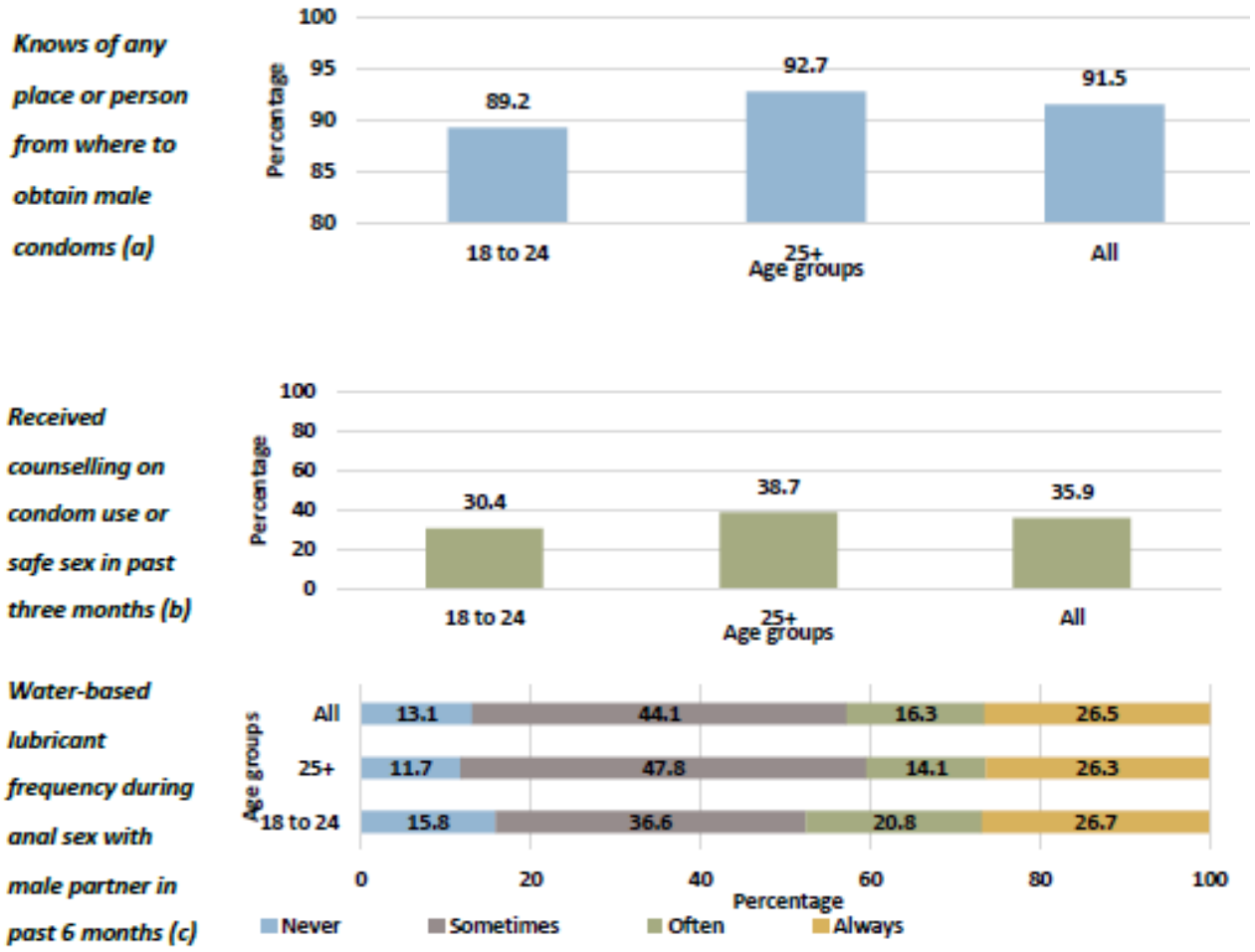


Figure 11 a-c. Access to condoms and lubricants among young and adult MSM, Lebanon 2023

HIV TRANSMISSION AND RISK KNOWLEDGE AND PERCEPTIONS

Almost all young and adult participants have heard of HIV (93% of young; 97% of adults, see tables in Appendix A), and 45% of young and 63% of adult participants know someone living with HIV or who has died of HIV (Figure 12a). Only 56% of young and adult participants correctly know that abstaining from sex can protect someone from HIV transmission and higher percentages of

adult, compared to young, participants correctly know that having one exclusive, faithful sero-negative sexual partner (57% vs. 69%, respectively) and using a properly fitted condom during penetrative sex can protect someone from HIV (79% vs. 86%, respectively) (Figure 12b). higher percentages of adults, compared to young, participants correctly know that a person with sexually transmitted infections has an increased chance to be infected with HIV (56% vs. 61%, respectively) and that someone who appears in good health can still be living with HIV (56% vs. 70%, respectively) (Figure 12c). A higher percentage of young (23%) participants incorrectly believe that HIV can be transmitted by sharing a meal, compared to adult (12%) participants.

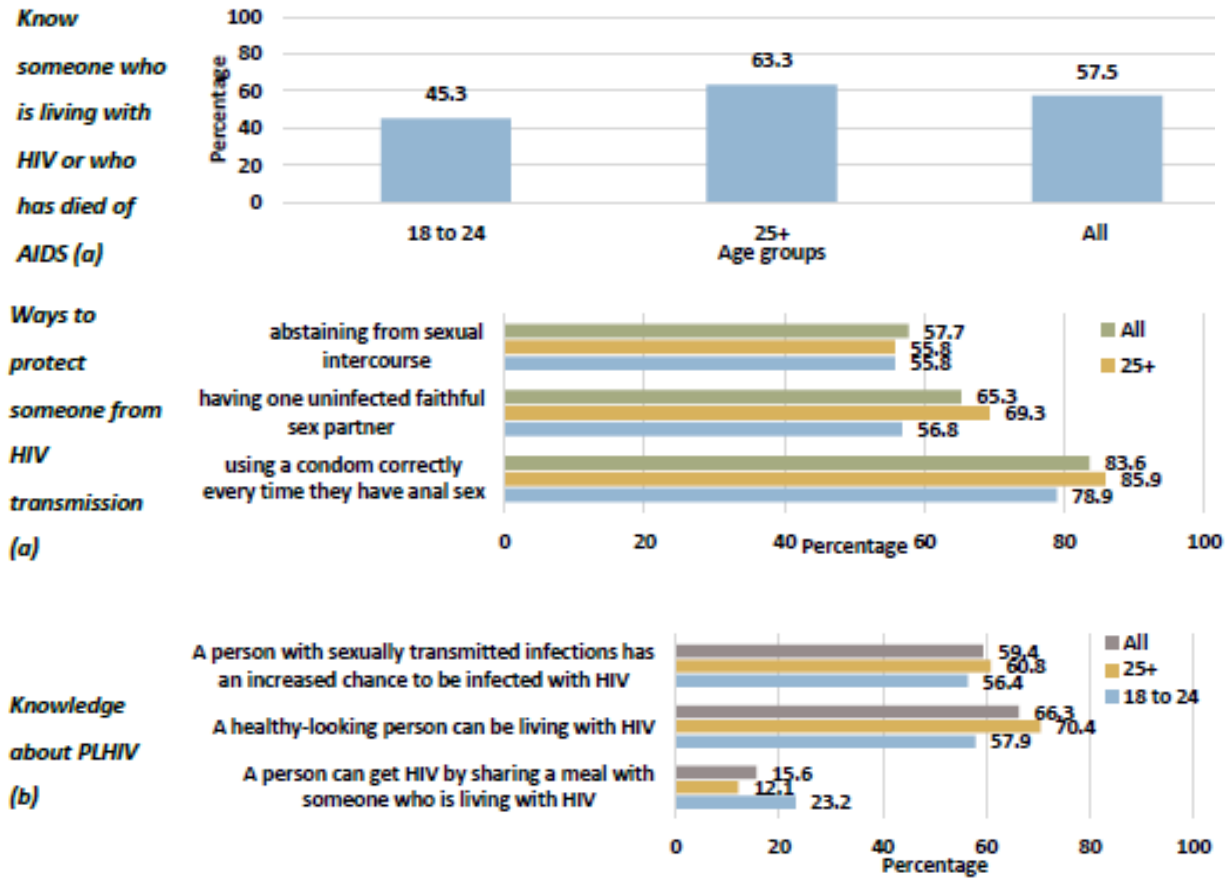


Figure 12 a-c. HIV transmission knowledge among young and adult MSM, Lebanon 2023

PREP AND PEP

A lower percentage of young, compared to adult, participants had ever heard of PrEP (Pre-exposure prophylaxis) (64% vs. 79%) or had ever used PrEP (8% vs. 26%) (Figure 13a). Of those who ever used PrEP, 100% of young and 79% of adult participants used PrEP in the past six months. Similarly, a lower percentage of young, compared to adult, participants had ever heard of PEP (Post-exposure prophylaxis) (32% vs. 45%) or ever used PEP (6% vs. 12%) (Figure 13b). Of those who ever used PEP, 50% of young and 45% of adult participants used PEP in the past six months. The majority of participants, get PrEP and PEP from NGOs in Lebanon.However. 40% of young MSM get PrEP from overseas (See tables in Appendix A).

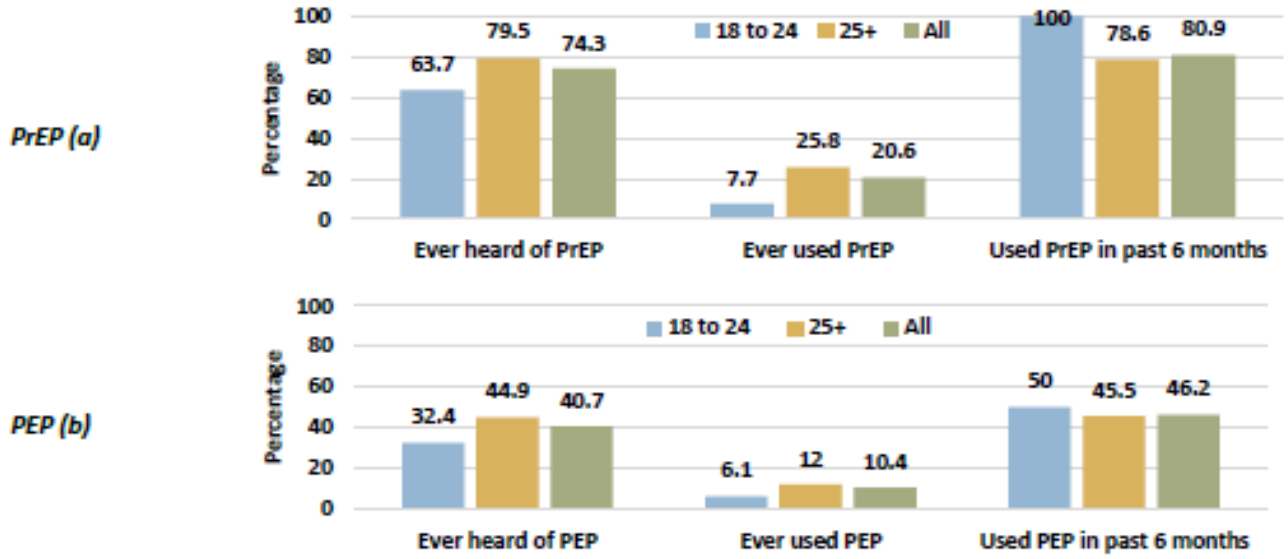


Figure 13 a-b. PrEP and PEP among young and adult MSM, Lebanon 2023

HIV TESTING AND RESULTS

A higher percentage of adult (85%), compared to young (79%), participants know that there is someplace to have a confidential HIV test in their community

(Figure 14a). Most MSM participants have ever had an HIV test, among which 87% of young and 92% of adult participants did so (Figure 14b). Among those who received their test results, 14% of young and 22% of adult participants reported receiving positive HIV test results (Figure 14c).

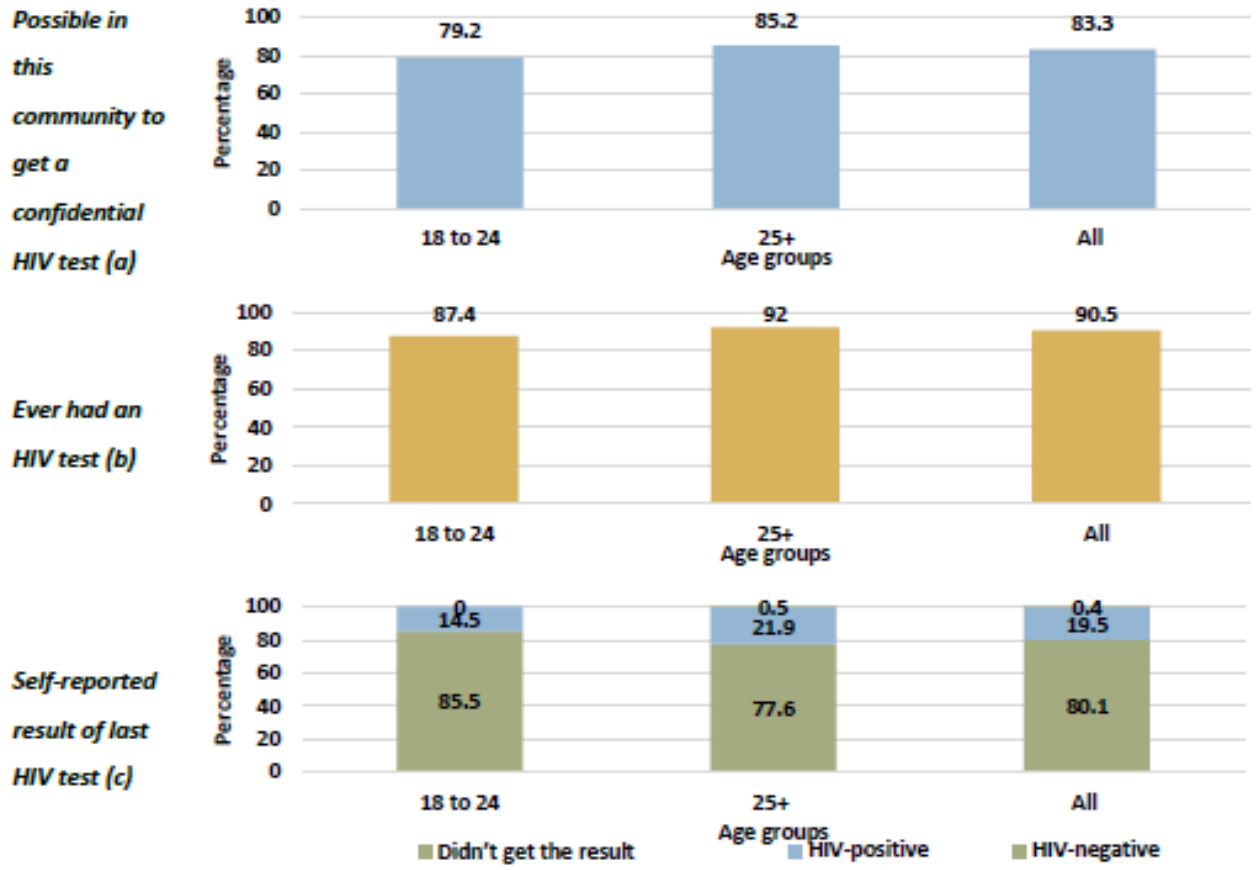


Figure 14 a-c. HIV testing among young and adult MM, Lebanon 2023

ART AND VIRAL TESTING

Of those with a positive test result, 92% of young and 100% of adult participants received ART in the past 12 months (Figure 15a), among which 18% of young and 22% of adult participants ever stopped taking ART once initiated (Figure 15b). Of those with a positive test result, 72% of young and

92% of adult participants ever had a viral load test (Figure 15c), among which 71% of young and 91% of adult participants showed undetectable HIV levels at their last viral load test (Figure 15d).

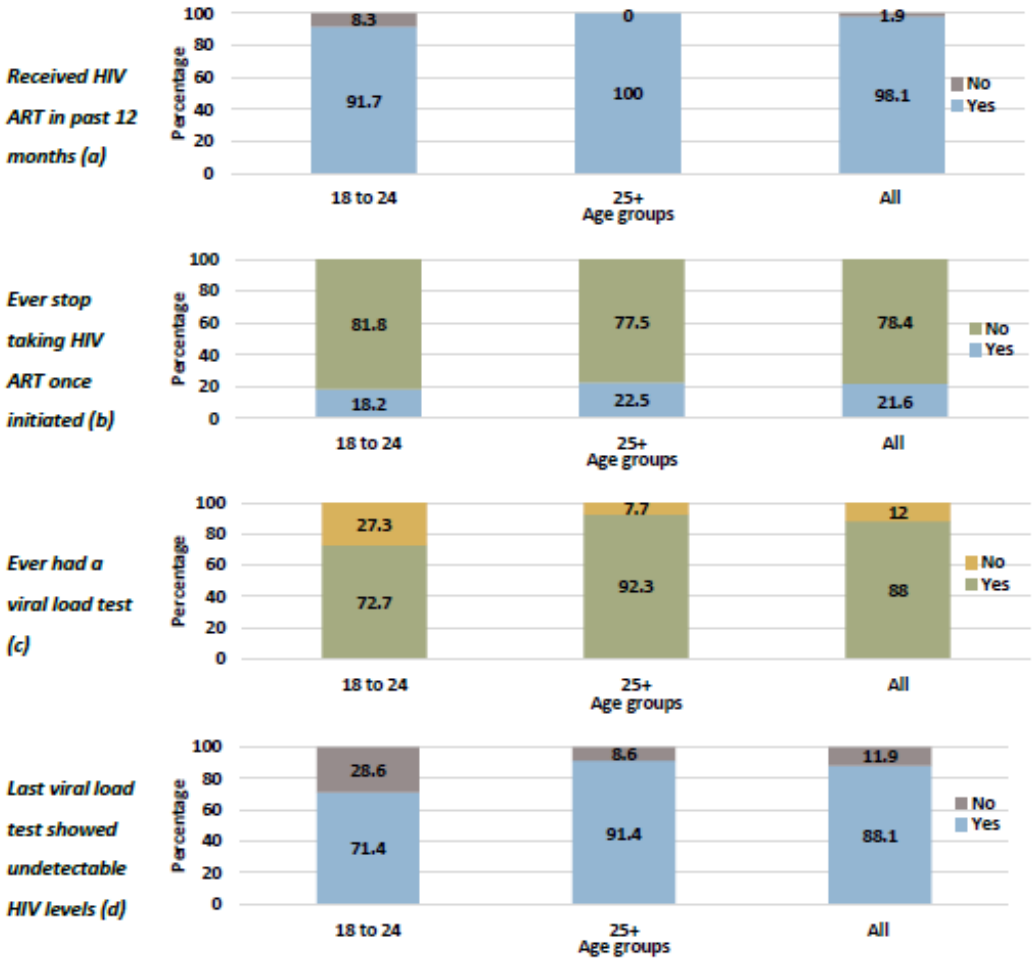


Figure 15 a-d. ART and viral load testing among young and adult MSM, Lebanon 2023

SEXUALLY TRANSMITTED INFECTIONS

A higher percentage of young (67%), compared to adult (63%), participants had a test for an STI in the past three months (Figure 16a), and a slightly higher percentage of young (18%), compared to adult (16%), participants had signs or

symptoms of an STI in the past 12 months (Figure 16b). Low percentages of young (14%) and adult (16%) participants were diagnosed with an STI in the past 12 months (Figure 16c), among which the highest percentages of young (43%) and adult (28%) participants reported being diagnosed with Chlamydia (Figure 16d). A high percentage of young (36%) were diagnosed with Human Papillomavirus and a high percentage of adults (25%) had gonorrhea.

