



KAUNTIM MI TU MULTI-SITE SUMMARY REPORT 2018

Key findings from the Key Population Integrated Bio-Behavioural
Survey Papua New Guinea



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Kauntim mi tu was only possible with the support, encouragement, leadership and advice of a diverse range of people.

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DEDICATION

Over the past three decades in the global response to HIV, many people have dedicated their lives to advocating for people most at risk for HIV, particularly, women and girls who sell and exchange sex for money and goods and sexually and gender diverse males.

We acknowledge the dedication of all these people, past and present, especially Papua New Guineans.

In particular, we want to acknowledge the late Scientia Professor David Cooper (AO), Director of the Kirby Institute for Infection and Immunity in Society, UNSW Sydney who passed away in March 2018 after a short and rare illness.

David was a global pioneer in the response to HIV. His life was dedicated to understanding HIV and the development of effective treatment for the virus. He was committed to ensuring treatment for all people and was always ready to serve those most at risk of HIV and those living with HIV with compassion and respect.

To him we dedicate this report.



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ACRONYMS & ABBREVIATIONS

AIDS - Acquired Immune Deficiency Syndrome

ART - Antiretroviral Therapy

CAPI - Computer-Assisted Personal Interviews

FSW - Female sex worker

HBV - Hepatitis B Virus

HIV - Human Immunodeficiency Virus

IBBS - Integrated Bio-Behavioral Survey

MDS - Men of Diverse Sexualities

MSM - Men who have sex with men

NACS - National AIDS Council Secretariat

PLoS - Public Library of Science

PNG - Papua New Guinea

RDS - Respondent-Driven Sampling

STI - Sexually transmitted infection

SW - Sex worker

TB - Tuberculosis

TG - Transgender woman

UNAIDS - Joint United Nations Programme on HIV/AIDS

WHO - World Health Organization

PREFACE



Kauntim mi tu is without doubt a major landmark in the evolution of PNG's HIV response and represents the most comprehensive attempt to date, to better understand the nature and extent of the country's epidemic.

In my leadership role in the Papua New Guinea National Department of Health, I am delighted to introduce the fourth and final report from the *Kauntim mi tu* study. Unlike the previous three reports from each of the cities, this report marks the completion of the *Kauntim mi tu* study. This final report represents another major step forward in the evolution of Papua New Guinea's HIV response. It represents the most comprehensive attempt to date to better understand the nature and extent of the country's epidemic. This study will contribute to the country's understanding of the national HIV and STI epidemics for years to come by providing more and better focussed information than previously available to policy makers, implementers, service providers, and financing agents, and by providing not only the first size estimation of women who sell and/or exchange sex and men who have sex with men, but also the most representative bio-behavioural data about these key populations to date.

The information that *Kauntim mi tu* provides comes at a critical time as we continue to shift our understanding of the country's HIV situation from long-held assumptions that we were addressing a generalised (or generalising) epidemic, to an understanding that we more likely have multiply concentrated and geographically situated epidemics most significantly affecting certain key populations. Without the crucial information provided by this study, it would remain difficult (if not impossible) to focus the national response on the places with the highest disease burdens and key population densities so as to ensure the access to prevention and treatment resources and services critical to stabilising (and hopefully reducing) HIV prevalence in the country. This is also of critical importance as the financing landscape for the nation's HIV and STI responses change and available financial resources decline.

UNAIDS calls on countries to "Fast Track" their national responses and this

requires a base of the best strategic information; innovation in service delivery, communication, development of new delivery paradigms, and in how we fund and resource our work; integration of the HIV and STI responses in the overall health and development agendas; strategic investments which find greater financial and implementation efficiencies; and finally putting the people most affected by HIV at the centre of our responses. None of these efficiencies are possible without the kind of information that *Kauntim mi tu* provides.

Kauntim mi tu has itself also represented an excellent example of exactly the sort of innovation, and investment efficiency which Fast-Track thinking calls for. The study has, in its design, included a number of firsts for PNG and also for the world in the conduct of integrated bio-behavioural surveys. The study provided up to nine separate point of care tests. In addition to tests for HIV, CD4 T-cell counts, syphilis and the Hepatitis B virus, the study also tested for TB, Chlamydia trachomatis and Neisseria gonorrhoeae and provided same day results for HIV viral load.

In addition, the study has exemplified the UN's Fast Track thinking by being a superb example of partnership between key players in the Papua New Guinea national HIV response – communities of key populations, the scientific and academic communities, Government and national institutions, civil society, service providers, bilateral / multilateral donors, public/private partnerships, technical assistance providers, and others, including the PNG Institute of Medical Research, the Kirby Institute, UNSW Sydney, Australia, the US Centers for Disease Control and Prevention, the Oil Search Foundation, the United Nations system, the Governments of Australia and the United States, The Global Fund for AIDS, TB and Malaria, and so many others. The design and delivery of this study has ensured the very highest quality input and management oversight from

some of the finest minds in partnership with Papua New Guinea's Government mechanisms, government and civil society service providers, and end users and beneficiaries of services. So not only have these technical, management, design and delivery mechanisms made this study such a success, it has also contributed to building stronger partnerships and levels of trust between service providers and users, while leveraging the study's implementation to help address some of the unfortunate realities of responding to HIV - stigma, discrimination, depression, sexual violence, complex sexuality, and the many other factors which often keep key population-associated individuals away from the services they need to be able to access freely, respectfully, and comfortably.

UNAIDS Executive Director and United Nations Under Secretary General Michel Sidibe has noted that "....as we build on science and innovation, we need fresh thinking to get us over the obstacles to achieving success in ending AIDS by 2030." He noted that "....what got us HERE, won't get us THERE because we continue to face persistent inequalities, the threat of fewer resources, a growing conspiracy of complacency..... and a paucity of innovatively generated strategic information." We firmly believe that *Kauntim mi tu* addresses some of these obstacles and will significantly contribute to getting Papua New Guinea "there" – an HIV response based on strong strategic information, focused on the realities of the national epidemic which contributes to building a more equitable and just country.

PASCOE KASE

Secretary for Health

PNG National Department of Health

EXECUTIVE SUMMARY

BACKGROUND AND METHODS

Kauntim mi tu (KM2), an integrated bio-behavioral survey (IBBS) of women and girls who sell and exchange sex (FSW) and men who have sex with men and transgender women (MSM/TG), provides much needed information to support the scale up of essential HIV prevention and treatment services for these populations. KM2 was conducted in three cities (Port Moresby, Lae, and Mt. Hagen) between June 2016 and December 2017 using respondent-driven sampling (RDS) to recruit participants. *Kauntim mi tu* had two goals: 1) to conduct updated population size estimations of FSW and MSM/TG in Papua New Guinea; and 2) to collect representative bio-behavioral data about FSW and MSM/TG in order to inform HIV and STI prevention and treatment services and policy. This document presents findings among FSW in all three cities.

WOMEN AND GIRLS WHO SELL AND EXCHANGE SEX - RESULTS

A substantial number of women and girls involved in the selling and exchanging of sex for goods, services, or money participated in the surveys conducted in Port Moresby, Lae, and Mt. Hagen (674, 709, and 709 respectively). As sample size requirements were met, we conducted weighted population analyses to estimate the number of sex workers and describe them. We estimated that there are 16,000 FSW in Port Moresby, 6,100 in Lae, and 2,600 in Mt. Hagen.

The median age of FSW in these three cities was 27, 29, and 25 years, respectively. The socioeconomic status of FSW in Port Moresby, Lae, and Mt. Hagen was generally low with 30.0-40.8% unable to read or write, only 1.3-3.8% having completed secondary school education (grades 11-12), 16.3-21.3% were unemployed, and 51.4-58.2% of women employed outside of sex work earned less than 500 Kina per month. Approximately two in three FSW were separated or divorced.

In all three cities, the median age of women's first vaginal sex was 16 years. Between one-fifth and one-quarter (17.1-25.9%) received money or goods the first time that they had sex. A similar proportion (18.7-26.3%) were forced into their first vaginal sexual experience. Furthermore, at least half of FSW in each city were physically or sexually abused at some point in their lives, with many believing that that some of these experiences were related to them selling or exchanging sex.

While 56.3-61.4% of women and girls have been selling or exchanging sex for less than five years in all three cities, more than one in ten women have been doing so for 10 or more years (11.4-15.5%). More than two-thirds (67.3-86.3%) of FSW in Port Moresby, Lae, and Mt. Hagen have not used condoms with all of their clients in the last 6 months.

The majority of FSW (63.3-75.1%) were not trying to become pregnant and, of these women, almost all (80.4%) were using modern family planning methods in Port Moresby, though less than half in Lae and Mt. Hagen did so (46.3% and 40.9%, respectively). Despite these regional differences in family planning, one in five women and girls in each city (17.9-20.5%) tried to induce an abortion at least once in their life. The majority of FSW (85.0-91.2%) who had a live birth in the last three years have attended an antenatal clinic (ANC) at least once. While not all women and girls were offered an HIV test at ANC (72.4-88.6%), of those that were offered a test nearly all (98.3-100%) tested for HIV.

HIV prevention services through community or peer outreach workers is the starting point for engaging female sex workers in HIV services. FSW engagement with outreach workers is limited with 30.8-50.9% of FSW having never interacted with one and 21.8-37.7% of FSW having been reached in the last three months.

Stigma in the healthcare setting is a problem for FSW with many women (23.0-45.2%) feeling the need to hide that they sell or exchange sex when accessing health services. FSW also have trouble with the police, 23.2-31.5% bribed police in order to avoid issues with them in the last 12 months and 5.2-10.9% have been arrested for selling or exchanging sex.

The prevalence of sexually transmitted infections (STI) such as hepatitis B virus, syphilis, chlamydia, and gonorrhea was high with 52.1-60.8% of FSW diagnosed with one or more STI (excluding HIV). The most prevalent STI was urogenital chlamydia in Lae and Mt. Hagen (35.3% and 32.5%, respectively) and anorectal chlamydia in Port Moresby (31.8%). Active syphilis infection was the least prevalent STI in all three cities (3.0-7.2%). While over half of FSW (51.6-53.8%) reported having abnormal vaginal discharge in the last 12 months, less than half (36.0-43.2%) sought healthcare to resolve these symptoms. Few FSW tested positive for TB (ranging from 0.7-2.2%).

HIV prevalence among FSW in Port Moresby, Lae, and Mt. Hagen was 14.9%, 11.9%, and 19.6% respectively, more than 10 times greater than the national PNG adult female estimate of 1.1%. The conditional UNAIDS 90-90-90 cascade of FSW in all three cities indicates the large amount of work that remains to be done in order to reach adequate HIV diagnosis and viral load suppression proportions, in particular. Awareness of HIV infection among HIV-positive FSW in the lowest of the three targets, ranging from 39.3% to 43.9%. This is not surprising given many FSW (32.1-43.9%) have never been tested for HIV. Importantly, KM2 demonstrates that approximately 90% of FSW in each city diagnosed with HIV are successfully linked to HIV treatment, although viral load suppression is suboptimal (ranging from 54.1-80.0% among those aware of their infection and on treatment). These HIV care cascade inadequacies provide an avenue to great improvement with appropriate resources and interventions specific to FSW, and successful treatment linking indicates that success is achievable.

MEN WHO HAVE SEX WITH MEN AND TRANSGENDER WOMEN - RESULTS

MSM/TG survey participation varied by city with 400 and 352 people participating in Port Moresby and Lae, respectively. We estimated that there are 7,500 MSM/TG in Port Moresby and 4,700 in Lae.

The median age of MSM/TG in these cities was 27 and 25 years, respectively. The socioeconomic status of MSM/TG in Port Moresby and Lae was generally low with 80.5-86.7% able to read and write, 10.8-12.4% having completed secondary school education (grades 11-12), 27.8-37.2% unemployed, and 45.8-55.6% earning less than 500 Kina per month. Approximately two in three MSM/TG were never married.

The median age of first anal sex with a man or TG among MSM/TG was 20 years in both Port Moresby and Lae. Almost all MSM/TG chose to have anal sex the first time they did so with a man or transgender woman (76.1-78.8%). Less than half of MSM/TG had a main male partner (20.0-39.4%), but of those that did only one in three reported using a condom at last anal sex with their main partner (31.3-35.5%).

The most common sexual identities for MSM/TG in Port Moresby and Lae were 'man who has sex with men' (32.6-35.8%), 'man of diverse sexualities' (24.7-26.6%), and 'heterosexual' (17.0-26.0%). Few MSM/TG identified their gender identity as TG (6.1-7.4%). In both cities, few MSM/TG were 'only attracted to men' (6.4-11.4%) or 'mostly men but sometimes women' (4.2-9.4%). Most MSM/TG in these two cities did not share their sexual practices or gender identity with their families (83.2-88.4%).

Almost half of MSM/TG in Port Moresby and Lae felt the need to hide their sexual practices and/or gender identity when accessing health services (44.9-48.0%), and one in three reported feeling ashamed of themselves based on their sexual practices or gender identity (29.8-32.7%). Depression was not uniform between the two cities, with 14.6% of MSM/TG in Port Moresby and 54.5% in Lae having depression based on the Patient Health Questionnaire-2 screening tool.

Three in five MSM/TG in Port Moresby (58.5%) and three in four in Lae (75.8%) have ever experienced physical violence, and in both cities one in four has been forced to have sex (23.7-24.1%). Of those that have experienced physical violence in the last 12 months, very few believed that it was related to their sexual practices or gender identity (6.4-8.9%). Of those who have ever experienced sexual violence, two in three in Port Moresby (62.6%) and three in four in Lae (74.8%) did not seek services after the experience. In Port Moresby, two in five (19.7%), and in Lae, one in ten (11.8%) had experienced violence from a live-in partner in the last 12 months.

Penile modification was common among MSM/TG, with almost two in three in Port Moresby (59.5%) and four in five in Lae (83.4%) reporting that they had cut the foreskin of their penis. The most common reasons given by MSM/TG in both cities who had cut their foreskin were to improve cleanliness/genital hygiene (44.2-45.0%) and because it was a customary practice (17.7-36.0%).

The prevalence of STI such as hepatitis B virus, syphilis, chlamydia, and gonorrhoea was high with 34.0% of MSM/TG in Port Moresby and 42.0% in Lae diagnosed with one or more STI (excluding HIV). STI prevalence was different between cities, with urogenital chlamydia being the most prevalent in Port Moresby (12.3%) and Hepatitis B virus being the most prevalent in Lae (23.8%). The most common STI symptom was painful urination in Port Moresby and Lae (23.2-36.1%); of MSM/TG with these symptoms, two in three did not see a health care worker (62.3-63.0%). Small proportions of MSM/TG in Port Moresby and Lae had TB (1.9% and 4.1%).

HIV prevalence among MSM/TG in Port Moresby and Lae was

8.5% and 7.1%, respectively, more than 7 times greater than the national PNG adult estimate of 0.9%. The conditional UNAIDS 90-90-90 cascade of MSM in all cities is unweighted due to the small number of HIV-positive individuals in the study. Of the 30 HIV-positive MSM/TG in the sample in Port Moresby, seven (23.3%) were aware of their infection; of those seven, three were on treatment; of those three, two were virally suppressed. Of the 23 HIV-positive individuals in the sample in Lae, nine (39.1%) were aware of their infection; of those nine, six were on treatment; of those six, five were virally suppressed. These results indicate the large amount of work that remains to be done along the entire cascade in order to reach UNAIDS targets. Awareness of HIV infection is the critical first step of the cascade but is only possible if people are testing for HIV. More than half of MSM/TG (58.2-67.9%) have never tested for HIV.

WOMEN AND GIRLS WHO SELL AND EXCHANGE SEX - RECOMMENDATIONS

Kauntim mi tu's findings demonstrate the need to expand the health and social services available for women and girls who sell and exchange sex in Port Moresby, Lae, and Mt. Hagen. With awareness of HIV infection still far below the UNAIDS goal of 90%, PNG should expand the use of peer driven, social network, index-testing, and other evidence-based HIV testing strategies to encourage FSW to test for HIV since this is the first and most important step in the HIV treatment cascade. Achieving this goal and ending the HIV epidemic among FSW in Papua New Guinea will require the collaboration of many partners: government, law enforcement, religious organizations, service providers, and most importantly, women and girls who sell sex. One of the most fundamental issues faced by FSW is the stigma, discrimination, and harassment they experience both inside and outside of the healthcare setting. Moreover, the coercive, violent, or otherwise unwanted physical and sexual abuses that FSW experience increases their vulnerability. This structural and literal violence increases the vulnerability of FSW on many levels is counterproductive to HIV epidemic control efforts. Sensitization for the general public, but most urgently for healthcare workers, can help mitigate these effects so that FSW can comfortably and freely discuss their sexual behaviors with healthcare providers and access HIV prevention and treatment. PNG's existing efforts to empower women and reduce domestic violence against them are important and should include the unique experiences faced by FSW. Most HIV-positive FSW are successfully linked to care, but more effort is needed to ensure that these women remain on treatment and achieve viral load suppression. Peer navigators and other differentiated health services can play a critical role in supporting retention. HIV-negative FSW should be engaged to stay HIV-free through peer outreach and other social network strategies, condom and lubricant distribution at hotspots and sexual health facilities, and the provision of pre-exposure prophylaxis. Likewise, reproductive health services should ensure that all of these women and girls are offered and tested for HIV and syphilis during pregnancy, receive treatment as needed, and are provided comprehensive reproductive health care including family planning. Integrating STI testing and treatment into HIV services can attract more people at risk for HIV for prevention, testing, and treatment. This is a crucial moment in the HIV epidemic in PNG; without increased attention and support, the epidemic will worsen.

MEN WHO HAVE SEX WITH MEN AND TRANSGENDER WOMEN - RECOMMENDATIONS

epidemic in PNG; without increased attention and support, the epidemic will worsen. *Kauntim mi tui's* findings demonstrate the need to expand the health and social services available for men who have sex with men and transgender women in Port Moresby and Lae. With awareness of HIV infection still far below the UNAIDS goal of 90%, PNG should expand the use of peer driven, social network, index-testing, and other evidence-based HIV testing strategies to encourage MSM/TG to test for HIV since this is the first and most important step in the HIV treatment cascade. Achieving this goal and ending the HIV epidemic among MSM/TG in Papua New Guinea will require the collaboration of many partners: government, law enforcement, religious organizations, service providers, and most importantly, men who have sex with men and transgender women. One of the most fundamental issues faced by MSM/TG is the stigma, discrimination, and harassment they experience both inside and outside of the healthcare setting. This structural violence increases the vulnerability of MSM/TG on many levels is counterproductive to HIV epidemic control efforts. Sexual orientation, and sexual identity diversity education for the general public, but most urgently for healthcare workers, can help mitigate these effects so that MSM and TG can comfortably and freely discuss their sexual behaviors and gender identity with healthcare providers and access HIV prevention and treatment. Roughly half of HIV-positive MSM/TG are successfully linked to care; more effort is needed to ensure that once linked they are started and stay on antiretroviral therapy to achieve viral load suppression. Peer navigators and other differentiated health services can play a critical role in supporting retention. HIV-negative MSM/TG should be engaged to stay HIV-free through peer outreach and other social network strategies, condom and lubricant distribution at hotspots and sexual health facilities, and the provision of pre-exposure prophylaxis. Integrating STI testing and treatment into HIV services can attract more people at risk for HIV for prevention, testing, and treatment. This is a crucial moment in the HIV epidemic in PNG; without increased attention and support, the epidemic will worsen.

RECOMMENDATIONS

Kauntim mi tu highlights the needs for enhanced HIV, health, and social services for FSW, MSM, and TG. Based on study findings, FSW, MSM, and TG in Port Moresby recommend that the National Department of Health and other service providers:

- 1 Expand the use of peer driven and social networks and other new evidence-informed HIV testing strategies to increase HIV testing yield.
- 2 Strengthen linkages of people newly diagnosed with HIV to key population friendly clinics for immediate initiation of ART.
- 3 Expand the use of peer navigators to support treatment retention of key populations.
- 4 Promote gender and sexual orientation and identity equality.
- 5 Provide key population sensitivity training to healthcare workers at key health facilities and designate them as key population friendly.
- 6 Ensure the availability of safe-spaces for the reporting of physical and sexual violence, and the provision of services for key populations.
- 7 Integrate point of care STI testing and treatment in all sexual health services, including HIV testing and treatment facilities.
- 8 Increase provision of condoms and lubricants at key population hotspots and sexual health facilities.
- 9 Ensure women and girls who sell and exchange sex are tested for HIV and syphilis during pregnancy, receive treatment as needed, and are provided with comprehensive reproductive health care including family planning.

INTRODUCTION

Despite more than three decades of global efforts in the prevention and treatment, there is still no cure for the disease. In 2015, more than 2.1 million adults and 150,000 children were infected with HIV (UNAIDS 2016). In many countries, HIV is concentrated amongst those who already experience substantial societal stigma and exclusion, such as female sex workers (FSW) and men who have sex with men (MSM) (UNAIDS 2016). Even in generalised epidemics, these populations are over represented in new HIV cases (UNAIDS 2016). The sexual behaviours that place these populations at risk for HIV also place them at risk for other sexually transmitted infections (STIs).

Previously described as a generalised epidemic, the understanding of Papua New Guinea's (PNG) HIV epidemic has undergone substantial revision in recent years due to increased data availability, particularly the increase in reporting from antenatal clinics conducting provider initiated HIV counselling and testing. In 2005 there were only 17 ANC HIV testing sites, while in 2011 this increased to 280 (NACS 2013). Data from ANC testing sites form the foundation of PNG's national and regional HIV estimates. The most recent estimates suggest that the national HIV prevalence is 0.9% among adults aged 15-49 years (Global AIDS Report. 2017). Higher rates of estimated adult prevalence are notable in particular regions and provinces (such as the National Capital District and the Highlands Region), as well as within key populations. With increasing evidence of heterogeneity of the epidemic, HIV has been increasingly referred to as a mixed HIV epidemic (see for example, Kelly, Rawstorne et al. 2014), neither concentrated nor generalised.

There is substantial evidence in Papua New Guinea to suggest that key populations such as sex workers (SWs), men who have sex with men (MSM), and transgender women (TG) are particularly at risk for HIV (Vallely, Page et al. 2010, Kelly, Kupul et al. 2011, Maibani, Ryan et al. 2011, NACS 2013). Multiple studies indicate that SW, MSM, and TG are at increased risk of HIV due to their engagement in high-risk sexual behaviours, including unprotected vaginal and anal intercourse, and experience increased vulnerability due to stigma, discrimination, and violence, particularly sexual violence (Maibani-Michie, Kavanamur et al. 2007, Kelly, Kupul et al. 2011, Maibani, Ryan et al. 2011). In addition, studies have indicated high HIV prevalence amongst FSW with the most recent studies reporting 19% in Port Moresby (Kelly, Kupul et al. 2011) and 2.7% in Eastern Highlands Province (Kelly, Kupul et al. 2011, Maibani, Ryan et al. 2011). FSW carry a higher burden of HIV than the general population and even within this group of women, prevalence of HIV varies across the country (Kelly, Rawstorne et al. 2014).

To date no representative bio-behavioural data are available for men who have sex with other men (irrespective of sexual identity) and TG in PNG. HIV prevalence amongst male sex workers in Port Moresby, most selling sex to other men, was 8.8%, while among TG who sell sex it was 23.7% (Kelly, Kupul et al. 2011).

In light of this situation, greater attention in terms of policy, services and surveillance is being afforded to women who sell or exchange sex, men who have sex with men, and transgender women in PNG (NACS 2013). Moreover, in order to ensure services are adequately reaching these populations, reliable size estimates of these populations is needed, which to date have not been available.

The Mid-Term Review of PNG's National HIV and AIDS Strategy

undertaken in 2013 (Godwin and & the Mid Term Review Team. 2013) emphasised the importance of prioritising HIV services and interventions for key populations such as FSW and MSM. Specifically, the review recommended that there needed to be substantial improvement in the uptake and retention of FSW and MSM in HIV clinical prevention, treatment and care services across their lifetime. The review also made a number of recommendations in relation to the importance of strengthening the link between the diagnosis and treatment of HIV, STIs and tuberculosis (TB). Specifically, the recommendations included for example: greater attention to the detection and treatment of asymptomatic STIs, scaling up HIV and STI combination prevention amongst MSM and FSW, and improving availability of and access to point-of-care (POC) HIV rapid testing, with an emphasis on provider-initiated counselling and testing (PICT), STI and TB services. Kauntim mi tu provides much needed information to improve the scaling up of combination prevention and improving access to POC services.

STUDY AIMS AND OBJECTIVES

Study Aims

- (1) To conduct Papua New Guinea's first size estimation of females who sell and /or exchange sex (FSW) and men who have sex with men (MSM)/ transgender women (TG) and;
- (2) to collect representative bio-behavioural data about these key populations in order to inform HIV/STI prevention, treatment and care programming and policy development.

Objectives

1. Estimate the size of each target population in each location.
2. Estimate the weighted prevalence of different risk behaviours among each target population in each location.
3. Estimate access to and uptake of HIV-related services among each target population in each location.
4. Develop an understanding of sexual networks including the roll of mobility among each target population in each location.
5. Estimate HIV, STIs, TB and HBV weighted prevalence and associated risk factors for each target population in each location.
6. Develop a map of where FSW find clients in each location
7. Develop a map of where MSM/TG socialise with other MSM/ TG
8. Translate research outcomes into recommendations for policy and program development.
9. Strengthen capacity of Papua New Guineans to conduct bio-behavioural HIV research, specifically using respondent-driven sampling.

COMMUNITY ENGAGEMENT

Prior to the design of this study and throughout the preparation for implementation, community consultation was undertaken with FSW and MSM/TG in Port Moresby, Lae and Mt. Hagen. Following the completion of field work in each city, results from

Kauntim mi tu were presented to members of the key populations and their civil society organisations. A separate meeting was held for other stakeholders and donors. Site-specific recommendations were developed during the community consultation by members of Friends Frangipani, Kapul Champions and the wider stakeholder groups. Each population's list of recommendations is represented at the end of report under 'Recommendations'. A statement was also written and presented by Friends Frangipani and Kapul Champions to the stakeholders and donors and included at the end of the report providing the final reflection on the study findings for each city (Kelly-Hanku et al 2017; Kelly-Hanku et al. 2018 and Willie et al 2018). In addition to this engagement with key population groups, members of these populations are employed in the *Kauntim mi tu* study team.

METHODOLOGY

This integrated bio-behavioural survey (IBBS) used respondent-driven sampling (RDS) to recruit participants. A smaller number of participants from the IBBS were recruited into a qualitative interview. The service multiplier and unique object multiplier methods were used to estimate the size of each population.

Integrated Bio-Behavioural Survey (IBBS)

Data collection in Port Moresby, the National Capital District of Papua New Guinea, occurred between June and November 2016.

The target populations were:

1. Women and girls who sell and exchange sex (from here on it will be written as FSW); and
2. Men who have sex with men, and transgender women (from here on it will be written as MSM and TG, respectively).

Inclusion criteria

To take part in this study, FSW participants must:

- ▶ Be born a biological woman;
- ▶ Be 12 years of age or older
- ▶ Have sold or exchanged sex in the past six months
- ▶ Speak English or Tok Pisin
- ▶ Be in possession of a valid study coupon

To take part in this study, MSM/TG participants must:

- ▶ Be born a biological man
- ▶ Be 12 years of age or older
- ▶ Have engaged in oral or anal sex with another man in the past six months
- ▶ Speak English or Tok Pisin
- ▶ Be in possession of a valid study coupon

Sample size

We proposed a sample size of 700 FSW and 700 MSM/TG in Port Moresby. This took into account the RDS-related design effect of two (as proposed by Salganik, 2006).

Study recruitment

There were two types of participants: (a) IBBS participants recruited by study team (known as seeds) and (b) IBBS participants recruited by previous *Kauntim mi tu* participants. After completing study procedures, each of the seeds were given three coupons and asked to recruit up to three peers by giving each one a coupon. In the final weeks of data collection, MSM/TG received four coupons to speed recruitment. Peers who received a coupon were themselves given coupons to recruit others after participating in the study. This process of referral and coupons

was repeated until sample size was reached.

Study reimbursements

Participants in *Kauntim mi tu* were reimbursed according to a schedule devised with the key population members and approved by the ethics committees (Table 1).

Primary incentives are those received when an eligible participant completes a first visit, including the survey and biological testing. Should a participant decline the biological testing they are still eligible for full reimbursement for their time. Secondary incentives are those received by a participant on their second visit. The amount reimbursed is determined by the number of successful recruits. A sub-sample of participants are identified to participate in a qualitative interview and a separate reimbursement schedule was devised and offered to those who consent and participant in a qualitative interview.

REIMBURSEMENT ITEM		KINA
Primary	Transport to and from study site	5
	Interview and testing time at study site	40
Subtotal		45
Secondary	Transport to and from study site, interview (on peer recruitment)	5
	Max. Recruitment (recruiting ≤3 peers, at K10 each)	30
Subtotal		35
Total (Max)		80
Qualitative	Transport to and from study site (if interview does not occur during follow-up visits.)	5
	Qualitative interview	20
Total (Max)		25

Table 1: Reimbursement schedule 1.1 Behavioural Survey

Eligible and consenting participants undertook a researcher-administered survey. In 2015, more than 2.1 million adults and 150,000 children were infected with HIV (UNAIDS 2016).

A trained researcher/interviewer used a tablet to administer a questionnaire to participants that covered a number of key areas including: basic socio-demographic data, sexual history, current sexual practices with a variety of partners (clients and main and casual partners), HIV knowledge, access to support services and peer outreach, stigma and discrimination, sexual and physical violence, condom use, HIV testing, and HIV care and treatment.

The questionnaire was administered in a language of the participants' choice - English or Tok Pisin. The questionnaire took approximately 1.5 hours to complete.

No personal identifiers were collected during the survey. Participants were able to refuse to answer any question during the survey or stop the survey at any time.

Condoms, lubricants and HIV-related information were provided free of charge to all *Kauntim mi tu* study participants.

Based on their clinical and social needs, all participants were provided with a written referral/s to one or more services in Port Moresby, which the community identified as being safe for FSW, MSM, and TG. Peer mentors were available to escort participants, as requested, to these services, and a study vehicle available to facilitate transportation.

1.2 Biological testing

Kauntim mi tu study participants were offered point of care tests (Table 2) and if necessary, same day treatment for syphilis, chlamydia and gonorrhoea. Subsequent treatment for syphilis was provided by local STI services. No treatment for HIV, TB or hepatitis B virus was provided as part of the study; referrals were provided for care and treatment of these diseases as needed.

Participants were only required to provide written informed consent for HIV testing. Verbal informed consent was provided for the survey, all other tests, to store remaining specimens and test them in the future, including overseas testing if necessary.

Table 2 shows the type of tests and specimen types and tests performed.

Internal and external quality control

The study was enrolled in an external quality assurance program with the Royal College of Pathologists of Australasia for HIV, hepatitis B virus and syphilis immunochromatographic testing.

Quality control for HIV was conducted by screening all HIV positive and inconclusive samples with a third HIV test - Geenius HIV-1/2 (Bio-Rad Mitry Mory, Switzerland). This testing was conducted at the PNG Institute Medical Research's Sexual and Reproductive Health Laboratory. In-house chlamydia, gonorrhoea, tuberculosis and HIV viral load QC were developed for this study and ran monthly on GeneXpert (Xpert) NAAT devices (Cepheid, Sunnyvale, CA).

1.3 Qualitative interviews

Qualitative interviews were undertaken with a sub-sample of participants to better understand and describe issues surrounding HIV and HIV risk, including practices, perceptions, stigma, and violence.

Qualitative interviews took approximately 40-60 minutes. Eighteen FSW and 22 MSM/TG participated in the qualitative interview. Participants for the qualitative interview were chosen based on a selection matrix that included for example, age, place of origin, diverse experiences of acceptance, family life, stigma or violence, HIV negative and positive, as well as not having participated in a qualitative IMR study before.

No personal identifiers were collected during the qualitative interview. Participants were able to refuse to answer any question during the interview or stop the interview at any time. Interviews were conducted in English or Tok Pisin and digitally recorded. All interviews were transcribed verbatim and translated into English as appropriate. A separate, additional written informed consent was obtained from those who participated in the qualitative interview.

All names used in the report are pseudonyms.

1.4 Data management

All quantitative interview data were collected via computer-assisted personal interviews (CAPI) whereby data were "entered" during the time of interview by a study researcher directly into a tablet. Each tablet was password protected.

At the conclusion of each data collection day, data from each tablet was stored on a cloud server.

All rapid test results were recorded in a paper-based laboratory test book. Individual test results were then transferred to a

TARGET	TEST	SAMPLE
Syphilis	Chembio DPP Syphilis Screen & Confirm Assay	Venous blood
Hepatitis B virus	Alere Determine HBsAg test	Venous blood
Gonorrhoea (genital and anorectal)	Xpert CT/NG Test	Self-collected vaginal swab (female participants only) Urine specimen (male participants only) Self-collected anorectal swab (male and female)
Chlamydia (genital and anorectal)	Xpert CT/NG Test	Self-collected vaginal swab (female participants only) Urine specimen (male participants only) Self-collected anorectal swab (male and female)
Tuberculosis	Xpert MTB/RIF Test	Self-collected sputum
HIV	Alere Determine HIV-1/2 Ag/Ab Combo followed by confirmatory Chembio HIV 1/2 Stat-Pak if Determine test is positive	Venous blood
If HIV positive: CD4 T cell count	Alere PIMA CD4 test	Venous blood
If HIV positive: HIV Viral load	Xpert HIV Viral Load Test	Venous blood

Table 2: Biological testing

dedicated case record form and returned to the clinician for review and referral to a treatment service if required.

Xpert results were automatically captured by the Xpert software and stored in an SQL database on the Xpert laptop computer. Each laptop has a secure password for entry and test results were backed up daily onto an external hard drive which was stored in a locked cupboard when not in use. Only authorised study personnel had access to the survey and test results.

The audio recording of qualitative interviews were downloaded daily into a study computer that was password protected and backed up daily at the study site to an external hard drive which was stored in a locked filing cabinet.

1.5 Size estimation

This study utilised the unique object multiplier method to estimate the number of FSW in Port Moresby, Lae and Mt. Hagen and MSM/TG in Port Moresby and Lae. Approximately two weeks prior to the start of the Kauntim mi tu study, peer volunteers distributed a fixed number of unique objects to FSW in Port Moresby, Lae and Mt Hagen and MSM/TG in in Port Moresby and Lae. They noted on Size Estimation Log Forms the number of objects they distributed, and the date and location of the distribution. Each person encountered by the peer volunteers received one unique object and was instructed to keep the unique object because they may be asked about it the near future by other project staff. They also verified that the person had not already received an object. The goal was to distribute as many unique objects as possible, ideally up to twice as much as the sample size. Volunteers were paid a small sum of money to thank them for their time distributing objects to their peers.

Peer volunteers distributed 867 unique objects to FSW and 598 to MSM/TG in Port Moresby. In Lae, volunteers distributed 790 unique objects to FSW and 777 to MSM/TG, and in Mt. Hagen they distributed 546 unique objects to FSW. To strengthen accuracy and recall of receiving an object, peer volunteers wore a Kauntim mi tu hat while distributing objects. After consenting to be in the study, study participants were asked whether they received the object.

The study used the formula below to estimate the size of each population (WHO, CDC, UNAIDS, FHI360 2017):

$$N = \frac{MC}{R}$$

Where:

M = Number counted during first phase (first capture)

C = Number counted during second phase (second capture)

R = Number of people captured during the first phase that were recaptured during the second phase (included in both captures)

N = Estimate of total population size

Ethics

This study was approved by the PNG National Department of Health's Medical Research Advisor Committee, the Research Advisory Committee of the National AIDS Council Secretariat, the PNG Institute of Medical Research's Institutional Review Board, the Human Research Ethics Committee at UNSW Sydney and the Ethics Committee at the US Centers for Disease Control and Prevention in Atlanta. Friends Frangipani and Kapul Champions provided letter of endorsement.

LAYOUT OF REPORT

The study results for FSW and MSM/TG are presented in two parts, one per population, with population-specific recommendations at the end of each of the parts. Overall, non-population specific, study recommendations, are presented at the end of the report.

- ▶ Part 1: Women and girls who sell and exchange sex
- ▶ Part 2: Men who have sex with men and transgender women

A NOTE ON TERMINOLOGY

For women and girls who exchange sex for money, goods or services, we use the term 'female sex worker' (FSW), to reflect international reporting practices. This term, however, was not used in the implementation of the study. We also note that women and girls in PNG move in and out of transactional relationships, often without referring to such practices as sex work.

The term, 'men who have sex with men' (MSM), is derived by the public health community to describe a sexual behaviour engaged in by some people born male. Introduced into PNG by development partners, the term MSM has in some contexts become an identity.

Kapul Champions, the Papua New Guinean peer-led civil society organisation representing males who engage in same-sex practices and individuals who identify as transgender originally referred to itself as representing MSM and TG.

As the organisation matured, a collective decision was made to use a more inclusive and reflective term that addressed the diversity and complexity of sexuality, rather than focusing solely on behaviour. They employ the term 'men of diverse sexualities' (MDS).

While the term MDS may not be perfect, it is an important step forward for affected communities in PNG where they are making sense of local realities in their own terms.

We, however, as authors of this report, face the challenge that the international community report on IBBS data about MSM and TG. We, therefore, use the term MSM/TG to refer to the behaviour being described, but in no way do we use this to reflect the identities of the men and transgender of Port Moresby specifically, or PNG more generally.

Indeed, the data presented in this report reflect the many identities embraced by MSM and TG in the country.

Part 1

Women and girls who sell and exchange sex

A total of **2092** women and girls across the three sites were involved in the selling and exchanging of sex for goods, services or money were eligible, provided informed consent and participated in the study. In Port Moresby, **674** participated and similar number of women and girls, **709** participated in Lae and Mt Hagen. Results presented here are weighted population proportions representing the entire population of FSW in each city, as per the RDS method. Unless otherwise stated through reference to study participants and the specific number of people, all data here should be interpreted as weighted population proportions.

1. SOCIO-DEMOGRAPHIC INFORMATION

Over half of the FSW in the study across the three sites, Port Moresby, Lae and Mt. Hagen were aged 25 years or older (56.7%, 61.4% and 54.5% respectively), with more than one in three adolescents and young people accounting for between 38.6% and 45.5% of FSW in across the three cities See Figure 1.1. The Highlands Region was the single largest region which FSW originated from. In Mt. Hagen, almost all FSW were from the

Highlands region (94.4%) while in Port Moresby and Lae one in two (50.2%) and two in three (63.6%) were from the Highlands Region.

More FSW in Port Moresby originated from the Southern Region (22.7%) compared with Lae and Mt Hagen (1.3% and 0.8% respectively). While one in four FSW in Lae originated from the Momase region (20.2%), very few in Port Moresby or Mt Hagen did (1.9% and 0.7% respectively). FSW originating from a mixed heritage of two or more regions was highest in Port Moresby

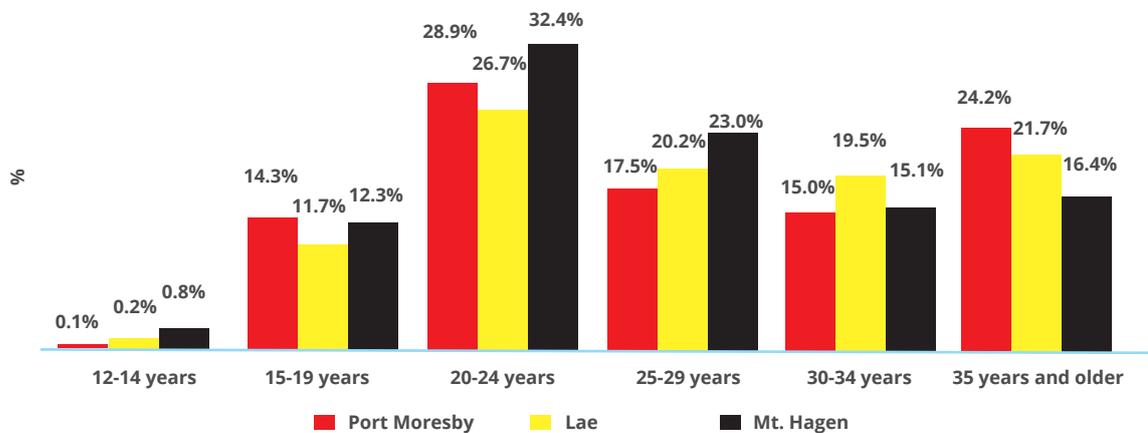


Figure 1.1: Distribution of Age

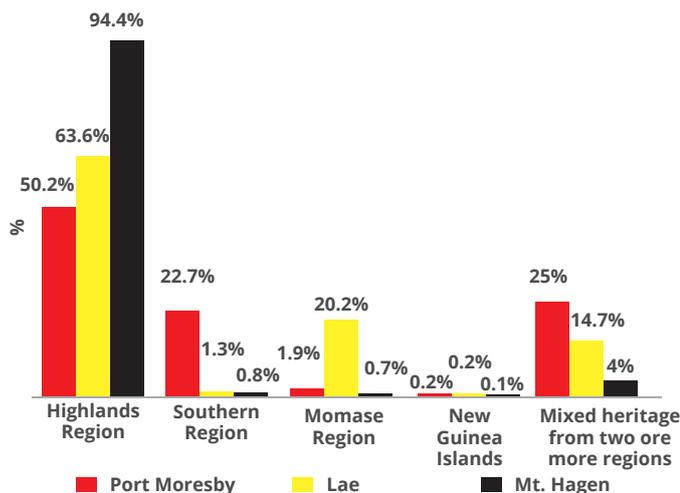


Figure 1.2: Region of Origin

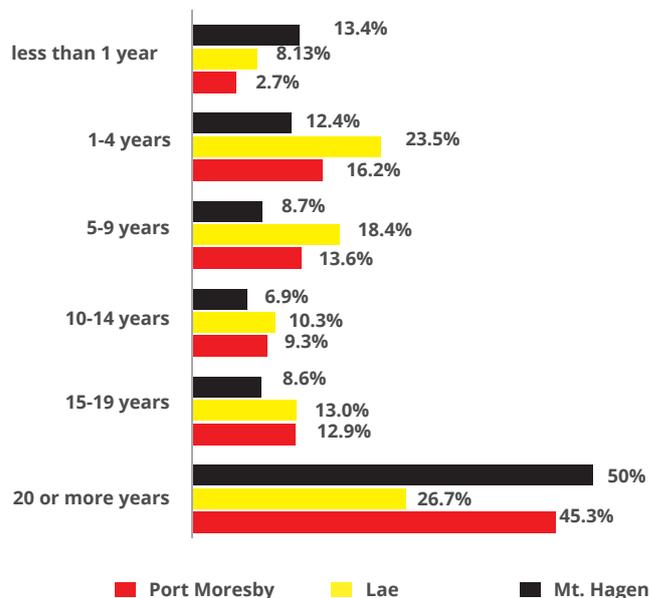


Figure 1.3: Years living in City of study

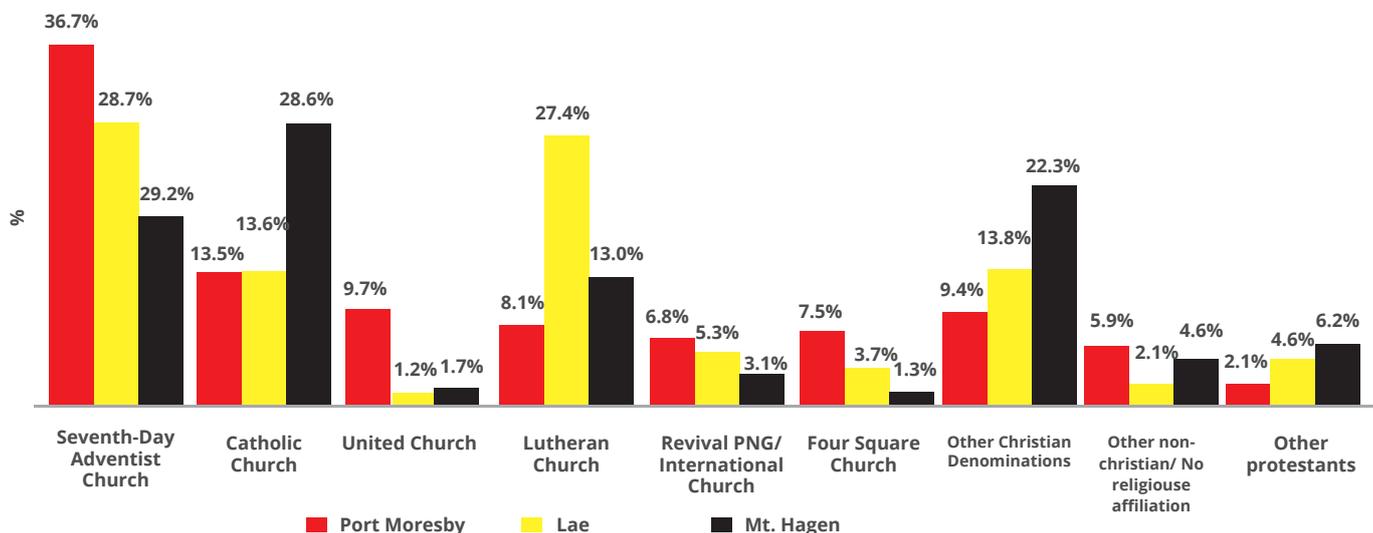


Figure 1.4: Religious affiliation

(25.0%) followed by Lae (14.7%) and Mt Hagen with 4.0%. Almost no FSW in each of the three cities were from the New Guinea Islands region. See Figure 1.2.