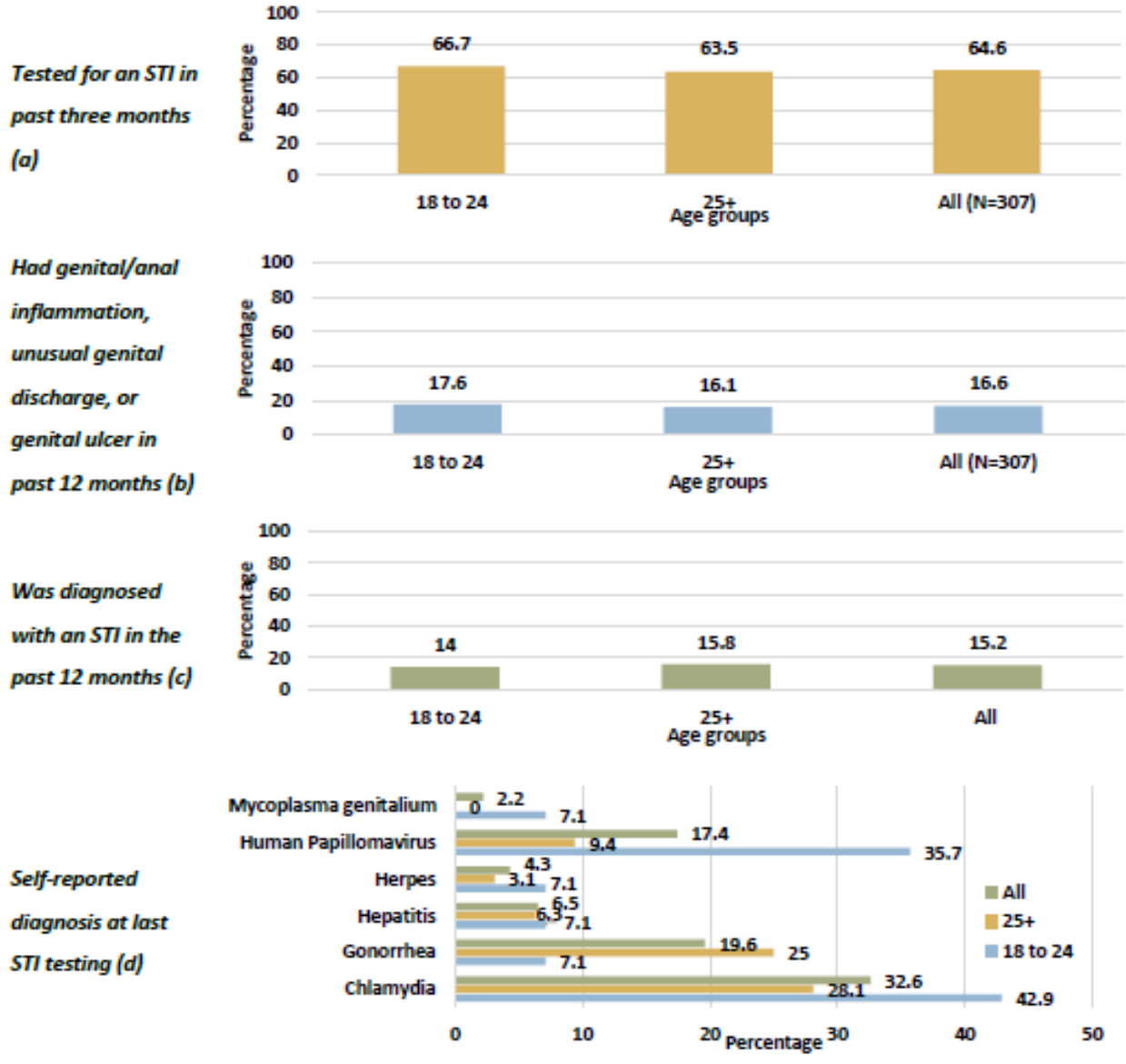
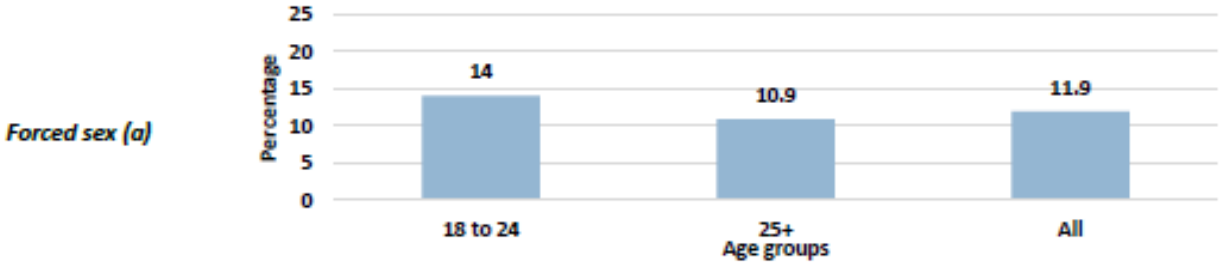


Figure 16 a-d. STI among young and adult MSM in past 12 months, Lebanon, 2023

STIGMA, DISCRIMINATION AND VIOLENCE

Fourteen percent of young and 11% of adult participants have ever been forced to have sex against their will in the past 12 months (Figure 17a). A higher percentage of young, compared to adults, participants were refused employment (11% vs. 7%), restaurant or bar service (7% vs. 3%), housing (10% vs. 7%), or police assistance (12% vs. 5%), in the past 12 months because someone thought they had sex with men (Figure 17b). Similarly, a higher percentage of young, compared to adult, participants experienced being hit, kicked, or beaten (18% vs. 8%) or receiving verbal insults (45% vs. 24%) in the past 12 months because they perceived by others as being sexually attracted to men (Figure 17c). In addition, higher percentages of young, compared to adult, participants were ever blackmailed (18% vs. 17%), scolded or verbally abused (29% vs. 23%), or excluded from family events (22% vs. 17%) because of their sexual attraction to men (Figure 17d).



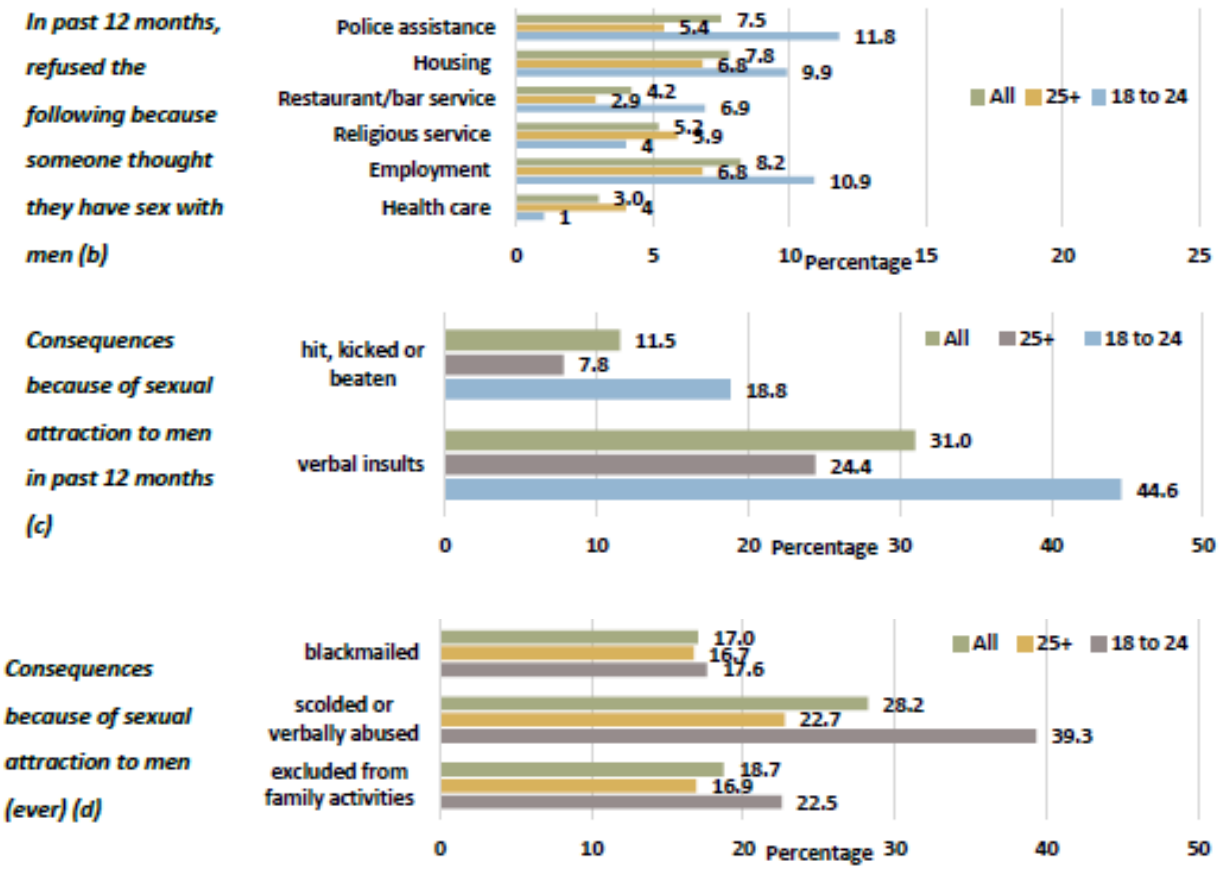


Figure 17 a-d. Stigma, discrimination, and violence among young and adult MSM in past 12 months, Lebanon, 2023

DRUG USE

Roughly one quarter of participants used alcohol in the past month (Figure 18a) and 17% of young and 22% of adult participants used non injection drugs in the past six months (Figure 18b). Just less than one quarter of participants used drugs before or during planned anal sex to facilitate, enhance, prolong, and sustain their sexual experience, and 28% of young and 35% of adult participants had anal sex with a man while under the influence of alcohol in the past six months (Figure 18c). Of the drugs used before or during planned anal sex to facilitate, enhance, prolong, and sustain sexual experiences, 41% of young people and 68% of adults used methamphetamine (Figure 18d).

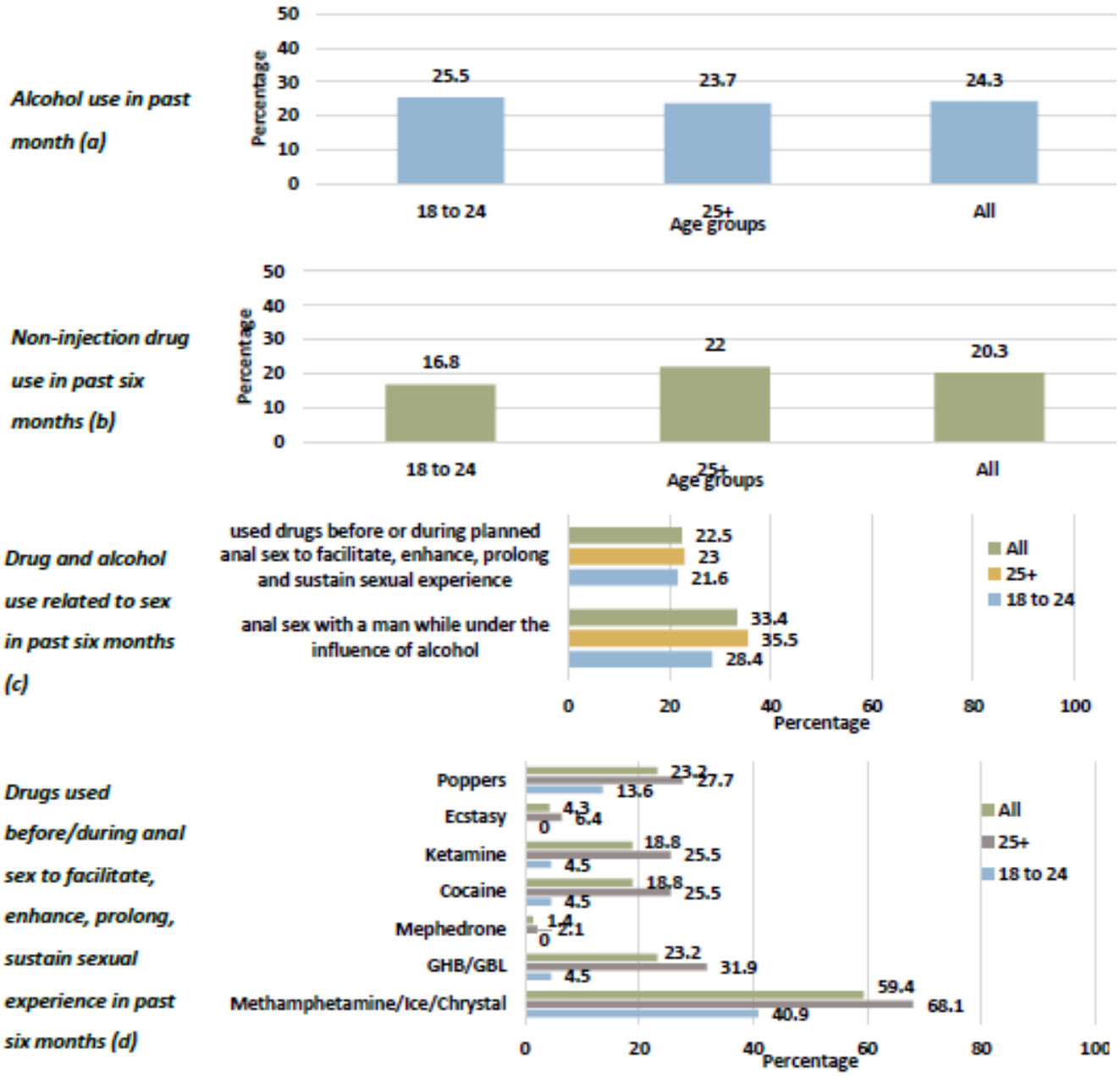


Figure 18 a-d. Drug use among young and adult MSM, Lebanon 2023

HIV AND SYPHILIS TEST RESULTS

Participants have an HIV prevalence of 19% and a syphilis prevalence of 2% (Figure 19). HIV prevalence among young MSM participants is 11%, and among adult MSM participants is 22%,among Lebanese participants is 17.1% and among

non-Lebanese participants is 23%. Non-Lebanese participants have a higher syphilis prevalence (4%) compared to Lebanese participants (0.9%).

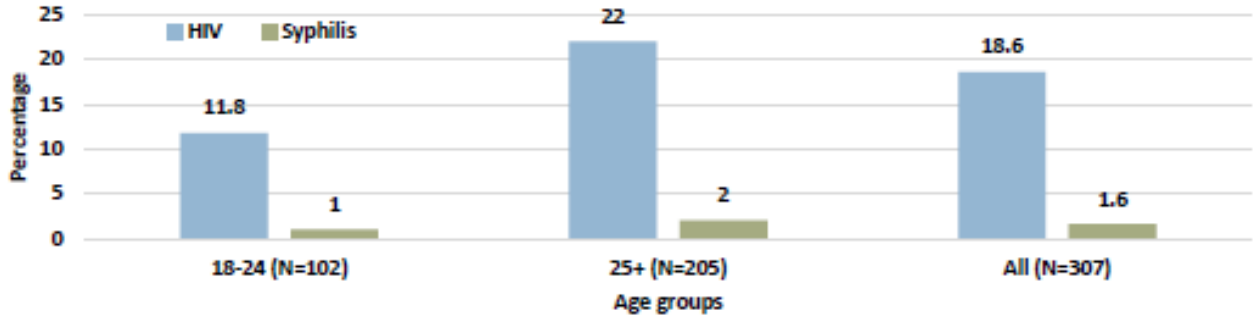


Figure 19. HIV and syphilis among young and adult MSM, Lebanon 2023

LIMITATIONS

The formative assessment encountered some challenges, particularly during the recruitment of key informant participants and the scheduling of the interviews. Multiple factors impacted the timeliness of the formative assessment process, mainly including the occurrence of the Al Adha Eid `holiday, and participants' refusal to participate, preoccupation with work duties, limited availability for participation, and busy schedules. Additionally, there were instances where on-spot cancellations and rescheduling occurred. As a result, scheduling the KIIs experienced some delays, as time and effort were dedicated to urgently finding replacement participants.

The IBBS survey was subject to several severe limitations, most notably the failure to implement the proposed probability sampling method, RDS. In addition to the lack of representativeness, this study suffers from other biases commonly found in surveys, including social desirability as a result of these data being self-reported in a face-to-face interview. Self-selection bias is evident as a result of the high levels of community stigma and harassment, resulting in many MSM actively avoiding participation in the study. As stated above, these data should be interpreted with caution.

DISCUSSION

Young MSM made up 33.2% of the sample, whereas adult MSM made up 66.7% of the sample. Most of the sample was Lebanese, had a university education, employed and single.

MSM HAVE HIGH HIV PREVALENCE

Lebanon has a concentrated HIV epidemic in which 19% of MSM participants were found to be living with HIV. The majority of those living with HIV are adults (22%) and non-Lebanese (23%).

MSM HAVE SEXUAL PRACTICES THAT PUT THEM AND THEIR PARTNERS AT RISK FOR HIV TRANSMISSION

MSM have multiple partner types, including regular, casual, and paying partners. Although condom use is one of the most effective ways to reduce the risk of HIV transmission during anal sex, MSM use condoms inconsistently with all partner types. Despite most participants knowing where to obtain condoms, only 52% of participants used a condom with their last regular partner, 63% with their last casual partner and only 37% with their last paying partner.

Among those who had sex with women, under 50% of all participants used a condom for their last vaginal or anal sex. Many participants do not use condoms because they reduce pleasure during sex. Of interest, among young participants who did not use a condom the last time they sold anal sex, 43% reported not using a condom because the partner objected. For those not using condoms with regular, casual, or paying male or female partners, the majority reported that it was because condoms reduce pleasure during penetrative sex.

LOWER ACCESS TO SAFE SEX AND CONDOM USE COUNSELING AMONG YOUNG MSM

A lower percentage of young participants know how to obtain condoms, compared to adult participants. In addition, lower percentages of young participants, compared to adult participants, received counseling on condom use or safe sex (for example, through an outreach service, drop-in center, or sexual health clinic). Overall, only 36% of participants have received counseling on condom use and safe sex. Access to condom use and safe sex counseling is essential for ensuring MSM protect themselves and their partners from HIV transmission.

LOW USE OF PREP AND PEP, ESPECIALLY AMONG YOUNG MSM

The WHO recommends PrEP and PEP as essential interventions to protect people at higher risk of HIV exposure from acquiring HIV. As more and more evidence shows PrEP as an effective method for protection, in Lebanon, only 8% of young participants and 26% of adult participants have ever used PrEP. PEP is also a useful HIV prevention strategy if individuals are able to identify high-risk exposures and seek timely care. However, under half of participants have ever heard of PEP, among which only 6% of young and 12% of adult participants have ever used PEP. The Ministry of Public Health does not provide PrEP to MSM, but rather, only to married heterosexual partners. Furthermore, the National AIDS Program website does not mention PrEP or PEP as a method for reducing HIV transmission.

YOUNG MSM ARE LESS KNOWLEDGEABLE ABOUT HIV TRANSMISSION

Having accurate knowledge about HIV is essential to protecting against HIV transmission. Knowledge about HIV transmission among MSM participants is

inconsistent and, for most indicators, is lower among young participants compared to adult participants. Although a high percentage of young people (70%), compared to adults (56%), participants correctly know that someone who appears to be in good health can still be living with HIV, a higher percentage of young people (23%), compared to adults (12%), participants incorrectly believe that HIV can be transmitted by sharing a meal.

HIGH HIV TESTING

HIV testing is essential for people who have multiple partners and inconsistent condom use. Knowing your HIV status is important for reducing the spread of HIV and getting the proper care and treatment needed if positive. This is especially so given that there are medications currently available for PLHIV to live normal and healthy lives and to eventually have undetectable viral levels. This is why it is hopeful to see that high percentages of MSM in this study have ever had an HIV test. It is important to point out that this study may have overrepresented MSM who are connected to NGOs, given that the study was conducted in NGOs by NGO staff. The high levels of stigma and discrimination towards MSM, likely dissuaded those who are less likely to have ever had contact with an NGO for HIV testing to enroll.

STIGMA, DISCRIMINATION AND ABUSE TOWARDS MSM, ESPECIALLY YOUNG MSM, PERSISTS

One of the most alarming findings from this study was the high level of stigma, discrimination, and abuse shown towards MSM. MSM were too frightened to enroll in the survey due to societal stigma and actual threats and actions of violence towards them. Roughly 10% of young participants reported that they were refused police assistance, housing, and employment because someone thought they had sex with men. Higher percentages of young,

compared to adults, participants experienced being hit, kicked, or beaten or receiving verbal insults in the past 12 months because they were perceived by others as being sexually attracted to men, and higher percentages of young people, compared to adults, participants were ever blackmailed, scolded, verbally abused, or excluded from family events because of their sexual attraction to men. Stigma and discrimination are identified as primary obstacles to vulnerable populations receiving basic health care and effective HIV prevention, which in turn is harmful to societies as a whole.

MSM ARE USING ALCOHOL AND DRUGS

Seventeen percent of young and 22% of adult participants used non injection drugs in the past six months, among which roughly 22% used drugs before or during planned anal sex to facilitate, enhance, prolong, and sustain sexual experience. The majority of participants used methamphetamines to enhance their sexual experience. Roughly one quarter of participants used alcohol in the past month, among which roughly one third had anal sex while under the influence of alcohol. It is well known that alcohol and drug use during sex leads to risky sexual behaviors and impairs someone's judgment about the dangers of having unprotected sex.

RECOMMENDATIONS

This survey shows clear evidence of the need to continue monitoring HIV among MSM in Lebanon. MSM engage in numerous high-risk behaviors, including inconsistent condom use and multiple sexual partners, which put them at risk of HIV transmission. The level of stigma, discrimination, and abuse towards MSM thwarted efforts to implement a probability-based sampling method to provide representative and actionable data to control the spread of HIV. Hopefully, progress toward respecting the rights and dignity of MSM, as well as all people in Lebanon, will allow for a future HIV IBBS study to be conducted that will provide the data so urgently needed. Normally, follow-up HIV IBBS studies should be conducted every three years to establish trends. Below are some recommendations based on the results of this study.

- Continue to support and scale up existing NGO health services for MSM.
- Scale up programs to provide targeted HIV outreach and services and HIV prevention and education to control the further spread of HIV.
- Scale up coverage, screening, condom distribution, and implementation of combination prevention.
- Operationalize the concept of combination HIV prevention given the multiplicity of factors that make MSM vulnerable to HIV and other infections.
- Integrate and scale up systematic screening for STIs into programs providing services to MSM.
- Screen MSM for Syphilis, especially in all HIV testing and counseling settings (rapid testing, confirmation, and treatment);
- Increase access to and availability of education about HIV risk and transmission for sexually active males.
- Make PrEP and PEP widely available to MSM.

- Develop user-friendly online applications that contain comprehensive awareness packages on STIs, sexual risk and provide information about places to receive essential services such as healthcare, counseling, andlegal assistance.
- Educate health staff to improve prevention services targeting high risk populations.
- Educate condom providers (shops, stores, pharmacies, etc.) about MSM needs, to encourage MSM tocontinue purchasing condoms.
- Scale up peer educators' and NGOs' efforts to distribute condoms and lubricants.
- Enhance youth programs to include healthy lifestyle choices and support for young boys.
- Screen MSM for alcohol and drug use and provide counseling and support services for those abusing substances. In addition, educate doctors and other medical staff to assess alcohol and drug use among MSM and to provide effective and accurate counseling to those at risk of alcohol and drug abuse.
- Scale up the monitoring and reporting on discrimination towards MSM.
- Increase outreach efforts/policy changes, including decriminalizing and reducing stigma related to male- to-male sex, to address sexual health needs of MSM and their partners.
- Educate health staff, educators, police, and society at large to reduce discrimination against MSM.
- Recognize and protect the human rights of MSM.

  Identify effective interventions to reduce stigma and discrimination particularly in health care settings and include them as one of the priorities to improve access for vulnerable groups to HIV and STIservices in future plans.

APPENDIX A. MSM TABLES

Table 1. Background Characteristics											
	18 to 24 (N=102)				25+ (N=205)				All (N=307)		
	N	%	95% CI		N	%	95% CI		N	%	95% CI
Nationality											
Lebanese	71	69.6	59.9	77.9	162	79	72.9	84.1	233	75.9	70.4-81.4
Syrian	23	22.5	15.4	31.8	32	15.6	11.2	21.3	55	17.9	7.8-28.0
Palestinian	1	1	0.1	6.8	6	2.9	1.3	6.4	7	2.3	0.0-13.4
No nationality	1	1	0.1	6.8	0	--	--	--	1	0.3	0.0-11.0
Other	6	5.9	2.6	12.6	5	2.4	1.0	5.8	11	3.6	0.0-14.6
Age (Calculated from date of birth)											
Mean ± SD	21.16 [SD=1.993]				33.656 [SD=8.208]				29.84 ± 8.70		
Median (min, max)	22.6 (18-24)				31.2 (25-68)				27.6 (18-68)		
Any education											
No	5	4.9	2.0	11.4	5	2.4	1.0	5.8	10	3.3	0.0-14.4
Yes	97	95.1	88.6	98.0	200	97.6	94.2	99.0	297	96.7	94.7-98.7
Highest level of education											
< secondary education	17	17.5	11.1	26.6	32	16	11.5	21.8	49	16.5	0.0-18.1
Secondary School	19	19.5	12.8	28.9	17	8.5	5.3	13.3	36	12.1	0.0-20.2
Vocational School	10	10.3	5.6	18.3	18	9	5.7	13.9	28	9.4	1.4-22.8
University	51	52.6	42.5	62.5	133	66.5	59.6	72.7	184	62.0	0.0-20.2
Currently employed											
Yes	48	47.1	37.4	56.9	62	30.2	24.3	36.9	110	35.8	26.8-44.8
No	54	52.9	43.1	62.6	143	69.8	63.1	75.7	197	64.2	57.5-70.9
Current student											
Yes	96	94.1	87.4	97.4	204	99.5	96.6	99.9	300	97.7	96.0-99.4
No	6	5.9	2.6	12.6	1	0.5	0.1	3.4	7	2.3	0.0-13.4
Persons living with											
Alone	15	14.7	9.0	23.1	73	35.6	29.3	42.5	88	25.2	19.2-38.2
A man (sexual partner)	8	7.8	3.9	15.1	24	11.7	7.9	16.9	32	9.8	0.0-0.0
Parents	61	59.8	49.9	69.0	82	40.0	33.5	46.9	143	49.9	0.0-11.0
Friends or roommates (non-sexual partner)	17	16.7	10.5	25.4	23	11.2	7.5	16.4	40	13.9	0.0-21.0
Other	1	1.0	0.1	6.8	3	1.5	0.5	4.5	4	1.2	0.0-12.3
Sexual orientation											
Homosexual	91	90.0	83.4	95.3	183	89.3	84.2	92.9	274	89.3	85.6-93.0
Bisexual	9	9.0	4.7	16.6	21	10.2	6.8	15.2	30	9.8	0.0-20.4
Heterosexual/other	1	1	0.1	6.9	1	0.5	0.1	3.4	1	1.0	0.0-11.0
Civil status											
Single, never married	102	100	--	--	198	96.6	93.0	98.4	300	97.7	96.0-99.4
Married	0	--	--	--	1	0.5	0.1	3.4	1	0.3	0.0-11.0
Separated/divorced	0	--	--	--	3	1.5	0.5	4.5	3	1.0	0.0-12.3
Widowed	0	--	--	--	3	1.5	0.5	4.5	3	1.0	0.0-12.3
Self-perceived socioeconomic status compared to others											
Poor	35	34.7	25.9	44.6	64	31.2	25.2	37.9	99	32.9	
Moderate	49	48.5	38.8	58.4	99	48.3	41.5	55.2	148	48.4	
Good	17	16.8	10.6	25.6	42	20.5	15.5	26.6	59	18.7	

Table 2. Sexual History – First Sexual Experiences, General Questions about Sex with Men											
	18 to 24 (N=102)				25+ (N=205)				All (N=307)		
	N	%	95% CI		N	%	95% CI		N	%	95% CI
Ever had oral sex											
No	0	--	--	--	2	1	0.2	3.8	2	0.7	0.0-12.3
Yes	102	100	--	--	203	99	96.1	99.7	305	99.3	98.4-100
Age of first have anal sex with a man											
Mean ± SD	16.82 ± 2.85				19.16 ± 5.14				24.48 ± 9.02		
Median (min, max)	17 (9-23)				18 (6-50)				18 (6-50)		
Type of sexual experience with a man in past 6 months (select multiple)											
Manual	38	37.3	28.3	47.2	82	40	33.5	46.9	120	39.1	30.4-47.8
Oral	56	54.9	45.0	64.4	131	63.9	57.0	70.2	187	60.9	53.9-67.9
Anal sex (top)	72	70.6	60.9	78.7	144	70.2	63.6	76.1	216	70.4	64.3-76.5
Anal sex (bottom)	72	70.6	60.9	78.7	112	54.6	47.7	61.4	184	59.9	52.8-67.0
Relation to the first male anal sex partner											
Co-worker	3	2.9	0.9	8.9	5	2.4	1.0	5.8	8	2.6	0.0-13.6
Friend	39	38.2	29.2	48.2	65	31.7	25.7	38.4	104	33.9	24.8-43.0
Family member	13	12.7	7.5	20.9	29	14.1	10.0	19.7	42	13.7	3.3-24.1
Neighbor	7	6.9	3.3	13.9	27	13.2	9.2	18.6	34	11.1	0.5-21.7
Commercial partner	1	1	0.1	6.8	1	0.5	0.1	3.4	2	0.7	0.0-12.3
Stranger	34	33.3	24.8	43.2	62	30.2	24.3	36.9	96	31.3	22.0-40.6
Partner (boyfriend)	5	4.9	2.0	11.4	16	7.8	4.8	12.4	21	6.8	0.0-17.6
Venue most used for sex with male partners in last 6 months (select multiple)											
On the street	13	12.7	7.5	20.9	19	9.3	6.0	14.1	32	11.0	0.2-21.8
Through friends	20	19.6	12.9	28.6	58	28.3	22.5	34.9	78	26.7	16.9-36.5
On the internet	30	29.4	21.3	39.1	55	26.8	21.2	33.4	85	29.1	19.4-38.8
Phone/Apps	54	52.9	43.1	62.6	107	52.2	45.3	59.0	161	55.1	47.4-62.8
In cafes	9	8.8	4.6	16.3	21	10.2	6.8	15.2	30	10.3	0.0-21.2
In bars/disco	10	9.8	5.3	17.4	32	15.6	11.2	21.3	42	14.4	3.8-25.0
In the parks	4	3.9	1.5	10.1	7	3.4	1.6	7.0	11	3.8	0.0-15.1
Do not look for sex partners	6	5.9	2.6	12.6	9	4.4	2.3	8.3	15	1.0	0.0-12.3
In Cinemas	1	1	0.1	6.8	2	1	0.2	3.9	3	1.0	0.0-12.3
In Toilets	1	1	0.1	6.8	2	1	0.2	3.9	3	1.4	0.0-12.9
Social media or internet used to meet men for sex in last 6 months (select multiple)											
WhatsApp	31	30.4	22.1	40.1	54	26.3	20.7	32.9	85	32.4	22.5-42.3
Facebook	23	22.5	15.4	31.8	56	27.3	21.6	33.9	79	30.2	20.1-40.3
Instagram	44	43.1	33.7	53.1	70	34.1	27.9	41.0	114	43.5	34.4-52.6
Snapchat	12	11.8	6.7	19.7	22	10.7	7.1	15.8	34	13.0	1.7-24.3
Twitter	5	4.9	2.0	11.4	4	2	0.7	5.1	9	3.4	0.0-15.2
Badoo	2	2	0.5	7.7	3	1.5	0.5	4.5	5	1.9	0.0-13.9
Tinder	24	23.5	16.2	32.9	38	18.5	13.8	24.5	62	23.7	13.1-34.3
Hichat	3	2.9	0.9	8.9	6	2.9	1.3	6.4	9	3.4	0.0-15.2

Wechat	4	3.9	1.5	10.1	9	4.4	2.3	8.3	13	5.0	0.0-16.8
Grindr	61	59.8	49.9	69.0	116	56.6	49.7	63.3	177	67.6	60.7-74.5
Scruff	13	12.7	7.5	20.9	25	12.2	8.3	17.5	38	14.5	3.3-25.7
Bearwww	3	2.9	0.9	8.9	4	2	0.7	5.1	7	2.7	0.0-14.7
Growlr	1	1	0.1	6.8	16	7.8	4.8	12.4	17	6.5	0.0-18.2
Only fans	0	--	--	--	2	1	0.2	3.9	2	0.8	0.0-13.1
Jff	0	--	--	--	2	1	0.2	3.9	2	0.8	0.0-13.1
Telegram	1	1	0.1	6.8	4	2	0.7	5.1	5	1.9	0.0-13.9
Hornet	2	2	0.5	7.7	10	4.9	2.6	8.9	12	4.6	0.0-16.5
Bumble	3	2.9	0.9	8.9	3	1.5	0.5	4.5	6	2.3	0.0-14.3
Sugar	3	2.9	0.9	8.9	5	2.4	1.0	5.8	8	3.1	0.0-15.1
In the last 6 months, used social media to meet men for sex											
No	14	13.7	8.2	22.0	31	15.1	10.8	20.8	45	14.7	4.4-25.0
Yes	88	86.3	78.0	91.8	174	84.9	79.2	89.2	262	14.7	4.4-25.0
Place where most often had sex with a man (select multiple)											
Home	52	51	41.2	60.7	120	58.5	51.6	65.1	172	56.0	48.6-63.4
At my partner's home	36	35.3	26.5	45.2	57	27.8	22.1	34.4	93	30.3	21.0-39.6
Rented room	6	5.9	2.6	12.6	13	6.3	3.7	10.7	19	6.2	0.0-17.0
In a public place (street, park)	4	3.9	1.5	10.1	6	2.9	1.3	6.4	10	3.3	0.0-14.4
At the hotel	4	3.9	1.5	10.1	6	2.9	1.3	6.4	10	3.3	0.0-14.4
At friend's homes	0	--	--	--	2	1	0.2	3.9	2	0.7	0.0-12.3
In Toilets	0	--	--	--	1	0.5	0.1	3.4	1	0.3	0.0-11.0
Anal sex with multiple male partners at the same time											
Yes	26	25.5	17.9	35.0	77	37.6	31.1	44.4	103	33.6	24.5-42.7
No	76	74.5	65.0	82.1	128	62.4	55.6	68.9	204	66.4	59.9-72.9
Best estimate of frequency of condom use during anal sex encounters, last time engaged in group sex with men [1]											
100% (everyone)	6	24	10.5	45.9	18	24.3	15.7	35.6	24	24.2	7.1-41.3
75% (most everyone)	3	12	3.6	33.3	16	21.6	13.5	32.7	19	19.2	1.5-36.9
50% (about half)	3	12	3.6	33.3	10	13.5	7.3	23.6	13	13.1	0.0-31.4
25% (few)	3	12	3.6	33.3	8	10.8	5.4	20.4	11	11.1	0.0-29.7
0% (nobody)	10	40	22.0	61.2	22	29.7	20.3	41.3	32	32.3	16.1-48.5
Condom use at last anal sex with a man											
Yes	63	62.4	52.4	71.4	127	62	55.1	68.4	190	62.1	55.2-69.0
No	38	37.6	28.6	47.6	78	38	31.6	44.9	116	37.9	29.1-46.7

[1] Among participants who ever had anal sex with multiple male partners at the same time in a group sex setting.