Slightly more than one in four women had lived in Lae for 20 or more years (26.7%). Half (50.0%) of the FSW in Port Moresby have lived there for more than 20 years while in Mt. Hagen, just under half (45.3%) had lived there for more than 20 years. See Figure 1.3.

There was diversity in religious affiliation among the women and girls engaged in transactional sex across the three sites. The most common religious affiliation of FSW was the Seventh Day Adventist Church in Port Moresby (36.7%) and in Lae (28.7%). In Mt. Hagen, the most common religious affiliation was Catholic (19.2%). The other common religious affiliations were the Catholic and Lutheran Churches in the three cities. Affiliation with newer Christian Denominations/churches is growing in Port Moresby, Lae, and Mt. Hagen (9.4%, 13.8%, 22.3% respectively). See Figure 1.4

The level of educational attainment for women and girls who sold or exchanged sex was low, with 23.7% in Port Moresby, 35.6% in Lae and 39.9% in Mt. Hagen having no formal education. Only about three in five, one in two and two in five women and girls had achieved some level of primary education in Port Moresby, Lae and Mt. Hagen respectively. A small proportion

of FSW had gone onto high school in Port Moresby (12.5%), Lae (12.0%), and Mt. Hagen (13.3%). Very few to none had completed secondary school and university or vocational school in the three sites. See Figure 1.5. Only 1.0% in Port Moresby, 1.7% in Lae and 1.2% in Mt. Hagen were currently in school (data not shown)

More than half of FSW in the three sites can read and write; 69.4% in Port Moresby, 56.7% in Lae and 57.2% in Mt. Hagen. About one in three women and girls in each city were not able to read or write, with less in Lae and Mt Hagen being able to read and write compared to Port Moresby. See Figure 1.6.

1.1. Living arrangements and marital status

Over three in five FSW were separated or divorced across the three sites; 61.4% in Port Moresby, 63.9% in Lae and 69.3% in Mt. Hagen. About one in five FSW (18.4% in Port Moresby, 19.5% in Lae and 21.5% in Mt. Hagen) were never married, fewer were married across the three sites and fewer more were widowed. See Figure 1.7.

The majority of FSW (85.9%) in Lae were mobile, spending more than a month away from Lae in the last 6 months. Whilst over one in five FSW in Port Moresby and Mt. Hagen did so (20.4% and 28.9% respectively). See Figure 1.8.

1.2. Income and employment

Combining all income sources, more than half of all FSW earned less than 500 Kina per month, 56.3% in Port Moresby, 58.2% in Lae and 51.4% in Mt. Hagen. One in four (25.1% and 25.4% in Port Moresby and Lae respectively) and about one in three (32.3% in Mt. Hagen) earned between 500 and 999 Kina per month. Less than one in five FSW (18.6%, 16.5% and 16.3% in Port Moresby, Lae and Mt. Hagen respectively) earned 1,000 or more Kina per month. See Figure 1.9.

Over half (54.7%, 50.3% and 51.0%) of FSW report sex work as their main source of income/employment, while just over one in five worked in the informal sector (22.6%, 25.8% and 24.1%),

16.3%, 18.5% and 21.3% were unemployed. Only 6.3%, 5.4% and 3.6% were employed in the formal sector in Port Moresby, Lae and Mt. Hagen respectively. See Figure 1.10.

2. SEXUAL DEBUT, INITIATION OF SEX WORK AND MOST RECENT SEX

2.1. Sexual debut

The median age for first vaginal sex was 16 years in all the three sites. The majority of FSW (77.0% in Port Moresby, 65.8% in Lae and 69.7% in Mt. Hagen respectively) had vaginal sex for the first time between the ages of 15 and 19 years. Over one in ten

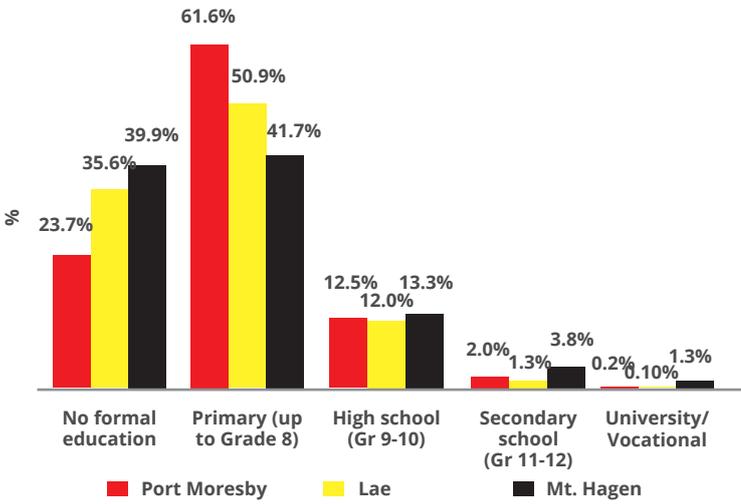


Figure 1.5: Education level

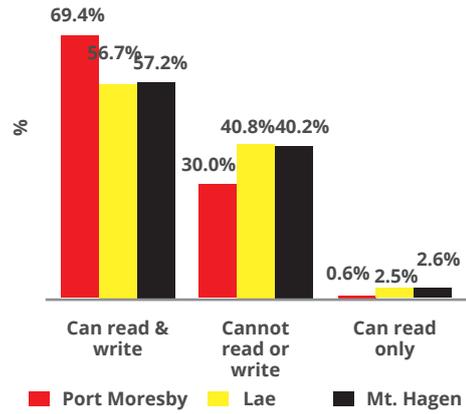


Figure 1.6: Literacy

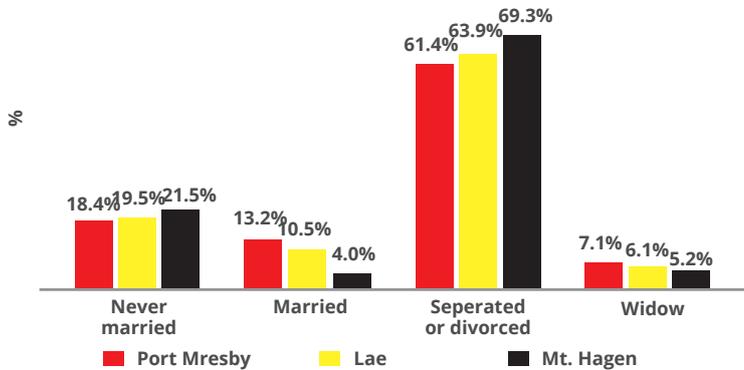


Figure 1.7: Marital Status

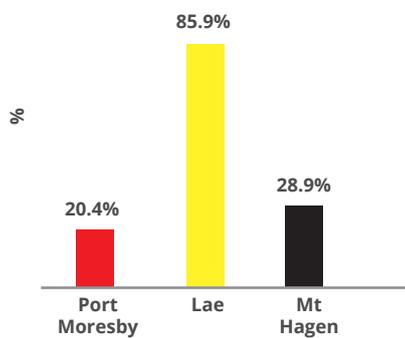


Figure 1.8: Time away from study City in the last 6 months for more than a month at a time

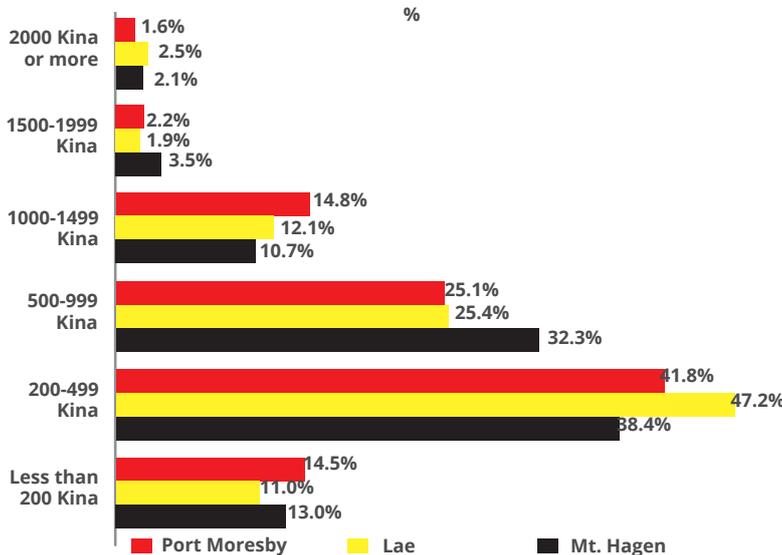


Figure 1.9: Average monthly income

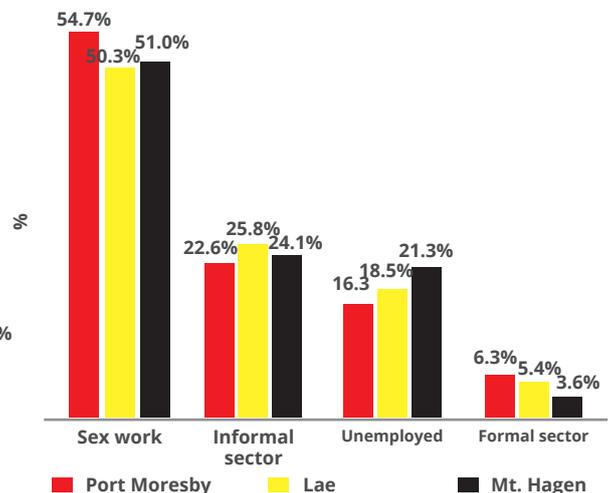


Figure 1.10: Main form of employment/ income

(14.1%) FSW in Port Moresby and one in four (27.0%) FSW in Lae and almost one in five (18.4%) FSW in Mt. Hagen first had vaginal sex between the ages of 10 and 14 years. About one in ten (8.9%, 7.2% and 11.9%) FSW in Port Moresby, Lae and Mt. Hagen had their first sexual debut after the age of 20 years in each of the three sites. See Figure 2.1.

The median age for first anal sex was 20 years in Port Moresby and Mt Hagen and 22 years in Lae. Of FSW who had ever had anal sex, 4.6% in Port Moresby, 6.2% in Lae and 4.0% in Mt. Hagen did so between the age of 10 and 14 years. More than one in three had anal sex for the first time between the ages of 15 and 19 years in Port Moresby (36.9%), Lae (33.6%) and Mt. Hagen (37.6%). About two in five, 41.5% in Port Moresby, 39.8% in Lae and 41.6% in Mt. Hagen had anal sex for the first time as an adolescent (10-19 years). See Figure 2.2.

Most FSW (80.4% in Port Moresby, 73.7% in Lae and 47.2% in Mt. Hagen) had vaginal sex for the first time by choice with 19.6% in Port Moresby, 26.3% in Lae and 18.7% in Mt. Hagen forced into their first experience of vaginal sex. See Figure 2.3. In contrast, the majority of FSW (64.5% in Port Moresby, 72.7% in Lae and 53.8% in Mt. Hagen) were forced into their first anal sex with 35.5% in Port Moresby, 27.3% in Lae and 46.2% Mt. Hagen having done so by choice. See Figure 2.4.

A common method of being forced to have vaginal sex for the first time was physical force (37.9% in Port Moresby, 36.6% in Lae and 30.3% in Mt. Hagen) See Figure 2.5, and a common means of being forced to have anal sex for the first time was being paid (37.0% in Port Moresby, 19.2% in Lae and 22.1% in Mt. Hagen). See Figure 2.6. Being pressured was the other common reason for being forced to have both vaginal (17.4% in Port Moresby, 27.9% in Lae and 33.4% in Mt. Hagen) and anal sex (20.6% in Port Moresby, 27.8% in Lae and 33.4% in Mt. Hagen). See Figure 2.5 and 2.6 respectively.

2.2.Vaginal and anal sex

The sexual behaviours of FSW varied. Over half of FSW (52.6% in Port Moresby, 62.3% in Lae and 65.5% in Mt. Hagen) engaged in both vaginal and anal sex, with 47.7%, 37.7% and 34.5% (Port Moresby, Lae and Mt. Hagen respectively) only ever had vaginal sex. See Figure 2.7.

2.3.Sexual attraction and history of same sex practices

Almost all FSW were attracted exclusively to men (89.1% in Port Moresby, 96.6% in Lae, and 97.6 % Mt. Hagen), with 1.9% in Port Moresby, 3.3% in Lae and 2.4% in Mt. Hagen having some form of attraction to other women. Most FSW had never had sex with another woman (96.3% in Port Moresby, 93.1% in Lae and 94.6% in Mt. Hagen), but 3.7%, 6.9% and 5.4% had in Port Moresby, Lae and Mt. Hagen respectively did. (data not shown).

2.4.Initiation of sex work

The median age when FSW first sold or exchanged sex was 20 years in Port Moresby and Mt. Hagen and 22 years in Lae. The majority (59.9% in Port Moresby, 60.0% in Lae and 55.3% in Mt. Hagen) first sold or exchanged sex aged 20 years or more. About two in five FSW, however, first sold or exchanged sex as adolescents between the ages of 10 and 19 years (40.2%, 40.0% and 44.7%) in Port Moresby, Lae and Mt. Hagen respectively. See Figure 2.8.

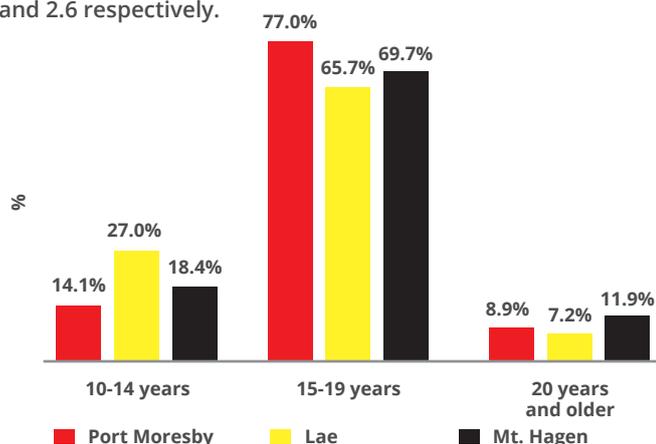


Figure 2.1: Age at first vaginal sex

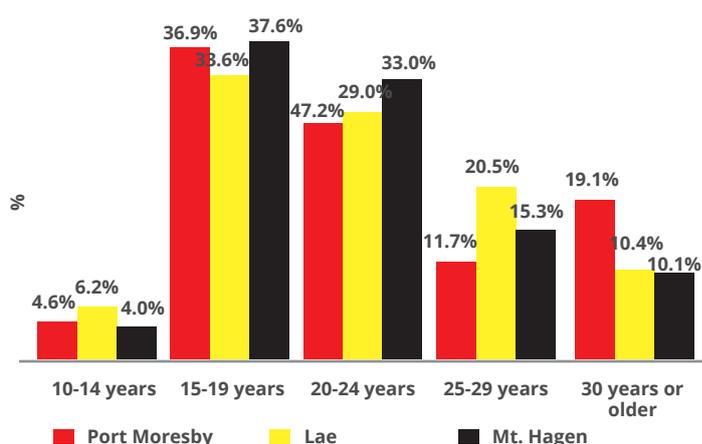


Figure 2.2: Age at first anal sex

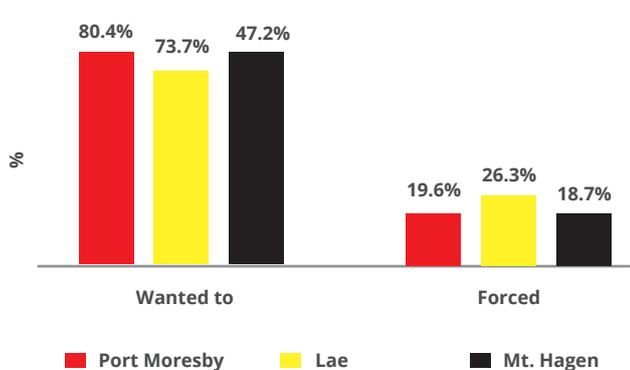


Figure 2.3: Proportion forced/coerced into first vaginal sex

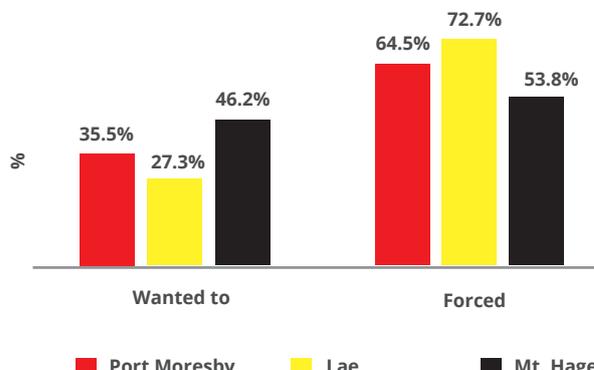


Figure 2.4: Proportion forced/coerced into first anal sex

"I was 18 when I started doing this. At 18, I married and when my husband deserted me, men started asking me. They smoothen me with nice words, bought me drinks or offered me betel nut and then they would ask me out and I would agree to them." Seru, 19 years, Port Moresby.

"I was 14 years old and in Grade 3. My parents didn't pay my school fee and so I followed other girls going around and started having sex. I also followed boys and went into nightclubs and we would hold men and take their money. Sometimes, when I see good men, I would follow them and go have sex with them." Yala, 19 years, Port Moresby.

"When I slept with that man, it changed me totally. It was my first time to have sex with a man and it completely changed me. Everything about being a young innocent girl seem difficult – it transformed me into a woman. My thoughts of being a good girl in the house and live a normal life became difficult. I just changed into a totally different person. I was exactly 17 years old." Anesa, 24 years, Port Moresby.

"I was staying with my aunty in town where a lot of street girls were. These girls lured me and took me to night clubs and I started following them. I started to go out with men and these men would give me money. I left my normal life and did that for a long time. I was 19." Sonia, 24 years, Lae.

Some FSW (25.9%, 17.1% and 20.6%) in Port Moresby, Lae and Mt. Hagen respectively received money or goods the first time that they had sex. See Figure 2.9.

While most FSW (61.4%, 56.3% and 58.0%) in Port Moresby, Lae and Mt. Hagen had been selling or exchanging sex for less than five years, 18.5% in Port Moresby, 15.5% in Lae and 11.4% in Mt.

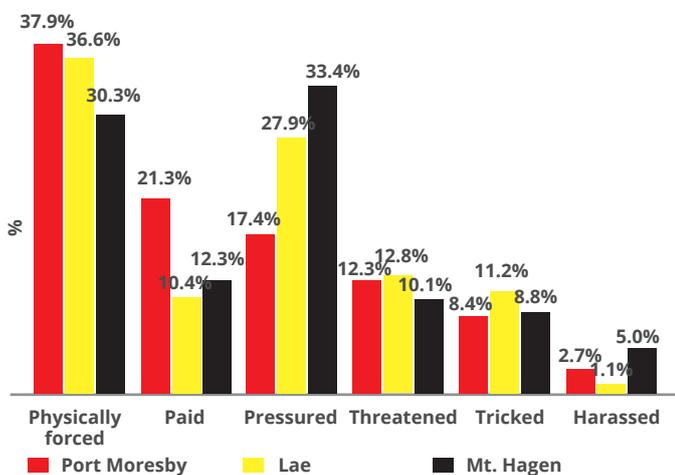


Figure 2.5: Means of being forced / coerced to have vaginal sex for the first time

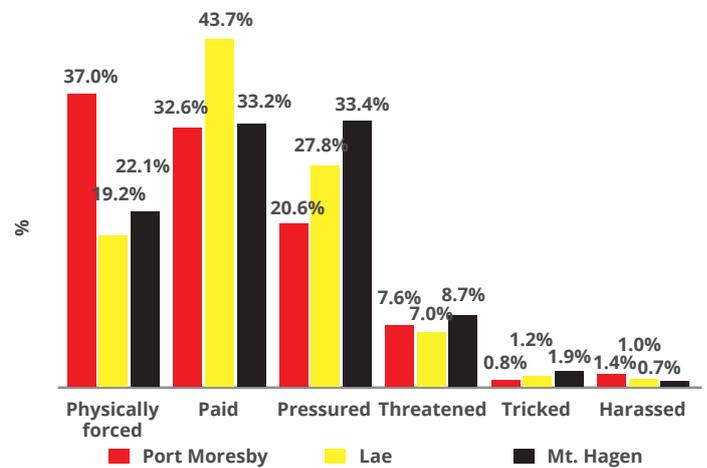


Figure 2.6: Means of being forced / coerced to have anal sex for the first time

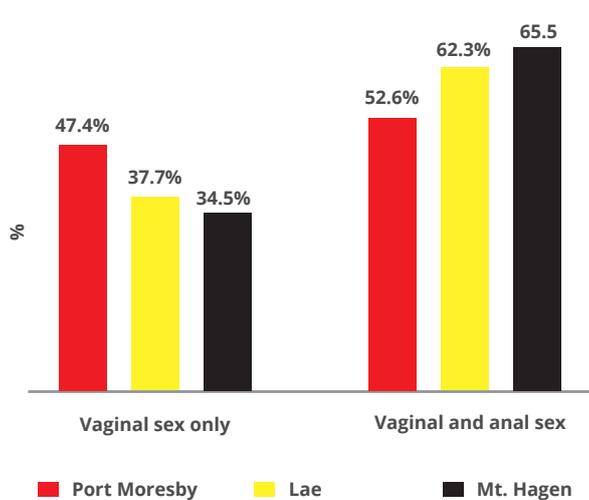


Figure 2.7: Sexual behaviour

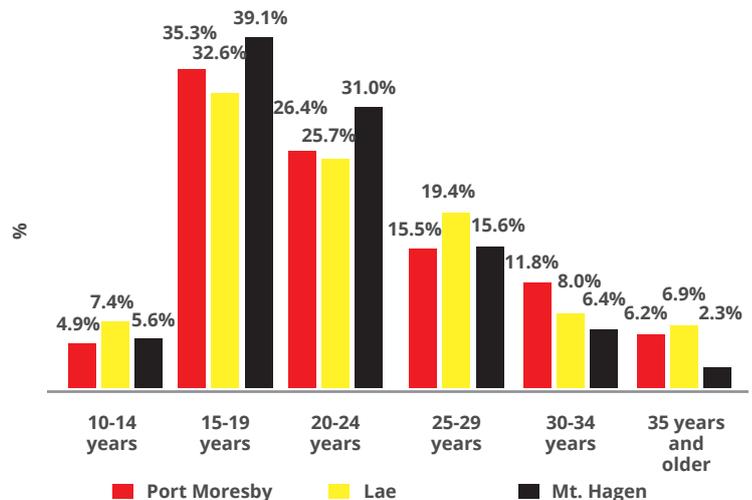


Figure 2.8: Age first sold or exchanged sex

Hagen have been doing so for 10 or more years. See Figure 2.10. The most common reason for beginning to sell and exchange sex was to provide money for the family or themselves (55.8%, 48.1% and 46.8%) in Port Moresby, Lae and Mt. Hagen respectively. Family and friends doing it was another common reason (17.7% in Port Moresby, 19.4% in Lae and 11.8% in Mt. Hagen). Very few sold or exchanged sex for pleasure or self-esteem (4.1%, 4.3% and 6.7%) in Port Moresby, Lae and Mt. Hagen respectively. See Figure 2.11.

"I was young when I went to this ship and I met this man. I married him and after our second child he left me for someone else in 2002 and so I started going around and now I am in this immoral practice." Molly, 40 years, Port Moresby.

"It's all about the body's desire and the pleasure that comes with it that is pulling me and I do it anyway. Since I have problem by husband who does not treat me well and, I go out with when men seek me out. If my husband takes good care of me, I will listen to him and be a good wife but since he's also seeing other women, I am also doing the same. When I feel like seeing other men, I just go ahead and do it. When I run short of needs or money and if they [men] want to give, I just go to them." Tina, 41 years, Port Moresby.

"It will be like three and a half years and at the end of this year, it will be four years of me doing sex work." Edna, no age supplied, Mt Hagen.

"Now I am 21 years old so it must be in 2000 that is when I was 20 years old then. No, that's when I was around 18 years old that I started sex work so the estimated number of years would be 2-3 years." Tania, 21 years, Mt. Hagen.

"In 2011, I came out and started living in the streets with some friends and girls and we would team up and go around together." Carol, 20 years, Lae.

"It is that along that way when I started doing sex work, well it was in 2007, 2008, 2009, and 2010 and in between those years." Mayo, 43 years, Lae.

"My second marriage in 2004 wasn't good then I left and live this lifestyle (selling sex) till now. I left school and got married and settle in well but then after going through marriage problem, life started like that since 2004." Kim, 38 years, Lae.

"This sex life is an income. Anyone that does not have an income goes and has sex for money. They think of their children [because] the family does not have an income. That person nwill go have sex and then be able to bring food [home]. So we survive on fairly on this because at the end of the day, I don't have a formal income. I usually go out and pay for food and bring it to the house." Sia, 40 years, Port Moresby.

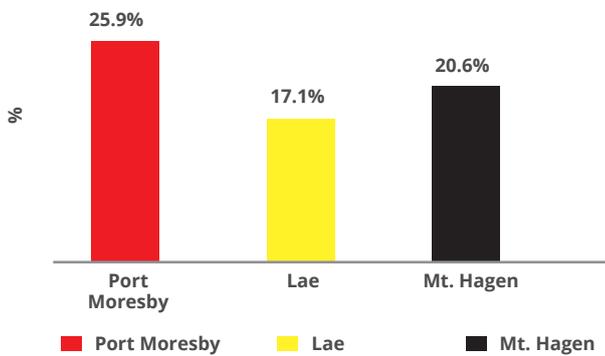


Figure 2.9: Sexual debut with a man who gave money or goods

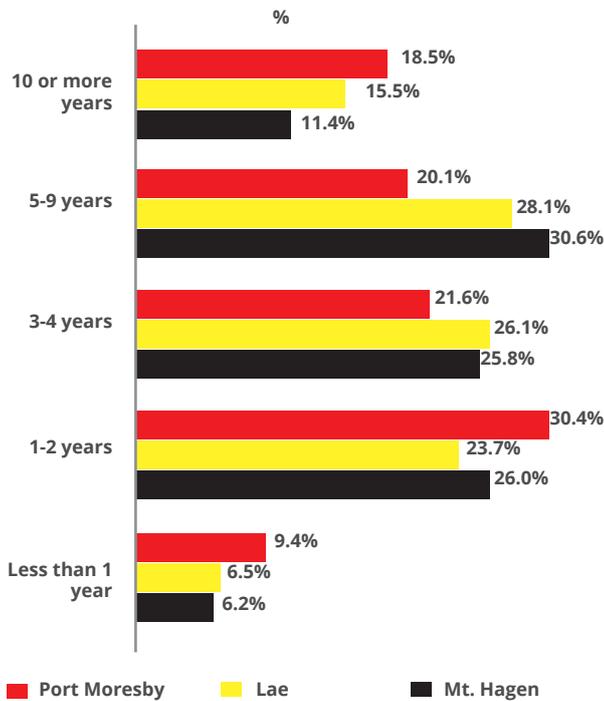


Figure 2.10: Time selling or exchanging sex

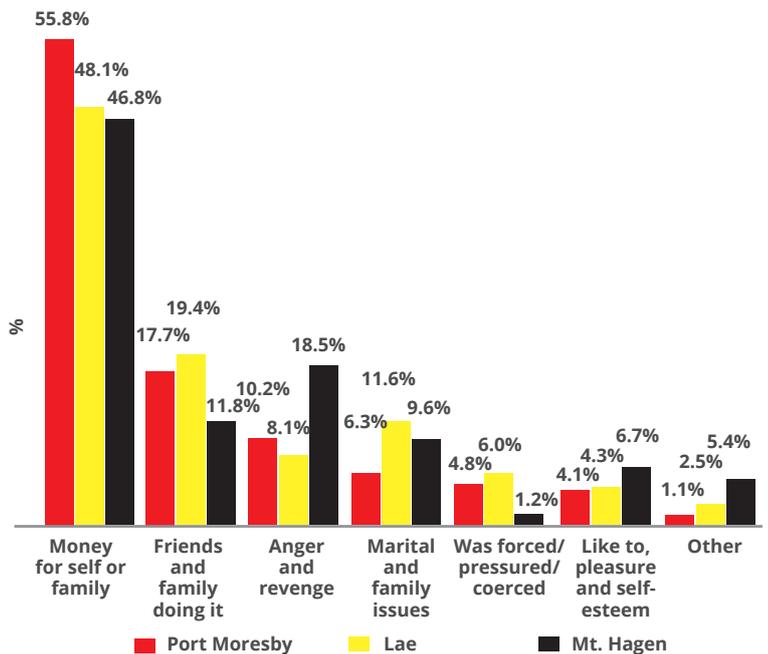


Figure 2.11: Reasons for starting to sell or exchange sex

"I live a difficult life; my husband does not give me a single toea. I would like sit down and think quite often and then I said to myself that 'ah, I must go out and go around with men.'" Sandra, 42 years, Port Moresby.

"I was about 16 years old and in grade 4 when I came here. I was with my parents but they forced me into marrying a man. I left home and got this disease. I argue with my parents when I think about it. I use to think that I would grow up and marry someone but you people forced me and I am now infected." Pokaya, 24 years, Lae.

"I stayed at home and I was worried how I would support my child. I was embarrassed the first time because I usually don't do this. I felt ashamed but then I realised that if I am feeling shame, who is going to give so I can take care of my child? So I went out and they gave me money. I usually go out like this and they would give me money and I would come and take care of my child ". Betty, 17 years, Lae.

"I stayed at home but I never had money. My parents provided for basic things in the house but I money for extra things like flex card, to go on Facebook; like my own money to spend on betel nut, cigarettes or whatever clothing that I wanted. When they [clients] called, I have to go because I have all these needs." Stacey, 31 years, Lae.

"I grew up in Wau Bulolo and went to school there but then my parents were having problems. My father left my mother and took another wife to his village and we [children] were left with our mother. There's was no money to pay for my school fees so I left home and came out to this life and have going around like this since. " Ato, 30 years, Lae.

"I have two sons, 5 and 7 years old. When my second son was 3 months old, I started having problems. My husband got another wife and came to Lae while I was still up in Simbu. I stayed on with my children but then I became agitated and angry. I gave away my first son to my relatives and came to Lae with my second child. We stayed with him and when my son was about 4 years old, I divorced my husband. I gave the child back to him and then I went onto live the streets. I drank alcohol at night clubs, go from hotel to hotel. I've gone to all the lodges and guest houses in Lae city. " Karu, 22 years, Lae.

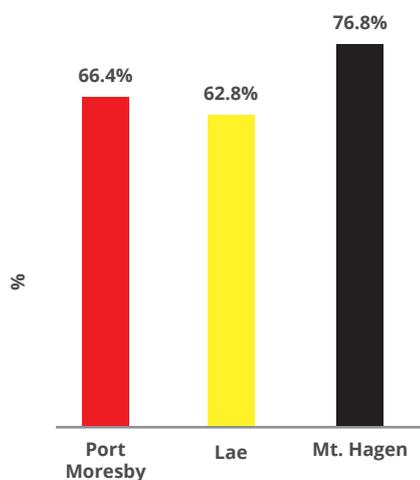


Figure 2.12: Sex work main source of income

Selling and exchanging sex was the primary income source for 66.4%, 62.8% and 76.8% of FSW in Port Moresby, Lae and Mt. Hagen respectively. See Figure 2.12.

2.5. Condom use and most recent sex

The four most common reasons (See Figure 2.13) for not using a condom during vaginal or anal sex were:

- ▶ "When my partner refuses" (54.5% and 58.1% respectively in Port Moresby; 67.2% and 66.3% respectively in Lae; 69.7% and 70.2% respectively in Mt. Hagen)
- ▶ "When having sex with a regular partner" (52.3% and 44.3% respectively in Port Moresby; 54.8% and 50.4% respectively in Lae; 46.0% and 45.4% respectively in Mt. Hagen)
- ▶ "When I cannot find one" (38.8% and 29.0% respectively in Port Moresby; 56.6% and 48.7% respectively in Lae; 51.7% and 40.4% respectively in Mt. Hagen)
- ▶ "When I'm drunk or stoned" (36.2% and 35.1% respectively in Port Moresby; 44.3% and 45.2% respectively in Lae; 53.5% and 56.3% respectively in Mt. Hagen). See Figure 2.13 and 2.14.

Most FSW (76.4% in Port Moresby, 74.3% in Lae and 71.4% in Mt. Hagen) had vaginal sex at last sex act and less than two in five FSW did use a condom at last sex in Port Moresby, Lae and Mt. Hagen respectively. See Figures 2.15 and 2.16.

"Person who stays at home and he insisted that I stayed with him. He gave me K45 and we had sex skin to skin inside his car. So when I go and have sex in the guest houses or anywhere, I sometimes would not recall if men used condom or not if I am dead drunk." Mofa, 20 years, Lae.

"I used to use condom when I was young but the I stopped. I started having sex without condom. I thought that I could use condom if I wanted to but I never seemed to have condoms with me when I go around. So I usually go and have sex without it." Yvonne 30 years, Lae.

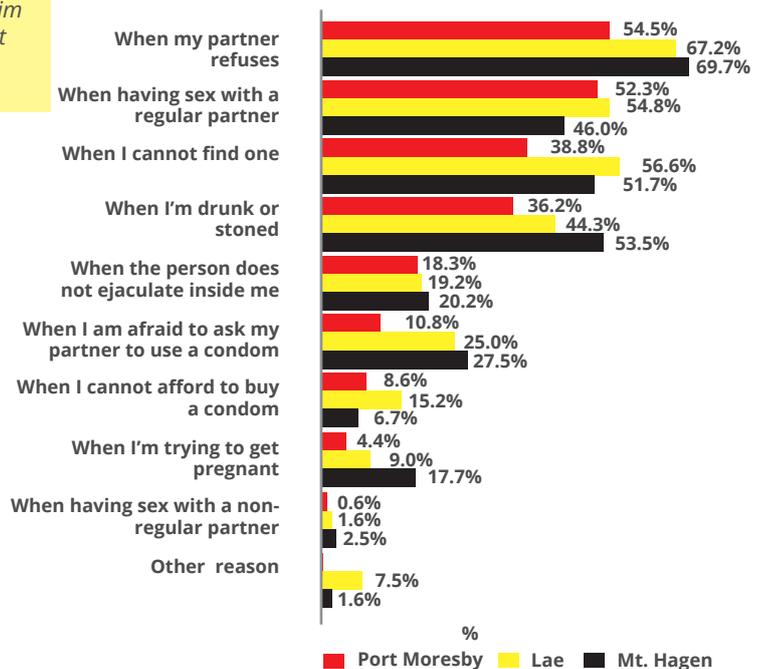


Figure 2.13: Reasons why condom not used during vaginal sex

"One thing I know for sure is that there are infections. When I go for testing, I've always wondered whether if that man that had sex with me comes only to me or if he's is cautious or not. I've always wondered about that but I still go around and have sex without condom. Sometimes I also feel like I'm not actually having sex when I am using condom." Stacey, 31 years, Lae.

"There are times especially when we are out there when some men will ask us to use condom. Sometimes when we ask them to use it, they would refuse and if we insist, they usually become violent. That is why I usually use condom sometimes only." Betty, 17 years, Lae.

3. CURRENT SEX WORK PRACTICES

3.1. Meeting clients and sex work areas

FSW usually meet their clients in a number of different ways, including at public areas such as streets and parks (77.0% in Port Moresby, 81.1% in Lae and 81.9% in Mt. Hagen), through mobile phones (58.1% in Port Moresby, 54.4% in Lae and 64.0% in Mt. Hagen) or at bars and clubs (48.0% in Port Moresby, 51.9% in Lae and 57.2% in Mt. Hagen). See Figure 3.1. Responding to a question specifically on the use of mobile phone applications and the internet, one in ten of FSW (7.9% and 10.8%) in Port Moresby and Lae respectively and two in ten (17.5%) in Mt. Hagen identified using a mobile phone and applications to find a client. (data not shown). The majority of FSW (85.6%, 76.2% and 64.8% for Port Moresby, Lae and Mt. Hagen respectively) sold or

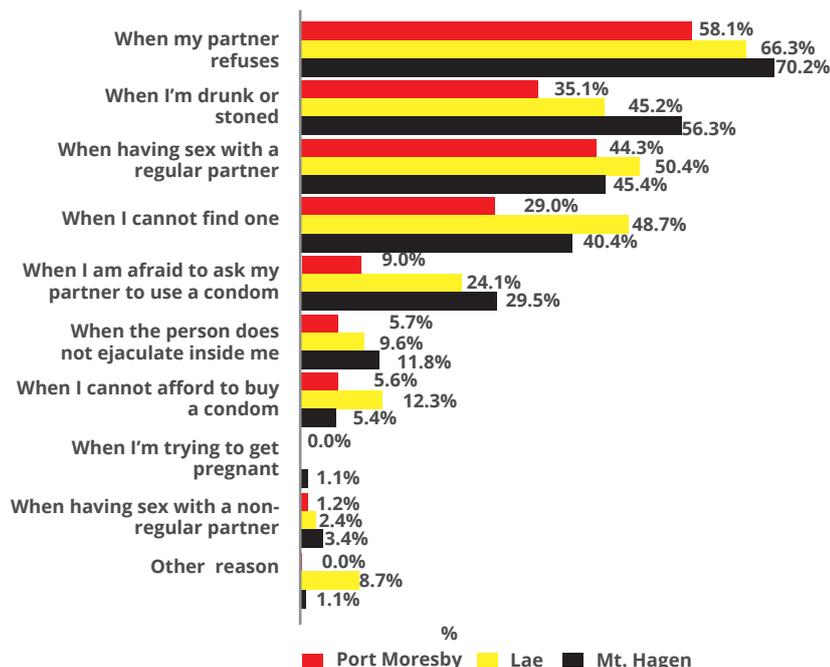


Figure 2.14: Reasons why condom not used during anal sex

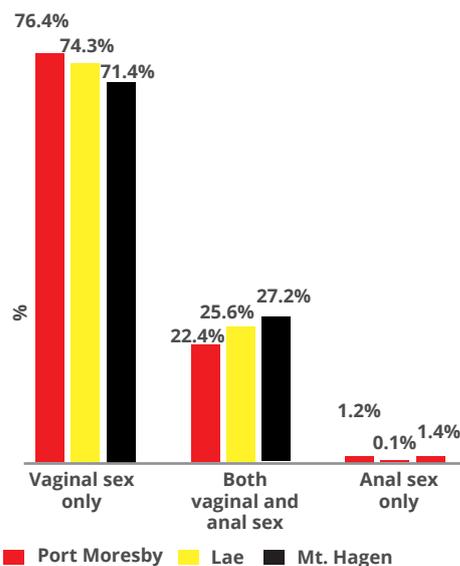


Figure 2.15: Type of sex at last sex act

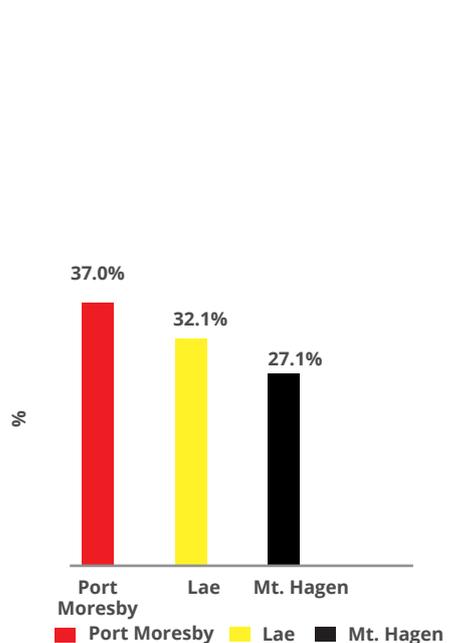


Figure 2.16: Last sex act used a condom

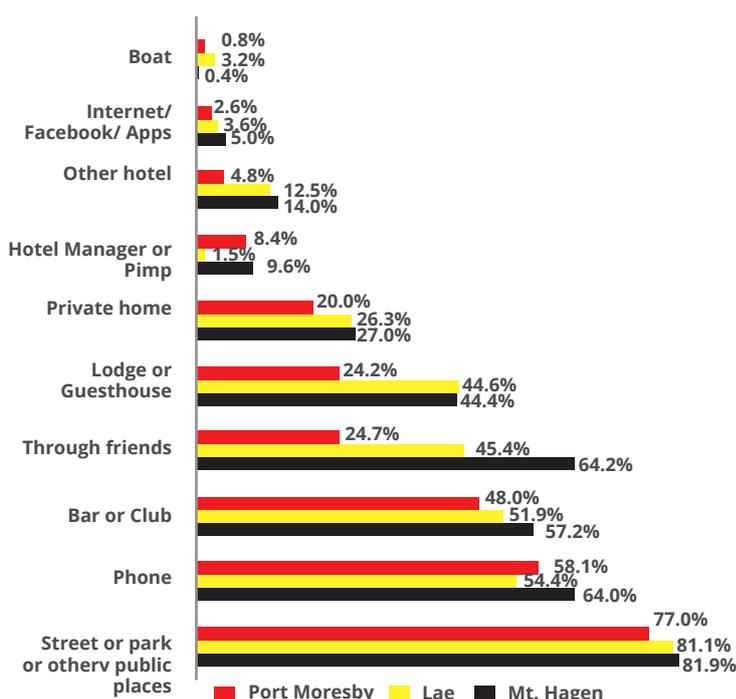


Figure 3.1: Venues where clients are usually found *Multiple responses possible

exchanged sex for goods, money or services only in and around the study city in the last 12 months. A higher proportion of FSW in Mt. Hagen have sold or exchanged sex for goods, money or services elsewhere with 19.5% doing so outside the city but inside the province and 28.6% outside the province compared to Port Moresby (13.2% and 1.2% respectively) and Lae (9.3% and 17.3% respectively). See Figure 3.2.

3.2. Methods of payment and income earned

Almost all FSW (99.5%, 99.8% and 99.4%) in Port Moresby, Lae and Mt. Hagen received money in return for sex, with over half (72.8% in Port Moresby, 50.7% in Lae and 61.7% in Mt. Hagen) also reporting that they are provided goods in exchange for sex. Approximately ten percent (7.1% and 9.5% in Port Moresby and Lae respectively) and approximately twenty percent (17.3% in Mt. Hagen) received services in return for sex. See Figure 3.3.

FSW received more money for anal sex than they did for vaginal sex. The median amount earned for vaginal sex was 100 Kina in Port Moresby and Mt. Hagen and 70 Kina in Lae. For anal sex it was 150 Kina in Port Moresby and 100 Kina in Lae and Mt. Hagen. Only 11.1% of FSW in Port Moresby, 11.2% in Lae and 14.5% in Mt. Hagen received 200 Kina or more for vaginal sex while 18.0% in Port Moresby, 20.1% in Lae and 22.7% in Mt. Hagen received 200 Kina or more for anal sex. Roughly equal proportions of FSW earned between 100 and 199 Kina for vaginal (27.5%, 36.1% and 35.9%) and anal sex (33.6%, 35.7% and 33.3%) in Port Moresby, Lae and Mt. Hagen respectively. See Figure 3.4.

"I do have anal sex. I remember one time when a man insisted to have anal sex and he said, 'I will give you whatever amount you charge so I agreed.'" Seru, 19 years, Port Moresby.

"In regards to payment, we know our job. We are not foolish so when we go out we usually negotiate first. We normally give them our rate and then we go out but whatever sexual positions they want and if we are comfortable, we do it. Whether it be oral, anal or vaginal, we do it, then that's how much they will give us." Yano, 28 year old, Port Moresby.

"I usually go out with this guy from Buka. When I go see him, he normally gives me K100, K150 or K200. I then buy food for my children and that is how I live and take care of my children." Yvonne, 30 years, Lae.

"They would give me K80. It's always K100 and below, anything between fifty and hundred. I don't get K200 on the spot, it's usually less than that." Stacey, 31 years, Lae.

3.3. Number and type of clients

Most FSW (57.0% and 67.1%) in Lae and Mt. Hagen respectively have had five or more clients who gave money in the past 6 months, with the remaining 43.0% and 32.9% having four or fewer clients in the last 6 months. In Port Moresby, 38.6% have had five or more clients who gave money in the past 6 months, with the remaining 61.4% having four or fewer clients in the last 6 months. See Figure 3.5.