Table 3. Sexual History – Male Commercial Partners											
	18 to 24 (N=102)				25+ (N=205)				All (N=307)		
	N	%	95% CI		N	%	95% CI		N	%	95% CI
Had anal sex with a man who paid for sex in past 6 months											
Yes	13	12.7	7.5	20.9	19	9.3	6.0	14.2	32	10.5	0.0-21.1
No	89	87.3	79.1	92.5	185	90.7	85.8	94.0	274	89.5	85.9-93.1
Has someone who to help find male clients (Agent, pimp) [1]											
Yes	1	8.3	0.8	50.1	2	10.5	2.3	37.1	3	9.7	0.0-43.2
No	11	91.7	49.9	99.2	17	89.5	62.9	97.7	28	90.3	79.3-100
Sold anal sex one month											
Yes	2	15.4	3.1	51.0	3	15.8	4.6	42.2	5	15.6	0.0-47.4
No	11	84.6	49.0	96.9	16	84.2	57.8	95.4	27	84.4	70.7-98.1
Position the last time sex was sold to a man in past 6 months [1]											
Top	5	38.5	14.6	69.5	9	47.4	25.0	70.8	14	43.8	17.8-69.8
Bottom	6	46.2	19.5	75.2	5	26.3	10.4	52.4	11	34.4	6.3-62.5
Both	2	15.4	3.1	51.0	5	26.3	10.4	52.4	7	21.9	0.0-52.5
condom used the last time anal sex was sold to a man in past 6 months [1]											
Yes	6	46.2	19.5	75.2	6	33.3	14.4	59.7	12	38.7	11.1-66.3
No	7	53.8	24.8	80.5	12	66.7	40.3	85.6	19	61.3	39.4-83.2
Person who suggested condom use last time [2]											
Self	5	83.3	18.6	99.1	6	100	--	--	11	91.7	75.4-100
Commercial partner	0	--	--	--	0	--	--	--	0	--	--
Joint decision	1	16.7	0.9	81.4	0	--	--	--	1	8.3	0.0-62.4
Why not used last time [3]											
Things happened too fast	1	14.3	1.0	74.3	1	8.3	0.8	50.1	2	10.5	0.0-53.0
Too expensive	1	14.3	1.0	74.3	1	8.3	0.8	50.1	2	10.5	0.0-53.0
Partner objected	3	42.9	9.1	85.0	2	16.7	3.3	54.3	5	26.3	0.0-64.9
Reduce pleasure	2	28.6	4.2	78.5	4	33.3	10.9	67.1	6	31.6	0.0-68.8
Pull out before ejaculation	1	14.3	1.0	74.3	0	--	--	--	1	5.3	0.0-49.2
Do not protect from diseases	1	14.3	1.0	74.3	0	--	--	--	1	5.3	0.0-49.2
Embarrassed to buy	1	14.3	1.0	74.3	1	8.3	0.8	50.1	2	10.5	0.0-53.0
Was under influence of drugs or alcohol	0	--	--	--	2	16.7	3.3	54.3	2	10.5	0.0-53.0
Thought partner was HIV-negative	0	--	--	--	2	16.7	3.3	54.3	2	10.5	0.0-53.0
Took PrEP	1	14.3	1.0	74.3	1	8.3	0.8	50.1	2	10.5	0.0-53.0
Frequency of use a condom with men who paid for sex in past 6 months [1]											
Always	5	83.3	18.6	99.1	6	85.7	25.7	99.0	11	84.6	63.3-100
Sometimes	1	16.7	0.9	81.4	0	--	--	--	1	7.7	0.0-60.0
Often	0	--	--	--	1	14.3	1.0	74.3	1	7.7	0.0-60.0
Never	0	--	--	--	0	--	--	--	0	--	--
Had anal sex with a man who sold sex in past 6 months											
Yes	1	1	0.1	6.8	10	4.9	2.6	8.9	11	3.6	0.0-14.6
No	101	99	93.2	99.9	194	95.1	91.1	97.4	298	96.4	94.3-98.5

Position the last time buying anal sex from a man in past 6 months [4]											
Top	0	--	--	--	2	20	3.7	62.2	2	18.2	0.0-71.7
Bottom	1	100	--	--	5	50	18.1	81.9	6	54.5	14.7-94.3
Both	0	--	--	--	3	30	7.6	69.0	3	27.3	0.0-77.7
Condom used the last time anal sex was bought from a man in the past 6 months [4]											
Yes	0	--	--	--	3	30	7.6	69.0	3	27.3	0.0-77.7
No	1	100	--	--	7	70	31.0	92.4	8	72.7	41.8-100
Frequency of condom use with men who sold sex in past 6 months [4]											
Always	0	--	--	--	3	30	7.6	69.0	3	27.3	0.0-77.7
Sometimes	1	100	--	--	4	40	7.6	69.0	5	36.4	0.0-83.6
Never	0	--	--	--	3	30	7.6	69.0	3	9.1	0.0-65.5
Ever discussed HIV or STIs with any men who bought anal sex											
Yes, all	15	16	9.8	25.0	31	15.8	11.3	21.7	46	15.9	5.3-26.5
Yes, some	20	21.3	14.0	30.9	51	26	20.3	32.7	71	24.5	14.5-34.5
No, none	59	62.8	52.4	72.1	114	58.2	51.1	64.9	173	59.7	52.4-67.0

[1] Among participants who had anal sex with a man to whom they sold sex during the past 6 months

[2] Among participants who used a condom last time they sold anal sex to a man in the past 6 months

[3] Among participants who did not use a condom last time they sold anal sex to a man in the past 6 months; No responses for my partner and I are both living with HIV, embarrassed to suggest using or offer, don't know how to use, afraid to carry.

[4] Among participants who had anal sex with a man from whom they bought sex during the past 6 months

Table 4. Sexual History – Non-Paying (Casual) Male Sex Partners											
	18 to 24 (N=102)				25+ (N=205)				All (N=307)		
	N	%	95% CI		N	%	95% CI		N	%	95% CI
Had anal sex with a non-paying casual male partner in past 6 months											
Yes	39	39.4	30.1	49.5	84	41.6	34.9	48.6	178	59.1	51.9-66.3
No	60	60.6	50.5	69.9	118	58.4	51.4	65.1	123	40.9	32.2-49.6
Non-paying partners in the past one month											
No	4	10.3	3.7	25.2	14	16.7	10.0	26.4	18	85.4	69.1-100
Yes	35	89.7	74.8	96.3	70	83.3	73.6	90.0	105	14.6	7.8-21.4
Condom used during last anal sex with casual partner [1]											
Yes	26	68.4	51.4	81.6	50	60.2	49.2	70.4	76	62.8	51.9-73.7
No	12	31.6	18.4	48.6	33	39.8	29.6	50.8	45	37.2	23.1-51.3
Person who suggested condom use last time [2]											
Self	17	65.4	44.3	81.8	29	58	43.6	71.2	46	60.5	46.4-74.6
Casual male partner	1	3.8	0.5	25.4	4	8	2.9	20.0	5	6.6	0.0-28.4
Joint decision	8	30.8	15.4	52.0	17	34	21.9	48.6	25	32.9	14.5-51.3
Why condom was not used last time [3] (select multiple)											
Afraid to carry	2	16.7	3.3	54.3	0	--	--	--	2	4.4	0.0-32.8
Things happened too fast	2	16.7	3.3	54.3	7	21.2	10.0	39.4	9	20	0.0-46.1
Too expensive	1	8.3	0.8	50.1	1	3	0.4	20.3	2	4.4	0.0-32.8
Partner objected	1	8.3	0.8	50.1	3	9.1	2.8	25.9	4	8.9	0.0-36.8
Reduce pleasure	5	41.7	15.7	73.3	13	39.4	23.7	57.6	18	40	17.4-62.6
Pull out before ejaculation	1	8.3	0.8	50.1	0	--	--	--	1	2.2	0.0-30.9
Embarrassed to buy	1	8.3	0.8	50.1	1	3	0.4	20.3	2	4.4	0.0-32.8

Under influence of drugs/alcohol	1	8.3	0.8	50.1	1	3	0.4	20.3	2	4.4	0.0-32.8
Thought partner was HIV-negative	2	16.7	3.3	54.3	3	9.1	2.8	25.9	5	11.1	0.0-38.6
Partner and I are both living with HIV	0	--	--	--	1	3	0.4	20.3	1	2.2	0.0-30.9
Took PrEP	3	25	6.7	60.7	4	12.1	4.4	29.4	7	15.6	0.0-42.5
With what frequency did you use a condom with your casual partner(s) in the past 6 months? [1]											
Always	16	59.3	39.0	76.8	36	72	57.6	83.0	52	67.5	54.8-80.2
Sometimes	11	40.7	23.2	61.0	9	18	9.4	31.7	20	26	6.8-45.2
Often	0	--	--	--	5	10	4.1	22.4	5	6.5	0.0-28.1
Never	0	--	--	--	0	--	--	--	0	--	--
Have you ever discussed HIV/AIDS or STIs with any of your casual partners? [1]											
Yes, all	20	51.3	35.3	67.0	30	36.1	26.4	47.2	50	41	27.4-54.6
Yes, some	9	23.1	12.1	39.5	28	33.7	24.2	44.8	37	30.3	15.5-45.1
No, none	10	25.6	14.0	42.2	25	30.1	21.1	41.0	35	28.7	13.7-43.7

[1] Among participants who had anal sex with a non-paying casual male partner in the past 6 months

[2] Among participants who used a condom the last time they had anal sex with a casual partner

[3] Among participants who did not use a condom the last time they had anal sex with a casual partner; No response for do not protect from diseases, do not know how to use, embarrassed to suggest using or offer.

Table 5. Sexual History – Regular Male Sex Partners

	18 to 24 (N=102)				25+ (N=205)				All (N=307)		
	N	%	95% CI		N	%	95% CI		N	%	95% CI
Had anal sex with regular male partner in past 6 months											
Yes	45	44.1	34.7	54.0	119	58.3	51.4	65.0	164	53.6	46.0-61.2
No	57	55.9	46.0	65.3	85	41.7	35.0	48.6	142	46.4	38.2-54.6
Had anal sex with regular male partner in past month											
No	3	6.7	2.1	19.4	6	5	2.3	10.9	9	5.5	0.0-20.4
Yes	42	93.3	80.6	97.9	113	95	89.1	97.7	155	94.5	90.9-98.1
Used condom during last anal sex with regular partner [1]											
Yes	20	44.4	30.3	59.6	65	55.1	45.9	63.9	85	52.1	41.5-62.7
No	25	55.6	40.4	69.7	53	44.9	36.1	54.1	78	47.9	36.8-59.0
Person who suggested condom use [2]											
Self	8	40	20.0	64.0	37	56.9	44.4	68.6	45	52.9	38.3-67.5
Regular male partner	2	10	2.2	35.5	6	9.2	4.1	19.4	8	9.4	0.0-29.6
Joint decision	10	50	27.7	72.3	22	33.8	23.2	46.4	32	37.6	20.8-54.4
Reasons for not using condom at last anal sex [3] (select multiple)											
Afraid to carry	1	4	0.5	26.3	0	--	--	--	1	1.3	0.0-23.5
Things happened too fast	4	16	5.7	37.5	3	5.7	1.8	16.7	7	9	0.0-30.2
Too expensive					1	1.9	0.2	12.9	1	1.3	0.0-23.5
Partner objected	1	4	0.5	26.3	5	9.4	3.9	21.3	6	7.7	0.0-29.0
Reduce pleasure	5	20	8.0	41.7	16	30.2	19.1	44.2	21	26.9	7.9-45.9
Embarrassed to buy	1	4	0.5	26.3	1	1.9	0.2	12.9	2	2.6	0.0-24.7
Embarrassed to suggest using or offer	1	4	0.5	26.3	0	--	--	--	1	1.3	0.0-23.5
Under influence of drugs/alcohol	1	4	0.5	26.3	0	--	--	--	1	1.3	0.0-23.5

Thought partner was HIV-negative	6	24	10.5	45.9	9	17	8.9	30.0	15	19.2	0.0-39.1
Partner and I are both living with HIV	0	--	--	--	1	1.9	0.2	12.9	1	1.3	0.0-23.5
Took PrEP	2	8	1.8	29.1	10	18.9	10.2	32.1	12	15.4	0.0-35.8
Frequency of condom use with regular partner(s) in past 6 months? [1]											
Always	12	60	36.0	80.0	47	71.2	58.9	81.0	59	68.6	56.8-80.4
Sometimes	7	35	16.4	59.6	16	24.2	15.2	36.3	23	26.7	8.6-44.8
Often	1	5	0.6	32.3	3	4.5	1.4	13.5	4	4.7	0.0-25.4
Never	0	--	--	--	0	--	--	--	0	--	--
Ever discussed HIV or STI with any regular partners [1]											
Yes, all	25	55.6	40.4	69.7	69	58	48.8	66.6	94	57.3	47.3-67.3
Yes, some	14	31.1	19.0	46.5	26	21.8	15.2	30.3	40	24.4	11.1-37.7
No, none	6	13.3	5.9	27.3	24	20.2	13.8	28.5	30	18.3	4.5-32.1
[1] Among participants who had anal sex with a regular male partner in the past 6 months.											
[2] Among participants who used a condom the last time they had anal sex with a regular partner.											
[3] Among participants who did not use a condom the last time they had anal sex with a regular partner.											

Table 6. Sexual History – Sex with Women											
	18 to 24 (N=102)				25+ (N=205)				All (N=307)		
	N	%	95% CI		N	%	95% CI		N	%	95% CI
Ever married to a woman											
Yes	0	--	--	--	9	4.4	2.3	8.3	9	2.9	0.0-13.9
No	102	100	--	--	195	95.6	91.7	97.7	297	97.1	95.2-99.0
Currently married to a woman [1]											
Yes	0	--	--	--	1	11.1	0.9	62.6	1	11.1	0.0-72.7
No	102	100	--	--	8	88.9	37.4	99.1	8	88.9	67.1-100
Ever had sexual intercourse (anal or vaginal with penetration) with a woman											
Yes	11	10.8	6.0	18.6	53	26	20.4	32.5	64	20.9	10.9-30.9
No	91	89.2	81.4	94.0	151	74	67.5	79.6	242	79.1	74.0-84.2
Currently living with a female sexual partner [2]											
Yes	0	--	--	--	1	1.9	0.2	12.9	1	1.6	0.0-26.2
No	11	100	--	--	52	98.1	87.1	99.8	63	98.4	95.3-100
Condom used at last anal/vaginal sex with a woman [2]											
Yes	6	54.5	22.6	83.2	22	44.9	31.3	59.4	28	46.7	28.2-65.2
No	5	45.5	16.8	77.4	27	55.1	40.6	68.7	32	53.3	36.0-70.6
Reasons for not using condom at last anal sex [3] (select multiple)											
Afraid to carry	0	--	--	--	1	3.7	0.5	24.5	1	3.1	0.0-37.1
Things happened too fast	1	20	0.8	88.9	4	14.8	5.3	35.1	5	15.6	0.0-47.4
Too expensive	0	--	--	--	1	3.7	0.5	24.5	1	3.1	0.0-37.1
Partner objected	1	20	0.8	88.9	4	14.8	5.3	35.1	5	15.6	0.0-47.4
Reduce pleasure	1	20	0.8	88.9	10	37	20.3	57.5	11	34.4	6.3-62.5
Pull out before ejaculation	1	20	0.8	88.9	1	3.7	0.5	24.5	2	6.3	0.0-40.0
Embarrassed to buy	0	--	--	--	1	3.7	0.5	24.5	1	3.1	0.0-37.1
Thought partner was HIV-negative	1	20	0.8	88.9	0	--	--	--	1	3.1	0.0-37.1

If condom used, partner would know of other partners	0	--	--	--	2	7.4	1.7	27.2	2	6.3	0.0-40.0
Frequency of using condoms with women during sexual intercourse in past 6 months [2]											
Always	4	66.7	14.9	95.8	15	65.2	42.6	82.6	19	65.5	44.1-86.9
Sometimes	1	16.7	0.9	81.4	3	13	3.9	35.8	4	13.8	0.0-47.6
Often	0	--	--	--	1	4.3	0.5	28.4	1	3.4	0.0-38.9
Never	1	16.7	0.9	81.4	4	17.4	6.2	40.3	5	17.2	0.0-50.3
1, from participants who have ever been married to a woman.											
2, from participants who ever had sexual intercourse with a woman.											
3, from participants who did not use a condom the last time they had anal sex with a woman; No response for do not protect from diseases, do not know how to use, embarrassed to suggest using or offer, under influence of drugs/alcohol, partner and I are both living with HIV, took PrEP.											