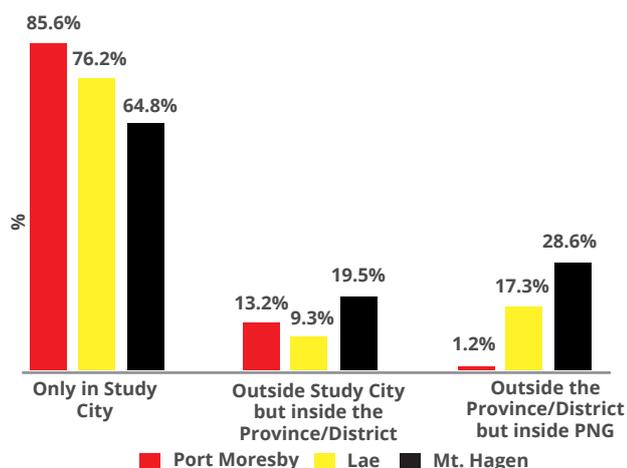


Figure 3.2: Sex sold or exchanged in Port Moresby and elsewhere

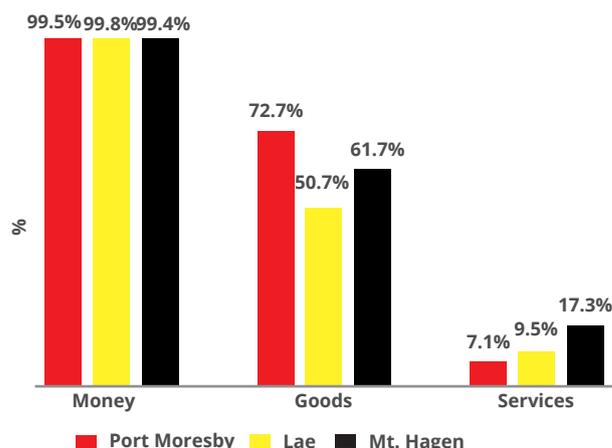


Figure 3.3: Method/s of payment and exchange * Multiple responses possible

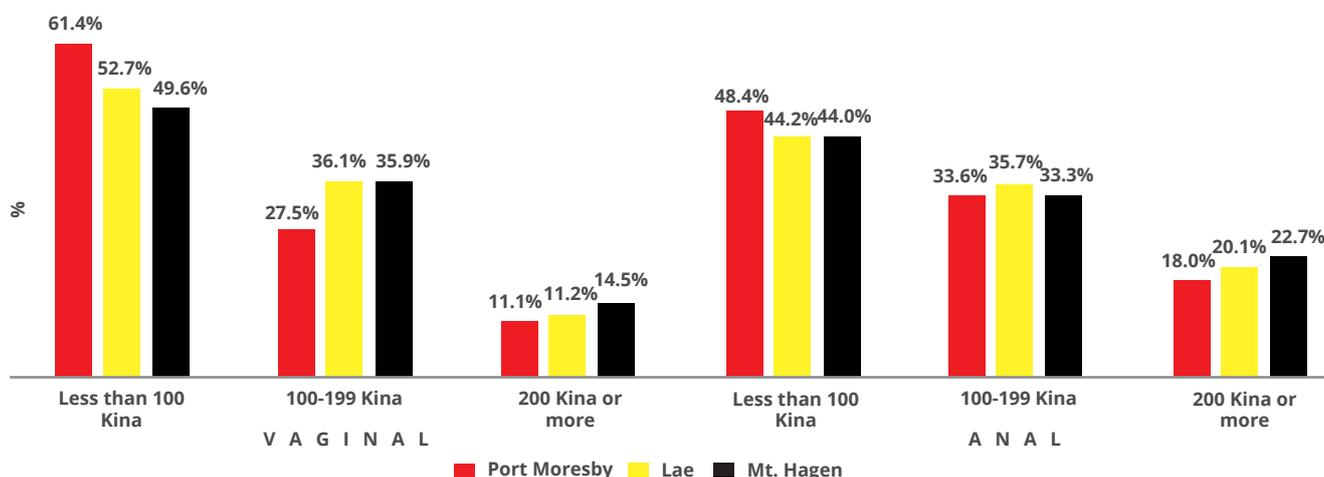


Figure 3.4: Income earned by selling anal or vaginal sex

The majority of FSW (59.1%, 61.0% and 56.4%) in Port Moresby, Lae and Mt. Hagen respectively had at least one regular client in the last two weeks with whom they had vaginal or anal sex. See Figure 3.6. Of those who had a regular client during this period, 19.8% in Port Moresby, 20.0% in Lae and 29.8% had vaginal or anal sex with three or more regular clients. See Figure 3.7.

"There are many (clients), there are about four". Amber, 24 years, Mt. Hagen.

"Around 9 or 8 men in one month." Neeta, 24 years, Mt. Hagen.

"One day we can go out with 3, 4 men (in one day) for their money. That is what we usually do so one day when we see with money, we go out with them, like in a day we usually earn about K300.00, K400.00, K500.00." Norris, 22 years, Mt. Hagen.

"Like one man only for one week. Like one man, and during a week like for 2 days or like 3 days; something like that." Tracey, 37 years, Lae.

"There are 4 to 5 men that I usually go out with as my partners. They are my regular partners that I normally go out with only, and not with any other unnecessary people. Not with more than that." Monica, 25 years. Lae.

"It's like 6 or 7 of them that I have gone out [with and sold sex]. It's like we would talk and decide whether we would go to a guesthouse or something like that." Seru, 19 years, Port Moresby.

"I would usually go out with 3 or 4 and sometimes I would only get one [client] and I would go." Sandra, 42 years, Port Moresby.

"I have a regular client that I go out with and he knows. He [my husband] knows that we [my regular client] go out together and so he bashed me just recently. That is why I like to keep things to myself to avoid such problems." Yano, 28 years, Port Moresby.

Over one in three of FSW (30.5%, 44.5% and 50.1%) in Port Moresby, Lae and Mt. Hagen respectively had a one-time client in the last two weeks. See Figure 3.8. Of FSW who had a one-time

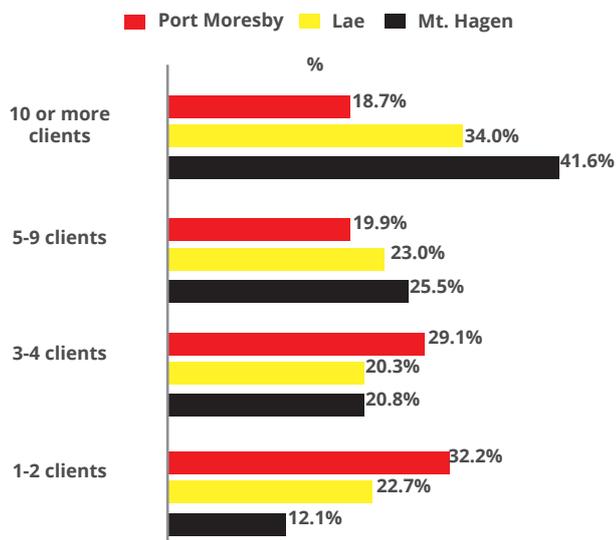


Figure 3.5: Number of clients who gave money for sex in the last 6 months

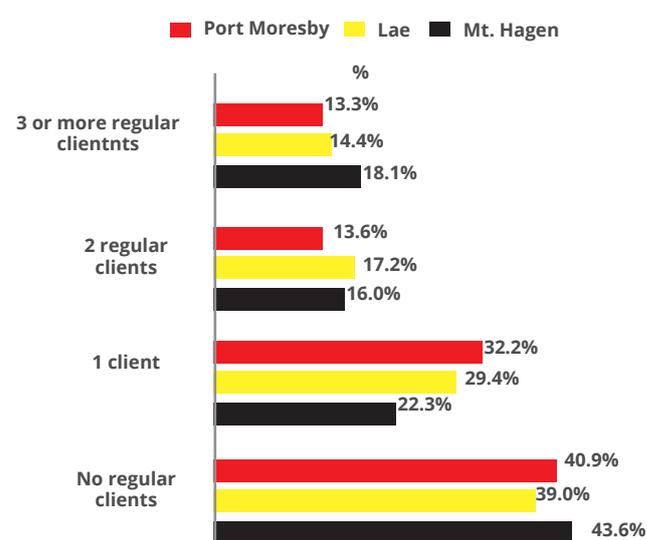


Figure 3.6: Number of regular clients with whom sold or exchanged vaginal or anal sex in the last 2 weeks

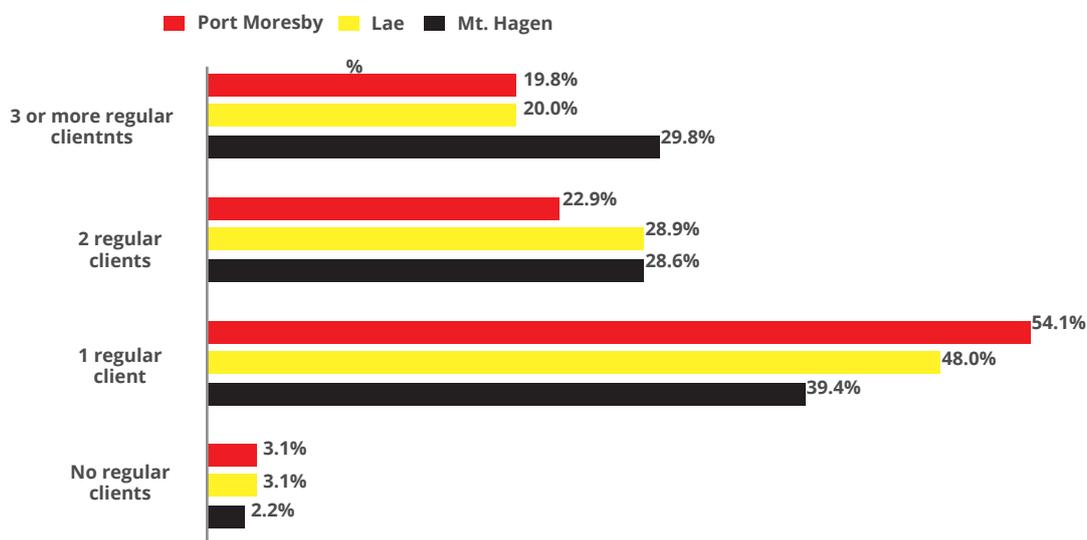


Figure 3.7: Number of regular clients with whom sold or exchanged vaginal sex in the last 2 weeks

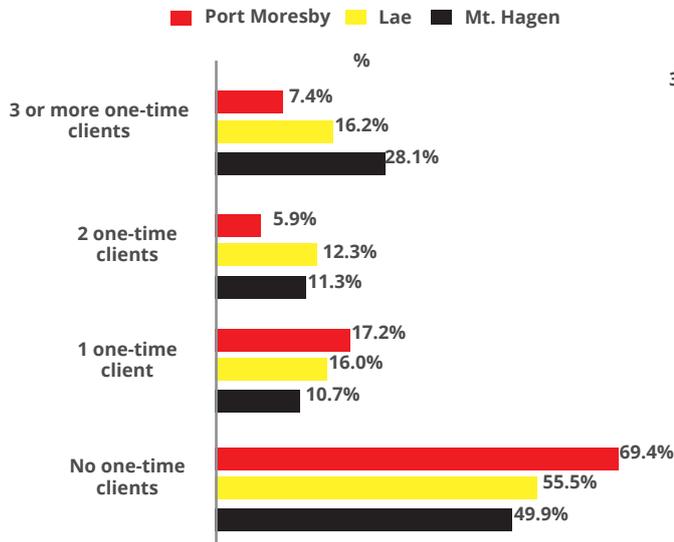


Figure 3.8: Number of one-time clients with whom sold or exchanged vaginal anal sex in the last 2 weeks

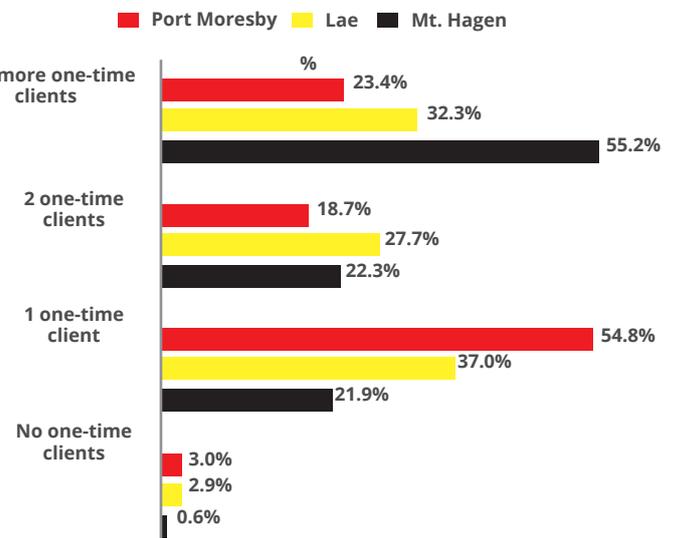


Figure 3.9: Number of one-time clients with whom had vaginal sex with in the last 2 weeks

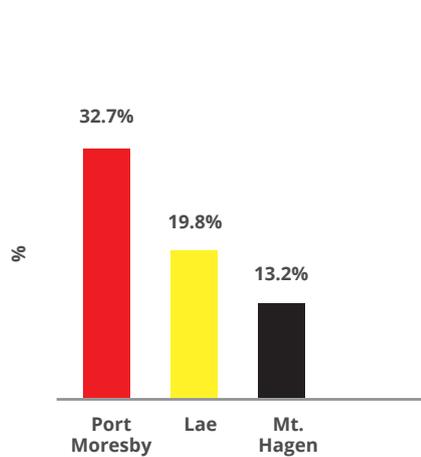


Figure 3.10: Condom use with clients who gave money in the last 6 months

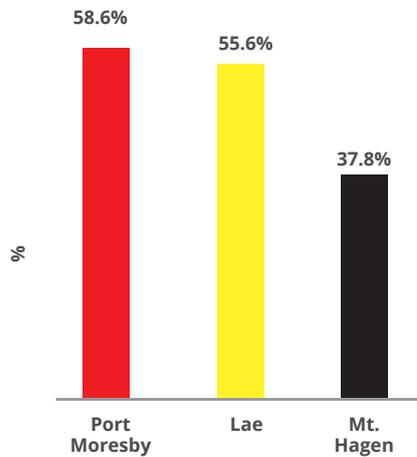


Figure 3.11: Condoms used at last vaginal sex with a one-time client in the last 2 weeks

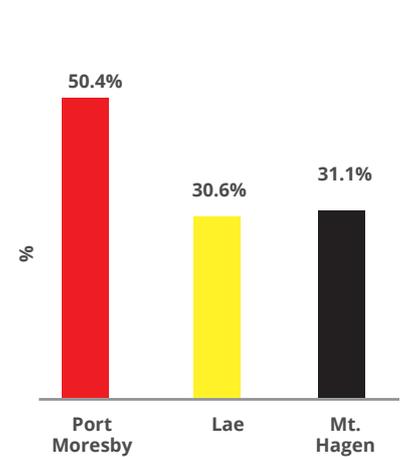


Figure 3.12: Condom use at last vaginal sex with a regular client in the last 2 weeks

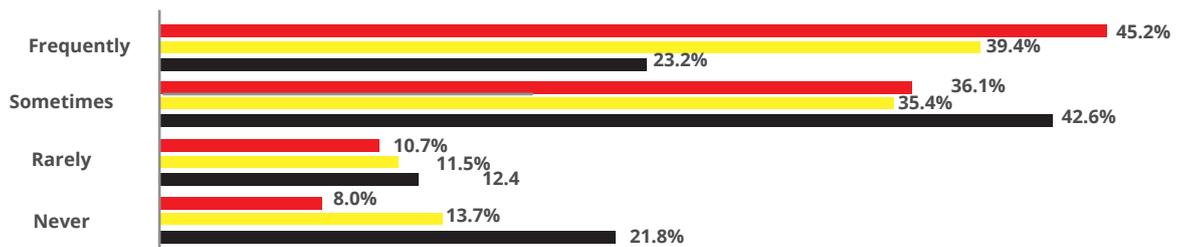


Figure 3.13: Ability to negotiate condom use with any client who refuses to use a condom in the last 6 months

client during this period, 23.4%, 32.3% and 55.2% in Port Moresby, Lae and Mt. Hagen respectively sold or exchanged vaginal sex with three or more one-time clients. See Figure 3.9.

3.4. Condom use with clients

Condom use was low with all clients who gave money in the last 6 months where only 32.7% in Port Moresby, 19.8% in Lae and 13.2% in Mt. Hagen did use a condom. The majority of FSW (67.3%, 80.2% and 86.8%) in Port Moresby, Lae and Mt. Hagen respectively have had at least one client with whom they did not use a condom. See Figure 3.10.

Of FSW who had sold or exchanged vaginal sex with a one-time client in the last 2 weeks, more than half (58.6 and 55.6%) in Port Moresby and Lae respectively and more than one in three

(37.8%) in Mt. Hagen used a condom during last vaginal sex with a one-time client during this period. See Figure 3.11. Of those with a regular client, half (50.4%) of the FSW in Port Moresby and one in three (30.6% and 31.1%) in Lae and Mt. Hagen respectively used a condom in the last two weeks with a regular client. See Figure 3.12.

Less than half of FSW (45.2%, 39.4% and 23.2%) in Port Moresby, Lae and Mt. Hagen respectively could frequently negotiate condom use with a client who refused to use one, while 18.7% in Port Moresby, 25.2% in Lae and 34.2% in Mt. Hagen could never or rarely do so. See Figure 3.13.

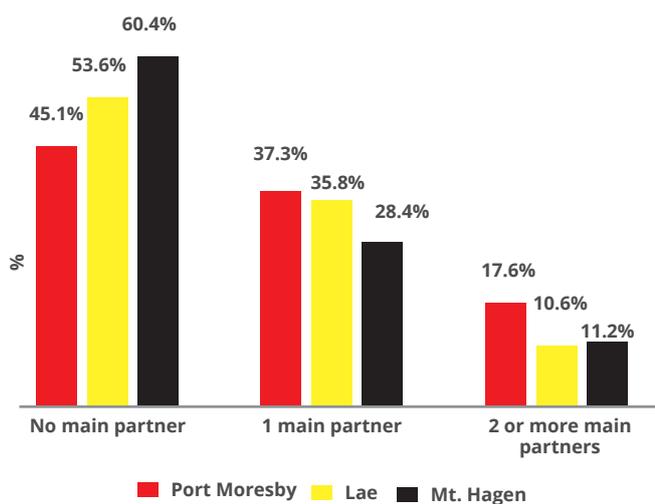


Figure 4.1: Number of main partners

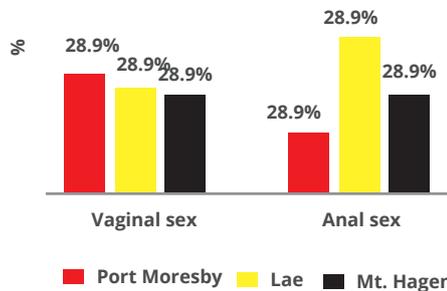


Figure 4.2: Condom use last vaginal and anal sex with a main partner

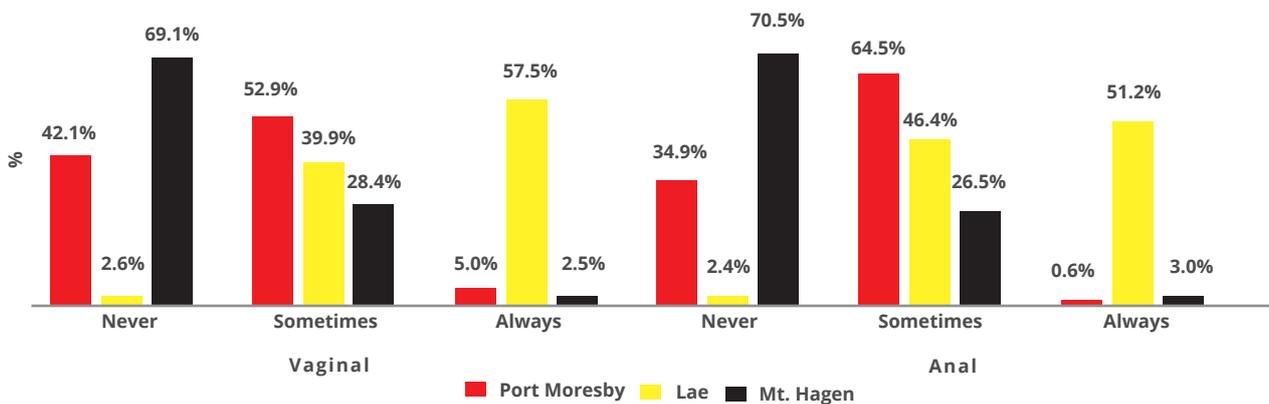


Figure 4.3: Frequency of condom use during vaginal and anal sex with a main partner in the last 6 months

"I usually tell them diseases are common these days. It is alright not to use condom with my husband but not with other men. It's a pity they have to use condom. We are able to use condom when men also agree to use it. Once in a while, we have sex without condom. It's when men do not wish to use condom, that when we have sex without condom." Tamox, Age not known, Port Moresby.

"Since I know that I am HIV [positive], I always fear reinfection so before payment negotiation, I always tell them that we will use condom. They don't want to use condom, fine, I leave. I don't mind that because I am scared. STIs are now coming resistant to drugs and I don't want to burden my immune system. Thus, I always want to use condom for my own safety because STI opens door to HIV." Yano, 28 years, Port Moresby.

"If a condom is available, we will have sex so we use condom and have sex. Sometimes, when I come across men who are skinny, I say to them that this shows that you are carrying virus; you must use a condom. They would ask how come I'm saying that and I would tell them that your rib cage is sticking out

so I'm a little scared. You don't have to use your cock without anything on so they would use condom. Some of them really like to experience the sweetness; they want to feel skin to skin." Pina, 27 years old, Port Moresby.

"This man didn't have a safety and so I said no to have sex with him. I told him that I don't know his sexual practices and he doesn't know about me either but he told me that I was lying. He said that I was a well behaved person who stays at home and he insisted that I stayed with him. He gave me K45 and we had sex skin to skin inside his car. So when I go and have sex in the guest houses or anywhere, I sometimes would not recall if men used condom or not if I am dead drunk." Mofa, 20 years, Lae.

"I used to use condom when I was young but the I stopped. I started having sex without condom. I thought that I could use condom if I wanted to but I never seemed to have condoms with me when I go around. So I usually go and have sex without it." Yvonne 30 years, Lae.

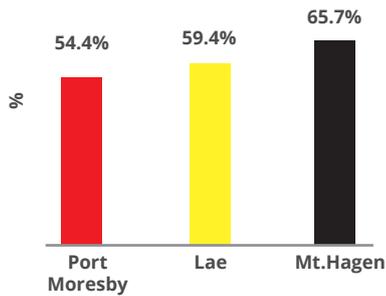


Figure 4.4: Could ask a main male partner to use a condom

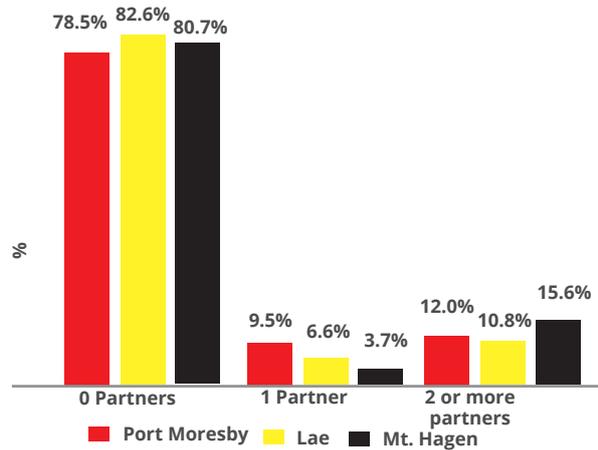


Figure 4.5: Number of casual partners in the last 6 months

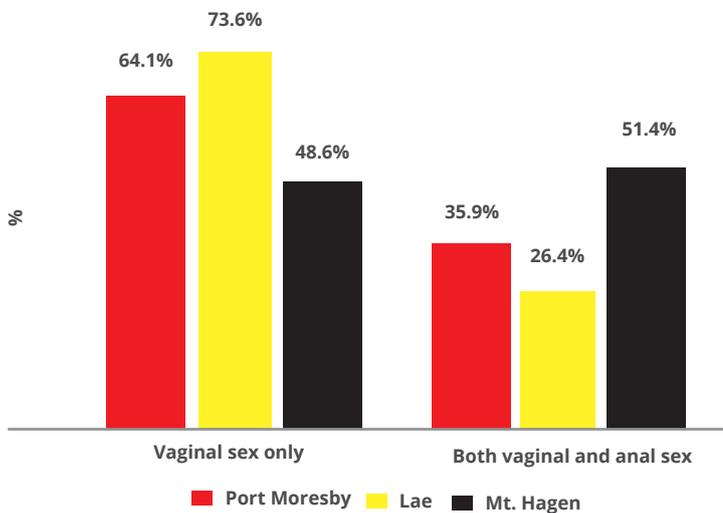


Figure 4.6: Type of sex with casual partners in the last 6 months

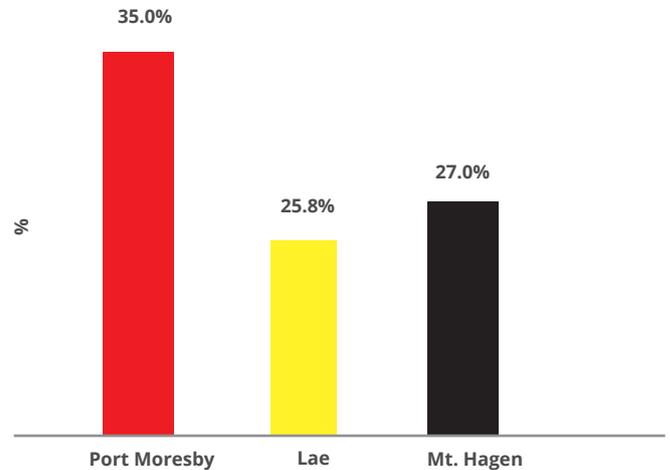


Figure 4.7: Condom use and casual partners in the last 6 months

"One thing I know for sure is that there are infections. When I go for testing, I've always wondered whether if that man that had sex with me comes only to me or if he's is cautious or not. I've always wondered about that but I still go around and have sex without condom. Sometimes I also feel like I'm not actually having sex when I am using condom." Stacey, 31 years, Lae.

"There are times especially when we are out there when some men will ask us to use condom. Sometimes when we ask them to use it, they would refuse and if we insist, they usually become violent. That is why I usually use condom sometimes only." Betty, 17 years, Lae

of the three cities. See Figure 4.2.

Condom use with a main partner in the last 6 months was relatively high with more than half reporting always using a condom during vaginal and anal sex (57.5% and 51.2% respectively) in Lae. On the other hand, condom use with a main partner in the last 6 months was relatively low in Port Moresby and Mt. Hagen, with 5.0% or less reporting to always using a condom during vaginal or anal sex (5.0% and 0.6% respectively) in Port Moresby and (2.5% and 3.0% respectively) in Mt. Hagen. See Figure 4.3.

Over half (54.4%, 59.4% and 65.7%) of FSW in Port Moresby, Lae and Mt. Hagen could ask their main partner to use a condom. See Figure 4.4.

4. SEX WITH NON-PAYING PARTNERS

4.1. Main partners

More than half of FSW in Lae and Mt. Hagen (53.6% and 60.4%) and almost half (45.1%) in Port Moresby had no main non-paying sexual partners in the last 6 months. See Figure 4.1

Condom use with a main non-paying partner during last anal sex (17.0% and 11.2%) was slightly more than that for vaginal sex (11.4% and 10.8%) in Lae and Mt. Hagen respectively compared to Port Moresby where condom use during vaginal sex (13.6%) was higher than anal sex (6.1%). Most FSW did not use a condom at last sex with main partners for either anal or vaginal sex in any

4.2. Casual partners

Most FSW in Port Moresby (78.5%), Lae (82.6%) and Mt. Hagen (80.7%) had no casual partners in the last 6 months. See Figure 4.5.

Of those FSW with a casual partner in the last 6 months, 35.9%, 26.4% and 51.4% had both vaginal and anal sex with their casual partners, with 64.1%, 73.6% and 48.6% having only vaginal sex in Port Moresby, Lae and Mt. Hagen respectively. See Figure 4.6.

Over one in five of FSW (35.0%, 25.8% and 27.0%) in Port Moresby, Lae and Mt. Hagen used condoms with all of their casual partners in the last six months. See Figure 4.7.

FSW reported slightly higher condom use at last sex with a casual partner during vaginal sex than during anal sex (43.9% versus 36.8% respectively) in Lae and (32.1% versus 23.6% respectively) in Mt. Hagen. In Port Moresby, condom use at last sex with a casual partner during vaginal sex was much higher (39.4%) than during anal sex (6.8%). See Figure 4.8.

FSW were more likely to report never using a condom during vaginal sex than they were anal sex (19.8% and 13.3% respectively) in Lae and (33.7% and 33.2% respectively) in Mt. Hagen. The opposite is true for Port Moresby where FSW were more likely to report never using a condom during anal sex than they were vaginal sex (34.8% and 31.0% respectively) in Port Moresby, (67.4% versus 62.9% respectively) in Lae and (80.4% versus 72.6%) in Mt. Hagen. Almost all FSW had supported a peer in the last 12 months by negotiating or standing up to a pimp/madam/broker (97.3%, 98.9% and 92.7%) in Port Moresby, Lae and Mt. Hagen respectively. See Figure 5.1.

respectively). However, more FSW were likely to report always using a condom during vaginal sex than they were for anal sex (22.8% and 8.6% respectively) in Port Moresby, (35.0% and 21.1% respectively) in Lae and (18.0% and 12.4% respectively) in Mt. Hagen. See Figure 4.9.

5. SOCIAL SUPPORT, MENTAL HEALTH AND STIGMA AND DISCRIMINATION

5.1. Social support

FSW were more readily able to rely on another FSW to help negotiate or stood up against the police than to accompany them to see a doctor (91.6% versus 59.9% respectively) in Port Moresby, (67.4% versus 62.9% respectively) in Lae and (80.4% versus 72.6% respectively) in Lae and (62.9% versus 59.9% respectively) in Mt. Hagen. See Figure 5.1.

5.2. Depression

Based on the two-item Patient Health Questionnaire-2 screening tool for depression, two in five (21.9%) FSW in Port Moresby, one in three (36.6%) in Lae and one in two (53.2%) in Mt. Hagen experienced depression. See Figure 5.2.

5.3. Stigma and discrimination

Almost one in two (45.2%) FSW in Port Moresby, over one in five (23.0%) in Lae

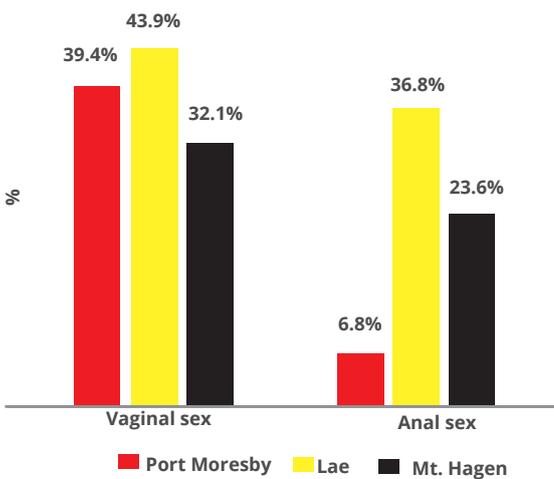


Figure 4.8: Condom use at last vaginal and anal sex with a casual partner

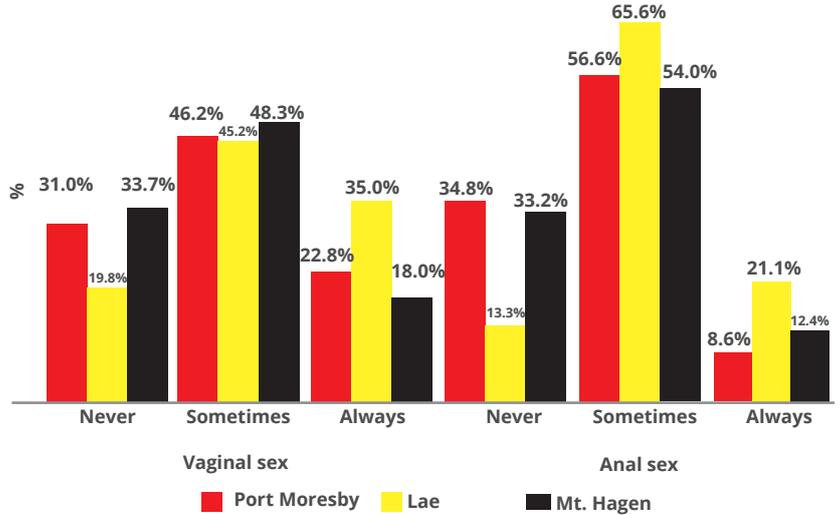


Figure 4.9: Frequency of condom use during vaginal and anal sex with casual partner in the last 6 months

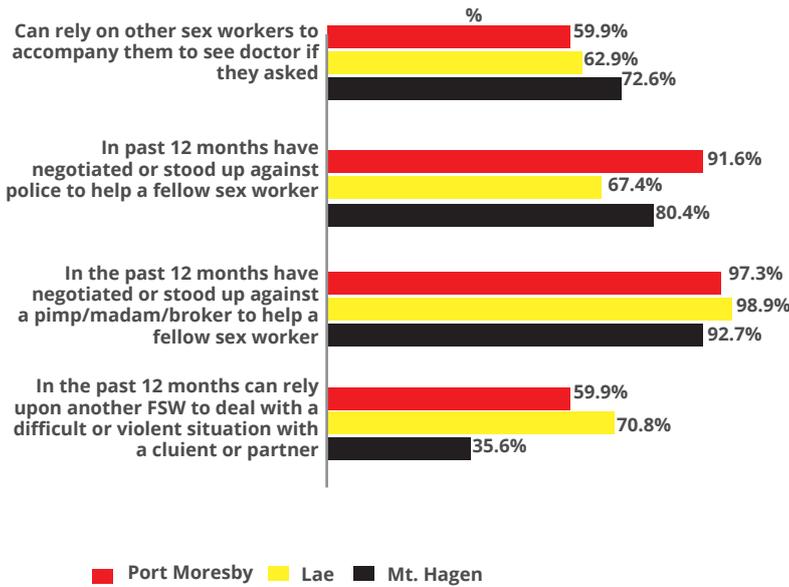


Figure 5.1: Social Support

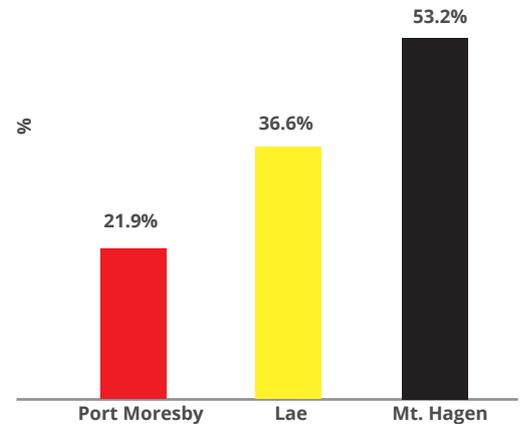


Figure 5.2: Depression

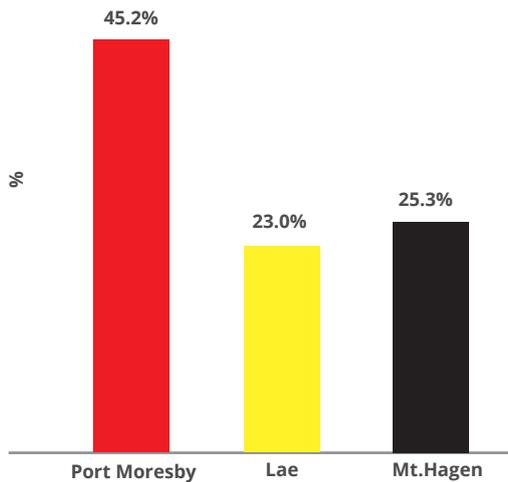


Figure 5.3: Feel the need when accessing health services to hide that they are engaged in selling and exchanging sex

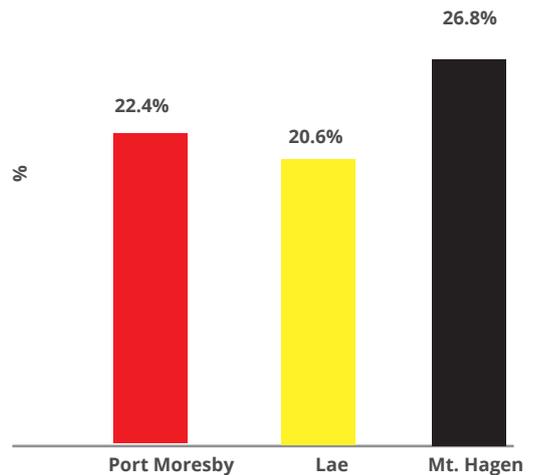


Figure 5.4: Blackmailed by someone because you sell or exchange sex

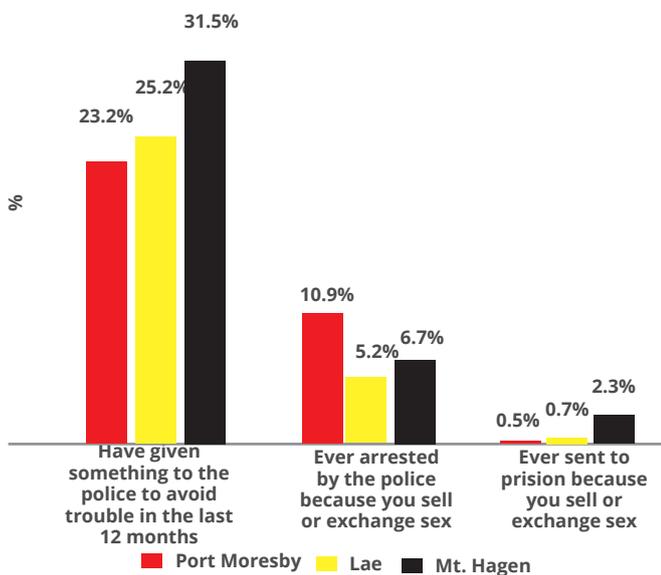


Figure 5.5: Experiences with Police

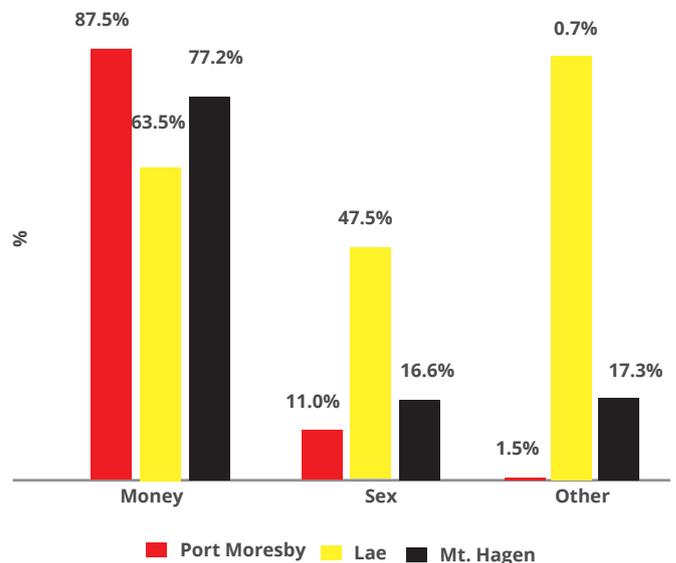


Figure 5.6: Things given to police to avoid trouble in the last 12 months

and one in four (25.3%) in Mt. Hagen felt the need to hide that they sell or exchange sex when accessing health services. See Figure 5.3.

Most FSW were not denied health care because they sell or exchange sex (75.3%, 85.0% and 80.1%) in Port Moresby, Lae and Mt. Hagen respectively, but another 23.2%, 14.9% and 18.3% respectively did not disclose that they sell sex and therefore were not denied health services. (data not shown).

Over one in five FSW (22.4%, 20.6%, and 26.8%) experienced some form of blackmail because they sell or exchange sex in Port Moresby, Lae, and Mt. Hagen respectively. See Figure 5.4.

While most FSW had not experienced discriminatory practices by the Police, 23.2% in Port Moresby, 25.2% in Lae and 31.5% in Mt. Hagen had given something to the Police to avoid trouble in the last 12 months. Some FSW (10.9%, 5.2%

and 6.7%) in Port Moresby, Lae and Mt. Hagen had been arrested because of their involvement in the selling and exchanging of sex and (0.5%, 0.7% and 2.3%) in Port Moresby, Lae and Mt. Hagen had been sent to prison because of this. See Figure 5.5.

Of the FSW who had given something to the Police to avoid trouble in the last 12 months, the majority of them gave money (87.5%, 63.4% and 77.2%) in Port Moresby, Lae and Mt. Hagen respectively. Another 11.0% in Port Moresby, 47.5% in Lae and 16.6% in Mt. Hagen exchanged sex with the Police in order to avoid trouble. See Figure 5.6.

5.4. Drug use

Drug use was very low among FSW. Only 1.0%, 0.9% and 0.6% of FSW in Port Moresby, Lae and Mt. Hagen respectively had ever taken illegal drugs, with none in Port Moresby and Lae and two out of

the five people in Mt. Hagen having taken illegal drugs in the last 6 months (data not shown).

6. VIOLENCE

6.1. Physical violence

More than half of FSW (57.3%, 72.9% and 69.1%) in Port Moresby, Lae and Mt. Hagen have ever experienced physical violence, where 20.7% in Port Moresby, 21.3% in Lae and 36.2% in Mt. Hagen of these survivors believed that the first time it happened was directly related to them selling or exchanging sex. In the past 12 months, 45.4%, 27.7% and 26.3% of FSW in Port Moresby, Lae and Mt. Hagen respectively experienced physical violence, where 42.9% in Port Moresby, 40.8% in Lae and 73.5% in Mt. Hagen of these survivors believed that this violence was related to them being involved in the selling and or exchanging of sex. See Figure 6.1.

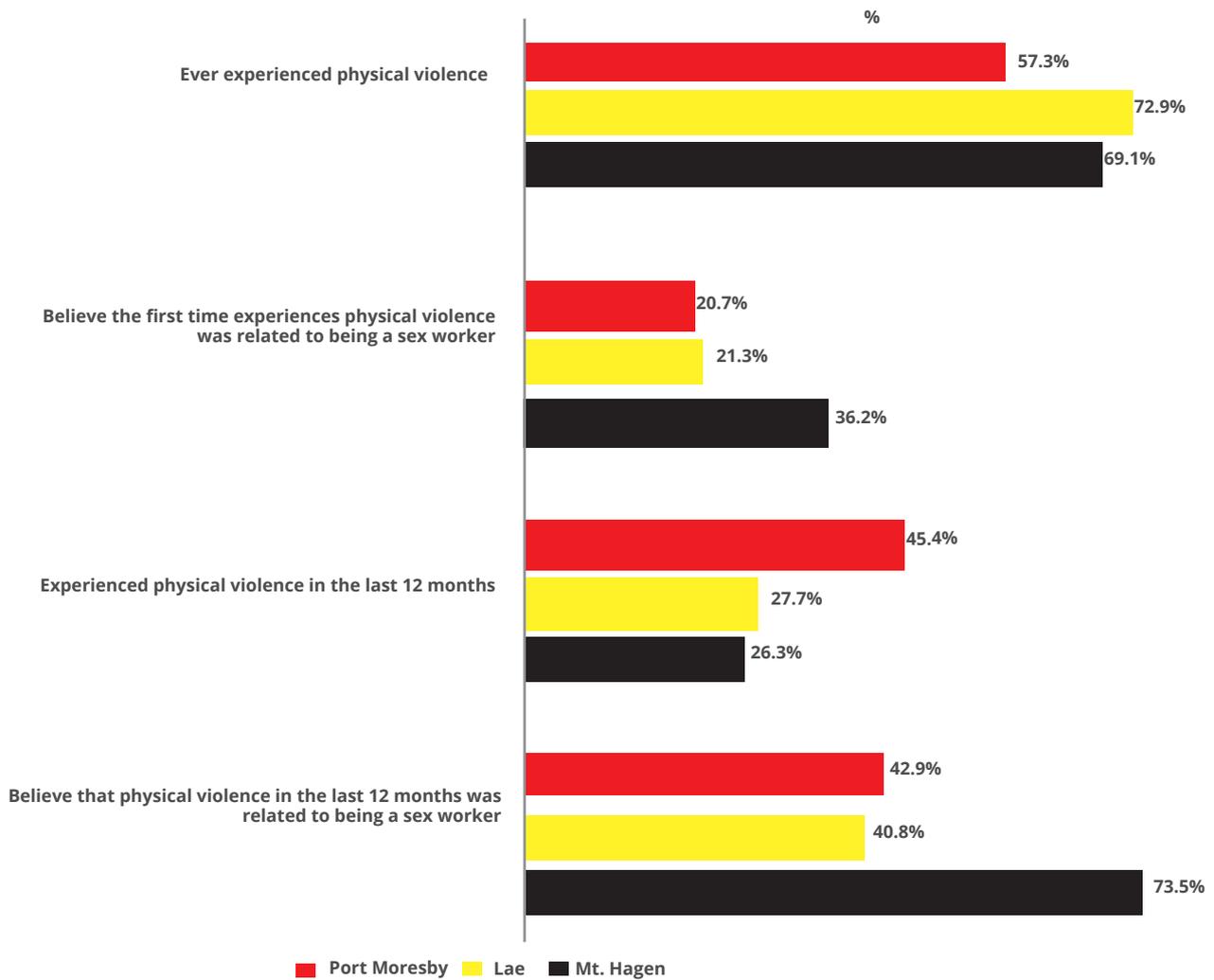


Figure 6.1: Experiences with violence

"My family got mad. They gave me a good beating when they found out. They said, 'quit it, you are very young'. They would beat me quite often and I went worse and was already in deep. When I got pregnant, they just didn't want anything to do with me. This is how they describe me 'kando wenipa' meaning 'woman that hangs around the roadside.'" Anesa, 24 years, Port Moresby

"I left my previous husband because of this life [sex work]. My former husband would beat me up all the time so I left him and found someone else." Molly, 40 years, Port Moresby.

"If my brothers heard of me being caught then they will surely bash me up to the point of death so I try not to be caught. However, the betel nut sellers usually report my cousins that they see me coming out of a certain vehicle then my cousins would belt me with rubber hose." Eve, 24 years, Mt. Hagen.

"He wanted to have sex with me. He came in drunk and I was there holding my baby and he wanted to have sex with me but I refused and he beat me. I sustained injuries here (pointing).

He beat and kicked me and people standing nearby had him chased. They told him that I wasn't his wife so he had to leave." Judy, no age supplied, Mt. Hagen.

"That's what I normally do, but as for these girls who usually want to fight, they are not in my age group, they are elderly women. They are the old familiar faces out there so the guest house is their base. But they usually take the younger ones like us to become their little ones and they take care of us. When other girls hit me this mother will go and hit her again. That's what they normally do." Erika, 27 years, Lae.