Table 7. Condoms and Lubricants											
	18 to 24 (N=102)				25+ (N=205)				All (N=307)		
	N	%	95% CI		N	%	95% CI		N	%	95% CI
Knows of any place or person from where to obtain male condoms											
Yes	91	89.2	81.4	94.0	190	92.7	88.2	95.6	281	91.5	88.2-94.8
No	11	10.8	6.0	18.6	15	7.3	4.4	11.8	26	8.5	0.0-19.2
Known places or persons to obtain male condoms [1] (select multiple)											
Shop	4	4.4	1.6	11.3	16	8.4	5.2	13.4	20	7.1	0.0-18.4
Pharmacy	74	81.3	71.8	88.2	166	87.4	81.8	91.4	240	85.4	80.9-89.9
Market	6	6.6	2.9	14.1	24	12.6	8.6	18.2	30	10.7	0.0-21.8
Clinic	2	2.2	0.5	8.6	8	4.2	2.1	8.2	10	3.6	0.0-15.1
Hospital	1	1.1	0.1	7.6	6	3.2	1.4	6.9	7	2.5	0.0-14.1
Family planning center	0	--	--	--	1	0.5	0.1	3.7	1	0.4	0.0-12.8
Bar/guest/house/hotel	1	1.1	0.1	7.6	0	--	--	--	1	0.4	0.0-12.8
Friend	2	2.2	0.5	8.6	12	6.3	3.6	10.8	14	5	0.0-16.4
Non-governmental organization	57	62.6	52.1	72.1	115	60.5	53.3	67.3	172	61.2	53.9-68.5
National AIDS Program	1	1.1	0.1	7.6	4	2.1	0.8	5.5	5	1.8	0.0-13.5
Sex partner who is a client	0	--	--	--	1	0.5	0.1	3.7	1	0.4	0.0-12.8
Sex partner who is not a client	0	--	--	--	2	1.1	0.3	4.2	2	0.7	0.0-12.3
In past 3 months, received counselling on condom use or safe sex (e.g., through an outreach service, drop-in center, or sexual health clinic)											
Yes	31	30.4	22.1	40.1	79	38.7	32.2	45.6	110	35.9	26.9-44.9
No	71	69.6	59.9	77.9	125	61.3	54.4	67.8	196	64.1	57.4-70.8
frequency of using water-based lubricants during anal sex with male partners in last 6 months											
Never	16	15.8	9.9	24.5	24	11.7	7.9	16.9	40	13.1	2.6-23.6
Sometimes	37	36.6	27.7	46.6	98	47.8	41.0	54.7	135	44.1	35.7-52.5
Often	21	20.8	13.9	30.0	29	14.1	10.0	19.7	50	16.3	6.1-26.5
Always	27	26.7	18.9	36.4	54	26.3	20.7	32.9	81	26.5	16.9-36.1
[1] Among participants who know of any place or person from which male condoms can be obtained.											

Table 8. Sexually transmitted infections											
	18 to 24 (N=102)				25+ (N=205)				All (N=307)		
	N	%	95% CI		N	%	95% CI		N	%	95% CI
Ever heard of illnesses that can be transmitted through sexual intercourse											
Yes	93	91.2	83.7	95.4	192	93.7	89.3	96.3	285	92.8	89.8-95.8
No	9	8.8	4.6	16.3	13	6.3	3.7	10.7	22	7.2	0.0-18.0
In last 3 months, was tested for a sexually transmitted infection [1]											
Yes	62	66.7	56.3	75.6	122	63.5	56.4	70.1	184	64.6	57.7-71.5
No	31	33.3	24.4	43.7	70	36.5	29.9	43.6	101	35.4	26.1-44.7
In past 12 months, had genital/anal inflammation, unusual genital discharge, or genital ulceration											
Yes	18	17.6	11.3	26.5	33	16.1	11.6	21.8	51	16.6	6.4-26.8
No	84	82.4	73.5	88.7	172	83.9	78.2	88.4	256	83.4	78.8-88.0
Actions taken at last genital/anal inflammation, unusual genital discharge, or genital ulceration [2] (select multiple)											
Nothing	0	--	--	--	1	3	0.4	20.3	1	2	0.0-29.4
Went to NGO for review and treatment	6	33.3	14.4	59.7	12	36.4	21.3	54.7	18	35.3	13.2-57.4
Went to private doctor for examination and treatment	7	38.9	18.2	64.5	15	45.5	28.8	63.2	22	43.1	22.4-63.8
Went to pharmacy to buy medicine	5	27.8	10.9	54.7	8	24.2	12.1	42.6	13	25.5	1.8-49.2
Asked friend for help	1	5.6	0.6	35.5	2	6.1	1.4	22.6	3	5.9	0.0-32.6
Self-medicated at home	1	5.6	0.6	35.5	1	3	0.4	20.3	2	3.9	0.0-30.7
Went to health center for examination and treatment	0	--	--	--	4	12.1	4.4	29.4	4	7.8	0.0-34.1
Informed sex partner about symptoms	0	--	--	--	1	3	0.4	20.3	1	2	0.0-29.4
Stopped having sex until symptoms disappeared	0	--	--	--	2	6.1	1.4	22.6	2	3.9	0.0-30.7
Used condoms during sex	0	--	--	--	1	3	0.4	20.3	1	2	0.0-29.4
In past 12 months, was diagnosed with STI											
Yes	14	14	8.4	22.4	32	15.8	11.4	21.6	46	15.2	4.8-25.6
No	86	86	77.6	91.6	170	84.2	78.4	88.6	256	84.8	80.4-89.2
Diagnosis at last STI testing [3] (select multiple)											
Chlamydia	6	42.9	18.3	71.6	9	28.1	14.8	46.9	15	32.6	8.9-56.3
Gonorrhea	1	7.1	0.7	44.1	8	25	12.5	43.7	9	19.6	0.0-45.5
Hepatitis	1	7.1	0.7	44.1	2	6.3	1.4	23.2	3	6.5	0.0-34.4
Herpes	1	7.1	0.7	44.1	1	3.1	0.4	20.9	2	4.3	0.0-32.4
Human Papillomavirus	5	35.7	13.7	66.0	3	9.4	2.9	26.7	8	17.4	0.0-43.7
Mycoplasma genitalium	1	7.1	0.7	44.1	0	--	--	--	1	2.2	0.0-30.9

[1] Among participants who ever heard of illnesses that can be transmitted through sexual intercourse.

[2] Among participants who had genital/anal inflammation, unusual genital discharge or genital ulceration in past 12 months.

[3] Among participants who have been diagnosed with a sexually transmitted infection in past 12 months.

Table 9. Knowledge, Opinions, and Attitudes towards HIV/AIDS											
	18 to 24 (N=102)				25+ (N=205)				All (N=307)		
	N	%	95% CI		N	%	95% CI		N	%	95% CI
Ever heard of HIV or the disease called AIDS											
Yes	95	93.1	86.1	96.7	199	97.1	93.6	98.7	294	95.8	93.5-98.1
No	7	6.9	3.3	13.9	6	2.9	1.3	6.4	13	4.2	0.0-15.1
Know someone who is living with HIV or who has died of AIDS [1]											
Yes	43	45.3	35.4	55.5	126	63.3	56.3	69.8	169	57.5	50.0-65.0
No	52	54.7	44.5	64.6	73	36.7	30.2	43.7	125	42.5	33.8-51.2
Has a close relative, close friend or partner who is living with HIV or has died of AIDS [2] (select multiple)											
Yes, a close relative	6	14	6.2	28.5	21	16.7	11.1	24.3	27	16	2.2-29.8
Yes, a close friend	33	76.7	61.2	87.3	92	73	64.5	80.1	125	74	66.3-81.7
Yes, a partner	1	2.3	0.3	15.8	14	11.1	6.6	18.0	15	8.9	0.0-23.3
No	7	16.3	7.7	31.1	18	14.3	9.1	21.7	25	14.8	0.9-28.7
People protect themselves from HIV by using a condom correctly every time they have anal sex [1]											
Yes	75	78.9	69.4	86.1	170	85.9	80.2	90.1	245	83.6	79.0-88.2
No	20	21.1	13.9	30.6	28	14.1	9.9	19.8	48	16.4	5.9-26.9
A person can get HIV from mosquito bites [1]											
Yes	12	12.6	7.2	21.1	30	15.1	10.7	20.8	42	14.3	3.7-24.9
No	83	87.4	78.9	92.8	169	84.9	79.2	89.3	252	85.7	81.4-90.0
A person can get HIV through saliva [1]											
Yes	27	28.4	20.1	38.5	37	18.6	13.7	24.7	64	21.8	11.7-31.9
No	68	71.6	61.5	79.9	162	81.4	75.3	86.3	230	78.2	72.9-83.5
People can protect themselves from HIV by having one uninfected faithful sex partner [1]											
Yes	54	56.8	46.6	66.6	138	69.3	62.5	75.4	192	65.3	58.6-72.0
No	41	43.2	33.4	53.4	61	30.7	24.6	37.5	102	34.7	25.5-43.9
People can protect themselves from HIV by abstaining from sexual intercourse [1]											
Yes	53	55.8	45.5	65.6	111	55.8	48.8	62.6	164	57.7	50.1-65.3
No	42	44.2	34.4	54.5	88	44.2	37.4	51.2	120	42.3	33.5-51.1
A person can get HIV by sharing a meal with someone who is living with HIV [1]											
Yes	22	23.2	15.6	32.9	24	12.1	8.2	17.4	46	15.6	5.1-26.1
No	73	76.8	67.1	84.4	175	87.9	82.6	91.8	248	84.4	79.9-88.9
Thinks that a healthy-looking person can be living with HIV, the virus that causes AIDS [1]											
Yes	55	57.9	47.6	67.6	140	70.4	63.6	76.3	195	66.3	59.7-72.9
No	40	42.1	32.4	52.4	59	29.6	23.7	36.4	99	33.7	24.4-43.0
Thinks that a person with sexually transmitted infections has an increased chance to be infected with HIV [1]											
Yes	53	56.4	46.0	66.2	121	60.8	53.8	67.4	174	59.4	52.1-66.7
No	41	43.6	33.8	54.0	78	39.2	32.6	46.2	119	40.6	31.8-49.4
A woman living with HIV/AIDS can transmit HIV during pregnancy or through breastfeeding [1]											
Yes	58	61.1	50.7	70.5	134	67.3	60.5	73.5	192	65.3	58.6-72.0
No	37	38.9	29.5	49.3	65	32.7	26.5	39.5	102	34.7	25.5-43.9
It is possible in this community for someone to get a confidential test to find out if they are infected with HIV [1]											
Yes	61	79.2	68.5	87.0	144	85.2	79.0	89.8	205	83.3	78.2-88.4
No	16	20.8	13.0	31.5	25	14.8	10.2	21.0	41	16.7	5.3-28.1
Has ever been tested for HIV [1]											
Yes	83	87.4	78.9	92.8	183	92	87.2	95.0	266	90.5	87.0-94.0
No	12	12.6	7.2	21.1	16	8	5.0	12.8	28	9.5	0.0-20.4
Time of most recent HIV test [3]											
< three months	39	47	36.3	57.9	78	43.1	36.0	50.5	117	44.3	35.3-53.3

Between 3 and 6 months	23	27.7	19.0	38.5	51	28.2	22.1	35.2	74	28	17.8-38.2
Between 6 and 12 months	12	14.5	8.3	24.0	20	11	7.2	16.6	32	12.1	0.8-23.4
> 12 months ago	9	10.8	5.7	19.8	32	17.7	12.7	24.0	41	15.5	4.4-26.6
Voluntarily underwent last HIV test [3]											
Yes	81	97.6	90.6	99.4	173	95.1	90.7	97.4	254	95.8	93.3-98.3
No	2	2.4	0.6	9.4	9	4.9	2.6	9.3	11	4.2	0.0-16.1
Result of last HIV test [3]											
HIV-negative	71	85.5	76.0	91.7	142	77.6	70.9	83.1	213	80.1	74.7-85.5
HIV-positive	12	14.5	8.3	24.0	40	21.9	16.4	28.5	52	19.5	8.7-30.3
Didn't get the result	0	--	--	--	1	0.5	0.1	3.8	1	0.4	0.0-12.8
Received HIV antiretroviral therapy in past 12 months [4]											
Yes	11	91.7	49.9	99.2	40	100	--	--	51	98.1	94.4-100
No	1	8.3	0.8	50.1	0	--	--	--	1	1.9	0.0-28.7
Ever stop taking HIV antiretroviral therapy once initiated [5]											
Yes	2	18.2	3.5	58.0	9	22.5	11.8	38.7	11	21.6	0.0-45.9
No	9	81.8	42.0	96.5	31	77.5	61.3	88.2	40	78.4	65.6-91.2
Ever had a viral load test [4]											
Yes	8	72.7	35.4	92.8	36	92.3	77.8	97.6	44	88	78.4-97.6
No	3	27.3	7.2	64.6	3	7.7	2.4	22.2	6	12	0.0-38.0
Last viral load test showed undetectable HIV levels [6]											
Yes	5	71.4	21.5	95.8	32	91.4	75.4	97.4	37	88.1	77.7-98.5
No	2	28.6	4.2	78.5	3	8.6	2.6	24.6	5	11.9	0.0-40.3
Screened or tested for syphilis in last 3 months											
Yes	63	61.8	51.8	70.8	125	61	54.1	67.5	188	61.2	54.2-68.2
No	39	38.2	29.2	48.2	80	39	32.5	45.9	119	38.8	30.0-47.6
Result of last test [7]											
Negative/Non-reactive	61	96.8	87.8	99.2	119	95.2	89.6	97.9	180	95.7	92.7-98.7
Positive/Reactive	2	3.2	0.8	12.2	6	4.8	2.1	10.4	8	4.3	0.0-18.4

[1] Among participants who ever heard of HIV or the disease called AIDS.

[2] Among participants who know anyone who is living with HIV or who has died of AIDS.

[3] Among participants who have ever been tested for HIV.

[4] Among participants who tested HIV-positive.

[5] Among participants who received HIV antiretroviral therapy in the past 12 months.

[6] from participants who ever had a viral load test.

[7] from participants who ever been screened or tested for syphilis in the last 3 months.

Table 10. PrEP and PEP

	18 to 24 (N=102)				25+ (N=205)				All (N=307)		
	N	%	95% CI		N	%	95% CI		N	%	95% CI
Ever heard of PrEP											
Yes	65	63.7	53.8	72.6	163	79.5	73.4	84.5	228	74.3	68.6-80.0
No	37	36.3	27.4	46.2	42	20.5	15.5	26.6	79	25.7	16.1-35.3
Ever used PrEP [1]											
Yes	5	7.7	3.2	17.5	42	25.8	19.6	33.1	47	20.6	9.0-32.2
No	60	92.3	82.5	96.8	121	74.2	66.9	80.4	181	79.4	73.5-85.3
Where PrEP ever obtained [2] (select multiple)											
Overseas	2	40	3.8	91.9	0	--	--	--	2	4.3	0.0-32.4

In Lebanon from private doctor	0	--	--	--	0	--	--	--	0	--	--
In Lebanon from public health clinic	1	20	0.8	88.9	1	2.4	0.3	16.2	2	4.3	0.0-32.4
In Lebanon from NGO	3	60	8.1	96.2	40	95.2	82.0	98.9	43	91.5	83.2-99.8
Used PrEP in past 6 months [2]											
Yes	5	100	--	--	33	78.6	63.0	88.8	38	80.9	68.4-93.4
No	0	--	--	--	9	21.4	11.2	37.0	9	19.1	0.0-44.8
Stopped taking PrEP in past 6 months [3]											
Yes	2	40	3.8	91.9	11	33.3	18.9	51.8	13	34.2	8.4-60.0
No	3	60	8.1	96.2	22	66.7	48.2	81.1	25	65.8	47.2-84.4
Ever heard of PEP											
Yes	33	32.4	23.9	42.2	92	44.9	38.2	51.8	125	40.7	32.1-49.3
No	69	67.6	57.8	76.1	113	55.1	48.2	61.8	182	59.3	52.2-66.4
Ever used PEP [4]											
Yes	2	6.1	1.4	22.6	11	12	6.7	20.5	13	10.4	0.0-27.0
No	31	93.9	77.4	98.6	81	88	79.5	93.3	112	89.6	83.9-95.3
Where PEP ever obtained [5]											
Overseas	0	--	--	--	2	18.2	3.5	58.0	2	15.4	0.0-65.4
In Lebanon from private doctor	0	--	--	--	3	27.3	7.2	64.6	3	23.1	0.0-70.8
In Lebanon from public health clinic	0	--	--	--	0	--	--	--	0	--	--
In Lebanon from NGO	2	100			8	72.7	35.4	92.8	10	76.9	50.8-100
Used PEP in past 6 months [5]											
Yes	1	50	-	-	5	45.5	16.8	77.4	6	46.2	6.3-86.1
No	1	50	-	-	6	54.5	22.6	83.2	7	53.8	16.9-90.7
Stopped taking PEP in past 6 months [6]											
Yes	1	100	--	--	2	40	3.8	91.9	3	50	0.0-100
No	0	--	--	--	3	60	8.1	96.2	3	50	0.0-100

[1]Among participants who ever heard about PrEP.