"It's like it's not easy. It's not easy to go out with a man. It's always tough, or difficult. Sometimes they can really punch us up; sometimes we usually return their punches as well." Mayo, 43 years, Lae.

While more than half (50.9%, 60.0% and 74.7%) of FSW in Port Moresby, Lae and Mt. Hagen did not try to seek support after any experience of physical violence in the past 12 months, 32.3%, 23.1% and 15.4% in Port Moresby, Lae and Mt. Hagen respectively sought support from Police or other security



Figure 6.3.

personnel. Few sought the professional support of health care professionals (5.3%, 2.6% and 7.2%) or a social worker, counsellor or non-government organisation (5.1%, 16.0% and 6.0%) in Port Moresby, Lae and Mt. Hagen respectively. See Figure 6.2.

6.2. Sexual violence

More than one in three FSW (34.2%, 40.5% and 40.4%) in Port Moresby, Lae and Mt. Hagen had ever been forced to have sex. Of these survivors, 23.5% in Port Moresby, 32.5% in Lae and 30.9% in Mt. Hagen had been forced to have sex with two or more people at the same time. Majority of the time (65.8%, 58.1% and 59.3%), the perpetrator was known to first cases of sexual violence in Port Moresby, Lae and Mt. Hagen respectively. See

"A lot of things have happened to me. One time as I was walking towards town some boys came and pulled me and dragged me down. There were about eight of them and they raped me. I screamed for help but they cracked my head with a stone. They stripped all my clothes off and I was naked. Some had their penis in my mouth, some in my vagina while others in my anus, all at the same time; I couldn't breathe. After they had their way, I wore my trousers and went out to call for help. There was a police car nearby so I called for help and I was brought straight to the hospital." Maria, 25 years, Port Moresby.



"One of the girls amongst our group must have had relationship with a boy amongst their group. So they said, they were going to drop us at the house and we thought it was true and go onto the vehicle but then they turned the vehicle around to Komun way. Then each of their boys they forced and got one each of our girls then this guy he forced and he chose me." Amber, 24 years, Mt. Hagen.

me. The two boys did not use condom." Norris, 22 years, Mt. Hagen.

"He dragged me, he held a gun and he threatened me then he pulled me and went he raped me that was my first what (first sex) with him." Ato, 30 years, Lae.

"...two boys took me in to the bathroom. So the boy came and saw three of us inside, I was already drunk and I was sleeping in the corner on the floor. The two boys took turns on me already and were there and at the same time the guy came in and two boys already did it and went and he just dived in there. But he used safety; the two boys didn't use safety. The boy I talked to him already and I gave him a condom to hold so he brought it in and use the safety on

"He took me to Hunter, he took me to the G4S's camp, he went inside and there was and old field there, they came out. He stopped the car then he pointed a pistol right on my head and told me to come out. I came outside then he said, take all your clothes off. You think that you usually have sex and go around, I want to see it, remove all your clothes, I undressed myself and I was standing. I got up and said that, both of the guys they were racing to have sex with me. They did all sorts, they wanted to have sex with me and they did all sorts. All sorts, I was also HIV positive, how you get it, it's your problem because it's by force." Karu, 22 years, Lae.

"There were two of us girls and we were on our way to the Erirambi guest house in Kamkumung, so both of us were slowly taking our time walking. Along the way these boys called out and they came out into the open, but both of us were thinking that they were the boys that we usually share things with, so we stood back but then we realised that it wasn't them. So both of us started to run but since she was in front she escaped while I was behind so I was late to escape so they held me up. There were a number of boys so every one of them had sex with me." Betty, 17 years, Lae.

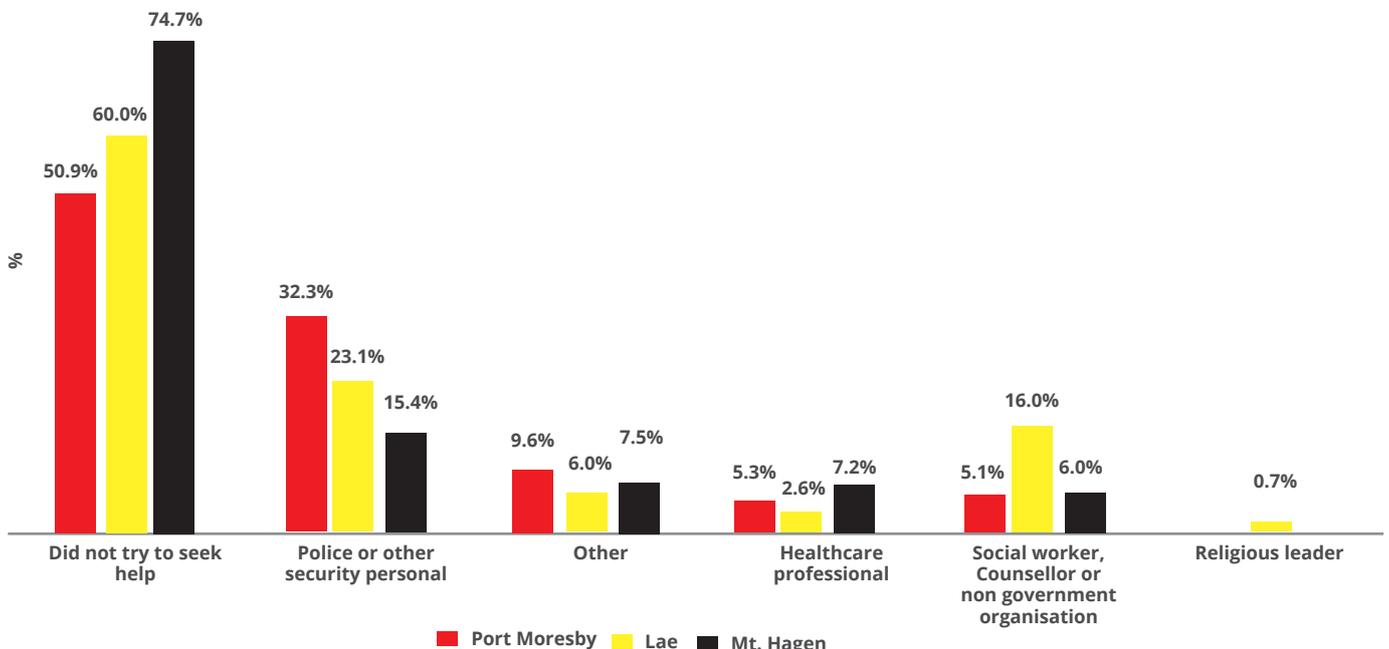


Figure 6.2: Access to support services after any physical violence

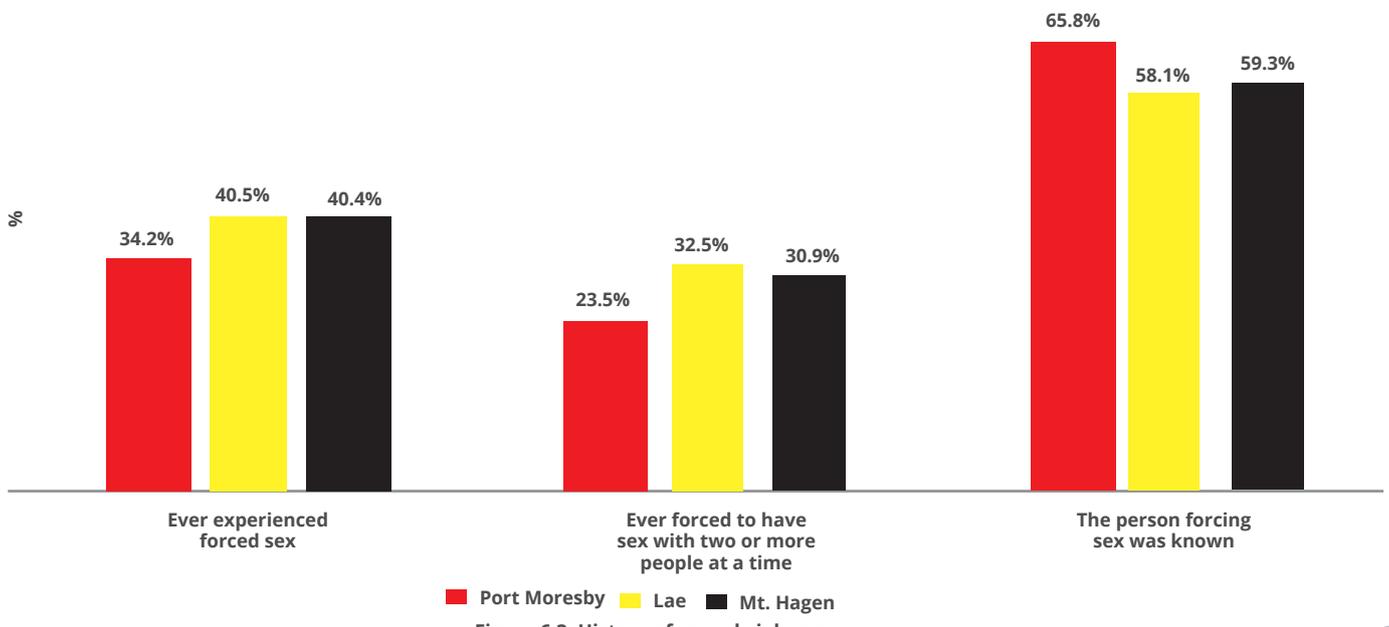


Figure 6.3: History of sexual violence

Among FSW who experienced sexual violence, 53.9%, 54.6% and 55.0% were abused before the age of 20 years, with 17.5%, 13.7% and 9.9% experiencing it under the age of 15 years in Port Moresby, Lae and Mt. Hagen respectively. See Figure 6.4.

6.3. Last experience of sexual violence

FSW in all the three sites were more likely to be sexually abused by a known perpetrator (51.2%, 63.4% and 61.3%) in Port Moresby, Lae and Mt. Hagen on the last incident of sexual violence. See Figure 6.5.

Most FSW who experienced sexual violence never sought help after their last unwanted sexual encounter (60.6%, 68.3% and 77.7%) in Port Moresby, Lae and Mt. Hagen respectively. While those who sought help, the common sources of help include family and police/other security personnel (15.5% and 11.7% respectively) in Port Moresby, (11.1% and 13.2% respectively) in Lae and (7.7% and 14.9% respectively) in Mt. Hagen. See Figure 6.6.

The two most common reasons for FSW not accessing support services after the most recent experience of sexual violence

across the three sites were because they felt ashamed/afraid to access these services (63.8%, 42.9% and 59.0%) or they felt that they did not have a problem and therefore did not require support services (23.5%, 42.0% and 31.9%) in Port Moresby, Lae and Mt. Hagen respectively. See Figure 6.7.

6.4. Sexual violence in the last 12 months

Of FSW (44.8%, 35.8% and 37.6%) in Port Moresby, Lae and Mt. Hagen who had ever experienced forced sex in the last 12 months, half (50.5%) of them in Port Moresby, over one in ten (16.5%) in Lae and one in four (25.5%) in Mt. Hagen were forced to do so by a live in sexual partner. Of these women, 56.2%, 51.9% and 91.9% in Port Moresby, Lae and Mt. Hagen respectively believed it was because they were involved in the selling and exchanging of sex. See Figure 6.8.

6.5. Violence from a client in the last 6 months

About one of five FSW (21.5, 18.4% and 21.9%) experienced any form of violence from their clients in the last 6 months. See Figure 6.9. The most common form of client-perpetrated

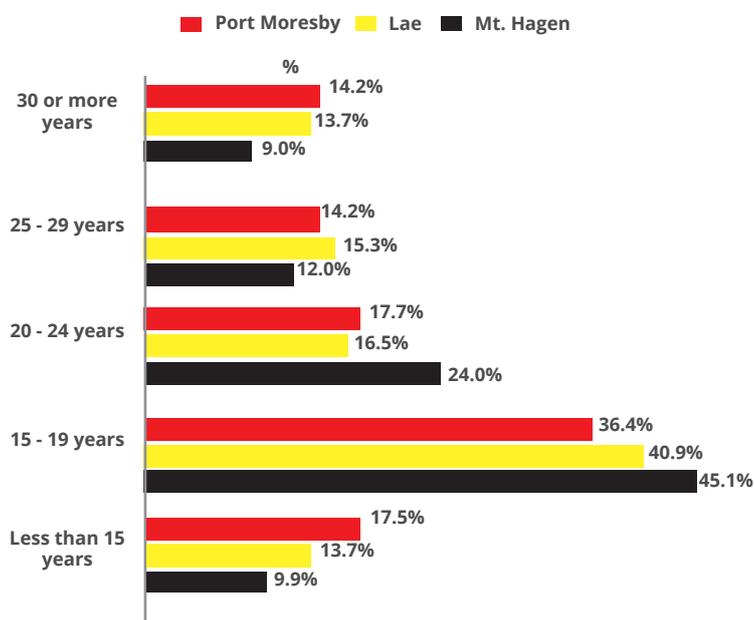


Figure 6.4: Age of first experience of sexual violence

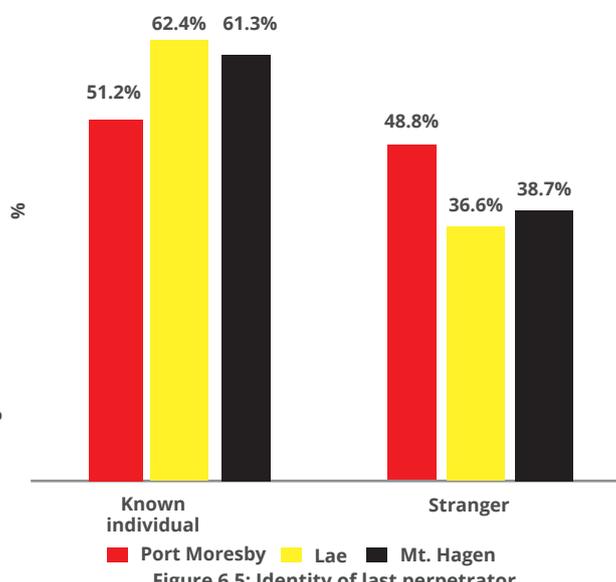


Figure 6.5: Identity of last perpetrator

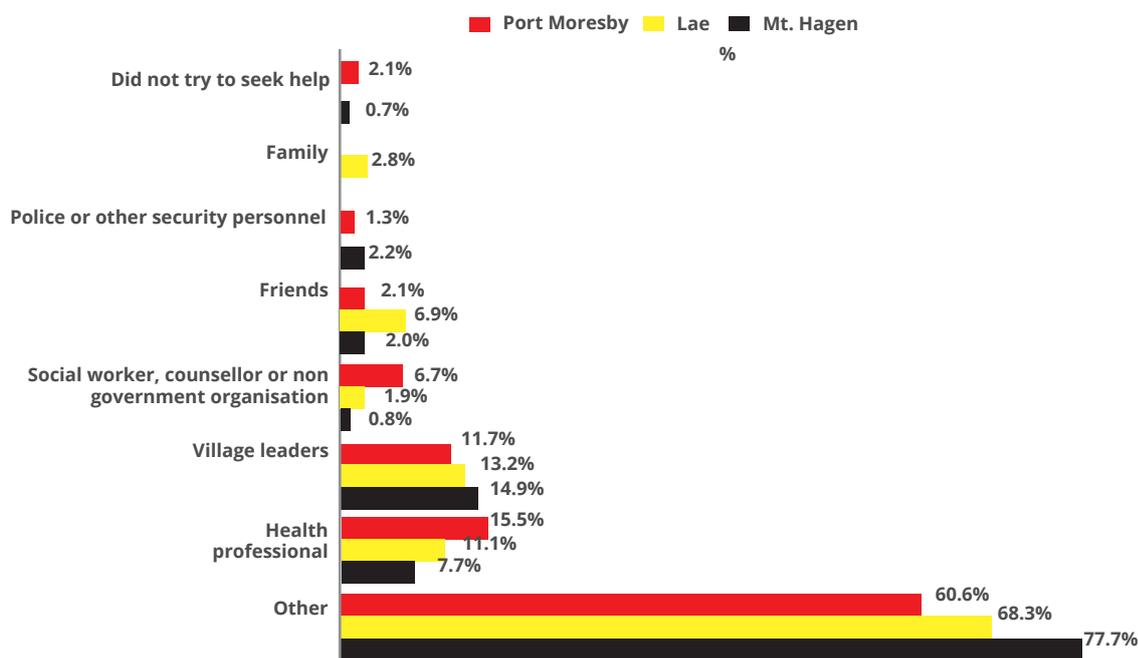


Figure 6.6: Sources of help after last sexual violence

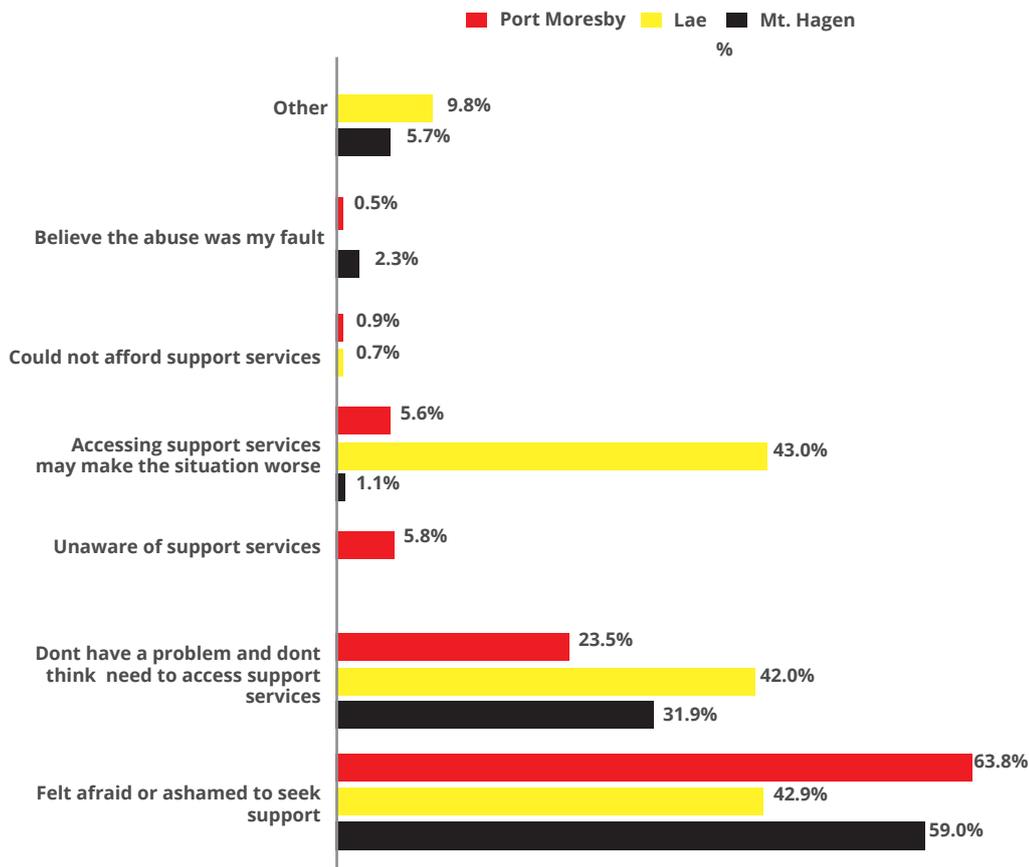


Figure 6.7: Reasons for not seeking support after most recent experience of sexual violence

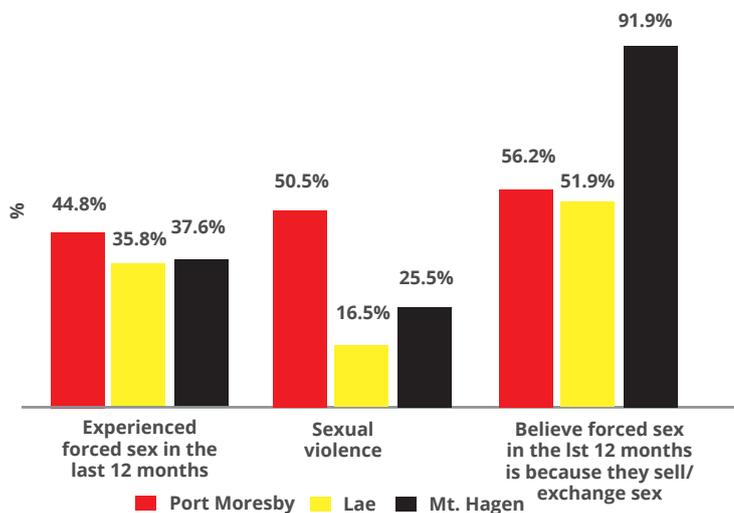


Figure 6.8: Sexual violence in the last 6 months

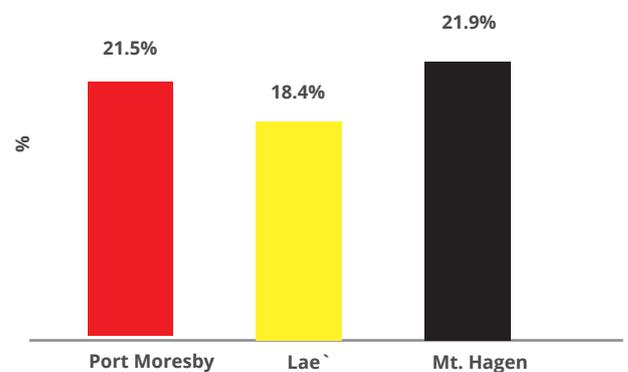


Figure 6.9: Any violence by client in the last 6 months

violence in the last 6 months was forced sex (17.4%, 14.9% and 20.9%) followed by physical abuse (9.2%, 10.5% and 14.8%) and threats (7.1%, 6.4% and 12.5%) in Port Moresby, Lae and Mt. Hagen respectively. See Figure 6.10.

"I have experienced sexual violence many times but not with my clients. I experience this within my marriage. My husband forces me when I don't feel like having sex. He would beat me and rip off my clothes without

my consent. He abuses me and so I reported him to the police. However, I see that sex with clients is with respect. They would respect your emotions and your opinions. Whatever kinds of sexual practice, they would respect but within marriage, husbands think that they own their wives and they can do anything they want. They can have sex anytime they want." Yano, 28 years, Port Moresby.

getting towards day break so allow me to release the fluid', he said. He insisted until he used the boot that he was wearing to kick me here again and again. From there I started to fight back. So we started to wrestle here and there...He attacked me again because of anger. I had swollen neck, and he kept on ignoring me. If I can remember that made me admit at Hagen Hospital and I went through a bad experience." Pamela, 35 years, Mt. Hagen.

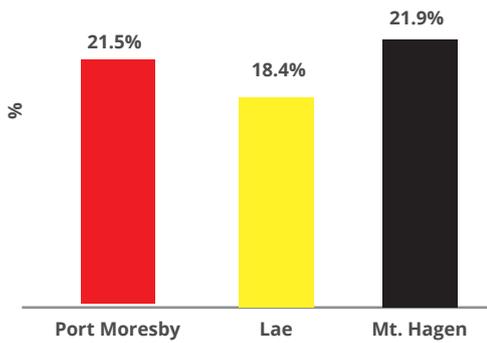


Figure 6.9: Any violence by client in the last 6 months

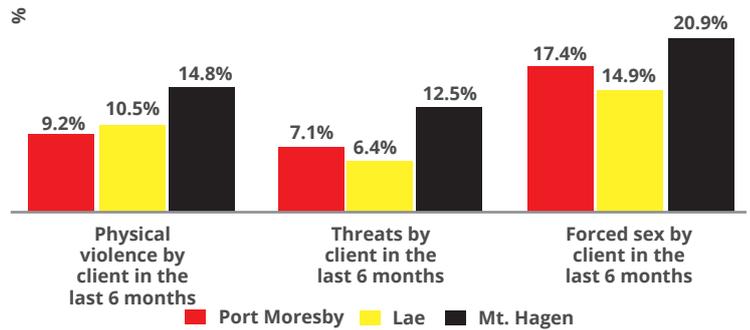


Figure 6.10: Types of violence perpetrated by a client in the last 6 months

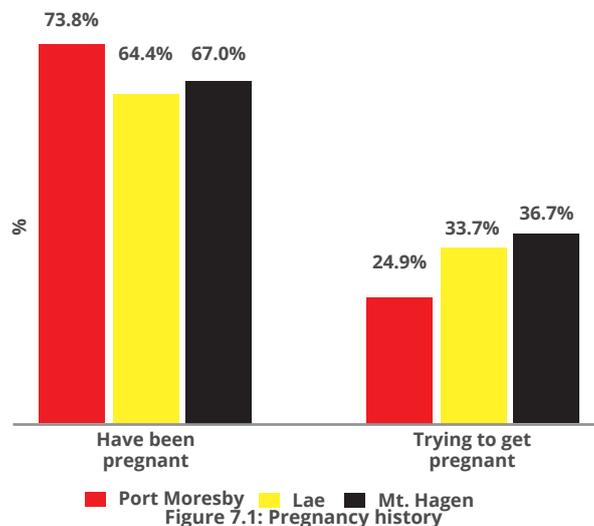


Figure 7.1: Pregnancy history

"When they told him that (I was HIV positive), he got frustrated because he had spent some money so we had sex once using condom. The man must have regretted having sex with me because he doubted his status so once while we were on our way to the other village he just approached me and said, 'why are you conning me when you are with the virus?' Whilst saying that he chopped me with an axe and here are the scars. I was admitted at Sopas Hospital." Veronica, 34 years, Mt. Hagen.

"Sometimes when we ask them to use condoms, they will decline, so when they ask us to go without condoms and when we decline they usually retaliate violently, so on occasions like that some of us never use condoms but the rest do use condoms." Betty, 17 year, Lae.

"The policemen do come and have sex with us. Sometimes they pay and other times they don't. They have been times when they would tell us to give suck their dicks and if we don't, then they usually threaten us that they would shoot us with their guns." Carol, 20 years, Lae.

7.REPRODUCTIVE HEALTH

7.1.History of pregnancy

The majority (73.8%, 64.4% and 67.0%) of FSW have been pregnant in Port Moresby, Lae and Mt. Hagen respectively while more than one in three in Lae and Mt. Hagen (33.7% and 36.7% respectively) and one in four in Port Moresby (24.9%) were trying to get pregnant. See Figure 7.1.

Among FSW who had been pregnant, 61.5% in Port Moresby, 73.2% in Lae and 69.6% in Mt. Hagen had their last pregnancy more than 3 years ago. Very few FSW were either currently pregnant (1.5%, 0.8% and 1.5%) or had been pregnant in the past 12 months (4.3%, 4.8% and 5.7%) in Port Moresby, Lae and Mt. Hagen respectively. See Figure 7.2.

7.2.Induced abortion

Among FSW who have been pregnant, 20.5%, 18.6% and 17.9% in Port Moresby, Lae and Mt. Hagen tried to induce an abortion at least once (data not shown). Among these women, the most commonly used methods across the three sites were:

- ▶ Port Moresby: 1) applying external physical force to the abdomen (24.4%), 2) taking medication available at the chemist (16.2%), and 3) drank coffee or other substances (15.3%);
- ▶ Lae: 1) applying external physical force to the abdomen (27.4%), 2) using traditional methods (26.8%), and 3) drank coffee or other substances (14.1%);
- ▶ Mt. Hagen were: 1) applying external physical force to the abdomen (29.4%); 2) taking medication prescribed by the doctor

(19.0%), and 3) using traditional methods (16.7%). See Figure 7.3.

7.3. Antenatal attendance

Of the 26.4%, 26.7% and 27.4% of FSW who had a pregnancy that resulted in a live birth in the last three years (data not shown), almost all (91.2%, 90.3% and 85.0%) attended an antenatal clinic at least once in Port Moresby, Lae and Mt. Hagen. See Figure 7.4.

7.4. HIV and syphilis testing during pregnancy

Of those who attended an antenatal clinic during the last pregnancy that resulted in a live birth in the last three years and were offered an HIV test, 72.1%, 100.0% and 100.0% tested for HIV in Port Moresby, Lae and Mt. Hagen respectively (data not shown). Of these women, 4.3%, 0.7% and 9.2% tested HIV positive in Port Moresby, Lae and Mt. Hagen respectively. See Figure 7.5.

At last pregnancy that resulted in a live birth in the last three years, 37.3%, 87.6% and 80.3% of FSW in Port Moresby, Lae and

Mt. Hagen were tested for syphilis. Among those tested, 18.2%, 19.9% and 4.0% tested positive and of them, almost all of them (94.3%, 100.0% and 100%) received treatment in Port Moresby, Lae and Mt. Hagen respectively. See Figure 7.6.

7.5. Family planning

The majority of FSW in Port Moresby (80.4%) and over two in five FSW in Lae and Mt. Hagen (46.3% and 40.9% respectively) were using family planning. See Figure 7.7.

Of FSW using family planning methods, the commonly used methods in each of the sites were:

- ▶ Port Moresby: 1) implant (51.9%), 2) injection/Depo (27.3%) and 3) tubal ligation (10.0%). See Figure 7.8.
- ▶ Lae: 1) injection/Depo (24.5%), 2) implant (18.9%) and 3) contraceptive pill (10.5%). See Figure 7.8.
- ▶ Mt. Hagen: 1) injection/Depo (36.0%), 2) implant (15.1%) and 3) condom (11.1%). See Figure 7.8.

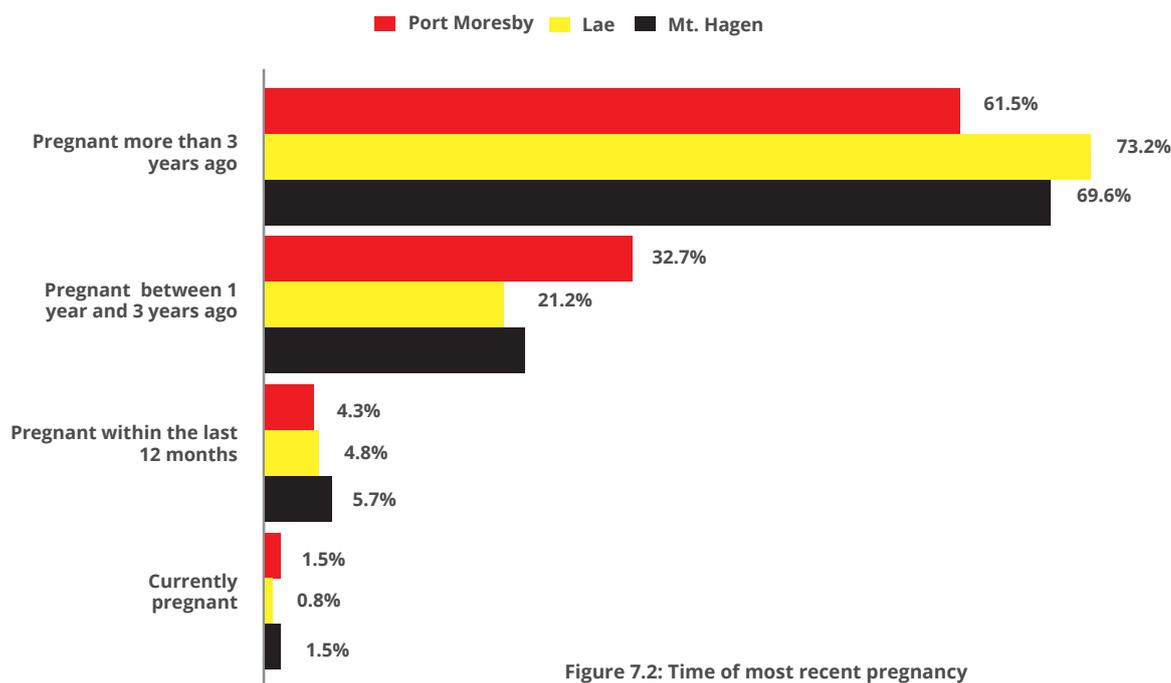


Figure 7.2: Time of most recent pregnancy

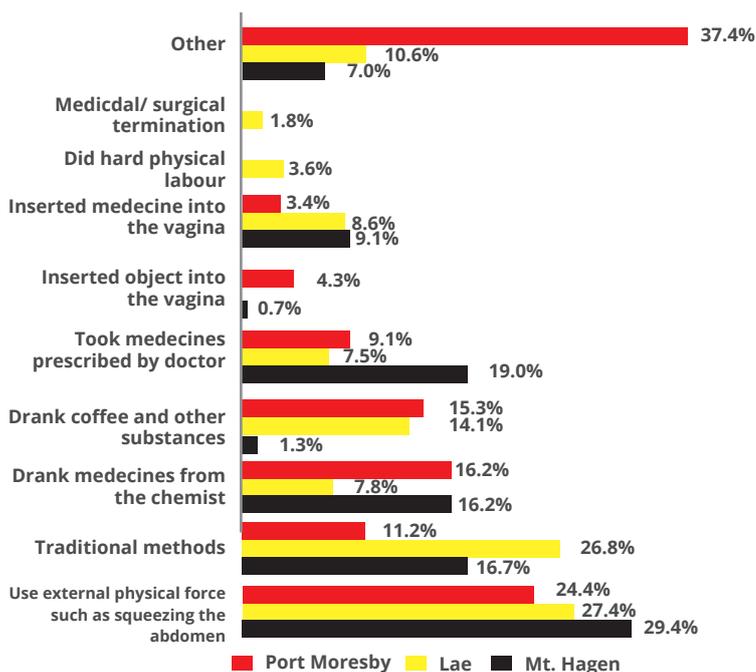


Figure 7.3: Methods of inducing an abortion *

*Multiple responses allowed

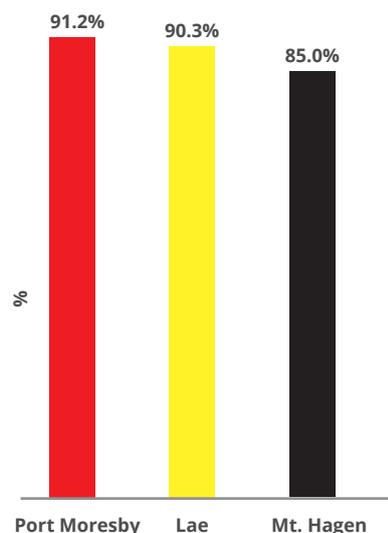


Figure 7.4: ANC attendance during last pregnancy

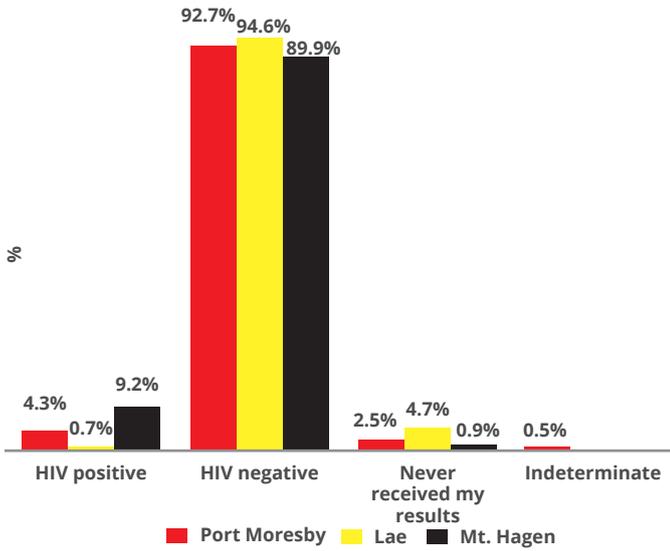


Figure 7.5: Results from HIV test during last pregnancy

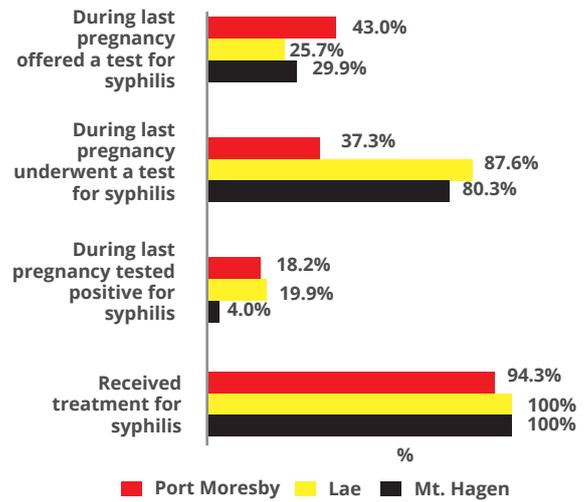


Figure 7.6: Syphilis testing and treatment during last pregnancy

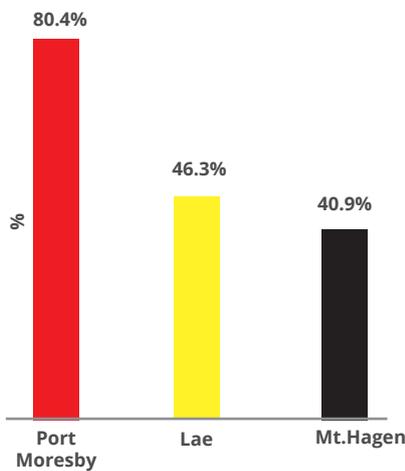


Figure 7.7: Uptake of family planning

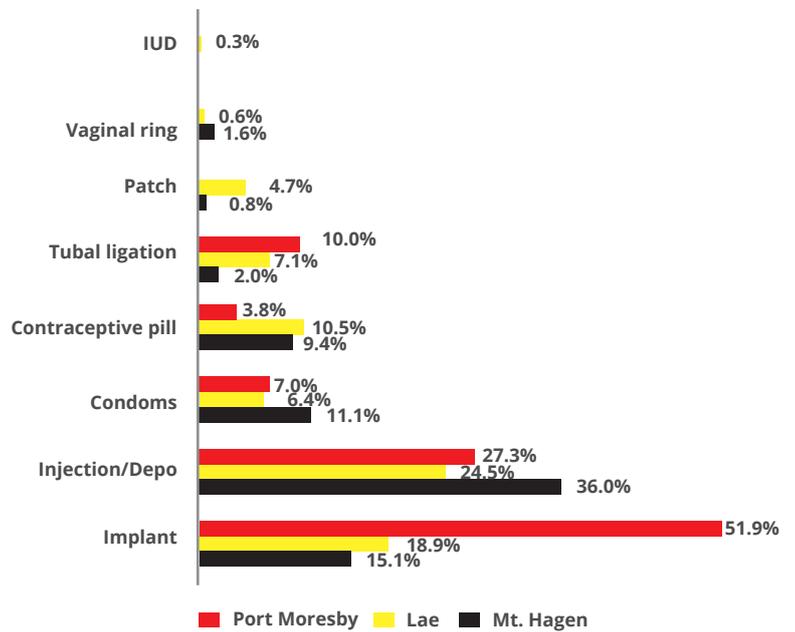


Figure 7.8: Main contraceptive method used

8. KNOWLEDGE OF HIV AND ACCESS TO OUTREACH AND HIV PREVENTION SERVICES, INCLUDING PROPHYLACTIC TREATMENT

8.1. Knowledge of HIV

HIV knowledge in Port Moresby, Lae and Mt. Hagen was in general greatest for knowing (correctly answered) that (See Figure 8.1):

- ▶ A health looking person can have HIV (91.1%, 89.3% and 85.4% respectively)
- ▶ Using a condom every time you have sex you can reduce the risk of getting HIV (83.5%, 86.7% and 85.7% respectively)
- ▶ You can reduce the risk of getting HIV by having sex with only one uninfected partner who has no other partners (81.6%, 87.4% and 84.6% respectively)

HIV knowledge in Port Moresby, Lae and Mt. Hagen was in general poorest for knowing (correctly answered) that (See Figure 8.1):

- ▶ If a condom is not used, anal sex puts a person at greatest risk for getting HIV (6.9%, 12.1% and 9.3% respectively)

- ▶ You can get HIV from mosquito bites (35.4%, 44.2% and 46.2% respectively)
- ▶ There is effective treatment for HIV (45.4%, 31.0% and 68.6% respectively)

"They said that if you have sores on your hand and if you touch someone's blood, you will get that virus or if someone cuts himself and you use that same razor to cut yourself or using same needle. You can also get HIV from not using condom. That is what I heard from the radio." Maria, 25 years, Port Moresby.

"I know HIV transmission is through vaginal and penial fluids and also from blood contacts. If someone has HIV and has a cut and you have an open sore on your body, you can be infected if blood from that person comes in contact with your open sore. In order for us women that go around to prevent this is to have sex with condom only." Anesa 24 years, Port Moresby.

"What I can say about HIV is that I've only heard about what people usually say about it. They actually said that if a woman has this infection then we must not ask her for half of the cigarette that she is smoking, or half of the lime that she is chewing from. Especially from those women who are infected." Ambo 21 years, Lae.

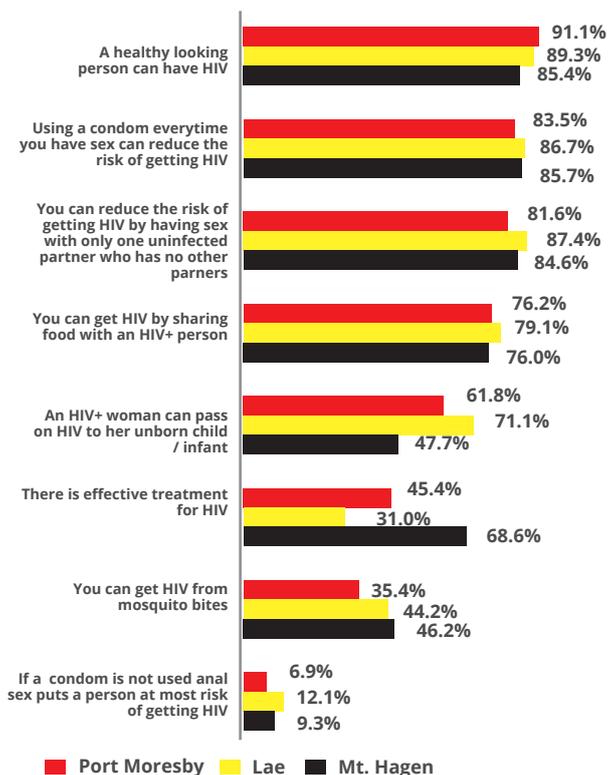


Figure 8.1: HIV knowledge

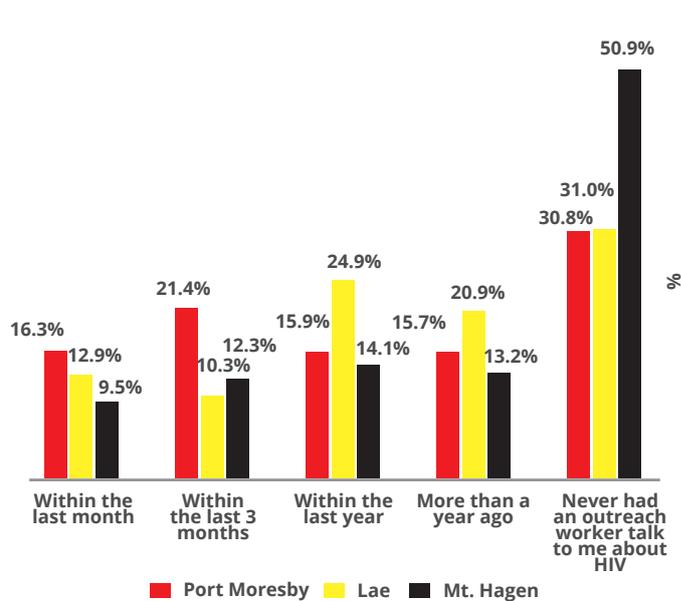


Figure 8.2: Last contact with peer outreach worker

“...if a blood stained blade that was used to cut their body was used by me again then I can contract aids from that.” Betty, 17 years, Lae.

“HIV, you are going to get it thru from having sex flesh to flesh. Ok, and from the blood, like from razor blade, needle that from the fresh blood. If you have an open cut or sore on your skin then the blood of the other person like the other woman opponent of a married woman stabled the one that is infected then you have a sore on your body and you go and support her, then her blood pass through your sore so you can get infected. Mosquito bite, or hugging or such will not.” Amber, 24 years, Mt. Hagen.

“HIV can be transmitted through the sharing of needles, razor blades and through unprotected sexual contact.” Diana, 20 years, Mt. Hagen

8.2. Peer outreach

Almost one in three FSW (30.8% and 31.0%) in Port Moresby and Lae and over half (50.9%) in Mt. Hagen have never been reached by a peer outreach worker in their lifetime. Only 37.7%, 23.2% and 21.8% have been reached within the last three months in Port Moresby, Lae and Mt. Hagen respectively. See Figure 8.2.

Of those reached by a peer outreach worker, 18.1%, 11.7% and 2.9% in Port Moresby, Lae and Mt. Hagen respectively received nothing. Condoms (78.5%, 67.2% and 82.2%), lubricants (65.9%, 26.2% and 52.1%) and pamphlets/brochures (39.2%, 51.4% and 43.4%) were the most common items received across the three sites respectively. See Figure 8.3. Most peer outreach workers belonged to non-government organisations (63.0% and 66.0%) in Port and Lae while in Mt. Hagen most belong to peer-led civil societies (82.7%). See Figure 8.4.