[2]Among participants who ever used PrEP.

[3]Among participants who used PrEP in the past 6 months.

[4]Among participants who heard of PEP.

[5]Among participants who ever used PEP.

[6]Among participants who used PEP in the past 6 months.

Table 11. Stigma, Discrimination, and Violence

	18 to 24 (N=102)			25+ (N=205)			All (N=307)		
	N	%	95% CI	N	%	95% CI	N	%	95% CI
In past 12 months, refused the following because someone thought the participant has sex with men									
Health care									
Yes	1	1	0.1 7.0	8	4	2.0 7.8	9	3.0	0.0-14.1
No	98	99	93.0 99.9	193	96	92.2 98.0	291	97.0	95.0-99.0
Employment									
Yes	11	10.9	6.1 18.8	14	6.8	4.1 11.2	25	8.2	0.0-19.0
No	90	89.1	81.2 93.9	191	93.2	88.8 95.9	281	91.8	88.6-95.0

Religious service											
Yes	4	4	1.5	10.2	12	5.9	3.3	10.1	16	5.2	0.0-16.1
No	97	96	89.8	98.5	193	94.1	89.9	96.7	290	94.8	92.2-97.4
Restaurant/bar service											
Yes	7	6.9	3.3	14.0	6	2.9	1.3	6.4	13	4.2	0.0-15.1
No	94	93.1	86.0	96.7	199	97.1	93.6	98.7	293	95.8	93.5-98.1
Housing											
Yes	10	9.9	5.4	17.6	14	6.8	4.1	11.2	24	7.8	0.0-18.5
No	91	90.1	82.4	94.6	191	93.2	88.8	95.9	282	92.2	89.1-95.3
Police assistance											
Yes	12	11.8	6.7	19.7	11	5.4	3.0	9.5	23	7.5	0.0-18.3
No	90	88.2	80.3	93.3	193	94.6	90.5	97.0	283	92.5	89.4-95.6
In past 12 months, received verbal insults because of sexual attraction to men											
Yes	45	44.6	35.0	54.5	50	24.4	19.0	30.8	95	31.0	21.7-40.3
No	56	55.4	45.5	65.0	155	75.6	69.2	81.0	211	69.0	62.8-75.2
In past 12 months, was hit, kicked, or beaten because of sexual attraction to men											
Yes	19	18.8	12.2	27.8	16	7.8	4.8	12.5	35	11.5	0.9-22.1
No	82	81.2	72.2	87.8	188	92.2	87.5	95.2	270	88.5	84.7-92.3
In last 12 months, frequency of being physically hurt, such as being hit, kicked, or beaten											
Not in last 12 months	83	83	74.2	89.2	176	90.3	85.2	93.7	259	87.8	83.8-91.8
Once	9	9	4.7	16.6	12	6.2	3.5	10.6	21	7.1	0.0-18.1
2-5 times	7	7	3.3	14.1	4	2.1	0.8	5.4	11	3.7	0.0-14.9
6-10 times	0	--	--	--	2	1	0.3	4.1	2	0.7	0.0-12.3
10 or more times	1	1	0.1	7.0	1	0.5	0.1	3.6	2	0.7	0.0-12.3
In the past 12 months, was force by someone to have sex											
Yes	14	14	8.4	22.4	22	10.9	7.3	16.0	36	11.9	1.3-22.5
No	86	86	77.6	91.6	180	89.1	84.0	92.7	266	88.1	84.2-92.0
In last 12 months, frequency of being tricked, lied to, or threatened in order to be made have sex against will											
Not in last 12 months	82	82	73.1	88.4	166	86.5	80.8	90.6	248	84.9	80.4-89.4
Once	11	11	6.1	18.9	16	8.3	5.1	13.2	27	9.2	0.0-20.1
2-5 times	5	5	2.1	11.6	9	4.7	2.4	8.8	14	4.8	0.0-16.0
6-10 times	2	2	0.5	7.8	0	--	--	--	2	0.7	0.0-12.3
10 or more times	0	--	--	--	1	0.5	0.1	3.7	1	0.3	0.0-11.0
Ever felt excluded from family activities because of sexual attraction to men											
No	79	77.5	68.2	84.6	168	83.2	77.3	87.8	247	81.3	76.4-86.2
Yes, in last 6 months	18	17.6	11.3	26.5	27	13.4	9.3	18.8	45	14.8	4.4-25.2
Yes, but not in past 6 months	5	4.9	2.0	11.4	7	3.5	1.7	7.1	12	3.9	0.0-14.9
Ever scolded or verbally abused because of sexual attraction to men											
No	62	60.8	50.8	69.9	157	77.3	71.0	82.6	219	71.8	65.8-77.8
Yes, in last 6 months	33	32.4	23.9	42.2	29	14.3	10.1	19.9	62	20.3	10.3-30.3
Yes, but not in past 6 months	7	6.9	3.3	13.9	17	8.4	5.2	13.1	24	7.9	0.0-18.7
Ever blackmailed because of sexual attraction to men											

No	84	82.4	73.5	88.7	170	83.3	77.5	87.9	254	83.0	78.4-87.6
Yes, in last 6 months	10	9.8	5.3	17.4	15	7.4	4.5	11.9	25	8.2	0.0-19.0
Yes, but not in past 6 months	8	7.8	3.9	15.1	19	9.3	6.0	14.2	27	8.8	0.0-21.1
In last 12 months, avoided seeking HIV testing because of (select multiple):											
Fear of or concern about stigma	11	10.8	6.0	18.6	8	3.9	2.0	7.6	19	6.2	0.0-17.0
Fear or concern someone may learn you have sex with men	5	4.9	2.0	11.4	5	2.4	1.0	5.8	10	3.3	0.0-14.4
Fear of or concern about or experienced violence	0	--	--	--	1	0.5	0.1	3.4	1	0.3	0.0-11.0
Fear of or concern about or experienced police harassment or arrest	2	2	0.5	7.7	4	2	0.7	5.1	6	2.0	0.0-13.2
None of the above	81	79.4	70.3	86.3	177	86.3	80.9	90.4	258	84.0	79.5-88.5

Table 12. Alcohol and Drug Use

	18 to 24 (N=102)				25+ (N=205)				All (N=307)		
	N	%	95% CI		N	%	95% CI		N	%	95% CI
Had alcohol in past month											
Yes	25	25.5	17.7	35.2	46	23.7	18.2	30.3	221	75.7	70.0-81.4
No	73	74.5	64.8	82.3	148	76.3	69.7	81.8	71	24.3	14.3-34.3
Frequency of alcohol use in past month											
Every day	4	4.1	1.5	10.5	6	3.1	1.4	6.8	10	4.5	0.0-17.3
At least once a week	33	33.7	24.9	43.7	77	39.7	33.0	46.8	110	49.8	40.5-59.1
Less than once a week	36	36.7	27.7	46.9	65	33.5	27.2	40.5	101	45.7	36.0-55.4
Did not drink in last 4 weeks	25	25.5	17.7	35.2	46	23.7	18.2	30.3	0	--	--
In past 6 months, had anal sex with a man while under the influence of alcohol											
Yes	29	28.4	20.4	38.1	72	35.5	29.1	42.3	101	33.4	24.2-42.6
No	73	71.6	61.9	79.6	131	64.5	57.7	70.9	204	66.9	60.4-73.4
In past 6 months, used drugs before/during planned anal sex to facilitate/enhance/prolong/sustain sexual experience											
Yes	22	21.6	14.5	30.8	47	23	17.7	29.4	69	22.5	12.6-32.4
No	80	78.4	69.2	85.5	157	77	70.6	82.3	237	77.5	72.2-82.8
In past 6 months, drugs used before/during planned anal sex to facilitate, enhance, prolong, and sustain sexual experience[1] (Select Multiple)											
Methamphetamine/Ice/ Chrystal	9	40.9	26.4	51.9	32	68.1	49.9	77.0	41	59.4	47.4-67.6
GHB/GBL	1	4.5	0.5	29.6	15	31.9	19.9	47.0	16	23.2	2.5-43.9
Mephedrone	0	--	--	--	1	2.1	0.3	14.5	1	1.4	0.0-24.4
Cocaine	1	4.5	0.5	29.6	12	25.5	14.8	40.4	13	18.8	0.0-40.0
Ketamine	1	4.5	0.5	29.6	12	25.5	14.8	40.4	13	18.8	0.0-40.0
XTC	3	13.6	4.0	37.2	13	27.7	16.5	42.6	16	23.2	2.5-43.9
Poppers	2	9.1	2.0	32.7	12	25.5	14.8	40.4	14	20.3	0.0-41.4
None of the above	8	36.4	18.2	59.5	6	12.8	5.7	26.3	14	20.3	0.0-41.4
During past 6 months, used non-injection drugs											
Yes	17	16.8	10.6	25.6	45	22	16.8	28.2	62	20.3	10.3-30.3
No	84	83.2	74.4	89.4	160	78	71.8	83.2	244	79.7	74.7-84.7

During past 6 months, frequency of non-injection drug use [2]											
Only once	3	18.8	5.3	48.6	8	17.8	8.9	32.4	11	18	0.0-40.7
2-3 times	7	43.8	20.4	70.2	10	22.2	12.1	37.2	17	27.9	6.6-49.2
About once/week	4	25	8.6	54.3	11	24.4	13.8	39.6	15	24.6	2.8-46.4
2-3 times/week	0	--	--	--	4	8.9	3.2	22.1	4	6.6	0.0-30.9
4-6 times/week	1	6.3	0.7	39.3	2	4.4	1.1	16.9	3	4.9	0.0-29.3
About once/day	1	6.3	0.7	39.3	6	13.3	5.9	27.3	7	11.5	0.0-35.1
2-3 times or more/day	0	--	--	--	4	8.9	2.4	34.5	4	6.4	0.0-50.3
Ever injected drugs											
Yes	1	1	0.1	6.8	5	2.5	1.0	5.8	6	2	0.0-13.2
No	101	99	93.2	99.9	199	97.5	94.2	99.0	300	98	96.4-99.6
During past 6 months, injected drugs [3]											
Yes	0	--	--	--	1	20	0.8	88.9	1	16.7	0.0-89.8
No	1	100	--	--	4	80	11.1	99.2	5	83.3	50.6-100

[1]Among participants who used drugs before/during planned anal sex to facilitate, enhance, prolong, and sustain sexual experience in past 6 months.

[2]Among participants who used non-injection drugs during the past 6 months.

[3]Among participants who ever injected drugs.

Table 13. Results of the Rapid Tests

	18 to 24 (N=102)				25+ (N=205)				All (N=307)		
	N	%	95% CI		N	%	95% CI		N	%	95% CI
HIV rapid-test result											
Positive	12	11.8	6.7	19.7	45	22	16.8	28.2	57	11.1	8.5-28.7
Negative	90	88.2	80.3	93.3	160	78	71.8	83.2	250	81.4	76.6-86.2
Syphilis											
Positive	1	1	--	--	4	2	0.7	5.1	5	1.6	0.0-12.6
Negative	101	99	--	--	201	98	94.9	99.3	302	98.4	97.0-99.8

APPENDIX B. KII GUIDE

An Integrated Bio-Behavioral Surveillance Study and Population Size Estimates among a Key Vulnerable Population in Lebanon: Men Who Have Sex with Men

Background information on KII:

Facilitator Name:	
KII Identification Number:	
Date of KII (dd/mm/yyyy):	
KII Venue:	
Language Used During Interview:	
Interview was recorded:	

Interviewee Age:	
Interviewee Gender:	
Role of Interviewee:	

Note to the facilitator*: Italicized comments are instructions for the facilitator.*

This tool should be used during interviewing key informants. The research team should ensure participants that all information shared during the interview will remain confidential; if the note-taker takes down notes, s/he will not have any information identifying or associating responses. Some of these questions are sensitive. The facilitator should take all potential ethical concerns into consideration before the interview, considering the safety of participants, and obtaining oral consent from each participant. The interview should not last more than one hour.

For the facilitator: *Introduce CRD. Introduce the consent form. Obtain consent.*

For the facilitator, introduce the project: *Thank you for agreeing to participate in this discussion. We are looking forward to hearing your insights and learning from you. The purpose of this discussion is to learn about male homosexual activity practiced among MSM residing in Lebanon.*

***Note to the facilitator**: Before starting the interview, the facilitator will ask the interviewee what terminology they would prefer to use regarding people engaged in male-to-male sex. Accordingly, within the questions below, the interviewee's preferred terminology will be adopted for the phrase "engage in having sex with other male partners".*

Interview Guide:

A. Warm-up and Introduction

1. Can you tell me a little bit about yourself?
   Probe: *What is your profession? Can you describe your role? Where do you work? Which type of facility? For how many years have you been in the field?*

B. MSM in Lebanon

2. How do you describe the MSM community in Lebanon?

3. Can you describe the different subgroups of MSM?
   Probe: Do they differ by: *Age; Education; Income; Other?*

4. How much interaction or contact is there between the sub-groups?
   Probe: *Do you think MSM in Lebanon are equally connected across areas? How MSM are not connected? Why do MSM go to other areas/cities? How often do MSM travel in and out of towns/cities? Are there certain times of year that MSM travel?*

5. How many MSM that you know of live in Beirut, Saida, and Tripoli?
   Probe 1: *How many men do you know who are not female/transgender and who have anal sex with a man, are 18 years and above, and live in/work in Beirut?*

   How many men do you know who are not female/transgender and who have anal sex with a man, are 18 years and above, and live in/work in Saida?

   How many men do you know who are not female/transgender and who have anal sex with a man, are 18 years and above, and live in/work in

Tripoli?

Probe 2: *How many of those have you seen in the last 1 month?*

Probe 3: *How many times do MSM in Beirut travel to Tripoli in a week? How many times do MSM in Beirut travel to Saida in a week? How many times do MSM in Tripoli travel to Beirut in a week? How many times do MSM in Tripoli travel to Saida in a week? How many times do MSM in Saida travel to Beirut in a week? How many times do MSM in Saida travel to Tripoli in a week?*

6. Based on your knowledge, how do MSM meet other men?
   Probe: *What kinds of social activities do they take part in with other men? Where do these activities usually take place? Can you give me specific names of places?*

7. Where do men who do not openly identify as MSM go to meet other MSM?

C. Closing Question

8. Before we conclude, do you have anything that you would like to add?

For the facilitator: *This is now the end of our discussion. Thank you for your time and participation in this discussion.*

APPENDIX C. FGD GUIDE

An Integrated Bio-Behavioral Surveillance Study and Population Size Estimates among a Key Vulnerable Population in Lebanon: Men Who Have Sex with Men

Background information on FGD:

Facilitator's Name:	
Note taker's Name:	
FGD Identification Number:	
Date of FGD (dd/mm/yyyy):	
FGD Venue:	
Start Time:	
End Time:	
Number of Participants:	
Language Used during FGD:	
FGD was recorded:	

***Note to the facilitator**: Italicized comments are instructions for the facilitator.*

This tool should be used during Focus Group Discussions with MSM. The research team should ensure participants that all information shared during the interview will remain confidential; if the note-taker takes down notes, s/he will not have any information identifying or associating responses. Some of these questions are sensitive. The facilitator should take all potential ethical concerns into consideration before the interview, considering the safety of participants, and obtaining oral consent from each participant. The interview should not last more than one hour.

***For the facilitator:** Introduce CRD. Introduce the consent form. Obtain consent.*

***For the facilitator, introduce the project:** Thank you for agreeing to participate in this discussion. We are looking forward to hearing your insights and learning from you. The purpose of this discussion is to learn about male homosexual activity practiced among MSM residing in Lebanon.*

***Note to the facilitator**: Before starting the interview, the facilitator will ask the interviewee what terminology they would prefer to use regarding people*

engaged in male-to-male sex. Accordingly, within the questions below, the interviewee's preferred terminology will be adopted for the phrase "engage in having sex with other male partners".

FGD Guide:

A. Warm-up and Introduction

1. Can you tell me a little bit about yourself?
   Probe: *How old are you? What is your profession? Where do you work/study? Where do you live? What doyou do during your day?*

B. MSM in Lebanon

2. How do you describe the MSM community in Lebanon?

3. Can you describe the different subgroups of MSM?
   Probe: Do they differ by: *Age; Education; Income; Other?*

4. How much interaction or contact is there between the sub-groups?

   Probe: *Do you think MSM in Lebanon are equally connected across areas? How MSM are not connected? Why do MSM go to other areas/cities? How often do MSM travel in and out of towns/cities? Are there certaintimes of year that MSM travel?*

5. How many MSM that you know of live in Beirut, Saida, and Tripoli?
   Probe 1: *How many men do you know and who know you, and who are not female/transgender and who have anal sex with a man, are 18 years and above, and live in/work in Beirut?*

   How many men do you know and who know you, and who are not female/transgender and who have anal sex with a man, are 18 years and above, and live in/work in Saida?

   How many men do you know and who know you, and who are not female/transgender and who have anal sex with a man, are 18 years and above, and live in/work in Tripoli?

Probe 2: *How many of those have you seen in the last 1 month?*

Probe 3: *How many times do MSM in Beirut travel to Tripoli in a week? How many times do MSM in Beirut travel to Saida in a week? How many times do MSM in Tripoli travel to Beirut in a week? How many times do MSM in Tripoli travel to Saida in a week? How many times do MSM in Saida travel to Beirut in a week? How many times do MSM in Saida travel to Tripoli in a week?*

6. Based on your knowledge, how do MSM meet other men?

   Probe: *What kinds of social activities do they take part in with other men? Where do these activities usually take place? Can you give me specific names of places?*

7. Where do men who do not openly identify as MSM go to meet other MSM?

c. Closing Question

8. Before we conclude, do you have anything that you would like to add?

For the facilitator: *This is now the end of our discussion. Thank you for your time and participation in this discussion.*

APPENDIX D. KII AND FGD CONSENT FORMS

An Integrated Bio-Behavioral Surveillance Study and Population Size Estimates among a Key Vulnerable Population in Lebanon: Men Who Have Sex with Men

The National AIDS Control Program and the World Health Organization have commissioned Connecting Research to Development to conduct an integrated bio behavioral surveillance study among MSM in Lebanon. Our assessment will explore the extent to which male homosexual activity is practiced among MSM residing in Lebanon.

The objectives of this assessment are to:

1. Estimate the population size and distribution of MSM.
2. Estimate the prevalence of HIV, syphilis, and associated risk behaviors among the MSM within this study.

For that, we will be conducting discussions with key informants and MSM in Lebanon to help us gain information that will guide a holistic and coherent understanding of the situation.

All the answers you give will be kept confidential. Participation in the discussion is completely voluntary, and we can stop the discussion at any time. We would like to tape record the discussion if you don't mind, since we cannot take notes on all the feedback you provide and your opinions are very important to us. The discussion will last between 45 minutes to 1 hour and of course we will not mention any names within the report. If you have any questions, concerns, or complaints about this research, you may contact CRD by phone at +961-70-065522 or email at registry@crdconsultancy.org, or the NAP at +961-1-566100/1 or email at wholeb_nap@inco.com.lb.

Researcher's Statement:

I have reviewed, in detail, the oral informed consent document with the participant. I have answered all the participants' questions clearly. I will inform the participant in case of any changes to the research. I have provided the

participant with a copy of this consent form.

Moreover, I have asked for the participant's consent to record the discussion:
[ ] Yes [ ] No

And I have asked for the participant's consent to quote from the discussion:
[ ] Yes [ ] No

_____	_____	_____
Name of Researcher	Signature	Date and Time

APPENDIX E. SURVEY INSTRUMENT

An Integrated Bio-Behavioral Surveillance Study and Population Size Estimates among a Key Vulnerable Population in Lebanon: Men Who Have Sex with Men

Questionnaire Information

001	Coupon Number:	
002	Governorate:	
003	District:	
004	Code of Interviewer:	
005	Date of Interview (DD/MM/YY):	/ /
006	Interview Start Time:	: AM/PM

Eligibility Screening with Network Size Questions

007	**SCREENER:** Is this person a seed?	Yes No	1 2	**018**
008	**SCREENER:** Does the candidate have a valid coupon?	Yes No	1 2	**Ineligible**
009	Have you participated in this study before?	Yes No	1 2	**Ineligible**
010	Are you above 18 years old?	Yes No	1 2	**Ineligible**
011	In what area have you been living in the past 6 months?	Beirut, surroundings (Mount Lebanon), Saida, or Tripoli Other areas	1 2	**Ineligible**
012	What sex were you born as?	Male Female	1 2	**Ineligible**
013	Do you identify as a female or transgender?	Yes No	1 2	**Ineligible**

014	Have you had anal sex with a man in the last 6 months?	Yes No	1 2	 **Ineligible**
015	Did anyone force you to participate in this study against your will?	Yes No	1 2	**Ineligible**
016	How did you get this coupon?	From someone I know Found/bought/traded it	1 2	 **Ineligible**
017	I do not want to know the person's name. From whom did you receive this coupon?	Friend/acquaintance Stranger	1 2	 **Ineligible**
018	**SCREENER:** Is the person unde influence of alcohol, drugs, or oth substance?	Yes No	1 2	**Ineligible**
019	***Conduct Consent Now.*** Do you agree to participate in this survey?	Yes No	1 2	**021**
020	Why do you not want to participate in this survey?	Didn't want to answer questions Fear of being identified No time Did not want to do rapid test Other (specify)	1 2 3 4 77	**Ineligible** **Ineligible** **Ineligible** **Ineligible** **Ineligible**

This section includes network size questions. Responses cannot be equal to zero.			
021	How many men do you know, and they know you, they do not identify as female or transgender, and who had anal sex with a man in the past 6 months?	Number of men who have sex with men [__|__|__|__]	
022	How many of them are 18 years old or older and have live and/or work in Saida, Tripoli, or Beirut and its surroundings in the past 6 months?	Number of men who have sex with men [__|__|__|__]	**This number should not be more than response to 021.**
023	How many of them have you seen in the past 1 month?	Number of men who have sex with men [__|__|__|__]	**This number should not be more than response to 022.** **Write response on Checklist Form.**

Section 1: Background Characteristics

This section presents some variables (age, literacy status, occupation, status of sexual partnership, residential status, etc.).

No.	Questions and Filters	Coding Categories	Skip To
Q101	What is your nationality?	Lebanese 1 Syrian 2 Palestinian 3 No nationality 4 Other _____ 77 No response 99	
Q102	What is your date of birth?	[__|__] / [__|__] / [__|__|__|__] Day / Month /Year Don't know 88 No response 99	
Q103	What has been your highest level of educational attainment?	No formal education 1 Primary school 2 Complementary school 3 Secondary school 4 Vocational school 5 University 6 Other _____ 77 Don't know 88 No response 99	
Q104	What is your employment status?	Employed 1 Self-employed (owning a shop or service) 2 Unemployed 3 Retired Student 4 No response 5 99	**Q106** **Q106** **Q106** **Q106**
Q105	Please specify the occupation sector.	Agriculture sector 1 Manufacturing sector 2 Trading sector 3 Education sector 4 Health/Healthcare sector Building and construction sector 5 Professional services sector (IT, research, legal services, consultancy) 6 7	

		Financial sector (banking, insurance, accounting, auditing) 8 Public service sector – Civil service (central government, regional, local government authorities) 9 Telecommunications sector 10 Transport sector (air, sea and land) 11 Hospitality service – Hotel and tourism 12 Other _____ 77 No response 99	
Q106	With whom do you live?	Alone 1 With husband 2 With wife 3 With a man to whom you are not married (sexual partner) 4 With a woman (sexual partner) 5 With parents 6 With other family members 7 With friends or roommates (non-sexual partner) 8 Homeless 9 Other _____ 77 No response 99	
Q107	In what type of dwelling do you currently live?	Residence 1 Hotel/Hostel 2 Informal settlement/Refugee camp 3 Collective shelter 4 Other public spaces 5 Other _____ 77 No response 99	
Q108	How would you identify yourself on the basis of your sexual orientation?	Homosexual 1 Bisexual 2 Heterosexual 3 Other _____ 77 Don't know 88 No response 99	
		Single, never married 1 Married 2 Separated/Divorced 3	

Q109	What is your civil status?	Widowed 4 Other _____ 77 Don't know 88 No response 99	
Q110	How do you perceive your socio- economic status compared to others like you?	Very poor 1 Poor 2 Moderate 3 Good 4 Very good 5 Don't know 88 No response 99	

Section 2: Sexual History – First Sexual Experience, General Questions about Sex with Men

The following section includes questions concerning your sexual history with male partners.			
No.	Questions and Filters	Coding Categories	Skip To
Q201	At what age did you first have oral sex with a man?	Age in completed years [__|__] Don't know 88 No response 99 Never had oral sex 0	
Q202	At what age did you first have anal sex with a man?	Age in completed years [__|__] Don't know 88 No response 99	
Q203	What type of sexual experience have you had with a man in the past 6 months? ***Multiple Responses Possible***	Manual 1 Oral 2 Anal sex (top position) 3 Anal sex (bottom position) 4 No response 99	
Q204	What was your relation to the first man with whom you had anal sex?	Co-worker 1 Friend 2 Family member 3 Neighbor 4 Commercial partner 5 Stranger 6 Partner (boyfriend) 7 Other _____ 77 Don't know 88 No response 99	
Q205	What was the age of the man with whom you first had anal sex?	Age in completed years [__|__] Don't know 88 No response 99	

Q206	In the last 6 months, what was your way of meeting men for sex? ***Read Responses; Multiple Responses Possible***	On the street 1 Through friends 2 On the internet 3 Phone/Apps 4 In cafes 5 In bars/disco 6 In the parks 7 I do not look for sex partners 8 In Cinemas 9 In Toilets 10 Other _____ 77 No response 99	
Q207	In the last 6 months, what social media or internet means were used to meet men for sex? ***Don't Read Responses; Multiple Responses Possible***	I don't use it 1 WhatsApp 2 Facebook 3 Instagram 4 Snapchat 5 Twitter 6 Badoo 7 Tinder 8 Hichat 9 Wechat 10 Grindr 11 Scruff 12 Bearwww 13 Growlr 14 Only fans 15 Jff 16 Telegram 17 Hornet 18 Bumble 19 Sugar 20 Rentmen 21 Other _____ 77 No response 99	

Q208	In the last 6 months, where have you most often had sex with a man? ***Don't Read Responses; Only One Response***	Home 1 At my partner's home 2 Rented room 3 In a public place (street, park) 4 At the hotel 5 At friend's homes 6 In the workplace 7 In Spa 8 In Toilets 9 Other _____ 77 No response 99	
Q209	Have you ever had anal sex with multiple male partners at the same time, that is in a group sex setting?	Yes 1 No 2 No answer 98	**Q212** **Q212**
Q210	In the last 6 months, on how many occasions have you had anal sex with multiple male partners at the same time, that is in a group sex setting?	Number of occasions [__|__] Don't know 88 No response 99	
Q211	The last time you engaged in group sex with men, what is your best estimate of the frequency of condom use during anal sexual encounters?	100% (everyone) 1 75% (most everyone) 2 50% (about half) 3 25% (few) 4 0% (nobody) 5 Don't know 88 No response 99	
Q212	**Did you use a condom the last time you had anal sex with a man?**	Yes 1 No 2 No response 99	

Section 3: Sexual History – Male Commercial Partners

The following section will specifically ask questions on male commercial partners.			
No.	**Questions and Filters**	**Coding Categories**	**Skip To**
Q301	Have you had anal sex with a man to whom you sold sex during the past 6 months?	Yes 1 No 2 No response 99	 **Q309** **Q309**
Q302	Do you have someone who helps you find male clients? (Agent, pimp)	Yes 1 No 2 No response 99	
Q303	To how many men have you sold anal sex in the last one month?	Number of male sexual partners to whom sex was sold [__|__] Don't know/Don't remember 88 No response 99 IF NONE 00	
Q304	The last time you sold anal sex to a man in the past 6 months, were you in the top or bottom position or both? ***If not applicable, please choose Bottom***	Top 1 Bottom 2 Both 3 Don't remember 88 No response 99	
Q305	The last time you sold anal sex to a man in the past 6 months, was a condom used?	Yes 1 No 2 Don't remember 88 No response 99	**Q307** **Q308** **Q308**
Q306	Who suggested condom use that time?	Yourself 1 The commercial partner 2 Joint decision 3 No response 99	**Q308** **Q308** **Q308** **Q308**
Q307	Why didn't you use a condom that time? ***Multiple Responses Possible***	I am afraid to carry a condom with me 1 Things happened too fast before I could get a condom 2 Condoms are too expensive 3 Partner objected 4 They reduce pleasure 5	

		Pull out before ejaculation	6	
		Condoms do not protect from diseases	7	
		Do not know how to use	8	
		Embarrassed to buy	9	
		Embarrassed to suggest using or offer	10	
		Was under the influence of drugs or alcohol	11	
		Thought the partner was HIV-negative	12	
		My partner and I are both living with HIV	13	
		Took PrEP (pre-exposure prophylaxis)	14	
		Other	77	
		Don't know	88	
		No response	99	
Q308	With what frequency did you use a condom with all the men to whom you sold sex during the past 6 months?	Always	1	
		Sometimes	2	
		Often	3	
		Never	4	
		Don't know	88	
		No response	99	
Q309	Have you had anal sex with a man from whom you bought sex during the past 6 months?	Yes	1	**Q314**
		No	2	**Q314**
		No response	99	
Q310	From how many men have you bought anal sex to in the last one month?	Number of male sexual partners from whom sex was bought [__|__]		
		Don't know/Don't remember	88	
		No response	99	
		IF NONE	**00**	
Q311	The last time you bought anal sex to a man in the past 6 months, were you in the top or bottom position or both?	Top	1	
		Bottom	2	
		Both	3	
		Don't know/Don't remember	88	
		No response	99	
Q312	The last time you bought anal sex from a man in the past 6 months, was a	Yes	1	
		No	2	
		Don't remember	88	

	condom used?	No response	99	
Q313	With what frequency did you use a condom with all the men from whom you bought sex during the past 6 months?	Always Sometimes Often Never Don't know No response	1 2 3 4 88 99	
Q314	Have you ever discussed HIV/AIDS or sexually transmitted infections (STIs)with any of the men to whom you sold or from whom you bought anal sex?	Yes, all Yes, some No, none Don't know No response	1 2 3 88 99	

Section 4: Sexual History – Non-Paying (Casual) Male Sex Partners

The following section will specifically ask questions on male casual partners.			
No.	**Questions and Filters**	**Coding Categories**	**Skip To**
Q401	Have you had anal sex with a non-paying male partner whom you considered to be a casual or one-time partner in the past 6 months?	Yes 1 No 2 No response 99	**Q501** **Q501**
Q402	With how many casual or one-time male sexual partners have you had anal sex with in the past one month?	Number of casual sexual partners [__|__] Don't know/Don't remember 88 No response 99 **IF NONE 00**	
Q403	The last time you had anal sex with this casual partner, was a condom used?	Yes 1 No 2 Don't remember 88 No response 99	**Q405** **Q406** **Q406**
Q404	Who suggested condom use that time?	Yourself 1 The casual male partner 2 Joint decision 3 No response 99	**Q406**
Q405	Why didn't you use a condom that time? ***Multiple Responses Possible***	I am afraid to carry a condom with me 1 Things happened too fast before I could get a condom 2 Condoms are too expensive 3 Partner objected 4 They reduce pleasure 5 Pull out before ejaculation 6 Condoms do not protect from diseases 7 Do not know how to use 8 Embarrassed to buy 9 Embarrassed to suggest using or offer 10 Was under the influence of drugs or alcohol 11 Thought the partner was HIV-negative 12	

		My partner and I are both living with HIV 13 Took PrEP (pre-exposure prophylaxis) 14 Other _____ 77 Don't Know 88 No response 99	
Q406	With what frequency did you use a condom with your casual partner(s) in the past 6 months?	Always 1 Sometimes 2 Often 3 Never 4 Don't know 88 No response 99	
Q407	Have you ever discussed HIV/AIDS or STIs with any of your casual partners?	Yes, all 1 Yes, some 2 No, none 3 Don't know 88 No response 99	

Section 5: Sexual History – Regular Male Sex Partners

The following section will specifically ask questions on male regular partners, with whom you regularly have sex with who can be a special friend, spouse, boyfriend.

No.	Questions and Filters	Coding Categories	Skip To
Q501	Have you had anal sex with a male partner whom you considered to be a regular partner in the past 6 months?	Yes 1 No 2 No response 99	**Q601** **Q601**
Q502	With how many regular partners have you had anal sex with in the past one month?	Number of regular sexual partners [__|__] Don't know/Don't remember 88 No response 99 **IF NONE 00**	
Q503	The last time you had anal sex with this regular partner, was a condom used?	Yes 1 No 2 Don't remember 88 No response 99	**Q505** **Q506** **Q506**
Q504	Who suggested condom use that time?	Yourself 1 The regular male partner 2 Joint decision 3 No response 99	**Q506** **Q506** **Q506** **Q506**
Q505	Why didn't you use a condom that time? ***Multiple Responses Possible***	I am afraid to carry a condom with me 1 Things happened too fast before I could get a condom 2 Condoms are too expensive 3 Partner objected 4 They reduce pleasure 5 Pull out before ejaculation 6 Condoms do not protect from diseases 7 Do not know how to use 8 Embarrassed to buy 9 Embarrassed to suggest using or offer 10 Was under the influence of drugs or alcohol 11 Thought the partner was HIV-negative 12	

		My partner and I are both living with HIV 13 Took PrEP (pre-exposure prophylaxis) 14 Other _____ 77 Don't know 88 No response 99	
Q506	With what frequency did you use a condom with your regular partner(s) in the past 6 months?	Always 1 Sometimes 2 Often 3 Never 4 Don't know 88 No response 99	
Q507	Have you ever discussed HIV/AIDS or STIs with any of your regular partners?	Yes, all 1 Yes, some 2 No, none 3 Don't know 88 No response 99	

Section 6: Sexual History – Sex with Women

This section will focus on your sexual history with female partners, if applicable.

No.	Questions and Filters	Coding Categories		Skip To
Q601	Have you ever been married to a woman?	Yes No No response	1 2 99	 **Q603** **Q603**
Q602	Are you currently married to a woman?	Yes No No Response	1 2 99	
Q603	Have you ever had sexual intercourse (anal or vaginal with penetration) with a woman?	Yes No Don't know No response	1 2 88 99	 **Q701** **Q701** **Q701**
Q604	Are you currently living with a woman with whom you have sexual intercourse?	Yes No No response	1 2 99	
Q605	How many women have you had sexual intercourse with in the past 1 month?	Number of female partners Don't know/Don't remember No response **IF NONE**	[__|__] 88 99 **00**	
Q606	The last time you had anal sex with a woman, was a condom used?	Yes No Don't know No response	1 2 88 99	**Q608** **Q608** **Q608**
Q607	Why didn't you use a condom that time?	I am afraid to carry a condom with me Things happened too fast before I could get a condom Condoms are too expensive Partner objected They reduce pleasure Pull out before ejaculation Condoms do not protect from diseases Do not know how to use	1 2 3 4 5 6 7 8	

	Multiple Responses Possible	Embarrassed to buy	9	
		Embarrassed to suggest using or offer	10	
		Was under the influence of drugs or alcohol	11	
		Thought the partner was HIV-negative	12	
		My partner and I are both living with HIV	13	
		Took PrEP (pre-exposure prophylaxis)	14	
		If I used a condom my partner would know I have other partners	15	
		Other _____	77	
		Don't know	88	
		No response	99	
Q608	With what frequency did you use a condom with all women with whom you have had sexual intercourse in the past 6 months?	Always	1	
		Sometimes	2	
		Often	3	
		Never	4	
		Don't know	88	
		No response	99	

Section 7: Condoms and Lubricants

This section contains questions on condoms and lubricants usage.