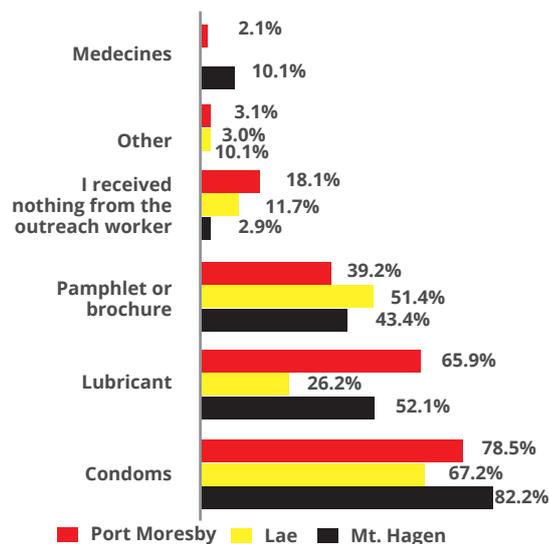


Figure 8.3: Products received at last peer outreach contact
*Multiple responses allowed

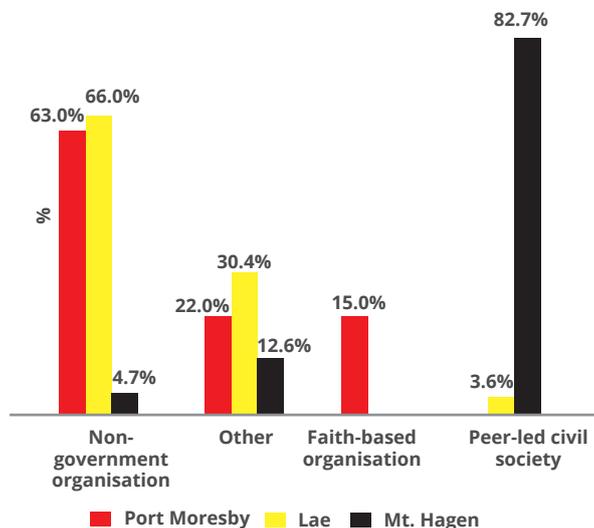


Figure 8.4: Organisation from where peer outreach worker comes from

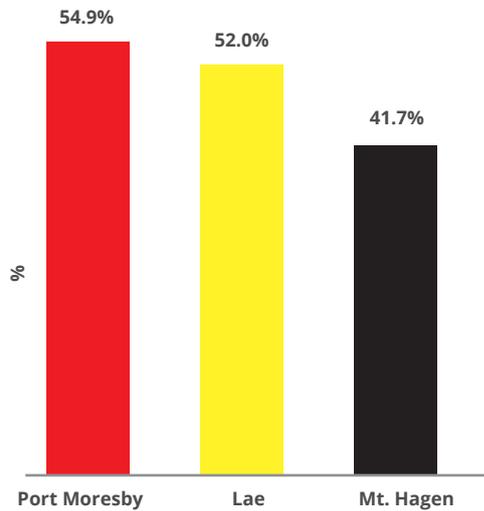


Figure 8.5: In last 12 months received information on condom use and safer sex

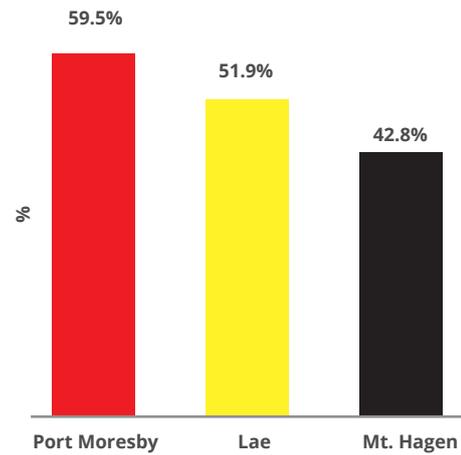


Figure 8.6: In the last 12 months been given condoms for free

8.3.Free condoms

Over half (54.9% and 52.0%) of FSW in Port Moresby and Lae and two in five (41.7%) in Mt. Hagen received information on condom use and safer sex in the last 12 months. See Figure 8.5. About similar proportion to the latter (59.5%, 51.9% and 42.8%) in Port Moresby, Lae and Mt. Hagen received free condoms at the same time. See Figure 8.6.

8.4.Free lubricant and lubricant use

More than one in two (53.7%) FSW in Port Moresby, less than one in five (18.4%) in Lae and less than one in three (29.3%) received free packets of lubricants in the last 12 months. See Figure 8.7. Few FSW (39.7%, 25.0% and 48.5%) in Port Moresby, Lae and Mt. Hagen used lubricants in the last 6 months for either vaginal or anal sex, but with more in Mt Hagen than any other site having done so. See Figure 8.8.

Of FSW who had used lubricants in the last 6 months, water-based lubricants such as KY Jelly was most commonly used (93.5%, 77.0% and 66.6%) followed by saliva (40.7%, 63.1% and 63.7%) and body lotion/shear nut butter/baby oil (8.0%, 21.0% and 6.6%) in Port Moresby, Lae and Mt. Hagen respectively. See Figure 8.9.

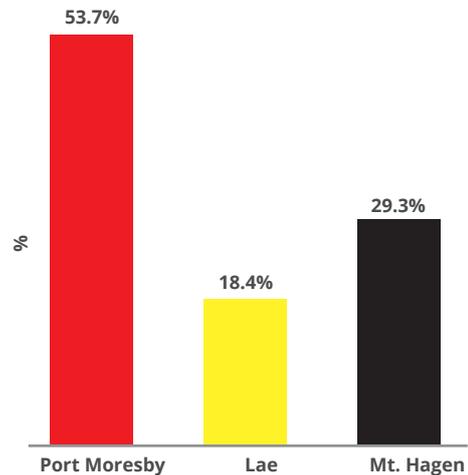


Figure 8.7: In the last 12 months given free packets of lubricant

8.5.Sources of influence

The most common influences in general across the three sites were: 1) friends (33.9%, 26.7% and 27.0%); 2) family (15.0%, 19.8% and 30.0%); and 3) health care workers (17.4%, 15.65 and 18.1%) in Port Moresby, Lae and Mt. Hagen respectively. See Figure 8.10.

8.6.Post-Exposure and Pre-Exposure Prophylaxis

Only 19.2%, 11.0% and 10.3% of FSW in Port Moresby, Lae and Mt. Hagen had heard of post-exposure prophylaxis. Of these, few had ever taken post-exposure prophylaxis (7.5%, 4.2% and 3.2%) respectively. Of those who had taken post-exposure prophylaxis, 37.0% in Port Moresby, 40.1% in Lae and 20.6% in Mt. Hagen had done so in the last 6 months. See Figure 8.11.

Very few FSW had heard of pre-exposure prophylaxis (11.0%, 10.1% and 3.6%) yet theoretical acceptability of pre-exposure prophylaxis was high (89.3%, 85.6% and 75.7%) in Port Moresby, Lae and Mt. Hagen respectively. See Figure 8.12.

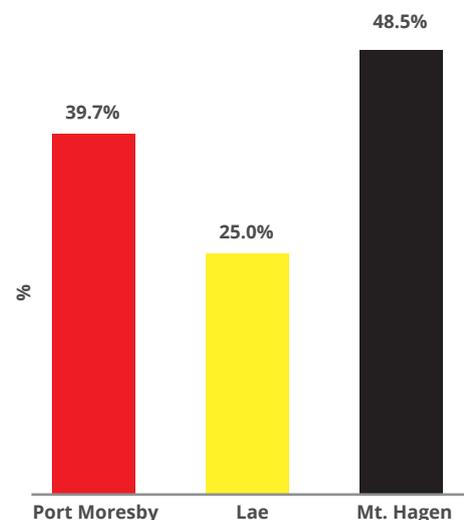


Figure 8.8: Used lubricant in the last 6 months for vaginal or anal sex

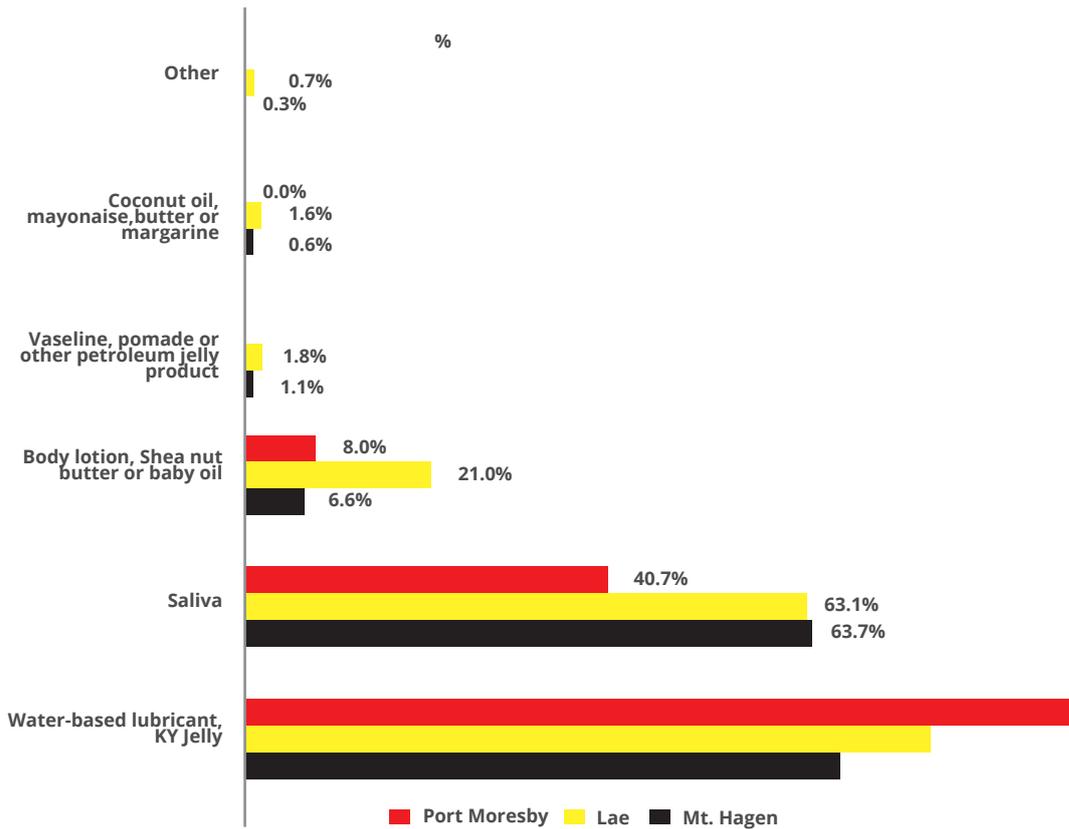


Figure 8.9: Type of lubricants used
*Multiple responses allowed

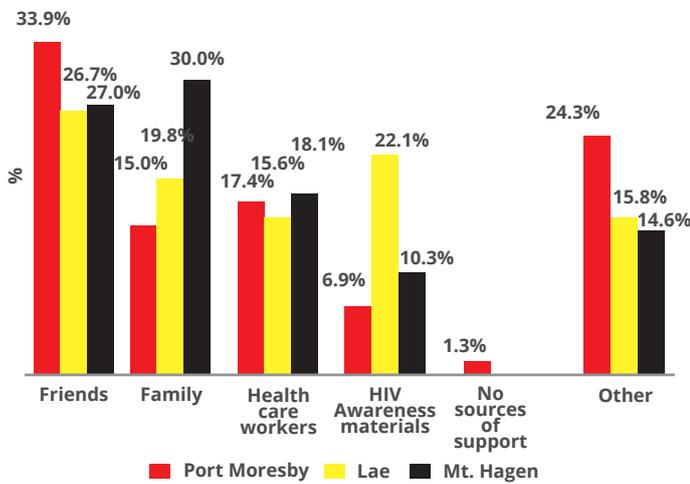


Figure 8.10: Sources of influence to protect self and others from HIV

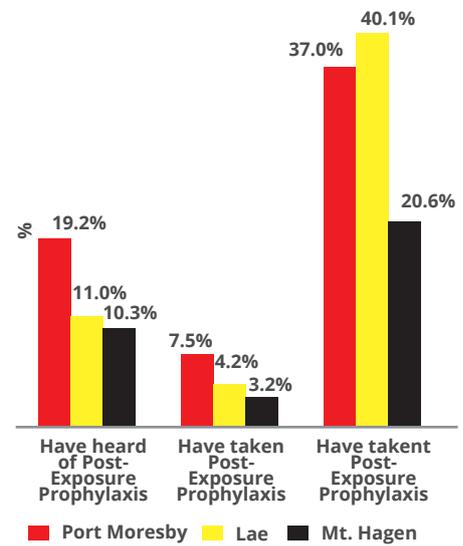


Figure 8.11: Post-exposure prophylaxis - knowledge and uptake

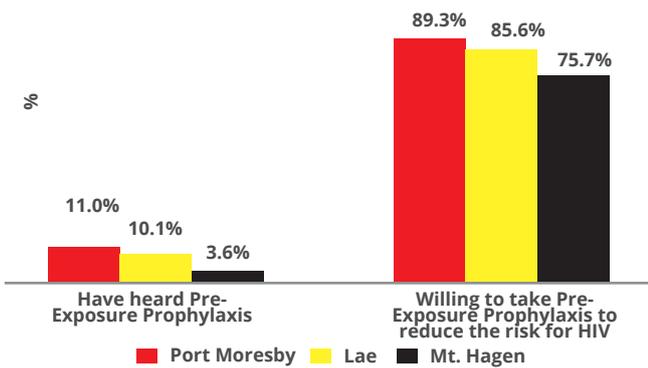


Figure 8.12: Pre-exposure prophylaxis - knowledge and acceptability

9. SEXUALLY TRANSMITTED INFECTIONS

9.1. Self-reported STI symptoms and health seeking behaviours

More FSW experienced abnormal vaginal discharge (53.8%, 52.8% and 51.6%) in Port Moresby, Lae and Mt. Hagen in the last 12 months than they experienced vaginal or anal scores or ulcers in the same period (14.2% and 8.1% respectively) in Port Moresby, (17.4% and 13.1% respectively) in Lae and (18.9% and 13.9% respectively) in Mt. Hagen. See Figure 9.1. Of FSW with these symptoms, less than half saw a health care worker (43.2%, 36.0% and 40.1%) in Port Moresby, Lae and Mt. Hagen. (data not shown).

9.2. Prevalence of STI

Sexually transmitted infections were common with more than half of FSW (52.1%, 60.8% and 53.4%) experiencing one or more sexually transmitted infection (excluding HIV) across the three sites. See Figure 9.2.

Chlamydia was the most common sexually transmitted infection among FSW. Prevalence of anorectal and urogenital chlamydia were roughly equal (31.8% and 29.7% respectively in Port Moresby), (32.1% and 35.3%, respectively) in Lae and (32.0% and 32.5% respectively) in Mt. Hagen. The next most common sexually transmitted infection was anorectal gonorrhoea and urogenital gonorrhoea (19.3% and 18.6%) in Port Moresby, (22.6% and 21.5%) in Lae and (15.1% and 15.4%) in Mt. Hagen. Syphilis was also common with 16.1%, 19.7% and 10.9% of FSW ever infected and 7.2%, 6.9% and 3.0% having active syphilis infection in Port Moresby, Lae and Hagen. About one in ten FSW (9.3%, 10.7% and 10.8%) in Port Moresby, Lae and Mt. Hagen had Hepatitis B Virus. See Figure 9.3.

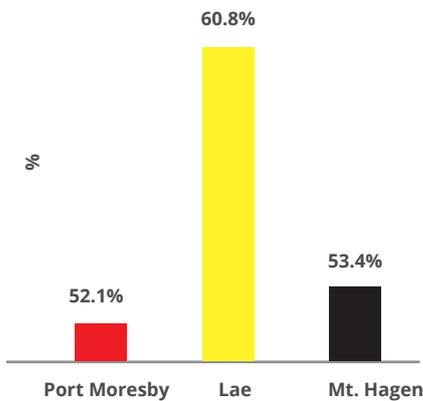


Figure 9.2: Proportion of FSW with one or more STIs

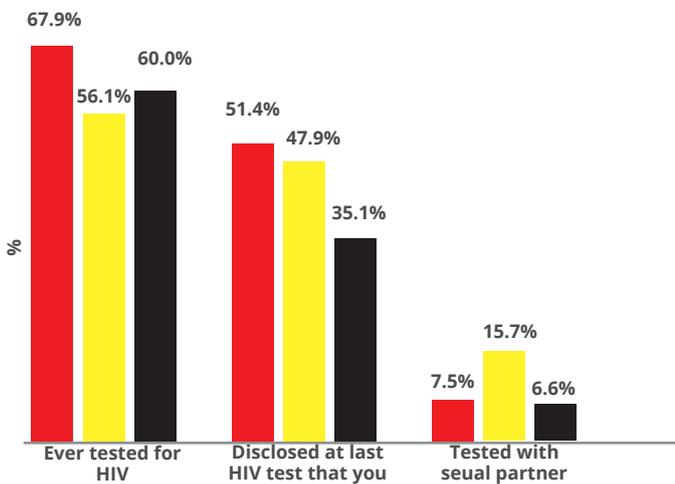


Figure 10.1: HIV testing history

10. HIV TESTING, CARE AND TREATMENT

10.1. HIV testing prior to *Kauntim mi tu*

Over half of FSW (67.9%, 56.1% and 60.0%) had ever tested for HIV in Port Moresby, Lae and Mt. Hagen. Of those who had tested, 51.4%, 47.9%, and 35.1% disclosed during their last test for HIV that they sold and or exchanged sex in the three sites respectively. Among women who had had tested for HIV and had a main partner 7.5%, 15.7% and 6.6% tested with their partner across the three sites respectively. See Figure 10.1.

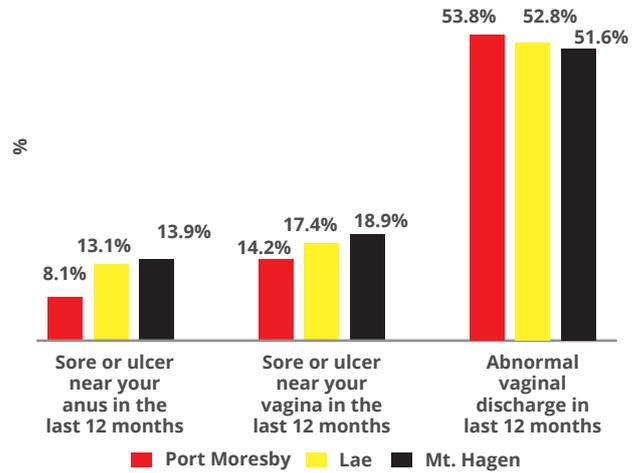


Figure 9.1: Symptoms of STIs in the past 12 months

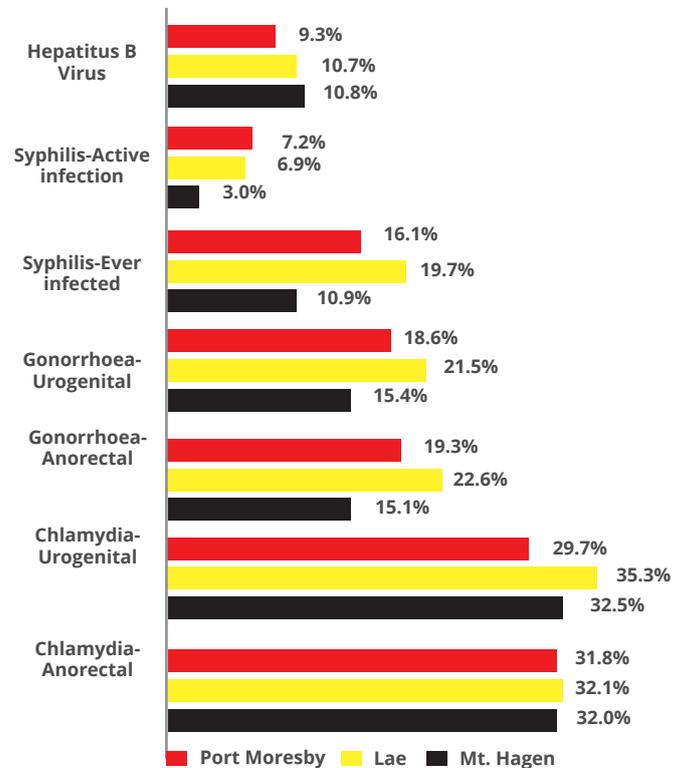


Figure 9.3: STI test results

"I hear from women that those women that go around doing this [sex work] usually get this diseases, all kinds of diseases such as HIV or gonorrhoea and such. I usually think about it and I have tested twice. The first I checked there at the clinic and this is my second test here." Sandra, 42 years, Port Moresby.

"If I have sex and if this person is someone new and I feel that I don't trust and I need to be checked, I quickly go and get tested. I would feel bad when I go to get my result because I used to think that I must have already had the disease. My heart would beat faster and I get impatient to get my results back". Anesa, 24 years, Port Moresby.

"I did test for HIV once and they said I was negative so I never went again. This was in 2016 up till now I've come here. I only go out with four men only with whom I trust so I won't have it [HIV]. I usually think like that so I have never gone for testing until now." Monica, 25 years, Lae.

The common reasons for never testing for HIV in each of the sites were:

► Port Moresby: 1) feeling fine and healthy (38.5%), 2) fear and stigma (28.4%) and 3) not knowing where to get tested (25.7%). See Figure 10.2.

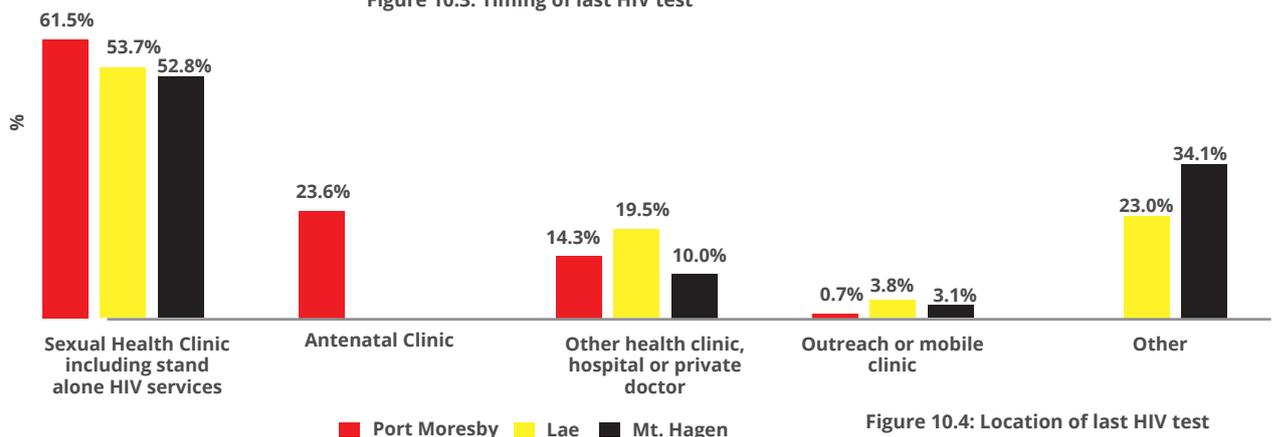
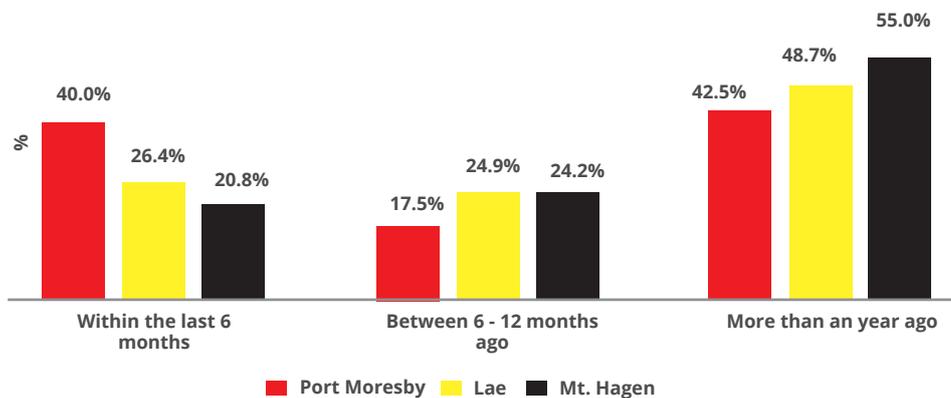
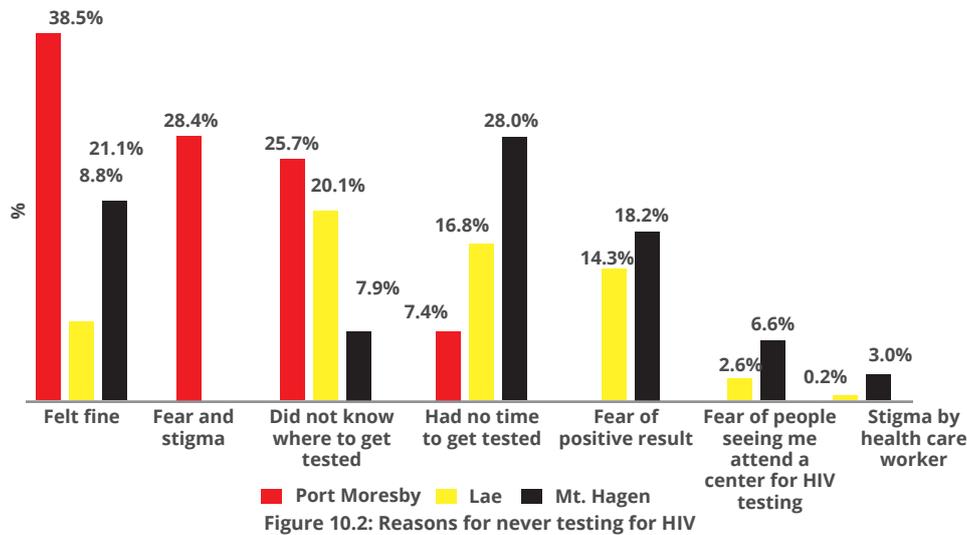
► Lae: 1) not knowing where to get tested (20.1%), 2) having no time to get tested (16.8%) and 3) fear of getting positive result (14.3%). See Figure 10.2.

► Mt. Hagen: 1) having no time to get tested (28.0%), 2) felt fine and healthy (21.1%) and 3) fear of getting positive result (18.2%). See Figure 10.2.

Most of the FSW who had ever tested for HIV did so within the last 6 months (40.0%, 26.4% and 20.8%) with most testing at a sexual health service (61.5%, 53.7% and 52.8%) in the three sites. See Figures 10.3 and 10.4.

Excluding those who knew that they were HIV positive, the most common reason for not testing for HIV in the last 12 months in each of the sites were:

► Port Moresby: 1) feeling fine (53.0%); 2) did not feel like testing



(19.8%) and; 3) the feeling fear/stigma (7.4%). See Figure 10.5.

► Lae: 1) did not have time to get tested (41.2%); 2) feeling fine/healthy (20.5%) and; 3) did not feel like testing (18.1%). See Figure 10.5.

► Mt. Hagen: 1) feeling fine/healthy (38.1%); 2) had no time to get tested (33.2%) and; 3) the feeling of fear/stigma (14.0%). See Figure 10.5.

Of those who tested for HIV prior to the study, 9.7%, 6.2% and 14.7% tested HIV positive and 4.8%, 7.4% and 3.7% did not know their result in Port Moresby, Lae and Mt. Hagen respectively. See Figure 10.6.

FSW were more likely to disclose their HIV status to a family member (78.6%, 69.9% and 88.5% respectively) or a doctor (48.6%, 67.9% and 51.9% respectively). Proportionally more HIV positive FSW in Lae disclosed to a friend, either involved in sex work (59.1%) or not (47.9) compared with HIV positive FSW in other cities. See Figure 10.7.

"I have seen a big change when I came out and disclosed my HIV status and joined NGOs. I see that my life has changed. I see that respect is there; support is there [and] help is there. I grow stronger and stronger every time I disclose my status. I disclose at a national level and [also] advocate at a national level so I personally feel that disclosure is a very important thing. When you disclose, it will take you to the next level and it will also give you courage and strength to move on and live." Yano, 28 years, Port Moresby.

"He [my husband] went to a private hospital and took his test but he wouldn't tell me but as for me, I have been to an HIV training and I know the symptoms. He can hide it from me but I can tell when he gets this back aches and when he's feeling sick, gets cold and he would have this itchiness. I know but I wouldn't say anything. I knew I was already infected too and I didn't tell him. But I could tell from the symptoms he had it; I knew that he is infected too." Sia, 40 years, Port Moresby.

"Many people don't know; I usually keep it to myself. I fear they might speak out and people might say I am a woman with bad disease. They would discriminate me or I will be stigmatised so I keep it to myself." Sonia, 24 years, Lae.

"You have the HIV virus and such and such. It was my first time so when I heard this, I was very worried. I felt like one part of my life had left me at that time. I came outside and I disclosed to my father. I told my father that I am like this and he said 'Oh, this is nothing in the eyes of God, so you go to church and live'. He encouraged me and I was strengthened by what he said to me." Maria 25 years, Port Moresby.

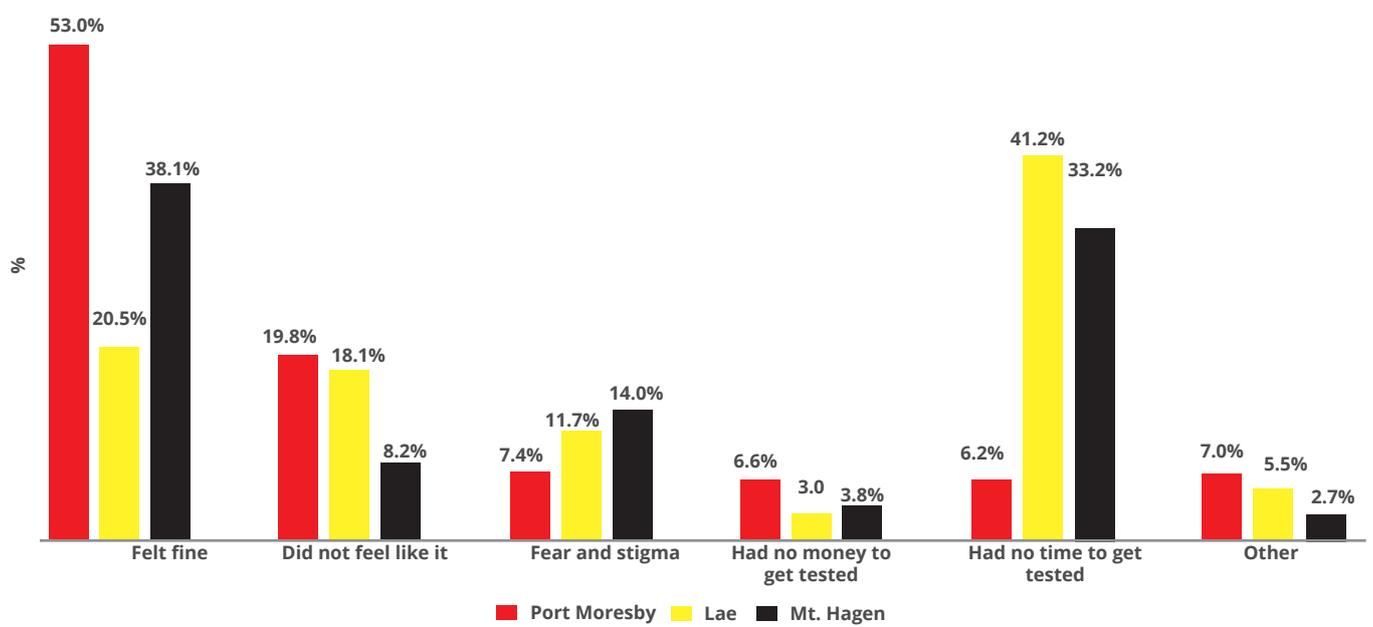


Figure 10.5: Reason for not testing in the last 12 months

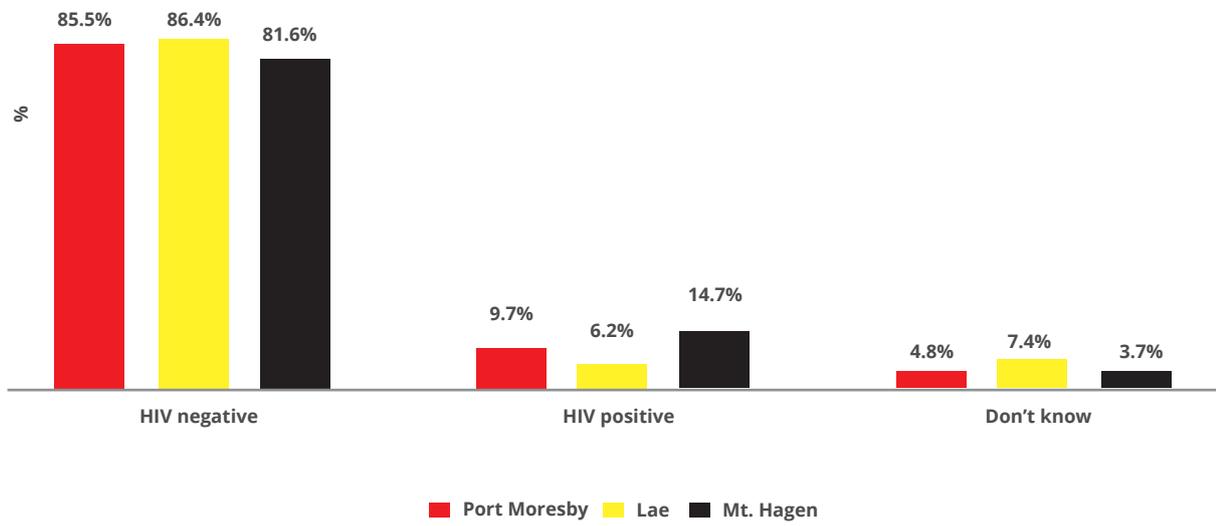


Figure 10.6: Result of last HIV test prior to Kauntim mi tu

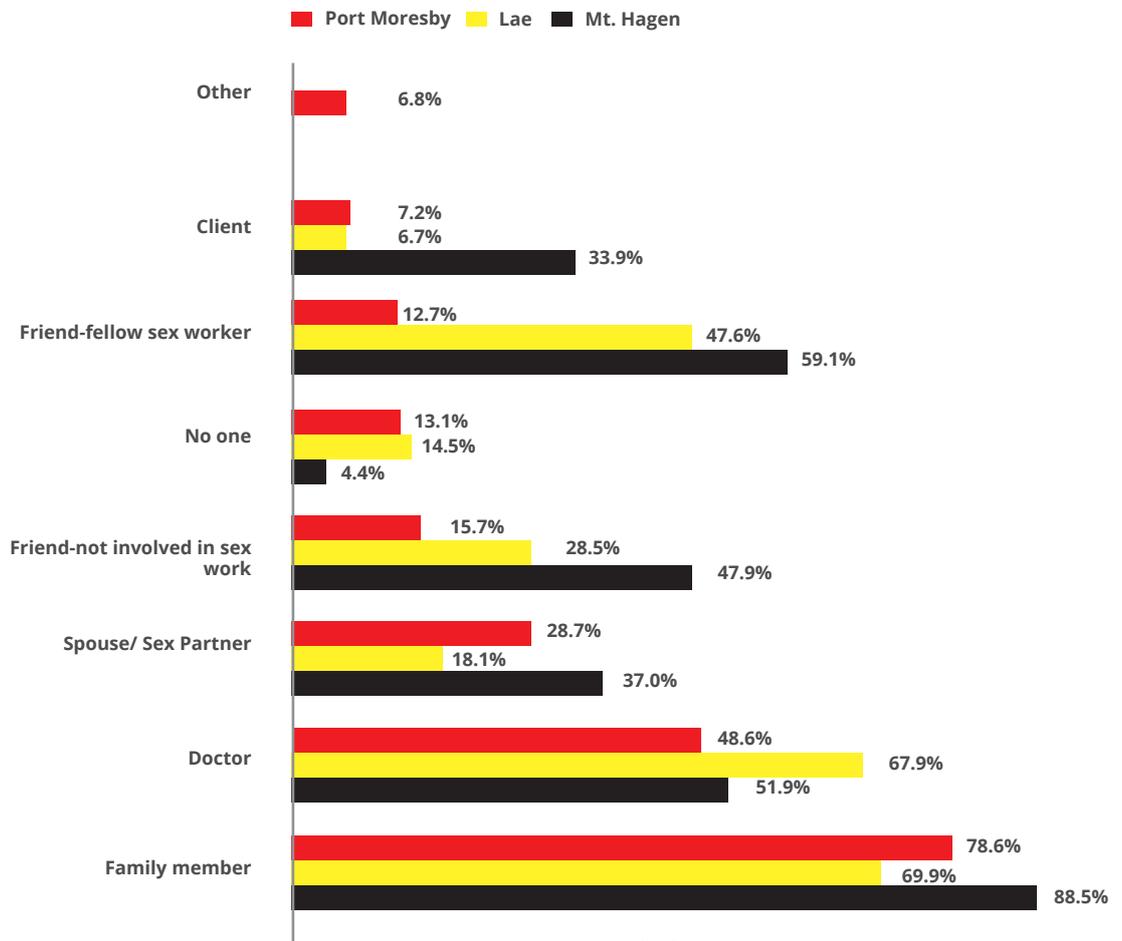


Figure 10.7: HIV disclosure
* Multiple responses allowed

"There's a man who usually comes to my house. He's married and has two children but he doesn't know my status. He comes around quiet often at night time but he is not my husband and so I don't tell him. My mother and I are the only two people that knows about my HIV status and no other family. They usually think that I am normal. This is my one year of living with HIV."
Pokaya, 24, Lae.

"I fear my life. I am like the only child in the family and they will tell my father and he would chop me. He is a leader too and I have already tarnished his name. That is why I am afraid to tell anyone. People suspect and they try to get a hold of me but I hide from them. I would contact a client and I go off with him. I never settle at home." Mofa, 20 years, Lae.

10.2. HIV care and treatment

Almost all FSW in Port Moresby, Lae and Mt. Hagen who had previously been diagnosed with HIV had been linked to HIV care (96.0%, 100% and 96.3%) respectively (data not shown). Almost all FSW who were aware of their HIV infection have taken ART (91.5%, 100.0% and 96.4%) and of them, 84.0%, 92.2% and 93.3% were currently on treatment in Port Moresby, Lae and Mt. Hagen. See Figure 10.8.

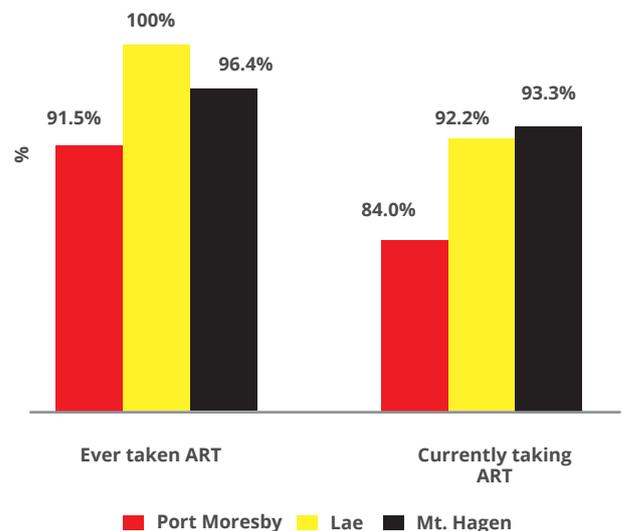


Figure 10.8: History of ART

"I usually think that I'm negative. I never think that I'm positive. I usually think that I am not a victim I have a strong conviction in my heart that I am negative. Why would I take this ART? Why will I take this medicine throughout my life? I'm not positive, I'm negative. I live convincing myself that. So when I come to the clinic, they [clinicians] would say 'Ah, what do you think about your ART?' and I tell them to wait and give me time to think." Sia, 40 years, Port Moresby.

"I left my medicines and ran into hiding from the father of my children. I said to myself that he might know the clinic that I usually get my medications from and he might wait there to attack me. I missed my medication for almost 5 months until I was very sick. I nearly died and so I went to the ward [hospital] and told the nurses. The nurses would go down to the clinic and get my medicine and bring them to me."
Rachael, 45 years, Port Moresby.

"ART boosts you. Like in the past I never gave much though about eating. Since I started taking ART, it has increased my desire to eat a lot. My appetite has gone up and I see that ART has helped me. It has helped me a lot." Scholar, Age not known, Port Moresby.

"Now that I am on treatment, I feel that I am regaining my weight. My skin tone has become light and normal again. My looks have gone back to what I was like before my diagnosis. I never miss it because the nurses and doctors told me that if I miss it, I will only be asking for my death. That is why I fear missing my medication and I take it with me where ever I go." Sonia, 24 years, Lae.

"ART is like my only life. It's not the money; I don't care about money. They say sister is important, she isn't, mother is life but is isn't too. I can say that ART is my whole heart. When I wake up, I get up with it and I go around with it."
Pokaya, 24 years, Lae.

"When I started taking that medicine, my body came back again. I felt that this medicine was an incredible medicine that I was taking so I decided not to go out so much. I took the advice of that female doctor not to spend too much time having sex with men." Mofa, 20 years, Lae.

Among FSW who knew they were HIV positive, 37.2% in Port Moresby, 3 people (18.2%) in Lae and 35.4% in Mt. Hagen ever undertook a CD4 cell test (data not shown).

Almost three in four (73.8%) FSW who were living with HIV in Port Moresby, two in three (65.5%) in Lae and one in two (50.9%) in Mt. Hagen were asked at their HIV clinic appointment if they had any symptoms of TB. (data not shown). Almost half (51.6% and 48.1%) of HIV positive FSW in Port Moresby and Lae and almost one in three (32.6%) in Mt. Hagen had had any one of the four HIV-related symptoms (cough, fever, night sweats or unexplained weight loss in the last two weeks) of TB in the last 12 months. (data not shown).

Of the 31, 22 and 59 FSW in Port Moresby, Lae and Mt. Hagen respectively who were aware of their HIV status and had never had TB, 12, 6 and 17 of them, respectively, have taken intermittent prophylactic therapy to prevent TB.

10.3. Prevalence of HIV

HIV prevalence among FSW was 14.9% in Port Moresby, 11.9% in Lae and 19.6% in Mt. Hagen. See Figure 10.9.

Among the 24, 29 and 68 FSW in the

study who self-reported being aware of their infection in our study, 60.0%, 68.3% and 45.8% had less than 500 CD4 T cells/ μ L in Port Moresby, Lae and Mt. Hagen respectively (data not shown).

Among the 24, 27 and 56 FSW who self-reported being on treatment for HIV, over half (54.4%, 70.4% and 80.0%) had suppressed HIV viral load (<1,000 copies/mL) in Port Moresby, Lae and Mt. Hagen respectively, with proportionally higher rates of viral suppression in Mt Hagen and Lae than Port Moresby (data not shown).

11. TUBERCULOSIS

In order to be eligible for TB testing in Kauntim mi tu, we applied the WHO screening for People with HIV, which is more sensitive than the algorithm for people without HIV. As a key population with a higher burden of HIV, this screening algorithm was decided upon to ensure that those with HIV who present with TB symptoms during study recruitment were tested for TB. Of all FSW in Port Moresby, Lae and Mt. Hagen:

56.2%, 37.9% and 37.3% had unexplained weight loss in the last two weeks;

- ▶ 35.5%, 25.7% and 25.4% had a cough in the last two weeks;
- ▶ 33.1%, 30.4% and 24.6% had a fever in the last two weeks;
- ▶ 25.9%, 29.4% and 29.8% had night sweats in the last two weeks, respectively

More than half (72.6%, 52.2% and 52.9%) of FSW in Port Moresby, Lae and Mt. Hagen experienced at least one of these symptoms of TB in the last two weeks and all of them (only in Port Moresby and Lae) and 47.0% of them in Mt. Hagen were

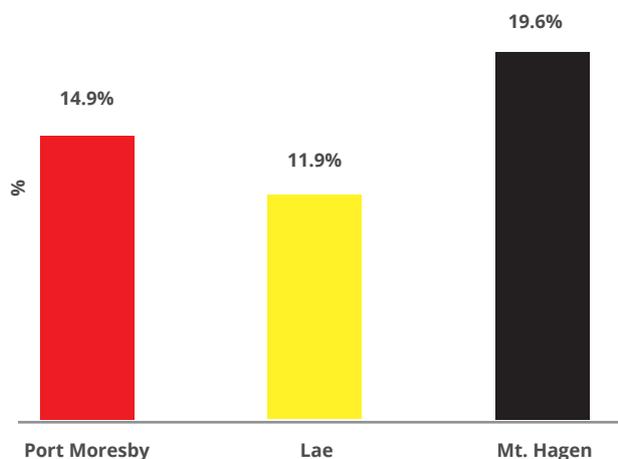


Figure 10.9: HIV prevalence

tested for TB.

Of FSW screened for tuberculosis, 2.2%, 2.0% and 0.7% in Port Moresby, Lae and Mt. Hagen respectively had TB and none had a drug resistant form.

Of all FSW screened for TB, 0.2% and 0.7% in Port Moresby and Lae had HIV/TB co-infection and none in Mt. Hagen.

Of the FSW with HIV (refer to Figure 10.9), 82.6%, 71.5% and 66.3% had at least one symptom of TB in the last two weeks and among them, 1.1%, 4.0% and none were co-infected with TB in Port Moresby, Lae and Mt. Hagen respectively.

12. GLOBAL TARGETS: 90-90-90

Papua New Guinea is not reaching the first, second or third target in all the three study sites except for Lae with its second targets where the global targets are; 90% of people with HIV are aware of their status and of those aware of their status 90% are on ART and those on ART be virally suppressed. Less than half (39.3%, 28.3% and 43.9%) of HIV positive FSW were aware that they had HIV, far below the target of 90%. In Lae, PNG is achieving the second target (91.9%) but is needing to improve the HIV viral load suppression amongst FSW on treatment, where only 70.4% have viral suppression, in order to achieve the third target. In Port Moresby and Mt. Hagen, PNG is not achieving the

second target (80.3% and 86.3% respectively) or the third target (54.1% and 80.0%), where they are still below the target of 90%. See Figure 11.1.