No.	Questions and Filters	Coding Categories	Skip To
Q701	Do you know of any place or person from which you can obtain male condoms?	Yes 1 No 2 No response 99	 **Q703** **Q703**
Q702	Which places or persons do you know where you can obtain male condoms? ***Multiple Responses Possible***	Shop 1 Pharmacy 2 Market 3 Clinic 4 Hospital 5 Family planning center 6 Bar/Guest house/Hotel 7 Peer educator 8 Friend 9 Non-governmental organization 10 NAP 11 Family member 12 Sex partner who is a client 13 Sex partner who is not a client 14 Other 77 Don't know 88 No response 99	
Q703	In the past 3 months, have you received counselling on condom use or safe sex (for example, through an outreach service, drop-in centre or sexual health clinic)?	Yes 1 No 2 No response 99	
Q704	In the last 6 months, with what frequency have you used water-based lubricants during anal sex with male partners?	Never 1 Sometimes 2 Often 3 Always 4 No response 99	

Section 8: STIs

The following section will assess your behaviors and attitudes towards STIs.			
No.	**Questions and Filters**	**Coding Categories**	**Skip To**
Q801	Have you ever heard of illnesses that can be transmitted through sexual intercourse?	Yes 1 No 2 No response 99	**Q803** **Q803**
Q802	In the last 3 months, have you been tested for a sexually transmitted infection?	Yes 1 No 2 No response 99	
Q803	In the past 12 months, have you had genital/anal inflammation, unusual genital discharge or genital ulceration?	Yes 1 No 2 No response 99	**Q805** **Q805**
Q804	The last time you had genital/anal inflammation, unusual genital discharge or genital ulceration what did you do? ***Do Not Read Out Responses; Multiple Responses Possible***	Nothing 1 Went to an association/NGO for review and treatment 2 Went to a private doctor for examination and treatment 3 Went to the pharmacy to buy medicine 4 Went to alternative treatment 5 Asked a friend for help 6 Self-medication at home 7 Went to a health center for examination and treatment 8 Informed my sexual partner about the symptoms 9 Stopped having sex until the symptoms/healing disappeared 10 Used condoms during sex 11 Other _____ 77 No response 99	
Q805	In the past 12 months have you been diagnosed with a sexually transmitted infection?	Yes 1 No 2 Don't know 88 No response 99	**Q901** **Q901** **Q901**

Q806	What were you diagnosed with the last time you were diagnosed with a sexually transmitted infection? ***Read Responses; Multiple Responses Possible***	Chlamydia 1 Gonorrhea 2 Hepatitis 3 Herpes 4 Human Papillomavirus (HPV) 5 Mycoplasma genitalium (Mgen) 6 Don't know 88 No response 99	

Section 9: Knowledge, Opinions, and Attitudes towards HIV/AIDS

The following section will assess your knowledge, opinions, and attitudes towards HIV/AIDS.			
No.	**Questions and Filters**	**Coding Categories**	**Skip To**
Q901	Have you ever heard of HIV or the disease called AIDS?	Yes 1 No 2 No response 99	**Q922**
Q902	Do you know anyone who is living with HIV or who has died of AIDS?	Yes 1 No 2 Don't know 88 No response 99	**Q904** **Q904** **Q904**
Q903	Do you have a close relative, close friend or partner who is living with HIV or has died of AIDS? ***Multiple Responses Possible***	Yes, a close relative 1 Yes, a close friend 2 Yes, a partner 3 No 4 No response 99	
Q904	Can people protect themselves from HIV by using a condom correctly every time they have anal sex?	Yes 1 No 2 Don't know 88 No response 99	
Q905	Can a person get HIV from mosquito bites?	Yes 1 No 2 Don't know 88 No response 99	
Q906	Can a person get HIV through saliva?	Yes 1 No 2 Don't know 88 No response 99	
Q907	Can people protect themselves from HIV by having one uninfected faithful sex partner?	Yes 1 No 2 Don't know 88 No response 99	
Q908	Can people protect themselves from HIV by abstaining from sexual intercourse?	Yes 1 No 2 Don't know 88 No response 99	

Q909	Can a person get HIV by sharing a meal with someone who is living with HIV?	Yes No Don't know No response	1 2 88 99	
Q910	Do you think that a healthy-looking person can be living with HIV, the virus that causes AIDS?	Yes No Don't know No response	1 2 88 99	
Q911	Do you think that a person with sexually transmitted infections has an increased chance to be infected with HIV?	Yes No Don't know No response	1 2 88 99	
Q912	Can a woman living with HIV/AIDS transmit the virus during pregnancy or through breastfeeding?	Yes No Don't know No response	1 2 88 99	
Q913	Is it possible in your community for someone to get a confidential test to find out if they are infected with HIV? By confidential, I mean that no one, except the posttest counselor, will know the result if you don't want them to know it.	Yes No Don't know No response	1 2 88 99	
Q914	Have you ever been tested for HIV?	Yes No No response	1 2 99	 **Q922** **Q922**
Q915	When did you have your most recent HIV test?	Less than three months Between 3 and 6 months Between 6 and 12 months More than 12 months ago Don't know No response	1 2 3 4 88 99	
Q916	Did you voluntarily undergo the HIV test, or were you required to have the test?	Voluntary Required No response	1 2 99	

Q917	What was the result of your last HIV test?	HIV-negative	1	**Q922**
		HIV-positive	2	
		Indeterminate	3	**Q922**
		Didn't get the result	4	**Q922**
		Don't know	88	**Q922**
		No response	99	**Q922**
Q918	Have you received HIV antiretroviral therapy in the past 12 months?	Yes	1	
		No	2	**Q922**
		Don't know	88	**Q922**
		No response	99	**Q922**
Q919	Once you initiated HIV antiretroviral therapy, did you ever stop taking it?	Yes	1	
		No	2	
		Don't know	88	
		No response	99	
Q920	Have you ever had a viral load test?	Yes	1	
		No	2	**Q922**
		Don't know	88	**Q922**
		No response	99	**Q922**
Q921	Did your last viral load test show you having undetectable levels of HIV?	Yes	1	
		No	2	
		Don't know	88	
		No response	99	
Q922	Have you ever been screened or tested for syphilis in the last 3 months?	Yes	1	
		No	2	**Q1001**
		No response	99	**Q1001**
Q923	What was the result of your diagnosis or test?	Negative/Non-reactive	1	
		Positive/Reactive	2	
		Don't know	88	
		No response	99	

Section 10: PrEP and PEP Usage

This section contains questions on PrEP and PEP usage.

No.	Questions and Filters	Coding Categories	Skip To
Q1001	Have you ever heard of PrEP (Oral Pre-exposure prophylaxis that protects an HIV-negative person at risk of contracting HIV to reduce their risk of infection)?	Yes 1 No 2 No response 99	**Q1006** **Q1006**
Q1002	Have you ever used PrEP?	Yes 1 No 2 No response 99	**Q1006** **Q1006**
Q1003	Where have you ever obtained PrEP? ***Multiple Responses Possible***	Overseas 1 In Lebanon from a private doctor 2 In Lebanon from a public health clinic 3 In Lebanon from non-governmental organization 4 Other _____ 77 No response 99	
Q1004	Have you used PrEP in the past 6 months?	Yes 1 No 2 No response 99	**Q1006** **Q1006**
Q1005	Have you stopped taking PrEP in the past 6 months?	Yes 1 No 2 No response 99	
Q1006	Have you ever heard of PEP (Oral Post-exposure prophylaxis that protects an HIV-negative person at risk of contracting HIV to reduce their risk of infection after exposure)?	Yes 1 No 2 No response 99	**Q1101** **Q1101**
Q1007	Have you ever used PEP?	Yes 1 No 2 No response 99	**Q1101** **Q1101**
		Overseas 1 In Lebanon from a private doctor 2	

Q1008	Where have you ever obtained PEP? ***Multiple Responses Possible***	In Lebanon from a public health clinic In Lebanon from non-governmental organization Other _____ No response	3 4 77 99	
Q1009	Have you used PEP in the past 6 months?	Yes No No response	1 2 99	**Q1101** **Q1101**
Q1010	Have you stopped taking PEP in the past 6 months?	Yes No No response	1 2 99	

Section 11: Stigma, Discrimination, and Violence

The following section will assess your experience of discrimination and violence.

No.	Questions and Filters	Coding Categories	Skip To
Q1101	In the past 12 months, have you been refused health care because someone believed you have sex with other men?	Yes 1 No 2 Don't know 88 No response 99	
Q1102	In the past 12 months, have you been refused employment because someone believed you have sex with other men?	Yes 1 No 2 Don't know 88 No response 99	
Q1103	In the past 12 months, have you been refused religious service because someone believed you have sex with other men?	Yes 1 No 2 Don't know 88 No response 99	
Q1104	In the past 12 months, have you been refused restaurant/bar service because someone believed you have sex with other men?	Yes 1 No 2 Don't know 88 No response 99	
Q1105	In the past 12 months, have you been refused housing because someone believed you have sex with other men?	Yes 1 No 2 Don't know 88 No response 99	
Q1106	In the past 12 months, have you been refused police assistance because someone believed you have sex with other men?	Yes 1 No 2 Don't know 88 No response 99	
Q1107	In the past 12 months, have you had verbal insults directed at you because someone believed you have sex with other men?	Yes 1 No 2 Don't know 88 No response 99	
Q1108	In the past 12 months, have you been hit, kicked or beaten because	Yes 1 No 2 Don't know 88	

	someone believed you have sex with other men?	No response 99	
Q1109	In the last 12 months, how many times has anyone physically hurt you, such as hit, kicked or beaten you?	This has not happened in last 12 months 1 Once 2 2-5 times 3 6-10 times 4 10 or more times 5 Don't know 88 No response 99	
Q1110	In the past 12 months, did anyone force you to have sex with them by sexually assaulting you? (Sexual assault is any type of sexual activity or contact that you do not consent to).	Yes 1 No 2 Don't know 88 No response 99	
Q1111	In the last 12 months, how many times has someone tricked you, lied to you or threatened you in order to make you have sex when you didn't want to?	This has not happened in last 12 months 1 Once 2 2-5 times 3 6-10 times 4 10 or more times 5 Don't know 88 No response 99	
Q1112	Have you ever felt excluded from family activities because you have sex with men?	No 1 Yes, in the last 6 months 2 Yes, but not in the past 6 months 3 Don't know 88 No response 99	
Q1113	Has someone ever scolded or verbally abused you because you because you have sex with men?	No 1 Yes, in the last 6 months 2 Yes, but not in the past 6 months 3 Don't know 88 No response 99	
Q1114	Has someone ever blackmailed you because you because you have sex with men?	No 1 Yes, in the last 6 months 2 Yes, but not in the past 6 months 3 Don't know 88	

		No response 99	
Q1115	In the last 12 months, you have avoided seeking HIV testing because of: ***Read Responses; Multiple Responses Possible***	Fear of or concern about stigma 1 Fear or concern someone may learn you have sex with men 2 Fear of or concern about or experienced violence 3 Fear of or concern about or experienced police harassment or arrest 4 None of the above 5 No response 99	

Section 12: Alcohol and Drug Use

This section asks questions which are important in assessing your attitudes and practices towards alcohol and drug use.

No.	Questions and Filters	Coding Categories	Skip To
Q1201	During the past month, how often have you had drinks containing alcohol? Would you say…….. ***Read Responses; Only One Response***	Every day 1 At least once a week 2 Less than once a week 3 Did not drink in the last 4 weeks 4 Other _____ 77 Don't know 88 No response 99	
Q1202	In the past 6 months, have you had anal sex with a man while under the influence of alcohol?	Yes 1 No 2 Don't know 88 No response 99	
Q1203	During the past 6 months, have you used drugs before or during planned anal sex to facilitate, enhance, prolong and sustain the sexual experience?	Yes 1 No 2 Don't know 88 No response 99	 **Q1205** **Q1205** **Q1205**
Q1204	During the past 6 months, which drugs have you used before or during planned anal sex to facilitate, enhance, prolong and sustain the sexual experience? ***Multiple Responses Possible***	MDMA/methamphetamine/speed/play 1 GHB/GBL 2 Mephedrone 3 Cocaine 4 Ketamine 5 Ice 6 XTC 7 T/Tina/ Chrystal 8 K 9 Poppers 10 None of the above 11 Don't know 88 No response 99	

Q1205	During the past 6 months, have you used non-injection drugs?	Yes No Don't know No response	1 2 88 99	 **Q1207** **Q1207** **Q1207**
Q1206	During the past 6 months, how often would you say you used non-injection drugs?	Only once 2-3 times About once a week 2-3 times a week 4-6 times a week About once a day 2-3 times a day 4 or more times/day Never Don't know No response	1 2 3 4 5 6 7 8 9 88 99	
Q1207	Have you ever injected drugs?	Yes No Don't know No response	1 2 88 99	 **Q1301** **Q1301**
Q1208	***During the past 6 months, have injected drugs?***	Yes No Don't know No response	1 2 88 99	 ***Q1301*** ***Q1301*** ***Q1301***
Q1209	***During the past 6 months, how often would you say you injected drugs?***	Only once 2-3 times About once a week 2-3 times a week 4-6 times a week About once a day 2-3 times a day 4 or more times/day Never Don't know No response	1 2 3 4 5 6 7 8 9 88 99	

Section 13: Population Size Estimation

This section asks questions about the number of men who have sex with men who live in Lebanon.

No.	Questions and Filters	Coding Categories	Skip To
Unique Object Multiplier			
Q1301	Did you receive a bracelet recently from an outreach worker?	Yes 1 No 2 Don't know/Doesn't remember 88 No response 99	**Q1303** **Q1303** **Q1303**
Q1302	Here are pictures of several bracelets, can you pick out the one you received? ***Show picture of different bracelets***	Yes 1 No 2	
Service Multiplier			
Q1303	Between January 1 and June 30, 2023, did you have a sexually transmitted infection, including HIV, test at any of the following centers? ***Read Responses; Multiple Responses Possible***	SIDC 1 Proud Lebanon 2 Marsa 3 Skoun 4 None of the above 5 Don't know/Doesn't remember 77 No respons 99	
Q1304	Between January 1 and June 30, 2023, did you have a medical consultation at any of the following centers? ***Read Responses; Multiple Responses Possible***	SIDC 1 Proud Lebanon 2 Marsa 3 Skoun 4 None of the above 5 Don't know/Doesn't remember 77 No response 99	
Q1305	Between January 1 and June 30, 2023, did you have a mental health consultation at any of the following centers? ***Read Responses; Multiple Responses Possible***	SIDC 1 Proud Lebanon 2 Marsa 3 Skoun 4 None of the above 5 Don't know/Doesn't remember 77 No response 99	
024	Interview End Time	__ __ : __ __ AM/PM	

APPENDIX F. IBBS CONSENT FORM

An Integrated Bio-Behavioral Surveillance Study and Population Size Estimates among a Key Vulnerable Population in Lebanon: Men Who Have Sex with Men.

Introduction and Overview

The National AIDS Control Program and the International Organization of Migration have commissioned Connecting Research to Development (CRD) to conduct an integrated bio behavioral surveillance study among MSM in Lebanon. Our assessment will explore the extent to which male homosexual activity is practiced among the Lebanese and non-Lebanese populations residing in Lebanon to better understand their HIV related health needs. This information will help improve HIV and other health services.

The objectives of this assessment are to:

1. Estimate the population size and distribution of MSM.
2. Estimate the prevalence of HIV, syphilis, and associated risk behaviors among the MSM within this study.

Your role in this survey

As part of the research, we would like to ask you to participate in a survey by answering questions related to your demographics, marriage and partnerships, sexual history, knowledge, opinions, and attitudes towards HIV/AIDS, among others. The survey will take approximately 30 to 45 minutes to be completed.

We would also ask to take a finger-prick rapid test for HIV and a rapid point-of-care test for syphilis. Before the tests, we will provide you with the necessary information regarding these tests. If you test positive for HIV and/or syphilis, we will provide you with the necessary information regarding referral to care and treatment. The used HIV and/or syphilis testing kits will be immediately discarded after documenting the results.

Possible Risks and Benefits

Some questions may make you feel uncomfortable. You can refuse to answer any question. Taking part in the survey is free. For your time, we will give you XX

USD. You can help make HIV services more accessible for your community by joining this survey. We will also give you information on HIV and sexually transmitted infections. You will also receive your HIV and syphilis test results.

Participation

Participation in the survey is completely voluntary, and you can stop the survey at any time. If you do not wish to answer any of the questions, we will move on to the next one.

Confidentiality

All the answers you give will be kept confidential. No one will know what you answered or the results of your tests. Your confidentiality during the study will be ensured by using a research identification number.

Your Rights

This study has obtained Institutional Review Board approval (Reference Number: ###). If you have any questions, concerns, or complaints about this research, you may contact CRD by phone at +961-70-065522 or email at registry@crdconsultancy.org, or the NAP by phone at +961-1-566100/1 or email at wholeb_nap@inco.com.lb.

Researcher's Statement:

I have explained the content of this document to the participant. The participant understands what it means to join the survey. The participant understands his/her rights and risks. The participant had time to ask questions. The participant understands that he/she can join the survey at his/her free will. The participant understands that he/she can leave the survey at any time.

Participant agrees to do an interview [ ] Yes [ ] No
Participant agrees to take the rapid tests: [ ] Yes [ ] No

_____
Questionnaire Identification Number

_____	_____	_____
Name of Researcher	Signature	Date and Time