13. SIZE ESTIMATION

Volunteers distributed 867 and 790 unique objects to FSW throughout Port Moresby and Lae respectively to estimate the sizes of their populations in both cities utilizing the unique object multiplier method. Combining this distribution with the RDS IBBS where we estimated that 5.4% and 13.0% of the populations in both respective cities received a unique object, we estimate that there are 16,100 (95% CI: 8,232-23,874) FSW in Port Moresby and 6,100 (95% CI: 4,459-7,752) in Lae. In Mt. Hagen, we distributed 546 unique objects, but the final estimate of the population of women and girls who sell or exchange sex was calculated using the service multiplier method and, more specifically, the number of women and girls tested for HIV by local service providers. This yielded an estimate of 2,700 (95% CI: 1,655-3,638) FSW in Mt. Hagen.

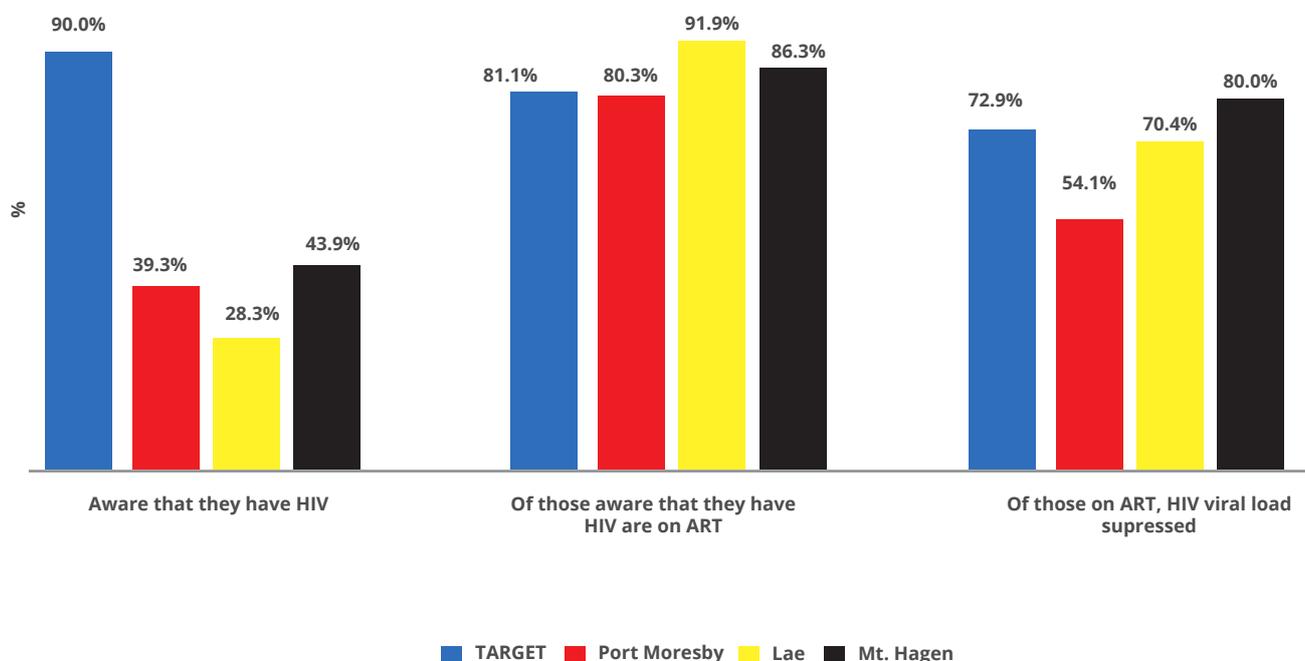


Figure 11.1 HIV Cascade among FSW in Lae





Part 2

Men who have sex with men, and transgender women

In Port Moresby **400**, and in Lae **352**, MSM and TG were eligible, provided informed consent and participated in the Kauntim mi tu study. Per the RDS method, results presented here are weighted population proportions representing the entire population of MSM and TG in Port Moresby and Lae who have had oral or anal sex with another MSM or TG in the last six months. Unless otherwise stated through reference to study participants and the specific number of people, all data here should be interpreted as weighted population proportions. We have not undertaken statistical analysis of the differences between the sites in this report. The number of MSM and TG in Mt. Hagen who were eligible and provided informed consent were too small to produce weighed population data and therefore cannot be included in this MSM and TG multi-site report. For Mt Hagen data, readers are advised to go to the site-specific report (Willie, B. et al. 2018).

1.SOCIO-DEMOGRAPHIC INFORMATION

The population of MSM and TG across the two sites had somewhat similar age distributions, although the population in Lae was slightly younger. Almost half of the population in Lae was less than 24 years of age (46.0%) while in Port Moresby this age group constituted 37.8%. The proportion of MSM and TG aged 30 years or older accounted for 35.9% of the population in Port Moresby and 28.0% in Lae. See Figure 1.1.

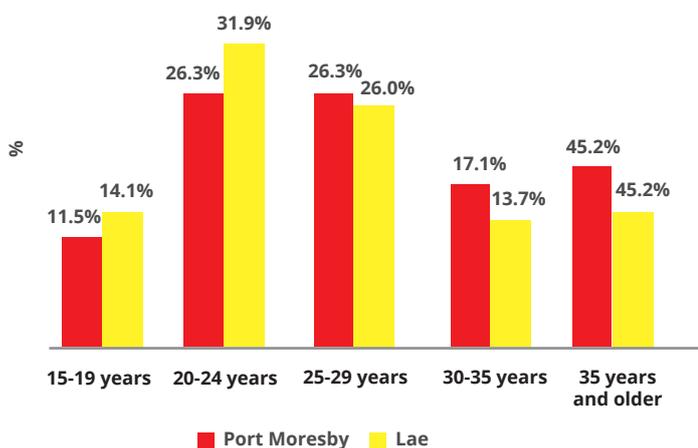


Figure 1.1: Distribution of age

The Highlands Region was the single largest region of origin for MSM and TG across the two sites. In Port Moresby 39.8% of the population self-reported that they were of mixed origin (two or more regions), while in Lae 23.7% of the population self-reported being of mixed origin. Origins from the New Guinea Islands and Momase Region were reported by 20.7% and 11.6% of the MSM and TGW population in Lae, respectively, while 8.0% and 2.3% of MSM and TG in Port Moresby reported being from these regions, respectively. See Figure 1.2.

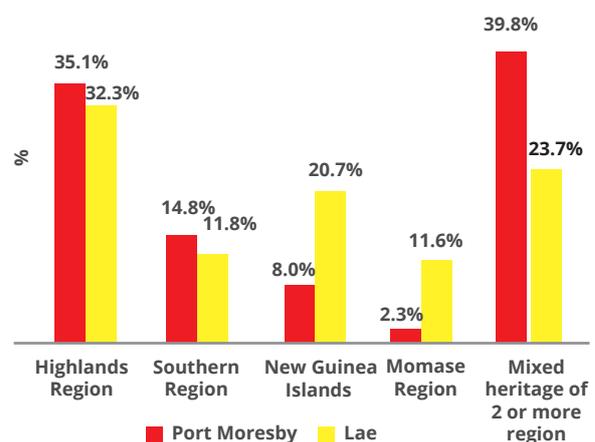


Figure 1.2: Region of origin

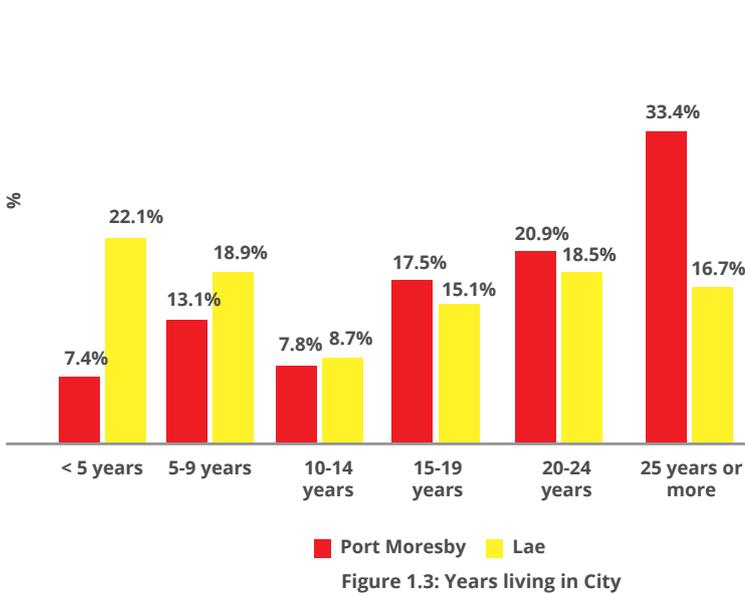


Figure 1.3: Years living in City

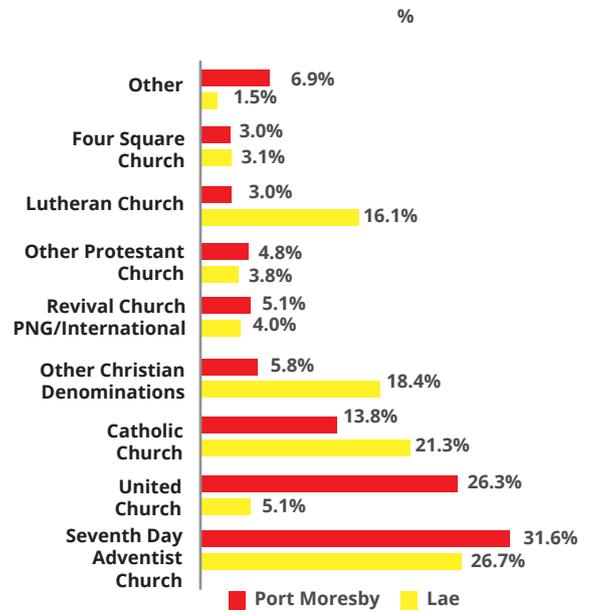


Figure 1.4: Religious affiliation

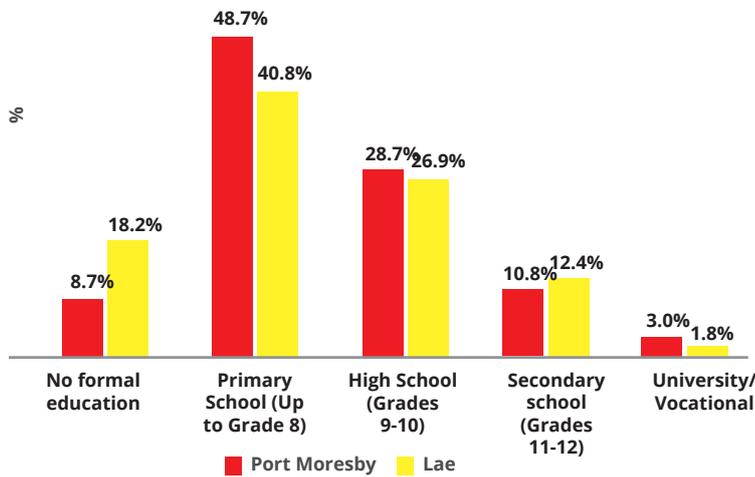


Figure 1.5: Educational level

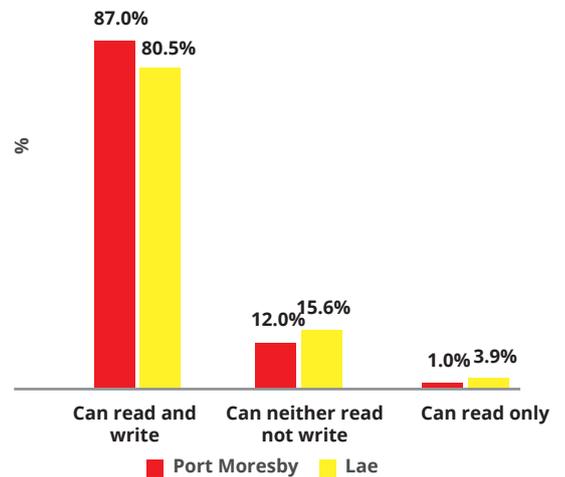


Figure 1.6: Literacy

The population of MSM and TG in Port Moresby were longer-term residences of the city compared to the population of MSM and TG in Lae who were newer to the city. For example, while 22.1% of the population reported living in Lae less than 5 years, only 7.4% reported having lived in Port Moresby for this time. Also, 33.4% of the MSM and TG population in Port Moresby reported having lived there 25 years or more while only 16.7% in Lae had. See Figure 1.3

More MSM and TG in both Port Moresby (31.6%) and Lae (26.7%) identified as Seventh Day Adventist than any other Christian denomination. Other religious affiliations were differently proportioned in Port Moresby and Lae with the Lutheran Church accounting for 3.0% in Port Moresby and 16.1% in Lae. The United Church accounted for 26.3% in Port Moresby and 5.1% in Lae, and 13.8% and 21.3% belonged to the Catholic Church, respectively). See Figure 1.4.

MSM and TG in Port Moresby were better educated than in Lae. Whereas 8.7% of MSM and TG in Port Moresby had no formal education, approximately twice the proportion (18.2%) in Lae had no formal education. See Figure 1.5.

Despite differences in formal education, literacy levels of both populations were similar in Port Moresby and Lae. See Figure 1.6

1.1. Living arrangements and marital status

The majority of MSM and TG in Port Moresby and Lae have never been married (62.5% and 70.7% respectively). Proportionally more MSM and TG in Port Moresby compared to Lae were married (18.1% and 13.9% respectively) or separated/divorced (16.6% and 13.4% respectively). See Figure 1.7.

MSM and TG in Lae were more mobile than in Port Moresby. In Lae more than two in five (41.9%) of the MSM and TG population had resided outside Lae for more than a month in the last six months compared to slightly more than one in four (24.4%) of the population in Port Moresby. See Figure 1.8.

1.2. Income and employment

A larger proportion of MSM and TG in Port Moresby (37.2%) were unemployed than in Lae (27.8%). About the same proportion of MSM and TG in Lae and Port Moresby were employed in

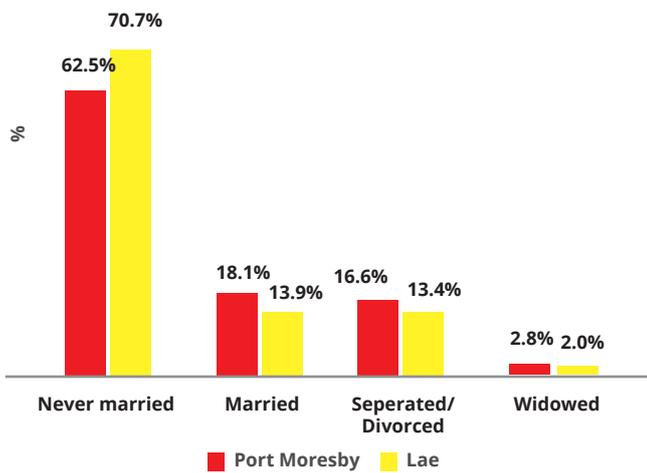


Figure 1.7: Marital Status

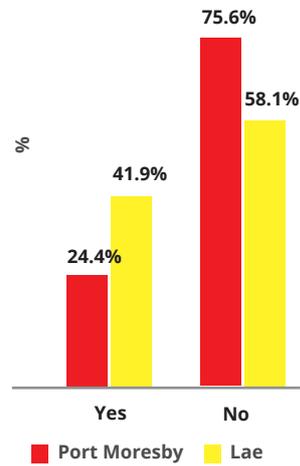


Figure 1.8: More than a month away from the city in the last 6 months

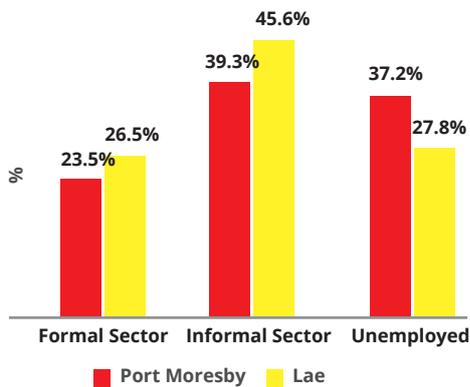


Figure 1.9: Main form of employment / income

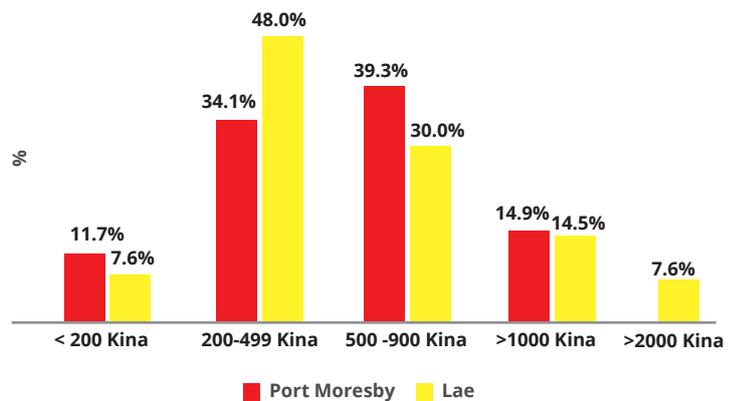


Figure 1.10: Average monthly income

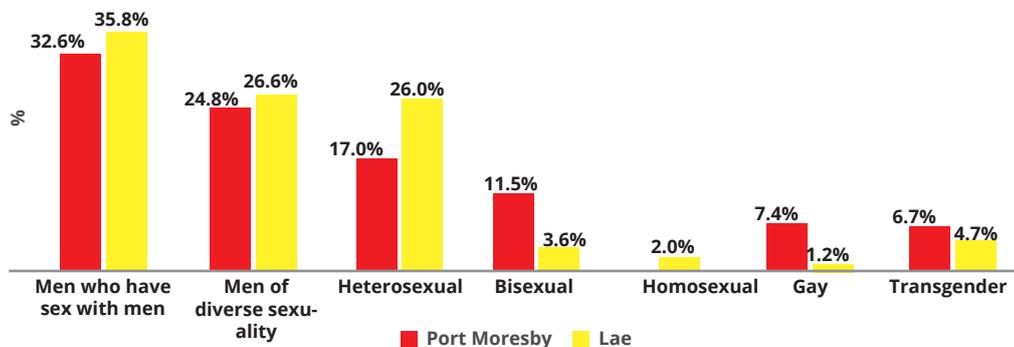


Figure 2.1: Sexual identity

the formal sector (26.5% versus 23.5%, respectively), while slightly more in Lae than Port Moresby earned income from the informal sector (45.6% versus 39.3% respectively). See Figure 1.9. Approximately one in two MSM and TG (45.8% and 55.6%) lived on less than 500 Kina per month in Port Moresby and Lae respectively. Over one in three MSM and TG earned between 500 and 999 Kina (39.9% and 30.0%) while few (14.9% and 14.5%) earned more than 1000 Kina per month in Port Moresby and Lae respectively. See Figure 1.10.

were 'men who has sex with men' or as a 'man of diverse sexualities'. In Port Moresby 32.6% and 24.7%, compared to 35.8% and 26.6%, respectively in Lae. Seventeen percent of MSM and TG in Port Moresby and 26.0% in Lae identified as 'heterosexual'. No MSM or TG in Port Moresby identified as 'homosexual', while 2.0% did so in Lae. In Port Moresby 7.1% identified as 'gay' while in Lae, very few did. Similarly, 11.5% in Port Moresby identified as 'bisexual' while few in Lae (3.6%) did. See Figure 2.1.

2.IDENTITY AND ATTRACTION

2.1.Sexual identity

Sexual identity was not uniform among MSM and TG in Port Moresby and Lae. The most common identities in both locations

*"I do not have sex with women but men only and I do not perform behaviours like a wife but behave in both ways. I'm identified as a gay man, but versatile. I can be a man and a woman at the same time. I dress up like a man but in terms of sexuality, yes, I categorize myself like that. I mean both insertive and receptive."*Kawas, 21 years, Lae

"When I am drunk and call out to my wife to have sex, you know how it is. Some women will be obedient while some would not submit easily; my wife is not too submissive. She would not submit to my request and so I would live in denial and go around with the boys. There are now very young boys ages 10 to 15 years that [who] are now coming out as gay in our country. I would lure them with betelnut and cigarette. I get excited when I see them. I tell myself while in Bomana [prison] I used to fuck men's ass so what makes you any different from them?" Theo, age not known, Port Moresby.

2.4. Living as a woman

Of those who identified as transgender, in Port Moresby, more than two in three (66.9%) TG lived publicly as a woman in the six months before the study. In Lae less than one in three (29.8%) lived publicly as a woman in the six months. See Figure 2.4.

2.5. Familial acceptance

Similar proportions of MSM and TG in Port Moresby and Lae were accepted by their families (14.3% and 10.6% respectively) and similar proportions keep private from

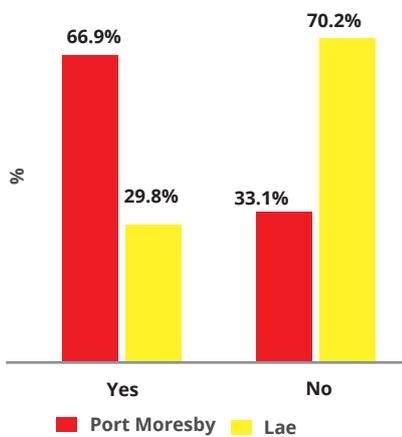


Figure 2.4: Publicly lived as a woman in the last 6 months

their families their sexual practices and/or gender and sexual identity (83.2% and 88.4% respectively). An additional 2.6% of MSM and TG in Port Moresby and 1.0% in Lae experience family rejection. See Figure 2.5.

3. SEXUAL HISTORY AND MOST RECENT SEX

3.1. History of anal sex

Almost all MSM and TG in both cities reported having anal sex with another man or TG in the last six months. See Figure 3.1. A larger proportion of MSM and TG in Lae have had anal sex with a woman (not including transgender women) (63.4%) compared to 48.2% in Port Moresby. See Figure 3.1.

"She is very experienced and she is going to pay. She will pay for it so whatever she needs, we would have to give it to her. It can be anal sex, oral or vaginal. We have oral sex, anal sex or the other way around but for anal, she is the receiver. We have all these kinds of sex during this time." Bobby, 36 years, Lae.

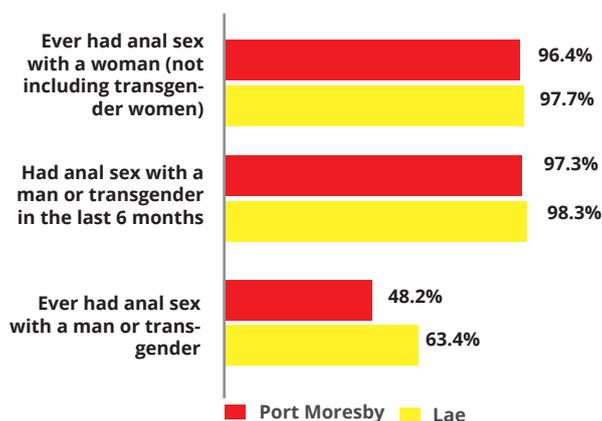


Figure 3.1: Ever had anal sex with a man or transgender

"Most women, I have had anal sex with them." Saki, age not known, Port Moresby.

3.2. Sexual debut

The single largest age category for sexual debut with a man or a transgender woman was between the ages of 15 and 19 years in both Port Moresby (37.7%) and Lae (40.7%), followed by 20 – 24 years (30.3% and 29.4% respectively). Very few and sex with an MSM or TG before the age of 15 years. See Figure 3.2.

"I started having penetrative sex when I was in high school. It's quite a long time ago and I started trying it out. I was actually attracted to boys, so I tried out oral sex and then it proceeded to penetrated sex, anal sex. It started in high school when I was 17 or 18." Takai, 25 years, Lae.

"I was in community school, Grade 5 when I first went out with a man. It was a new experience for me. He asked me and so I attended to him the first time. The experience I got from that moment after was something new and I felt like I wanted to keep on doing it. So I continued going out with some of these kinds of men and then when I went to high school, some men identified me as

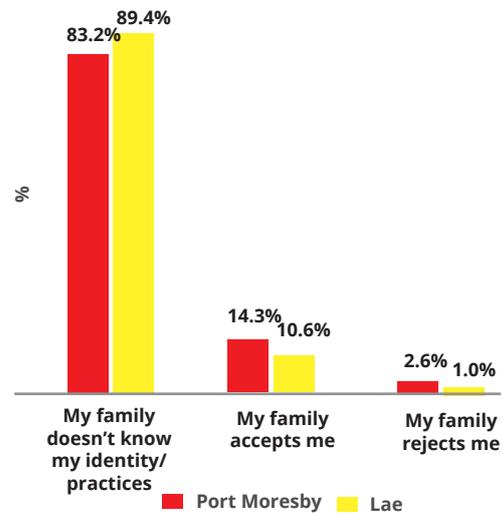


Figure 2.5: Family acceptance

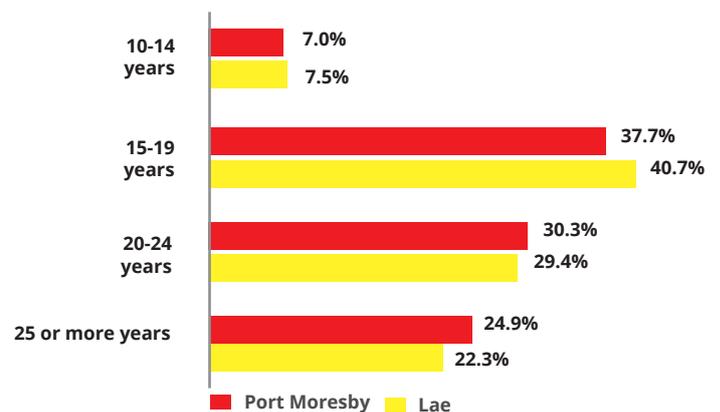


Figure 3.2: Ever had anal sex with a man or transgender

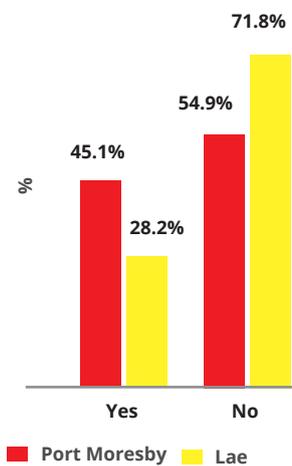


Figure 3.3: Received money, goods or services the first time had sex with a man or TG

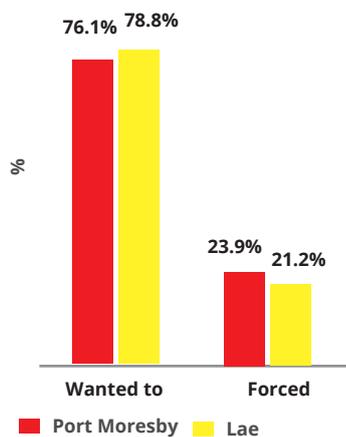


Figure 3.4: Reason for first having anal sex with a man or TG

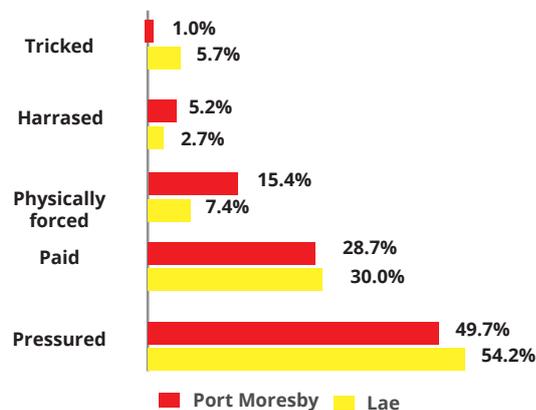


Figure 3.5: Means of being forced/coerced to have anal sex for the first time

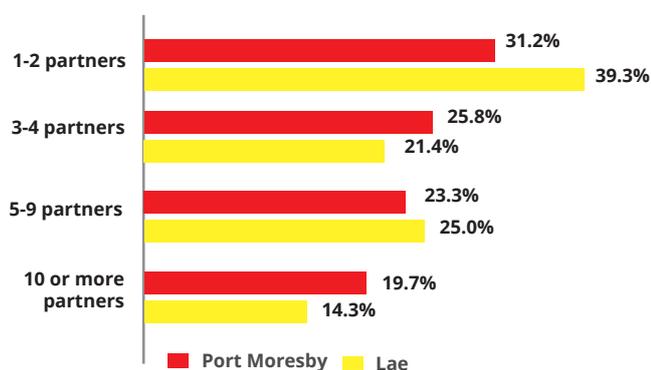


Figure 3.6: Number of lifetime partners

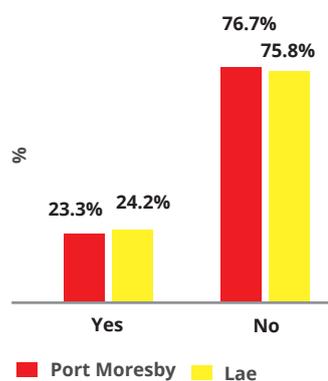


Figure 3.7: Internet or mobile phone used to meet partners

someone like this, so they started asking me out.” Saki, age not known, Port Moresby.

“My first sex, I fucked a gay. He was a church deacon. I was in Grade 8. It was a male anus and wow! The feeling I got from this sex was too good. He was much older than me with a big arse hole but his body was smooth and just like a woman.” Terry, age not known, Port Moresby.

“I think I've had about five different relationships with different men. The current one and I attend the same school and then there are two white men and then there are two other boys as well.” Akowe, 20 years, Lae.

“I am 26 years old and never had sex until just last year. I had sex without condom. This year, I have had six sexual encounters, four with women and two with men.” Seva, 26 years, Port Moresby.

Almost one in two (45.1%) MSM and TG in Port Moresby received money, goods or services the first time they had anal sex with a man or transgender women. In Lae, more than one in four (28.2%) did. See Figure 3.3.

Approximately three in four MSM and TG in Port Moresby (76.1%) and Lae (78.8%) first had anal sex with a man or transgender woman out of free will. Around one in five MSM and TG in Port Moresby (23.9%) and Lae (21.2%) were forced to have sex the first time they did so with a man or transgender woman. See Figure 3.4. Of those who were forced in both Port Moresby and Lae, the most common reason given was that they were 'pressured' (49.7% and 54.2%, respectively). See Figure 3.5.

3.3. Number of lifetime male or transgender partners

Around one in three MSM and TG in Port Moresby and Lae have had one or two male or transgender women partners in their lifetime (31.2% and 39.3% respectively). Almost one in two MSM and TG in Port Moresby (49.1%) and Lae (46.1%) reported having between three and nine lifetime male or transgender women partners. Fewer had ten or more male or transgender women partners in their lifetime in both cities. See Figure 3.6.

3.4. Meeting sexual partners

Almost equal proportions of MSM and TG in Port Moresby and Lae used the internet or mobile phones (including applications) to meet sexual partners (23.3% and 24.2% respectively). See Figure 3.7.

3.5. Sex with female partners

The majority of MSM and TG in both Port Moresby (80.7%) and Lae (92.1%) had sex with a female (not transgender women) in the last six months. See Figure 3.8. Of those who had sex with a female in the last six months the majority in both cities only had had one female partner during the period (72.2% and 71.1%) respectively. See Figure 3.9.

“So from these four partners, I think that I will make a selection of which one I would stay remain with. I did have a lot of sexual partners but I have left them and now I am left with four. So currently I have four female sexual partners.” Mukito, Age unknown, Lae.

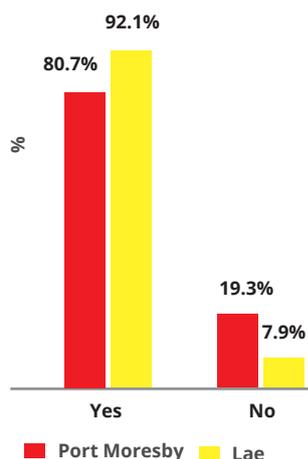


Figure 3.8: Sex with a female in the last 6 months

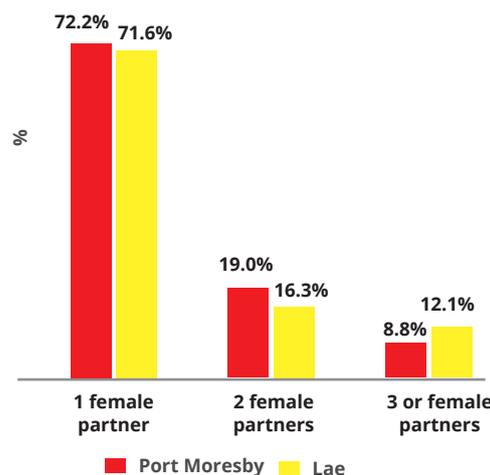


Figure 3.9: Number of main female partners in the last six months

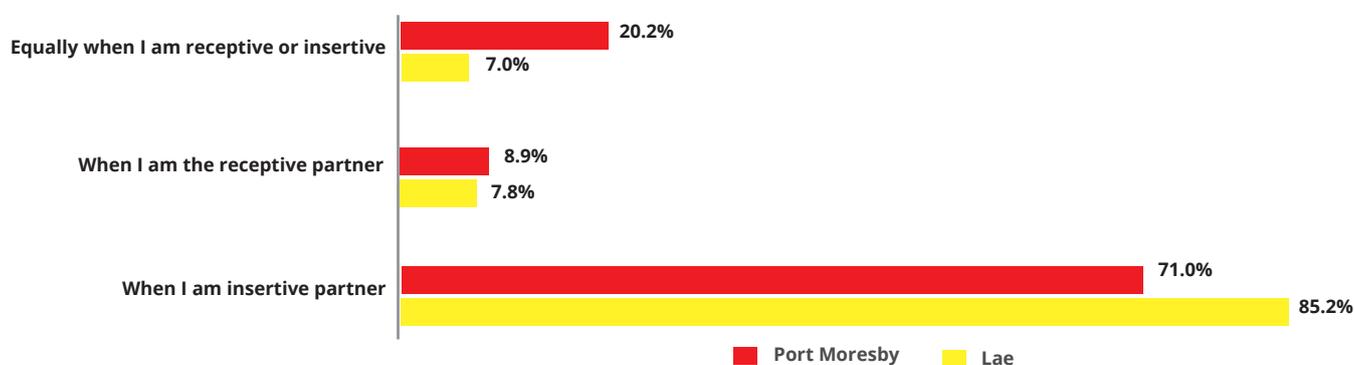


Figure 3.11: Likely to use a condom in which sexual position

"These are street girls. Fucking their vaginas and after a while if I don't feel satisfied, I fuck their mouths. I have sex the same way, but I don't fuck their arses; I only fuck their mouths and vaginas. I usually like to fuck their arses but I get scared. They don't say anything. That is the usual route and so we would still go ahead and take it."
Yawa, 26 years, Lae.

"Last two weeks ago, I got my Christmas bonus and I also took out a loan, K20,000 in total and I booked a room at Boroko Lodge for a week. I took countless women around night clubs and brought them to that room and had sex with them and used up all that money. I have no money left and am now having a hard time repaying the loan." Saki, age not known, Port Moresby.

"There are young girls that are taken in and looked after and then sent to do

sex work for them. In my case, I have around four girls that I know and have sex with. When one goes out, I have sex with another, another time with another and so on." Terry, 26 years, Port Moresby.

3.6. Condom use

The majority of MSM and TG in both cities did not use a condom the last time they had anal sex, irrespective of partner type. MSM and TG in Port Moresby (65.9%) were proportionally more likely not to use a condom than MSM and TG in Lae (59.4%). See Figure 3.10.

"Condom is good when having sex. It protects the body from diseases around the place. Before having sex, condom has to be worn; that I understand but when the time comes for sex, I never use it. I have sex without it. I am already drunk or when I am drinking, the sexual feelings just overcome me that I don't bother using condom. I go ahead and

have sex." Ranu, 32 years, Lae.

"I usually have sex with them. Sometimes I don't put on a condom. I see that thing right in front of me and when I want to look for condom, it's too late. That thing in front of me puts me under pressure and so I take would take out my penis and shove it in. I get the excitement feeling and then leave."
Yasa, 33 years, Lae.

"The reason for not using condom regularly is when a man forces me. A man would usually force me. Sometimes I would see a man's cock and would picture that cock going inside my hole and I would feel it's sweetness; I don't like want to use condom so men cause me not to use condom. I want to feel the taste of cock." Megusa, Age unknown, Lae.



FH0860

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Monday, Wednesday & Friday - Females Only
Tuesday, Thursday & Saturday - Males Only

"There is no satisfaction when you have sex with a condom. It's very important you know I must play safe to keep both not getting the STI or HIV. When I am under liquor, I don't think twice, I just go for it. That's one thing bad about me. Liquor makes me forget about it, do it quickly, something like that. When I am normal I usually use my head, ok safety first protection". Baku, 24 years, Port Moresby.

"I use condom when it is available but most of the time when I am too drunk, I rush and I don't use it. Sometimes the condom is there but I usually ignore it because I want to feel the taste of sex. If the condom is there, it's rubber and I don't like rubber because I like to go flesh to flesh so that I will really feel the taste and the pleasure of sex. This way, I will enjoy it and be sexually satisfied." Ricky, 34 years, Port Moresby

The majority of MSM and TG in Port Moresby (71.0%) and Lae (85.2%) used a condom when they were the insertive partner, compared to 8.9% and 7.8%, respectively, when they were the receptive partner). See Figure 3.11 The three most common reasons for not using a condom in Port Moresby and Lae included not being able to find one, when drunk or stoned, or when having sex with a man partner. See Figure 3.12.

4. MAIN NON-PAYING MALE AND TRANSGENDER WOMEN PARTNERS IN THE LAST SIX MONTHS

4.1. Number of main partners in the last six months

The majority of MSM and TG in Port Moresby (60.7%) and Lae (80.0%) did not have a main male or transgender woman partner in the last six months. See Figure 4.1.

"I've noticed these 3 sisters (transgender women) take good care of my children. They are truly my wives. They take good care of the children even when I am not around. When the children cry, they attend to them just as if they are my wives." Tyson, age not known, Port Moresby.

4.2. Sexual positioning

In Port Moresby (62.5%) and Lae (65.5%) around two in three MSM and TG were insertive partners. In Port Moresby, 20.7% of MSM and TG in Port Moresby were a receptive partner and 26.0% were in Lae. More than double the proportion of MSM and TG in Port Moresby compared to Lae were both an insertive and receptive partner (16.8% and 7.5% respectively). See Figure 4.2.

Only about one in three MSM and TG in both Port Moresby (31.3%) and Lae (35.5%) reported that a condom was used the last time that they had anal sex with a main male or transgender women partner. See Figure 4.3

"I use condoms very regularly all the time. I have a regular boy who I have an intimate relationship with. If I'm away [or] I've been away from Lae, I just came back just this month. So seven months I think from Lae and like when I am back I usually ask them if you've gone to check up. I ask them and or usually I drag them along for a VCT check up and then we can, is to find out their results and then we have sex like unprotected sex. Or I go to the extent of producing the results and then we have unprotected sex but like if I am back now and they want to have sex then we have to use a condom. But with one-night stands and strangers or people whom I just met if they want to have sex, I say, okay we have to use condom so I'd say I practice a lot safe sex." Takai, 25 years, Lae.

"My best friend tells me skin to skin is nice when we have sex. When I tell him to use condom, he would say that condom makes it difficult for him to ejaculate quickly. Sometimes he gets mad and tells me he is not just anybody trying to have sex with me ." Baria, 33 years, Port Moresby.

"I usually prefer not to use condom with the sisters [transgender women]. Sometimes they would force me to use safety but I usually tell them that I want to really feel it. I want to feel my dick going inside and the gripping. No condom, how am I supposed to feel you? I must go skin to skin and experience the nice sexual pleasure." Tyson, age not known, Port Moresby.

Roughly equal proportions of MSM and TG in Port Moresby and Lae 'always', 'sometimes' or 'never' used a condom during sex with a main male or transgender woman partner in the last six months. Approximately only one in five always used a condom

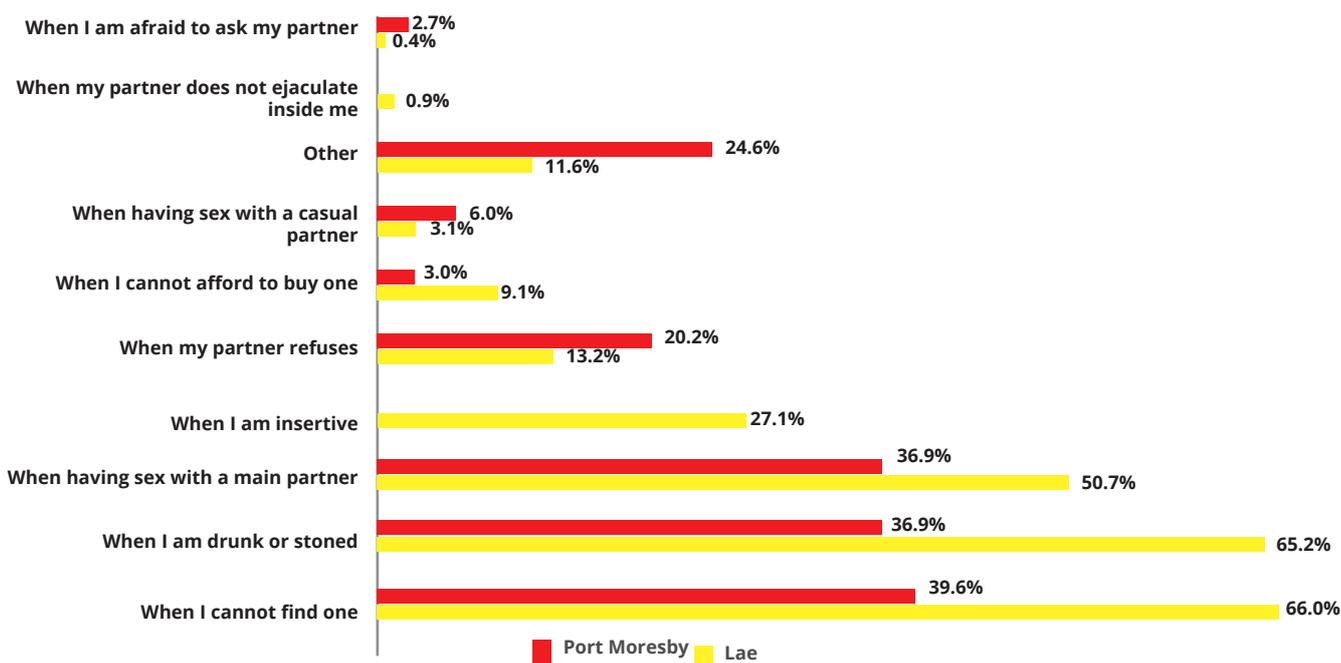


Figure 3.12: Reasons for not using a condom

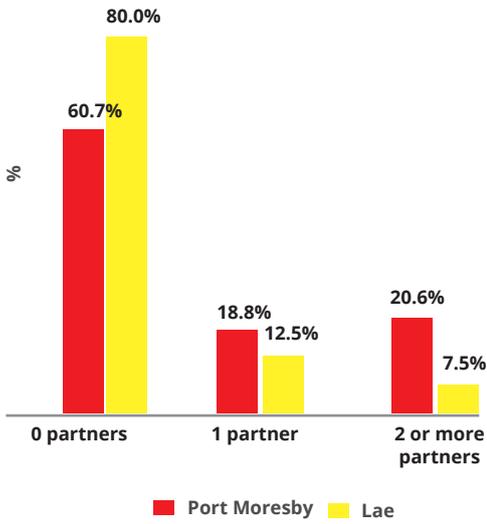


Figure 4.1: Number of main male or TG in the last 6 months

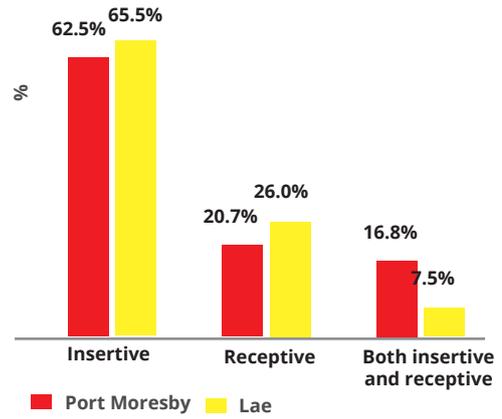


Figure 4.2: Usual sexual position when having anal sex with main male partner or TG in the last 6 months

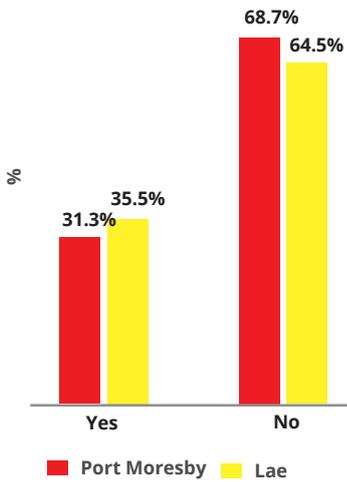


Figure 4.3: Condom use last time had anal sex with a main male or TG partner

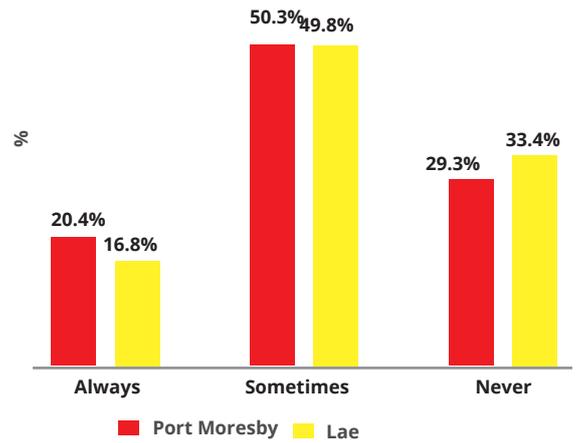


Figure 4.4: Frequency of condom use with a main male or TG partner in the last 6 months

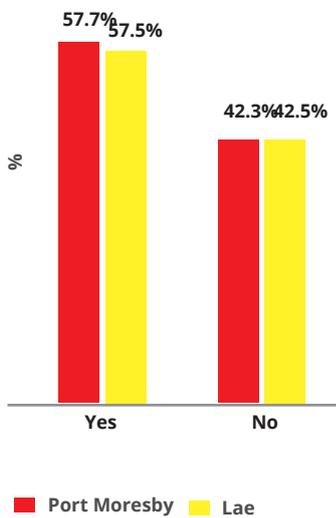


Figure 4.5: Could ask a main male or TG partner to use a condom

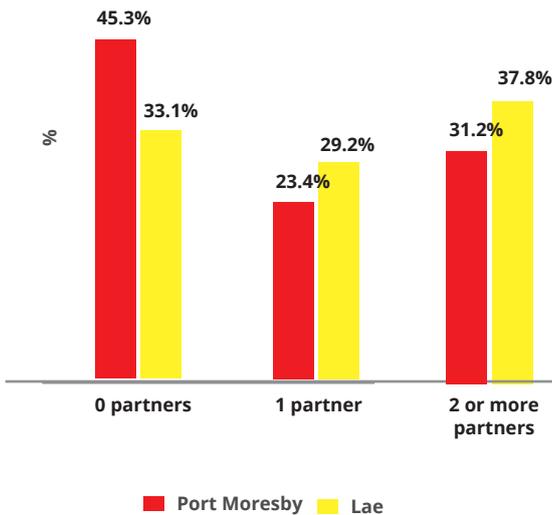


Figure 5.1: Number of casual male or TG partners in the last 6 months

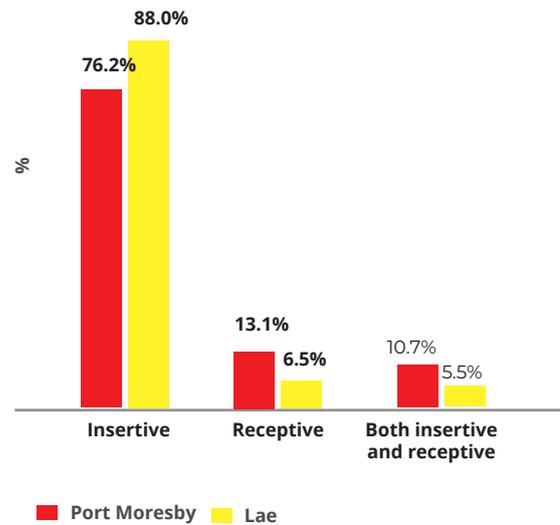


Figure 5.2: Usual sexual position with casual male or TG partner

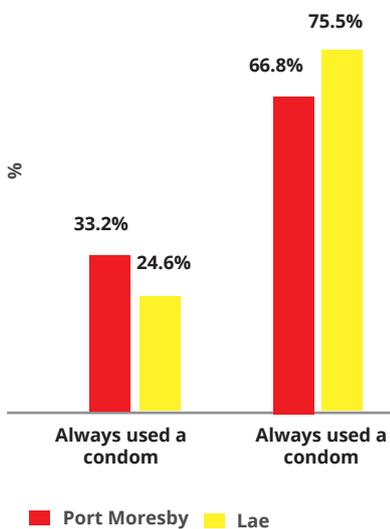


Figure 5.3: Condom use with sexual partners in the last 6 months

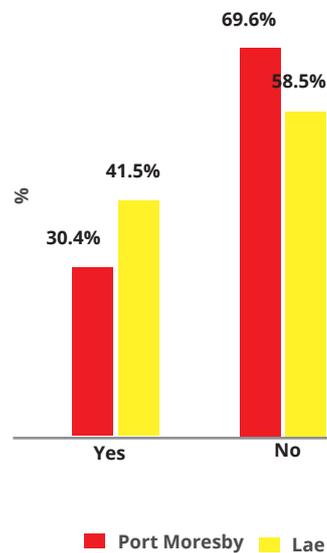


Figure 5.4: Condom use during anal sex with a casual male or TG partner

during sex with a main male or transgender woman partner in the last six months (20.4% in Port Moresby and 16.8% in Lae). However, one in two MSM and TG in both cities (57.7% in Port Moresby and 57.5% in Lae) reported that they could ask a main male or transgender partner to use a condom during sex. See Figure 4.5.

5. CASUAL NON-PAYING MALE AND TRANSGENDER WOMEN PARTNER/S

5.1. Number of casual partners

Roughly one in three MSM and TG in Port Moresby (31.2%) and almost two in five in Lae (37.8%) have had two or more casual male or transgender women partners in the last six months. One in three in Lae (33.1%) and almost one in two in Port Moresby (45.3%) reported no casual male or transgender women partners in this time. See Figure 5.1.

5.2. Sexual positioning

The majority of MSM and TG in both Port Moresby (76.2%) and Lae (88.0%) were the insertive sexual partner with casual partners. More MSM and TG in Port Moresby reported engaging in receptive (13.1%) or both insertive and receptive sex (10.7%) than in Lae (6.5% and 5.5% respectively). See Figure 5.2.

"I identify myself as gay man but versatile. Like I cannot have relations with a woman but men only. I don't act as and behave as a wife but be both. I can be both male and female at the same time. Dress normal and live like a male and female at the same time but when it comes to my sexuality, I categorize myself under this meaning I can be both insertive and receptive, I play both roles." Kawas, 21 years, Lae.

5.3. Condom use

In Port Moresby two in three MSM and TG (66.8%) did not always use a condom with casual male or transgender woman partners in the last six months, compared to three in four (75.4%) in Lae. See Figure 5.3.

"Casual partners are I would say it's a one-night stand people that I just meet. Normally I meet them in the club, I don't need to know whatever these, where they belong, I don't need their contact what so ever but just one-night stand. Being a HIV positive person and because I normally get regular check-ups and knowing that an HIV person is more vulnerable to STIs so you can also spoil so the use of condom is very consistent with me. I always use condom with casual partners." Rocky, 25 years, Lae.

The majority of MSM and TG in Port Moresby (69.6%) and Lae (58.5%) did not use a condom the last time they had anal sex with a casual male or transgender woman partner. See Figure 5.4.

6. BUYING, SELLING OR EXCHANGING SEX

6.1. Buying sex

Most MSM and TG in both Port Moresby (90.8%) and Lae (87.1%) have never paid another man or transgender woman for sex in the last six months. Only 9.2% in Port Moresby and 12.9% in Lae had bought sex in that time. See Figure 6.1.

In Port Moresby, only 40.9% of MSM or TG who paid another MSM or TG for sex used a condom on last occasion (data not shown). In Lae, of the 42 MSM or TG who paid another MSM or TG for sex only 17 used a condom on the last occasion (data not shown). Similar proportions bought sex from the same person (55.9%) as from a different person (44.1%) in Port Moresby (data not shown). The same was reported in Lae (N=19 and N=23, respectively) (data not shown).

6.2. Selling or exchanging sex

One in two MSM and TG in Port Moresby (51.6%) and slightly more than one in three MSM and TG in Lae (38.4%) have ever sold or exchanged sex for money, goods or services. See Figure 6.2.

6.2.

Of those who have sold or exchanged sex for money, goods or services, the roughly half had only one client in the past six months in both Port Moresby (46.8%) and Lae (50.8%). Roughly equal proportions of MSM and TG in both cities have had between two and four clients (Port Moresby 43.6%; Lae 44.1%). A small proportion had sold to five or more clients. See Figure 6.3.

6.3. Sexual positioning with clients

Of MSM and TG who have ever sold or exchanged sex for money, goods or services in Port Moresby and Lae, approximately eight in ten were the insertive partner with clients (78.5% and 81.7%, respectively). A larger proportion in Port Moresby than Lae reported being receptive (16.0% and 9.5% respectively) and similarly small proportions in Port Moresby and Lae were both the insertive and receptive partner (5.5% and 8.8% respectively). See Figure 6.4.

"The sex I have with him is me giving him my "cock to suck and he would suck on it". Then I realize that he is not a woman but man. So the only way is to have oral and then I would pay him. I did try taking his rear [anal]. I inserted my penis in his anus but I felt that it was not alright. It didn't 'match' and was like a woman so I told him to suck my penis only and then we went outside after we were done." Ranu, 32 years, Lae.

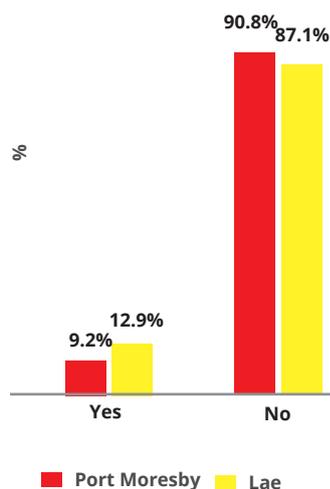


Figure 6.1: Paid another man or TG in the last 6 months

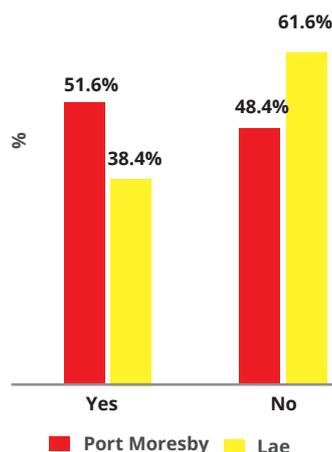


Figure 6.2.: Ever sold or exchanged sex

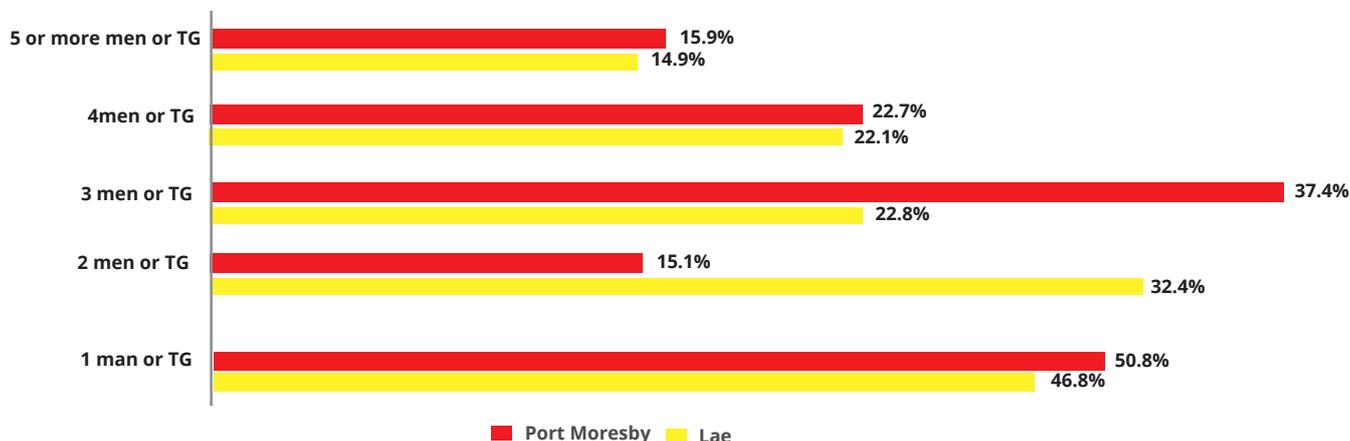


Figure 6.3: Number of clients

"I make it known to them that they must pay me when they want to use me. There are quite a few of them but there are eight of them who usually pay and bribe me. They know so they come and bribe me with beer, food and money. I don't feel guilty about it; I just go for it." Seva, 26 years, Port Moresby.

being wanted than, like they needed [me]." Rocky, 25 years, Lae.

"They usually meet us at the motels. They call us by phone and we go meet them. You give them your number and that's, we've already established a relationship. Sometimes we meet them when we go shopping and they get our contacts and we think that that's it's nothing but then they would call us and from there we gure it out that they are these kinds of people." Bobby, 36 years, Lae.

"When I was in Goroka, some of my mates that are in other provinces like Lae, Moresby, Madang, Hagen or Simbu, we know ourselves and so we contact and communicate. So if a client is on duty trip to Goroka, my friend would text to inform me. He will also give my phone number to that client and when that client arrives in Goroka, he would get in touch with me. I would go see him and he would at least give me K20, K50 or buy me beer and then we would have sex. In the past we used phone but now we use Facebook so we have our own network." Saki, age not known, Port Moresby.

"I normally meet them on social networks like dating sites, face book and what do you call it; 'what's up blog and peer dating sites. Normally I just chat, I tell them what I want, like who I am but most of the times they ask. I don't like to let other people know about me wanting sex for money, so I like to like feel like

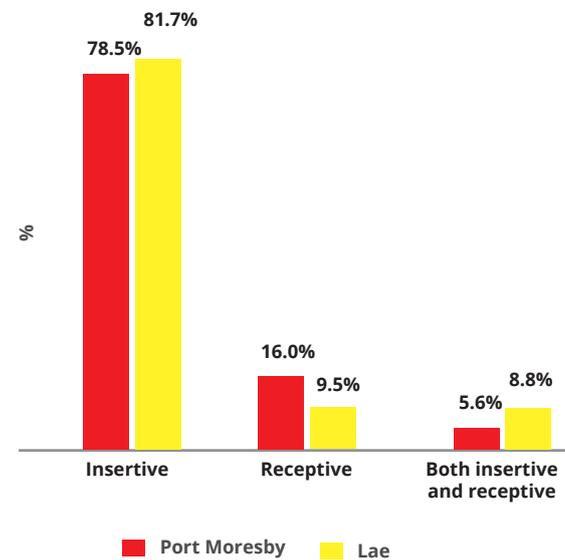


Figure 6.4: Usual sexual position with clients

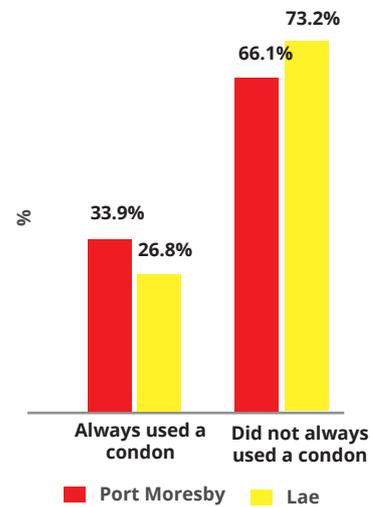


Figure 6.5: Condom use with a male or TG

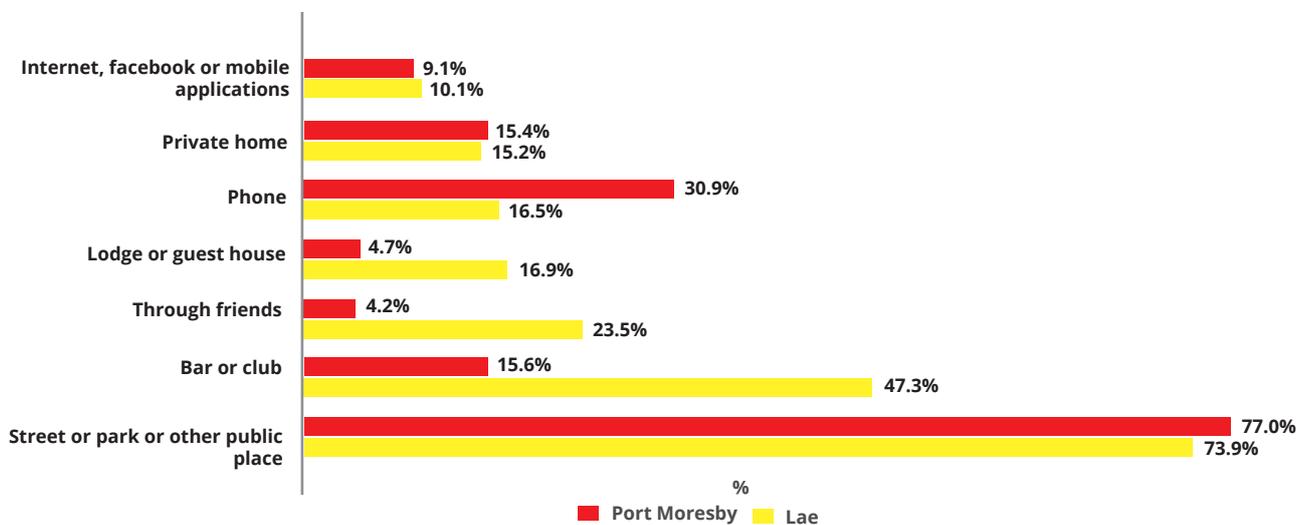


Figure 6.6: Contacting clients

7. SOCIAL SUPPORT, MENTAL HEALTH AND STIGMA AND DEPRESSION

7.1. Social support

Whereas 64.2% of MSM and TG in Port Moresby negotiated or stood up against the police to help an MSM or TG peer in the last 12 months, in Lae only 12.9% did. Most MSM or TG in Port Moresby (92.7%) could rely on an MSM or TG peer to accompany them to the doctor compared to 58.6% in Lae. On both of these measures of social support, MSM and TG had stronger support in Port Moresby than in Lae. On the other hand, a in Port Moresby 53.7% could rely on another MSM or TG to assist them to deal with a violent partner if while 65.2% in Lae could See Figure 7.1.

7.2. Depression

Based on the two-item Patient Health Questionnaire-2 screening tool for depression, a small proportion of MSM and TG in Port Moresby (14.6%) had depression. This is in stark contrast to MSM and TG in Lae where more than one in two (54.5%) had depression. See Figure 7.2.

7.3. Shame, stigma and discrimination

Around one in three MSM and TG in Port Moresby (32.7%) and Lae (29.8%) felt ashamed of their sexual practices or gender identity. Almost one in two MSM and TG in Port Moresby (48.0%) and Lae (44.9%) felt the need to hide their sexual practices and/or gender identity when accessing sexual health services. In Port Moresby 13.6% and in Lae 8.7% reported being blackmailed by someone because of their sexual practices or gender identity.

See Figure 7.3. Few MSM and TG in Port Moresby (4.1%) and Lae (0.6%) have ever been arrested because of their sexual practices or gender identity (data not shown). In order to avoid trouble with the Police, 12.7% of MSM and TG in Port Moresby and 4.7% in Lae had given something to the Police (data not shown).

7.4. Drug use

There was very little illegal drug use in the way of cocaine, heroin, and marijuana among MSM and TG across the two cities, although it was proportionally higher in Port Moresby (5.1%) than in Lae (1.8%). There were even smaller proportions of MSM and TG in both Port Moresby and Lae who had ever injected illegal drugs (1.9% and 0.4%, respectively). See Figure 7.4.

8. VIOLENCE

8.1. Physical violence

Three in four MSM and TG in Lae (75.8%) and nearly three in five in Port Moresby (58.5%) had ever experienced physical violence. Among those who experienced violence, very few in either Port Moresby or Lae believed that their first experience of violence was related to their sexual practices and or gender identity (8.6% and 3.5% respectively). Among those who had ever experienced violence, more than one in two MSM and TG in Port Moresby (53.8%) and more than one in four (28.5%) in Lae experienced physical violence in the last 12 months. Of those who had experienced physical violence in the last 12 months, very few believed that the physical violence was associated with their sexual practices and or gender identity. See Figure 8.1.

The majority of MSM and TG in Port Moresby (62.6%) and Lae (73.2%) who had experienced physical violence never sought

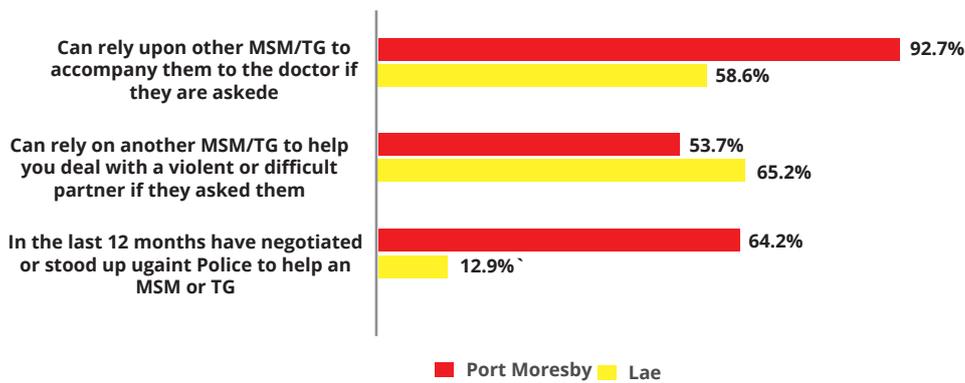


Figure 7.1: Social support

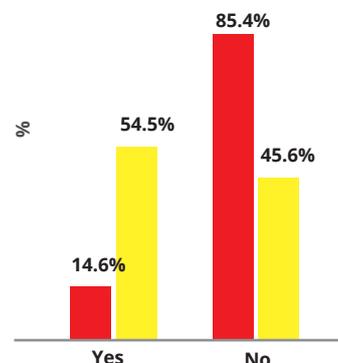


Figure 7.2: Depression

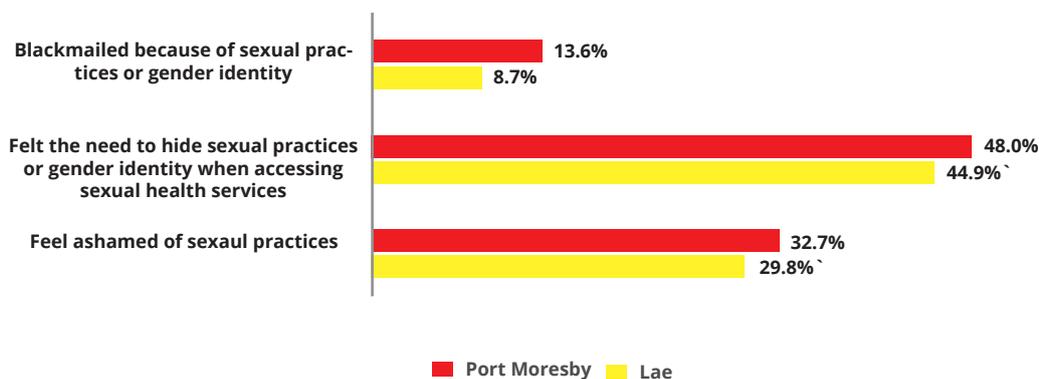


Figure 7.3: Discrimination

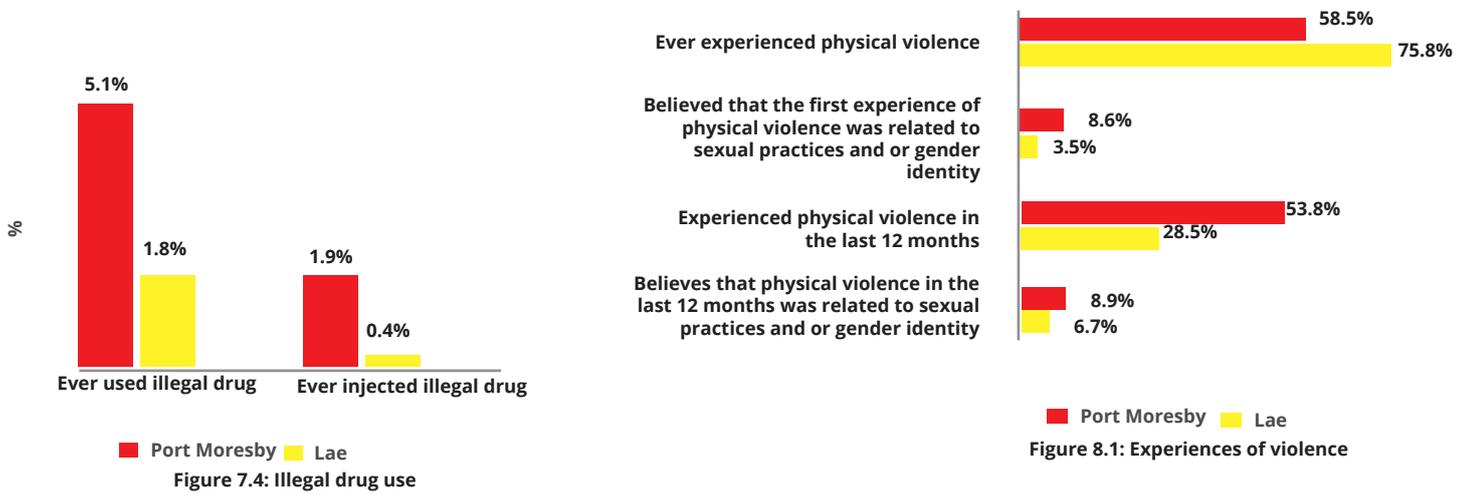


Figure 7.4: Illegal drug use

Figure 8.1: Experiences of violence

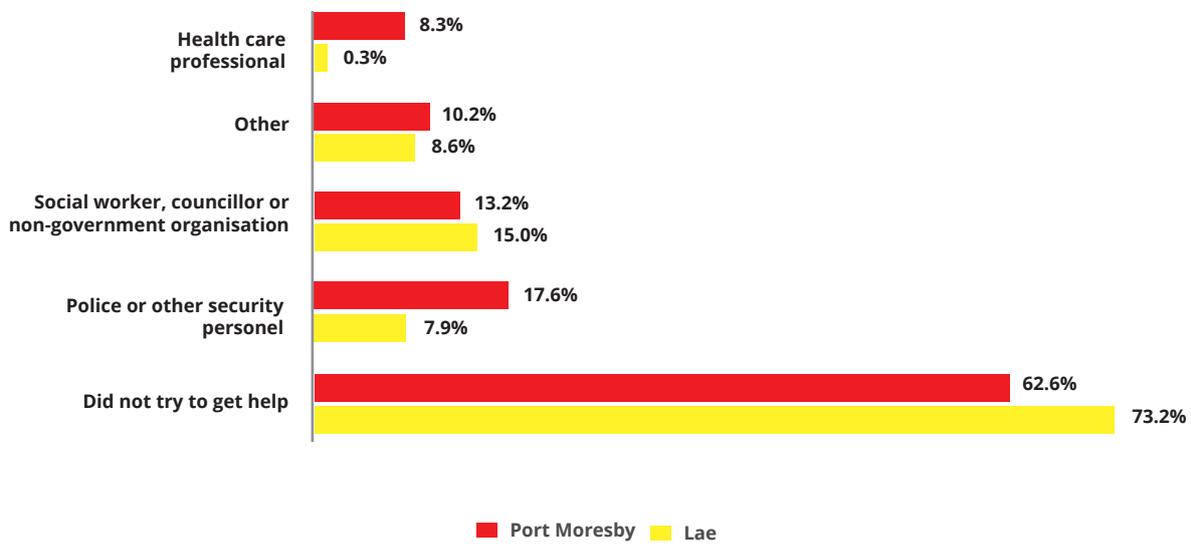


Figure 8.2: Access to support services after physical violence *Multiple responses possible

help. See Figure 8.2. Of those who sought support, 13.2% and 15.0% did so from a social worker, counsellor or non-government organisation in Port Moresby and Lae respectively. About one in five (17.6%) in Port Moresby and one in ten (7.9%) in Lae sought the professional support of Police or security services with much fewer from health care professionals (8.3% and 0.3% respectively). See Figure 8.2.

8.2. Sexual violence

Approximately one in four MSM and TG in Port Moresby (24.1%) and Lae (23.7%) have ever been forced to have sex. See Figure 8.3. Of these people, one in five in Port Moresby (21.7%) and almost two in five in Lae (39.7%) were forced to have sex by two or more people at the same time. See Figure 8.3. In the majority of cases (83.4% in Port Moresby and 68.4% in Lae) the perpetrator was known by the survivors of sexual violence. See Figure 8.3. In Port Moresby (57.1%) more than one in two MSM and TG identified that the first person to ever force them to have sex was a male, with slightly less reporting this in Lae (49.7%). See Figure 8.3.

The age at which MSM and TG first experienced sexual violence varied somewhat across both cities, however for the majority in both Port Moresby (81.8%) and Lae (78.3%) it occurred at age 24 years or younger. A larger proportion of MSM and TG in Port Moresby (15.3%) experienced sexual violence for the first time by age 14 years than in Lae (7.9%). The first experience of sexual violence occurred between the ages of 20 and 24 years for a smaller share of MSM and TG in Port Moresby (23.2%) than in Lae (30.2%). Roughly similar proportions experienced sexual violence in the other age categories. See Figure 8.4. The majority of MSM and TG in both cities knew the identity of the last person who forced them to have sex. Eight in nine MSM and TG in Port Moresby (82.4%) and two in three in Lae knew the identity of the last person who forced them to have sex (66.2%). See Figure 8.5.

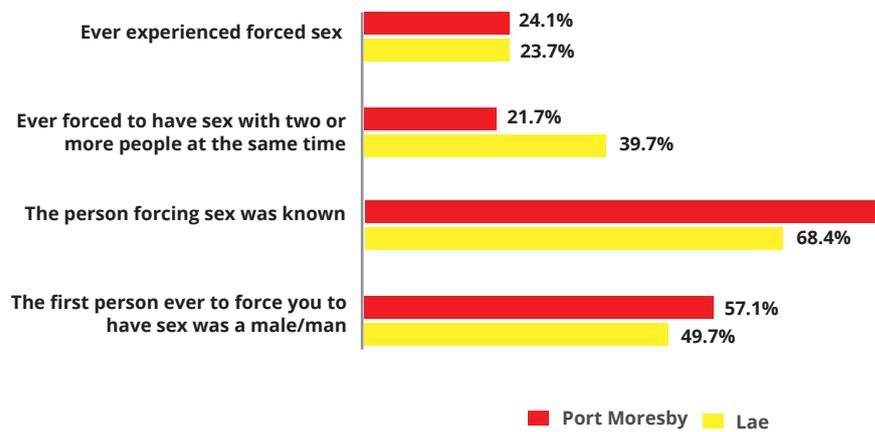


Figure 8.3: History of sexual violence

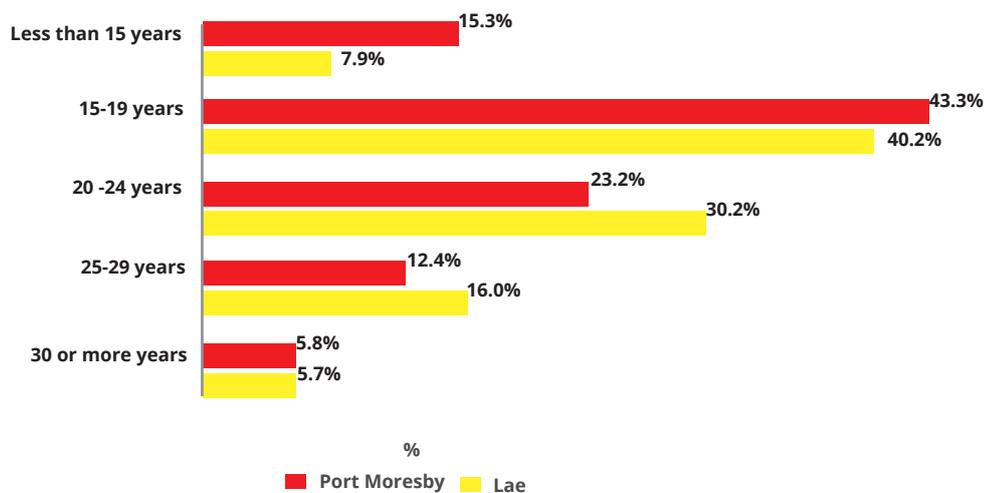


Figure 8.4: Age of first sexual violence

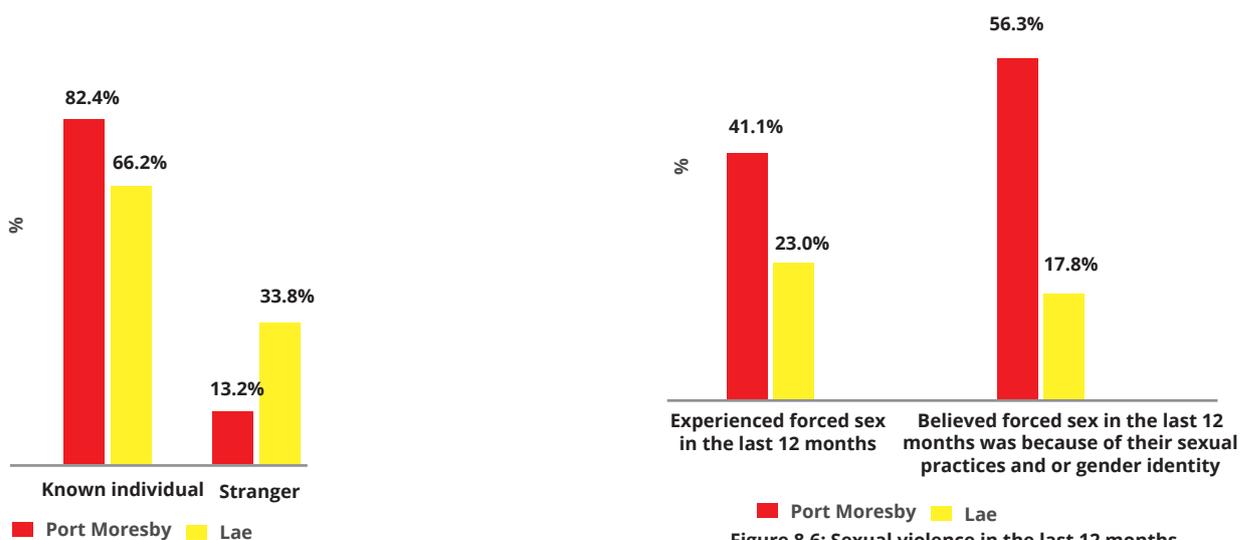


Figure 8.6: Sexual violence in the last 12 months

Figure 8.5: Identity of last perpetrator

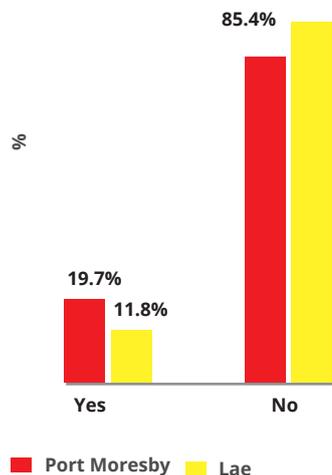


Figure 8.7: Sexual violence from partner in the last 12 months

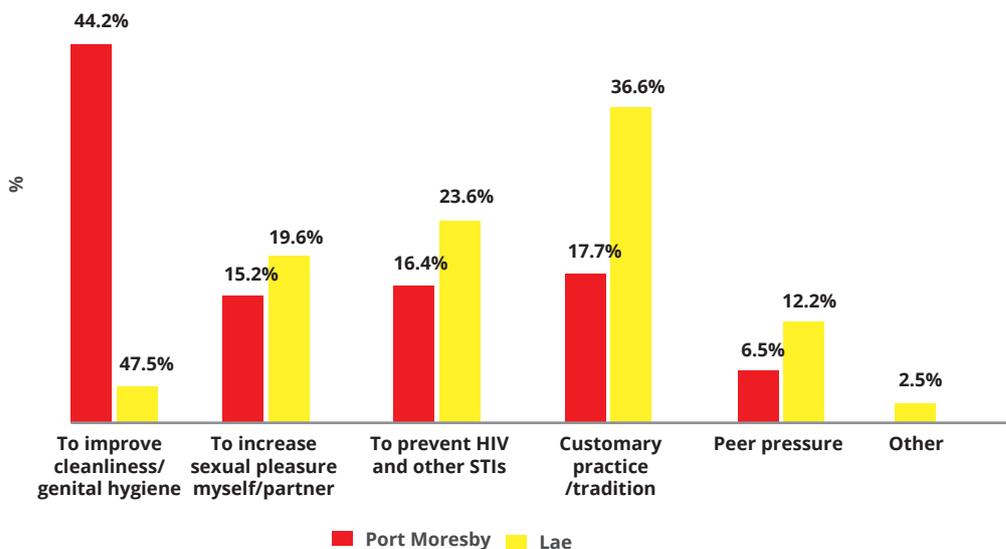


Figure 9.2: Reason for cutting foreskin

9. PENILE MODIFICATION

Penile modification was common among MSM and TG in Port Moresby and Lae, with 59.5% and 83.4% having cut the foreskin of their penis. See Figure 9.1. Some MSM and TG in Port Moresby and Lae had ever injected something into their penis (15.0% and 12.4%, respectively) and ever inserted something into foreskin (8.0% and 19.2%, respectively). The most common reasons MSM and TG in Port Moresby and Lae had their foreskin cut was to improve cleanliness/genital hygiene and it's a custom/tradition and to prevent HIV/other STIs (47.5%, 36.6% and 23.6% respectively) (data not shown).

The common reason for fore skin cutting in Port Moresby and Lae were; to improve cleanliness/genital hygiene (44.2% and 47.5%), customary practice/tradition (17.7% and 36.6%) and to prevent HIV/other STIs (16.4% and 23.6%) respectively in the two sites. See Figure 9.2.

10. HIV KNOWLEDGE, ACCESS TO OUTREACH AND PREVENTION SERVICES INCLUDING PROPHYLACTIC TREATMENT

10.1. Knowledge of HIV

Correct HIV knowledge (see Figure 10.1) was greatest among MSM and TG in Port Moresby and Lae for knowing correctly that:

- ▶ A healthy looking person can have HIV (93.3% and 90.7%)
- ▶ You can reduce the risk of HIV by having just one sex partner who is HIV negative (91.2% and 96.6%)
- ▶ Using a condom every time you have sex can reduce the risk of getting HIV (86.4% and 94.3%)

"In most cases, most of the abuse is caused by those who we know of. Two or three times they have used knives and asked me to have sex with them. They have their knives with them so whatever they ask; you have to give it to them. This happened in the area where I used to live. I went for a walk to my friends' and family's house and was returning home. The attackers saw me returning so they hid in the dark and held me with a knife and took me with them to the garden or where it is dark. Where it's possible for them to have me suck their cock. After this they fucked me. Most of them are men from the same area, like my neighbours in the same street. They are not strangers so most of the time it happens, it is from persons who are known to us".
Saki, age not known, Port Moresby.

Of MSM and TG who have ever experienced sexual violence, two in five MSM and TG in Port Moresby (41.1%) and one in four in Lae (23.0%) experienced sexual violence in the last 12 months. More than one in two of those in Port Moresby (56.3%) believed that this sexual violence was related to their sexual practices and/or gender identity with a smaller proportion in Lae (17.8%) believing so. See Figure 8.6. Of those who had experienced sexual violence in the last 12 months, one in five MSM and TG in Port Moresby (19.7%) and just over one in ten in Lae (11.8%) had experienced sexual violence by their live-in sexual partner. See Figure 8.7.

- ▶ You cannot get HIV by sharing food with an HIV positive person (84.3% and 80.4%)

Correct HIV Knowledge (see Figure 10.1) was poorest among MSM and TG in Port Moresby and Lae for knowing correctly that:

- ▶ If a condom is not used receptive anal sex puts a person at most risk of getting HIV (19.0% and 13.4%)
- ▶ If a condom is not used anal sex puts a person at most risk for getting HIV (26.6% and 14.2%)
- ▶ There is effective treatment for HIV (51.6% and 27.4%)

“In my understanding, to contract this disease, a man has to have sex with not only one person but goes on to have sex with another woman who also has sex with another man. So during this time, a certain kind of disease develops when I a man or a woman do not wash and clean themselves. So when you have sex with that person, maybe AIDS develops from this practice.” Ranu, 32 years, Lae.

“STI and HIV is like when I’m having sex, when I’m not using condom, I will be infected and if I use the condom I will not be infected. In any kind of way, on the mouth or deep kissing; [] even the needle, razor blade [], I will be infected. I must keep myself away from those open cuts and like using the razor the other TGs are using or like having sex unprotected sex I would say, not using condom.” Negiso, 30 years, Port Moresby.

“HIV is transmitted through sexual intercourse and currently there is no treatment, there is no cure. There is a treatment, but

there is no cure for the sickness. Treatment, I see it as it’s just like life support ah? Yeah one main thing that we use to control the spread and transmission of HIV is when we are having sex we use condoms. We can use condoms to have sex or by sticking to one partner only. Be faithful to each other.” Bonny, 24 years, Port Moresby.

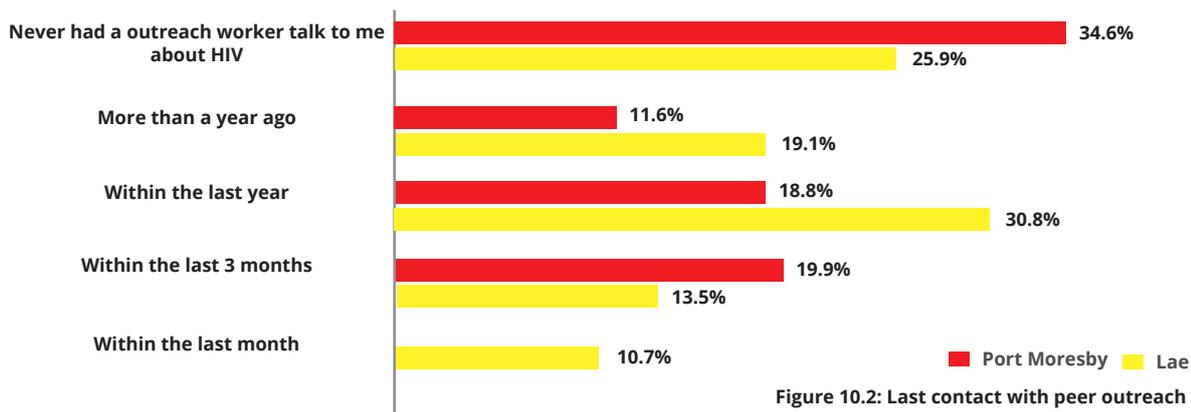
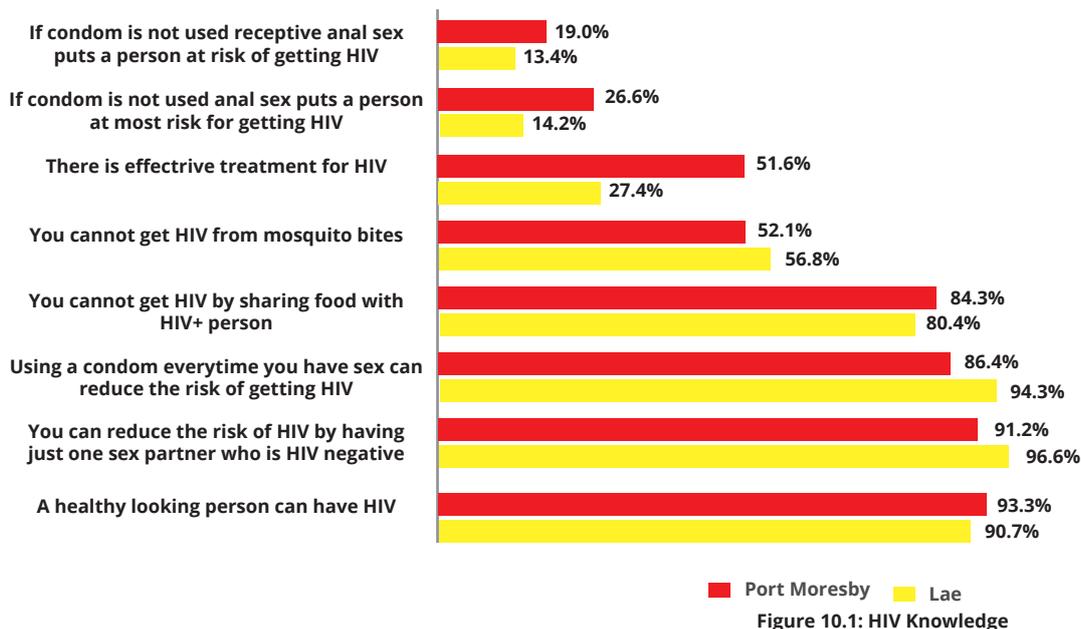
“I think about it [HIV testing] quite often after I go out and have sex, but then I would have these thoughts that it’s not vagina that I fucked but anus [so its ok].” Kenny, 30 years, Port Moresby.

10.2. Peer outreach

One in three MSM and TG in Port Moresby (34.6%) and one in four (25.9%) in Lae have never had an outreach worker talk to them about HIV. Just over one in three (35.0%) in Port Moresby and one in four (24.2%) in Lae had contact with a peer outreach worker within the last three months. See Figure 10.2.

“They are friendly there and all of the gay community goes there. It’s quite secluded so you won’t get harassed if you are go there. So I get most of the service [there], I go there for blood work, and for condom distribution, lubricants and stuff like that I get it from Save The Children. Like I present myself as a gay person so they know that I am gay. Most of the staff out there are really friendly towards gay people. So they don’t mind you can go and talk and make fun and they’ll just look at you and laugh and they might even join in the conversation.” Takai, 25 years, Lae.

The most common item received by MSM and TG in Port Moresby and Lae who had been reached by a peer outreach



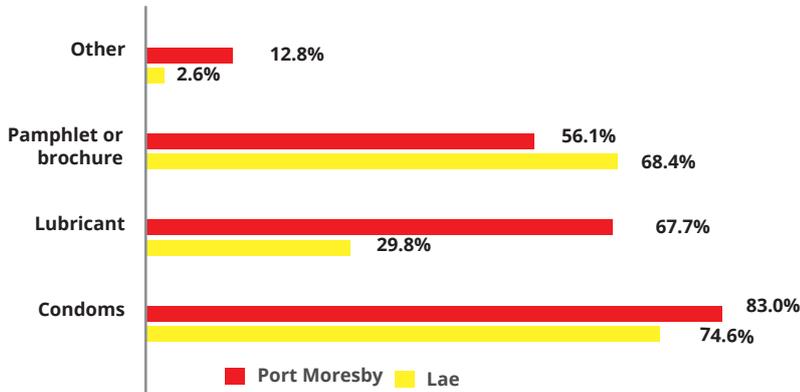


Figure 10.3: Products received at last outreach contact *Multiple responses possible

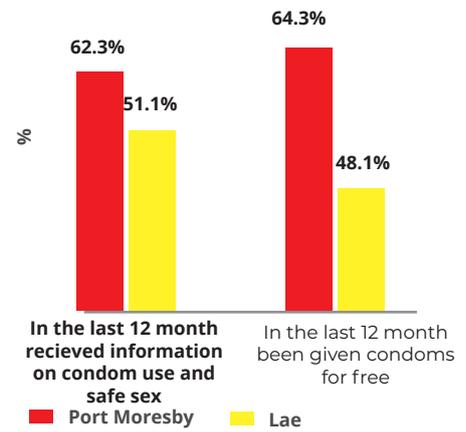


Figure 10.4: Condoms

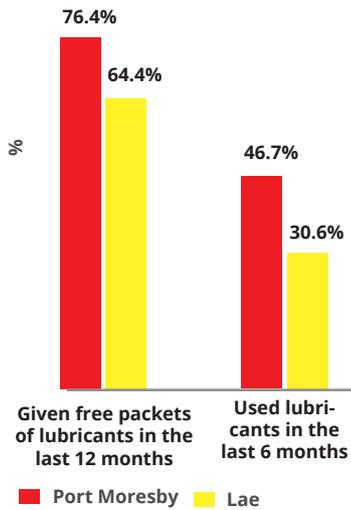


Figure 10.5: Lubricants

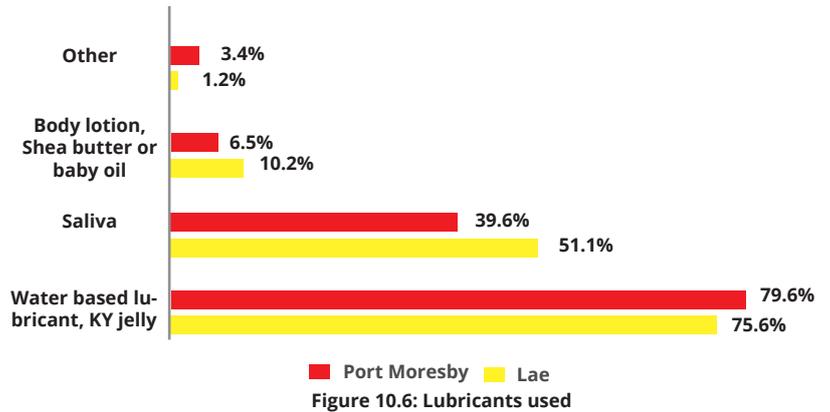


Figure 10.6: Lubricants used

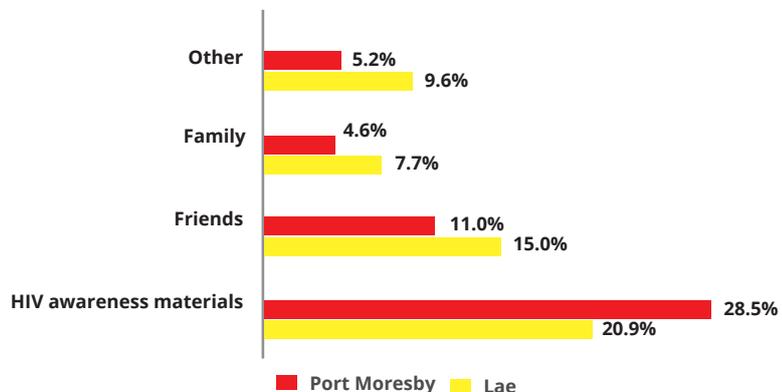


Figure 10.7: Sources of influence to protect self and others from HIV

worker was condoms (83.0% and 74.6%, respectively). While roughly similar proportions received a pamphlet or brochure in Port Moresby (56.1%) and Lae (68.4%), a larger proportion of MSM and TG in Port Moresby received lubricants than in Lae (67.7% and 29.8% respectively). See Figure 10.3.

10.3. Condoms and lubricants

A larger proportion of MSM and TG in Port Moresby than in Lae received information on condom use and safe sex in the last 12 months (62.3% versus 51.1%, respectively) and had been given condoms for free (64.3% versus 48.1%, respectively). See Figure 10.4. Similarly, a larger proportion of MSM and TG in Port Moresby than in Lae received free packets of lubricant in the last 12 months (76.4% versus 64.4% respectively) and had used lubricants in the last six months for anal sex (46.7% versus 30.6% respectively). See Figure 10.5.

"Sometimes (in prison) we used soapy water and give it them and then the men would destroy their ass." Theo, age not known, Port Moresby.

Similar proportions of MSM and TG in Port Moresby (79.6%) and Lae (75.6%) used water-based lubricants like KY Jelly. A smaller proportion of MSM and TG in Port Moresby used saliva as a lubricant than in Lae (39.6% and 51.1%, respectively). See Figure 10.6.

10.4. Sources of influence

Friends were the most common source of influence on HIV prevention behaviours of MSM and TG in Port Moresby (37.4%) whereas HIV awareness materials were most common in Lae (32.4%). Nonetheless, friends were still influential in Lae (22.8%). Similar proportions of MSM and TG in Port Moresby and Lae identified healthcare workers (9.0% and 7.8%, respectively), family (22.7% and 22.1%, respectively) and 'other' (15.9% and

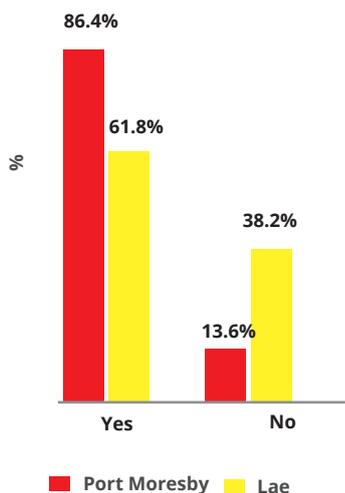


Figure 10.8: Relevance of HIV messaging to MSM and TG

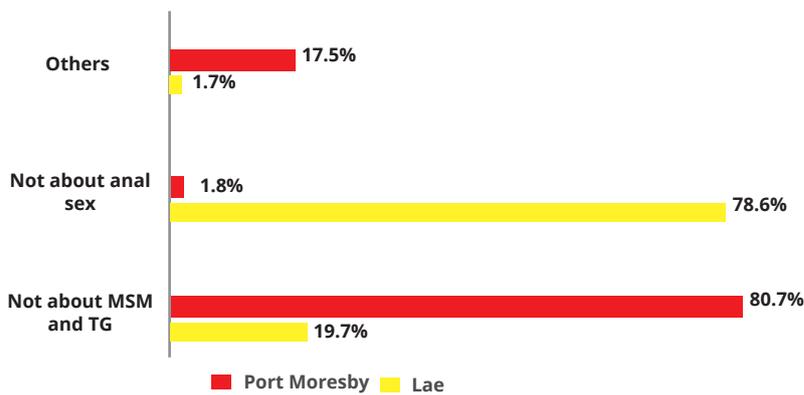


Figure 10.9: Reasons why HIV messaging does not apply to MSM and TG

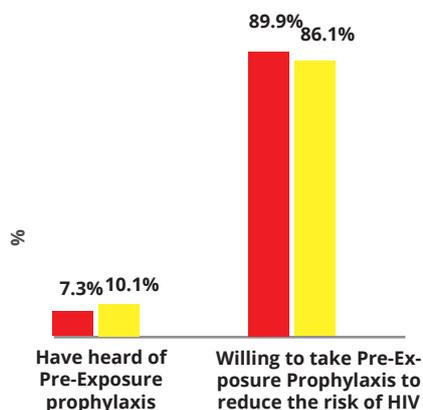


Figure 10.10: Pre-Exposure Prophylaxis - knowledge and acceptability

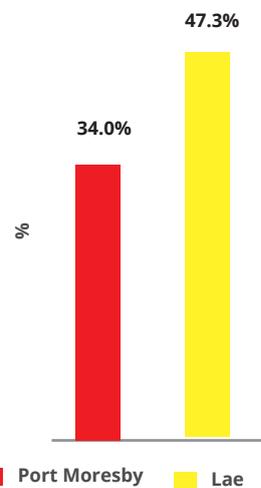


Figure 11.1: Proportions of MSM and TG with one or more STIs

14.9%, respectively), as influencing them regarding their HIV prevention behaviours. See Figure 10.7

“When I was in my late teens, my parents [taught me] how to use a condom because they are well educated. They [told] me that you were grown up now so you need to have your sex education so my dad [was] teaching me males’ side and my mum on the female side on how to react and do all these other things. It was a way back at home when I was young. First discipline was at home and then I bred from home and went out so it was not a problem to me when I joined those NGOs and those things. I knew from home first and then I went out.”
Negiso, 30 years, Lae.

HIV information and communication messages were relevant to the majority of MSM and TG in both Port Moresby and Lae, (86.4% and 61.8%, respectively). See Figure 10.8. Among those for whom the messaging was not relevant, the reasons were different between Port Moresby and Lae. For example, a larger proportion reported messaging was not about MSM and TG people in Port Moresby than Lae (80.7% and 19.7% respectively). Conversely a larger proportion reported that the HIV messaging did not address anal sex in Lae than in Port Moresby (78.6% versus 1.8%). See Figure 10.9.

10.5. Post-Exposure and Pre-Exposure Prophylaxis

Similar proportions of MSM and TG in Port Moresby (16.2%) and Lae (12.7%) had heard of Post-Exposure prophylaxis. In Port Moresby, almost one in ten (9.9%) of those who had heard of Post-Exposure prophylaxis had taken it in their lifetime. The results for Lae were too small to weigh and therefore cannot be compared to Port Moresby. (data not shown).

Similarly, small proportions of MSM and TG had heard of Pre-Exposure prophylaxis in both Port Moresby (7.3%) and Lae (10.1%), and said they were willing to take this medication in order to reduce the risk of HIV infection (89.9% and 86.1% respectively). See Figure 10.10

11. SEXUALLY TRANSMITTED INFECTIONS

11.1. Self-reported STI symptoms and health seeking behaviours

The most common STI symptoms experienced by MSM and TG in Port Moresby and Lae in the last 12 months were pain while urinating (23.2% and 36.1%, respectively) and abnormal penile discharge (17.7% and 23.3%, respectively). See Figure 11.1. Of those MSM and TG with these symptoms, similar proportions

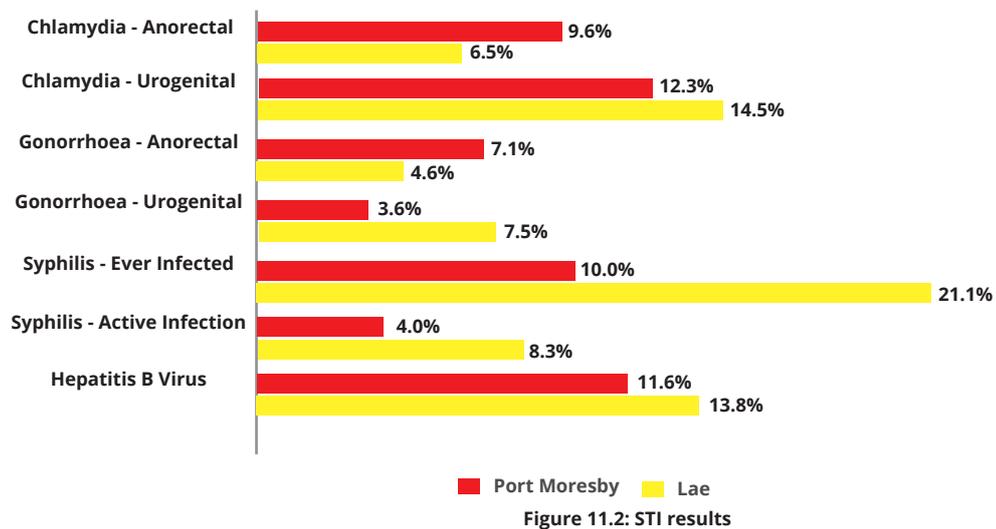


Figure 11.2: STI results

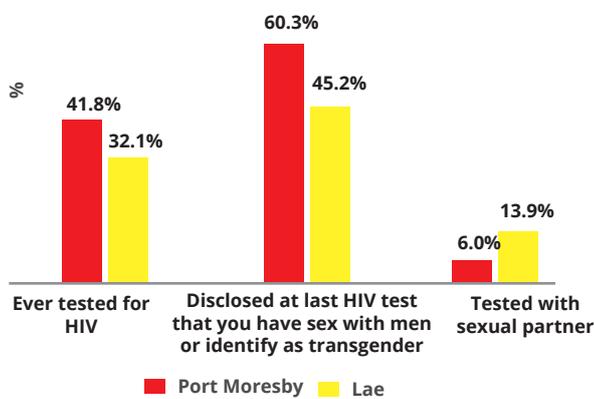


Figure 12.1: Testing history

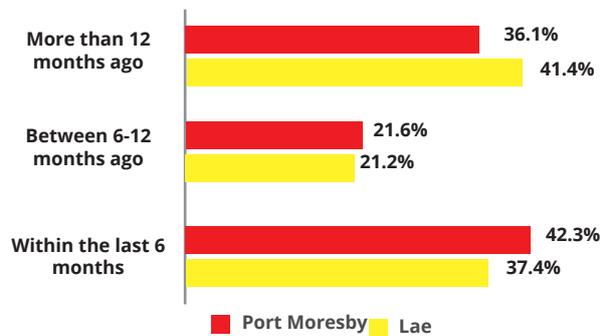


Figure 12.2: Timing of last HIV test

did not see a health care worker in both cities (63.0% and 62.3%, respectively) (data not shown).

11.2. Prevalence of STIs

More than one in three MSM and TG in Port Moresby (34.0%) and two in five in Lae (47.3%) had one or more STI (excluding HIV) confirmed during point of care testing at the *Kauntim mi tu* study site. See Figure 11.1.

Prevalence of Hepatitis B virus was 11.6% in Port Moresby and 13.8% in Lae. Large differences were also found for syphilis, for which prevalence of lifetime infection was 10.0% in Port Moresby and 21.1% in Lae; prevalence of active infection was 4.0% and 8.3%, respectively. Anorectal gonorrhoea and chlamydia were more common in Port Moresby (7.1% and 9.6%, respectively) compared to Lae (4.6% and 6.5%, respectively). In contrast, urogenital gonorrhoea and chlamydia were less common in Port Moresby (3.6% and 12.3%, respectively) than in Lae (7.5% and 14.5%, respectively). See Figure 11.2.

12. HIV TESTING, CARE AND TREATMENT

12.1. HIV testing prior to *Kauntim mi tu*

A higher proportion of MSM and TG in Port Moresby had ever tested for HIV (41.8%) compared to Lae (32.1%). Of those who had ever tested for HIV, higher proportions had disclosed at their last test that they had sex with other males or identified as a transgender woman in Port Moresby (60.3%) than in Lae (45.2%). Among those who had tested for HIV, testing with a sexual partner was less common in Port Moresby (6.0%) than in Lae (13.9%). See Figure 12.1.

"I was scared and I have never done it. My brother who brought me here persuaded me to come so I came. I have never done any testing. I thought that I was infected already and I did so many things and this scared me and I never go to the hospital."
Nori, 36 years, Lae.

Two in five MSM and TG in Port Moresby (42.3%) who had ever tested for HIV last tested within six months prior to the study period with a slightly smaller proportion in Lae (37.4%) doing so. Similar proportions of MSM and TG in both Port Moresby and Lae who had ever tested for HIV had done so

between six and 12 months prior to the study (21.6% and 21.2% respectively). See Figure 12.2.

The majority of MSM and TG in both Port Moresby and Lae who had tested for HIV did so in sexual health clinics (88.6% and 64.1%, respectively). The next most common testing sites were other clinics, hospitals, or private doctor offices (7.3% and 22.3%, respectively). See Figure 12.3

Excluding those who knew that they were HIV positive and had tested for HIV more than 12 months ago, the most common reasons for not testing in Port Moresby and Lae in the last 12 months was because people said that they felt fine (58.8% and N=4, respectively) and because they did not have time (26.2% and N=23, respectively). (data not shown)

"I was afraid to know my result and it took me quite a while to test again. I was waiting to see if I would fall sick or not. I had such thoughts even though I was a volunteer, I had these fears. All kinds of thoughts were killing my head." Megusa, Age unknown, Lae.

"People usually come and talk about it but I have never been interested in taking in taking the test. I lived a care free life." Yawa, 26 years, Lae.

"I was a bit scared when I went up to get my results. My heart raced and I panicked but when I got my results, I was relieved. My blood results came clean, it was negative." Ricky, 34 years, Port Moresby.

Prior to HIV testing in *Kauntim mi tu*, the HIV prevalence of MSM and TG, as indicated by knowing that they had HIV, was higher in Port Moresby (5.0%) than in Lae (2.5%). See Figure 12.4.

12.2.HIV care and treatment

In both Port Moresby and Lae, very few MSM/TGW who participated in *Kauntim mi tu* were aware of their HIV infection.

In Port Moresby, seven of 400 study participants living with HIV had been diagnosed with HIV prior to participating in the study. All self-identified as TG. Of these seven TG who were aware that they had HIV prior to participation in the study, six had been linked to medical care (data not shown). Of these six, all had already started treatment, three were still on treatment and two were virally suppressed (data not shown).

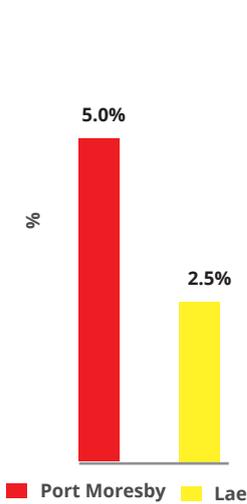


Figure 12.4: Result of last HIV test prior to *Kauntim mi tu*

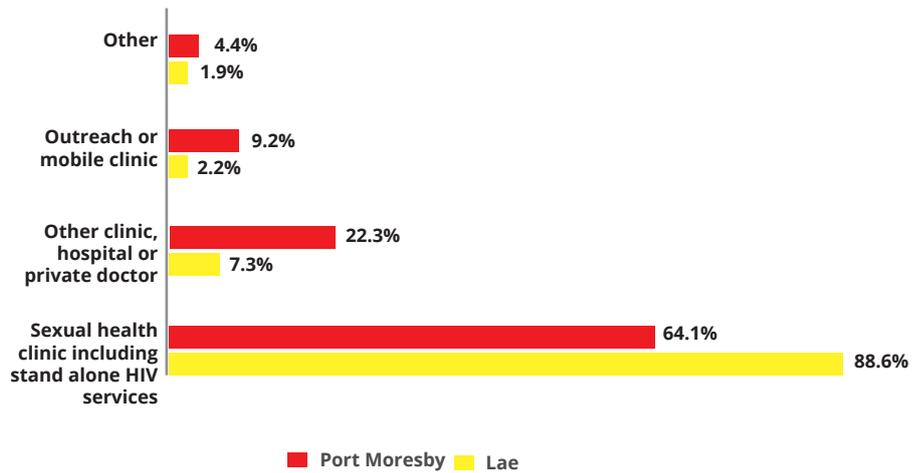


Figure 12.5: Location of last HIV test

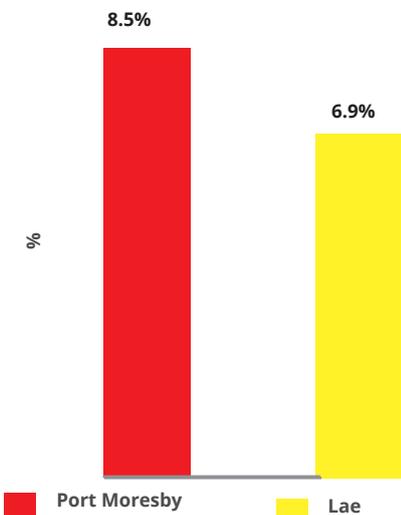


Figure 12.6: HIV prevalence

"I always use condom but it so happened that the condom broke so in one way or the other it's like I knew the risk already so when finding out, I accepted it. The transmission was kind of consensual. I knew who I slept with and knew the risk. So it was like after that I always use condom. I waited about 20 months, before I was on treatment so let's say January 2013 till November 2015 that I went on ART. The other thing too is that my partner who is an expatriate and he is on medication. He gets his medicine from overseas, so I wanted him to be responsible of what has happened to me, so I wanted him to give me the drugs. So in one way or the other I held him accountable. So I have to wait for him to get me on the drugs. At the moment no; I was on drugs for 5 months and then I went on again because he couldn't give me the drugs again." Rocky, 25 years, Lae.

"I'm still continuing my HIV dose so I got this supply. I am happy that now my body is feeling alright. When I'm getting this supply, I feel like before I used to live, and now I am also feeling like that. Now I feel that I am normal." Baria, 33 years, Port Moresby.

Two of the three people no longer taking treatment were taking traditional medications instead (data not shown). Five of the six TG who accessed HIV care received at least one CD4 result. Of the five people who received a CD4 result, three received one in the last six months and two more than one year ago (data not shown).

Of the six TG who accessed care, four were taking prophylactic medication in the form of Cotrimoxazole (data not shown). Of the six TG who accessed HIV care, two were asked at their last HIV clinic appointment if they had any symptoms of TB. Two of the seven TG aware of their HIV positive status experienced at least one symptom of TB in the last 12 months (data not shown).

In Lae, seven of the 352 study participants living with who were aware that they had HIV prior to participation in the study, all seven had been linked to medical care (data not shown). Of these seven, all had started treatment and six were still on treatment. Of these six, four were virally suppressed (data not shown).

Three of the seven MSM and TG who accessed HIV care received at least one CD4 result. Of the three people who received a CD4 result, one received one in the last six months, one in the last 7-12 months, and 1 does not know when it was received (data not shown).

Of the seven MSM and TG who accessed care, three were taking prophylactic medication in the form of Cotrimoxazole (data not shown). Five were asked at their last HIV clinic appointment if they had any symptoms of TB. Two of the seven MSM and TG aware of their HIV positive status experienced at least one symptom of TB in the last 12 months (data not shown).

12.3. Prevalence of HIV

The prevalence of HIV among MSM and TG based on testing in Kauntim mi tu was 8.5% in Port Moresby and 6.9% in Lae. See Figure 12.6.

13. TUBERCULOSIS

In Kauntim mi tu the WHO screening algorithm for people with HIV, which is more sensitive than the one for people without HIV, was applied. As a key population with a higher burden of HIV, this screening algorithm was decided upon to ensure that those with HIV who present with TB symptoms during study recruitment were tested for TB.

Of all MSM and TG in Port Moresby and Lae:

- ▶ 52.7% and 39.0%, respectively had unexplained weight loss.
- ▶ 40.1% and 24.6%, respectively had a cough in the last two weeks.

- ▶ 26.8% and 25.2%, respectively had a fever in the last two weeks.
- ▶ 24.6% and 29.1%, respectively had night sweats in the last two weeks.

More than one in two MSM and TG experienced at least one of these symptoms of TB in the last two weeks and was tested for TB in Port Moresby (69.0%) and Lae (52.6%) (data not shown).

Of MSM and TG screened for tuberculosis in Port Moresby, 1.9% had tuberculosis. Of the four MSM and TG in the study who had tuberculosis, one had a drug resistant form (data not shown).

Of the 194 MSM and TG tested for TB in Lae, valid results were only available for 123. Invalid results were due to high beetle nut debris in the sputum. Of the 123 who had valid results, five had tuberculosis. Of them, none had a drug resistant form (data not shown).

Among MSM and TG screened for TB, none had HIV/TB coinfection in either city (data not shown).

14. GLOBAL TARGETS: 90-90-90

The results presented here for both cities are unweighted due to the small number of HIV-positive individuals in our study.

In Port Moresby and Lae, PNG is not reaching the global targets where 90% of people with HIV are aware of their status, of those aware of their status, 90% of people who know they have HIV are on ART, and of those on treatment 90% are virally suppressed. Of the 30 HIV-positive MSM and TG in Port Moresby and 22 in Lae, only seven individuals and six individuals were aware of their infection, respectively. Of these individuals who were aware, only three and five were on treatment, respectively. Finally, of these three and five individuals who were on treatment, only two and four were virally suppressed, respectively. Much more work remains in supporting MSM and TG in order for PNG to reach the UNAIDS 90-90-90 global targets.

15. SIZE ESTIMATION

Volunteers distributed 598 and 777 unique objects to MSM and TG throughout Port Moresby and Lae respectively to estimate the sizes of their populations in both cities utilizing the unique object multiplier method. Combining this distribution with the RDS IBBS where we estimated that 8.0% and 16.6% of the populations in both respective cities received a unique object, we estimate that there are 7,500 (95% CI: 4,000-11,000) MSM and TG in Port Moresby and 4,700 (95% CI: 3,100-6300) in Lae.



Statement by Port Moresby members of Friends Frangipani



Many of our friends do not feel accepted, respected or supported in our communities.

When we came to *Kauntim mi tu* we found a home. We were welcomed and respected. It was confidential.

We were interested in the study because we could access services to find out about our bodies, the infections we had.

It was good for our health to know who we are and to get tested and treated. We were told what was wrong within us on the same day.

We didn't have to wait to know if we had an infection or not. We had never been tested for these STIs before and we are happy to know our status.

Many of us thought there was nothing wrong with us, but after being tested we found out we had STIs and this shocked us. But we were treated. We liked doing our own examination. We want more of this.

Even after the IMR and the *Kauntim mi tu* team left, more of our friends kept on asking where they had gone because they wanted the service too. We want clinics like this.

We want to know about TB, STIs and our HIV viral load. We had never heard of viral load. Now we know about HIV viral load and we know about the goal of 90-90-90.

Some of our friends found out they had HIV and are now on treatment. Others were treated for syphilis and are now pregnant.

The results of the study have been shared with our community and we are very happy to hear them; we wanted to know the exact results of the study so we could share with others.

The results tell us where we need to continue, what we need to do more of and where we need to improve. We need more of our friends to test. This study cannot be the last.

Friends Frangipani felt it was a partner in this study. We at Friends Frangipani are proud of this study, we think of it as an achievement of our friends.

We are not rubbish women; we want people to understand us, to respect us.

We want to feel free to access services. We want the types of services we got in *Kauntim mi tu* to be here for us all the time. We don't want to be blamed for these infections, being called bad names.

We want people to be concerned for us. We also want people to partner with us.

This is our time to stand up and speak up for our rights to health and equity.

RECOMMENDATIONS

- ▶ Improve quality of clinical services and introduce point of care testing for STIs and HIV viral load among FSW.
- ▶ Improve knowledge of peer educators on STIs, HIV viral load and other key health issues.
- ▶ In the absence of a stand-alone FSW clinic, we need to ensure that healthcare workers are trained and supervised by members of our community to be friendly, respectful and understanding of our situation.
- ▶ Improve the quality and scope of peer outreach including adherence support and HIV testing.
- ▶ Ensure peer educators are trained to understand risks of anal sex for women and to improve use of condoms during anal sex.
- ▶ Continue to advocate for condom distribution to FSW.
- ▶ To reduce the stigma and fear associated with accessing clinics we need to have peer educators in the clinics.
- ▶ Improve knowledge of and access to PEP.

Statement by Lae members of Friends Frangipani



Through the *Kauntim mi tu* study we have benefited a lot, not just being tested and treated.

As female sex workers in Lae, non-government organisations come and go and we are left to ourselves. We were so happy when the *Kauntim mi tu* team came. Some of us had been involved in the previous IMR Transex project and were happy to participate again. We were able to get tests done at the study site that we cannot get at any other clinic in Lae. We were tested for HIV, STIs and TB. It is really important that we also tested for TB as people with HIV are at risk for TB. We were happy and comfortable to be provided with these self-collection swabs to tests for anorectal and vaginal STIs. For those of us who were positive we received treatment on the same day. After knowing our results and knew we were clean we felt able to protect ourselves.

Through the *Kauntim mi tu* study we have benefited a lot, not just being tested and treated. We have learned a lot of things such as a positive woman on treatment can have a negative baby and now we know the different risks between unprotected vaginal and anal sex. As peer educators receiving these study results we also came to learn about HIV viral load. We now know what to tell people about HIV risk when having unprotected sex with a person on ART. We are learning this because the team have come back and presented us the data; data that belongs to us. *Kauntim mi tu* put the data back in our hands.

We are concerned with the low use of condoms among our friends. The shortage of condoms has seen some unpleasant activities with the selling of condoms in order to try and earn money. We want free condoms to be readily available so that our friends' lives can be saved. Condoms should be placed at "hot spots" where our friends meet their clients and the locations where they have sex.

In many settings we don't feel that our rights are respected. The staff in *Kauntim mi tu* respected us and they knew our rights. We were treated for STIs without having to bring in our last sexual partner. Many clinics won't treat us

on the spot until we bring in our partners; we are thankful to the *Kauntim mi tu* team for understanding that we don't always know our last sexual partner and that we ourselves deserve treatment straight away.

People in the community continue to disrespect us, beat us up and in some cases the police make us still blow up condoms and ask for free sex in exchange for being served at the station when putting in a complaint. Sometimes it's forceful. The older police are respectful because they were trained but the newer recruits need to be sensitised, as do many of the health care workers. Very few people specifically work with us members of key populations. We need to partner with the police and government to make sure all female sex workers are safe from HIV and from violence. Our members are trained and skilled. We need to be involved meaningfully in the response, not just as volunteers but as paid staff. We need better provincial HIV collaboration and coordination.

Many of us live very difficult lives. We live in drains, cardboard boxes and in football fields. We don't all have access to clean water, healthy food or a safe space. We are struggling. Yet we are told to look after ourselves, protect ourselves from HIV and if HIV positive stay healthy. That is very hard for many of us. People need to understand our lives better. *Kauntim mi tu* has done that through the survey and the qualitative interviews.

As members of Friends Frangipani in Morobe Province, we also want to be viewed and valued as women, wives, mothers, sister's, daughter and friends. There is more to us than sex work. We seek a life where we can move freely, are not labelled and not discriminated against or abused. We want to lead a normal, healthy and productive life. We want to advocate to our peers and be role models to them where we are agents of change. We want to show them how to care for and respect themselves and try and prevent each of them from being infected with HIV, or if they are already positive, look after themselves so they can live a long and fruitful life.

RECOMMENDATIONS

- ▶ We urge for the continued fight to decriminalise sex work.
- ▶ We want the community, health care workers and the police to be sensitised to our issues.
- ▶ Members of our community need support to find safe and affordable housing. Improve the quality and scope of peer outreach including adherence support and HIV testing.
- ▶ Our community needs a one stop shop where we can access HIV prevention, testing, treatment and care, STI testing and treatment, family planning and TB testing.
- ▶ We want to be treated without the need for contact tracing. To reduce the stigma and fear associated with accessing clinics we need to have peer educators in the clinics.
- ▶ Strong referral pathways as shown by *Kauntim mi tu* need to continue in our community to ensure linkages are made.
- ▶ Increase awareness on the importance of condom use, particularly for anal sex.
- ▶ Increased access to condoms in places where we socialise, meet clients and have sex is critical.
- ▶ The information on HIV that we and our peer educators have is outdated and needs to be updated and expanded to address STIs, reproductive health issues and TB.
- ▶ A mobile clinic would be an important step forward in increasing access to sexual and reproductive health services for women and girls in our community.
- ▶ We need adult literacy training and to identify new and innovative ways to provide information (not just pamphlets).

Statement by Mount Hagen members of Friends Frangipani



Many of our friends do not feel accepted, respected or supported in our communities.

The study provided for us in very good ways. The staff talked to us respectfully and understood us. They did not judge or look down on us. They respected our confidentiality. When we got to talk to the staff we felt it was better than counselling, we shared very deep secrets that we had not told anyone, even counsellors. The questions we were asked were easy for us to understand. We liked the tablets that they put our answers in.

We appreciated that we could know our health status and get treatment on the same day. This was the best thing ever. While some of us had to say late in the day and struggle to get home before dark, getting our results, treatment and referrals was worth it. The referral pathways that Kauntim mi tu set up were effective.

Most of the time we are only asked about symptoms and never get tested and know exactly what STI we have. In Kauntim mi tu we were told exactly what STI we had and were given treatment on the same day. We were so happy. Even our peer educators did not know much about each of these different STIs. We were supported by staff to go to the clinics. One of our members was particularly grateful that having tested positive for TB that the laboratory staff member escorted her to the TB clinic himself. She is about to finish treatment and if it was not for the study she would not have known.

For those of us who have lived with HIV for a long time, some of us 20 years, this was the first time that our members were able to know of HIV viral load. We were happy to share our viral load and CD4 T-cell count results with our health care workers, and they were excited to see them. We are crying out for HIV viral load tests to be rolled

out to other clinics so all our HIV positive friends can get tested.

We were so excited to wait and get a coupon. Once we were given one from our peer we were so happy could not wait for the assigned date on our card to come around.

We feel proud of the different roles we had in the study, being seeds, study participants or for some of us being part of the qualitative interview as well.

Our friends who did not get coupons are asking when the research is coming back because they feel that they missed out on something special that others got. Those us of us that were part of Kauntim mi tu are very happy. After the study some of us have insisted protected sex at all times, others have reduced the number of clients we have, others still (based on the knowledge that they were free from HIV and STIs) have sought other means of earning an income.

We knew this study was coming; we were spreading the message to our friends before the study team even arrived. We knew our friends would benefit from this and so we sent word around before, soon after the first community mobilization meeting.

We want to acknowledge and thank the Kauntim mi tu study team for coming and we think everyone, including the government and others should be thankful as well.

RECOMMENDATIONS

- ▶ Strong referral pathways are important to ensuring members of our communities access a variety of services
- ▶ We want to have more comprehensive HIV/STI and TB services like those provided by Kauntim mi tu using the point of care testing machine
- ▶ We need to research our peers that live beyond Mt Hagen town and who live in more rural areas and are currently not being reached
- ▶ We need more condoms and lubricants available to members of our community
- ▶ We need to diversify and find more participatory ways for how we provide information to members of our community since the literacy rates are so low
- ▶ Stakeholders and people who work with our community need to be better sensitized to our community and our needs
- ▶ The systems that bridge stakeholders and communities of key populations need to be strengthened
- ▶ We want a safe house / space where we can come and get information and access services
- ▶ We need to advance decriminalization efforts so that we are seen as citizens and people, particularly police, can leave us alone and have the right to earn an income and freely access services.
- ▶ We want the services in Mt Hagen to treat us like the staff at the Kauntim mi tu study did.
- ▶ Micro-financing opportunities should be considered to help our community

Statement by Port Moresby members of Kapul Champions



Kauntim mi tu provided a safe space for men of diverse sexualities and transgenders to come and access the services and the study. The research has given us more information about

where our community is at and there are many issues we are still facing, including violence, shame, forced sex and the alarming low rates of condom use.

The good thing about *Kauntim mi tu* was that it gave us clinical services we haven't had before and still cannot get anywhere.

We were tested and treated for chlamydia and gonorrhoea right there on the spot, given results and treated straight away. It was a one-stop shop. The services for HIV, STIs and TB were very convenient.

We want more Gene-Xpert machines to test us. We did not spend a whole day waiting. Some of our friends thought that they were not affected by any of these infections, but many were. Many of our friends did not have a chance to go to other services for a check-up because they did not know about other clinics or are too afraid.

Once people saw their friends coming they felt it was their chance to come out as well and find out about their status. Some of our friends found out that they had HIV and were surprised and shocked. But they were cared for by the *Kauntim mi tu* team. They counselled us well and referred our friends to clinics. We continue to support our newly diagnosed friends.

Talking about the abuses we have faced was uplifting, a big relief. The questions in the survey helped us to talk about things that we face in our lives, but don't talk about. It helped us to assess our own risky behaviours.

Many of the clinics in Port Moresby are not friendly. The IBBS survey team were friendly and made us feel comfortable. The coupons were great. The coupons were able to reach our peers.

The coupons went further than our peer educators have gone before. Although we are doing a lot of outreach, the rates of contact with hidden men who have sex with men are low and a concern for us. Many have never sat with an outreach worker before.

There are so many programs in the National Capital District and it appears from *Kauntim mi tu* we are reaching the same people over and over again. Something needs to change in order for us to reach those who have not been reached before.

Kapul Champions is the network that represents MDS and TG in PNG and we were central to the development of the *Kauntim mi tu* study.

Kapul Champions has an important role to play in addressing the issues of our members including the alarming issues raised in this study such as violence, depression, condom use and HIV testing. We carry the voice of all members, particularly the silent ones; ones who started to come out in *Kauntim mi tu*. The hidden members are being strengthened.

Kapul Champions need to be urgently supported to continue to address the issues facing our members.

We would like to thank the *Kauntim mi tu* team for welcoming our friends to be part of the study. We acknowledge the way you treated us, cared for us and referred us on for further support and treatment. Many of our friends are now on treatment having been diagnosed.

We also acknowledge that the IMR are not new partners, they have worked and journeyed with us from the beginning with the TranSex Project and continue still.

We are grateful for this partnership and look forward to working further together and using this evidence for action.

RECOMMENDATIONS

- ▶ The Secretariat of Kapul Champions needs to be funded to ensure civil society participation and the ongoing representation of men of diverse sexualities (MDS) and TG in PNG. Kapul Champions must be part of the HIV response.
- ▶ Ensure adequate supply and distribution of condoms.
- ▶ The national response to HIV needs to work in partnership with all partners to strengthen the current systems including clinics. With the closure of the only clinic designated for our community, we need to train healthcare workers in other sexual and reproductive health services about our communities, diversity of sexual practices and gender and sexual identity. Members of our community should be employed to work in these clinics to ensure they are safe and welcoming. In order to build sustainable change in healthcare worker attitudes and skills, a training curriculum should be implemented for healthcare worker trainings addressing the issues of sexuality and gender diverse Papua New Guineans. This same training could be used in the training of law enforcement officers such as the police.
- ▶ Reinvigorate the efforts to address law reform for MDS and TG in PNG, including laws on sodomy and sex work, of which many of our members also engage in.
- ▶ Address the wider health issues of our members including gender-based violence including forced sex and mental health issues.
- ▶ Shift from syndromic management of STIs to point of care testing with the Gene-Xpert machine.
- ▶ Improve the quality and scope of peer outreach workers to address issues of mental health, violence, treatment adherence for HIV and TB, HIV testing and STI information. As part of this, identify and pilot new approaches to bringing HIV testing to the settlements, rural areas and more hidden populations such as mobile clinics and peer testing.
- ▶ Improve the capacity of the MDS and TG community to understand new tests like HIV viral load and improve our understandings of HIV risk.
- ▶ Increase the use of social media to disseminate information. This will require developing updated and electronic information, education and communication materials specifically for our MDS and TG population.

Statement by Lae members of Kapul Champions



The *Kauntim mi tu* team from the PNGIMR were very friendly and we felt comfortable talking to them. We were treated in a manner where we felt welcomed, respected and could open

up honestly about who we are and what we do. We felt safe to express and tell them everything about ourselves; we told them some dark secrets.

We would like to have such welcoming and comfortable treatment when we access services in other places. They were well trained to fit in with our population and at the same time they had the equipment (GeneXpert Machines and other rapid diagnostic tests) for testing different sexually transmitted infections (STIs) that we never heard of. Testing was done the same day in a timely manner; we were able to do all our testings, receive our tests results and treatment on the same day. This allowed us to still have time to do our other work/ business. We were also properly linked to other services for further care and support.

We would like to have a one stop shop where all services are provided in the same place rather than having to go to multiple clinics for HIV, STIs and TB. We were invited to self-collect an anal swab for STI testing which was new to us. With this, we felt that we were being properly checked for the different STIs (gonorrhoea, chlamydia, syphilis, Hepatitis B virus and HIV) that we have. If we were positive for any one or more of these STIs, we were counselled and treated accordingly. We were not treated syndromically.

We have gained more knowledge by going into *Kauntim mi tu* study. Most of us did not know about other STIs like chlamydia, syphilis and Hepatitis B virus. All we know about is gonorrhoea and "gono packs". Prior to this study, we were thinking that all STIs can be treated with "gono packs", but now we know better and that specific infections have specific treatments. We also

learned that although so many of us have Hepatitis B virus there is no treatment for us. The clinicians sat with us and described specifically what infections we had and did not have. We liked this detailed information.

At *Kauntim mi tu* study, they sat down with us and have time to explain the different STIs, on how it spreads, complications it can cause, the treatments that are available and how to prevent transmitting or acquiring them. Therefore, we would like to have such services where we can be provided with more STI counselling, screening, and treatment rather than a single or dual screening for one or two STIs and get specific treatments respectively.

From the study, we learnt and can reflect that most of our peer educators lacked the knowledge on the different types of STIs. Most peer educators generalise STIs as gonorrhoea and therefore we need workshops and refresher courses for peer educators.

We also learnt about viral load, which helped us to understand why we should remain faithful to taking ART every day and on time. Therefore, we would like to have viral load testing done clinics that provided HIV testing, treatment and care.

The study showed issues of gender based violence. This is a real and ongoing issue for our community. We need to address this and ensure safe spaces for our community to report and get support.

Kauntim mi tu study did not have any geographical boundaries, like most non-government organisations do. The coupons from *Kauntim mi tu* reached our population from within Lae city and beyond into settlement areas and other unsafe places where people in our community live. They reached all walks of life. *Kauntim mi tu* recognised that we are unique and not like other parts of the country, places where decisions about us and the programs that affect us are usually made.

RECOMMENDATIONS

- ▶ The diversity of our community here in Morobe Province needs to be recognised and responded to.
- ▶ We need to reach out beyond the boundaries identified by non-government organisations. We need to be flexible to find our peers where they live and socialize, not always in Lae town.
- ▶ We need to have an environment where we are respected in our families, homes and communities. Decriminalisation will contribute to this, but additional sensitisation and support needs to happen at the same time.
- ▶ Members of our community need to be updated on advances in HIV and innovative biomedical technologies that are available and may benefit our community.
- ▶ We no longer want to be treated on the basis of symptoms. We want to be tested and treated for specific STIs using point of care technology. We waste our time having to go and come back for results.
- ▶ Improve the quality and scope of peer outreach workers
We want one stop shops where we are treated along a continuum of care.
- ▶ We need to trial and test new and different approaches to reaching our community. The results of *Kauntim mi tu* showed what we have done in the past has not worked.
- ▶ We cannot keep repeating the same approaches while our friends die.
- ▶ Members of our community need to be provided with certified training to be specialist mentors who can be employed in sexual and reproductive health clinics to ensure the clinics are friendly and welcoming to our community and we can provide peer counselling and support.
- ▶ With so many of our community infected with Hepatitis B Virus we want treatment to be available for it.
- ▶ Peer education need to have updated knowledge around HIV, STIs, other sexual and reproductive health issues and TB.
- ▶ The Family Sexual Violence Unit (FSVU) needs to be sensitised to our issues and recognise that violence against us is gender-based violence (GBV). We need support to access other GBV services and receive the same support as women. We would like the PNG DLA to be reinstated to assist us with legal issues or otherwise have an NGO take responsibility for assisting us in these matters.
- ▶ Include indicators for GBV in data collection forms at clinics
- ▶ Issues with the UIC (unique identification code) need to be addressed, especially for people who do not want to be registered in this way.

Recommendations from All Stakeholders*

- ▶ Continue efforts to achieve law reform to create an enabling legal environment for key populations.
 - ▶ Review and revise current peer outreach models to improve quality of outreach. Expand outreach activities to reach more people. Include outreach HIV testing and/or referrals to HIV testing.
 - ▶ Use social media for health advocacy and information for key populations.
 - ▶ Secure funding for civil society organisations to ensure ongoing representation of key populations and advocacy for health and human rights, including law reform.
 - ▶ Implement Sunset Clinics for key populations so that they can access out of hour's healthcare.
 - ▶ Expand health and HIV treatment literacy to all key populations in order to improve knowledge of HIV and of treatments.
 - ▶ Train members of key populations to be Peer Workers in healthcare services to ensure services are friendly and receptive to the needs of the community.
 - ▶ Invest in alternative methods of condom distribution through hotels and in the community.
 - ▶ Information, education and communication materials on HIV and STIs need to be designed and tailored to the risky behaviours of key populations.
 - ▶ Incorporate detailed and correct information on anal sex for key populations (including women and girls in transactional sex), including different levels of risks associated with unprotected receptive anal sex.
 - ▶ Devise and implement educational curriculum in healthcare worker training to ensure that they are equipped with the necessary knowledge to provide quality care and treatment to members of key populations in whatever services they access.
 - ▶ WHO Integrated Management of Adolescents Adult Illnesses training needs to be strengthened to include modules on caring for members of key populations.
 - ▶ Integrate health services so that people can be tested and treated for HIV, STIs, TB and other infections and diseases in the same service.
 - ▶ Prioritise the implementation of point of care testing for genital and anorectal STIs.
 - ▶ Undertake research into the epidemiology of oropharyngeal STIs among key populations.
 - ▶ Promote family planning especially use of long-term methods among FSW.
 - ▶ Work with facilities providing services to key populations to provide more psychosocial support at clinics for survivors of violence/abuse.
- * A one day workshop was held with representatives from the Government of Papua New Guinea, international and local non-government organisations, faith based organisations, civil societies representing key populations and donors, including the Government of Australia and representatives from the Global Fund to Fight AIDS, TB and Malaria.

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Kauntemi tu

