

Papua New Guinea

Country Review December 2011

PAPUA NEW GUINEA AT A GLANCE

Total population (in thousands)	6,888 (2010) ¹
Annual population growth rate	2.2% (2010-2015) ¹
Population aged 15-49 (thousands)	3,457 (2010) ²
Percentage of population in urban areas	13% (2010) ³
Crude birth rate (births per 1,000 population)	31.4 (2008) ⁴
Under-5 mortality rate (per 1,000 live births)	69 (2008) ⁵
Human development index (HDI) - Rank/Value	137/0.431 (2010) ⁶
Life expectancy at birth (years)	61.6 (2010) ⁶
Adult literacy rate	59.6% (2005-2008) ⁶
Ratio of girls to boys in primary and secondary education (%)	N/A
GDP per capita (PPP, \$US)	2,281 (2009) ⁴
Per capita total health expenditure (Int.\$)	65 (2007) ⁵

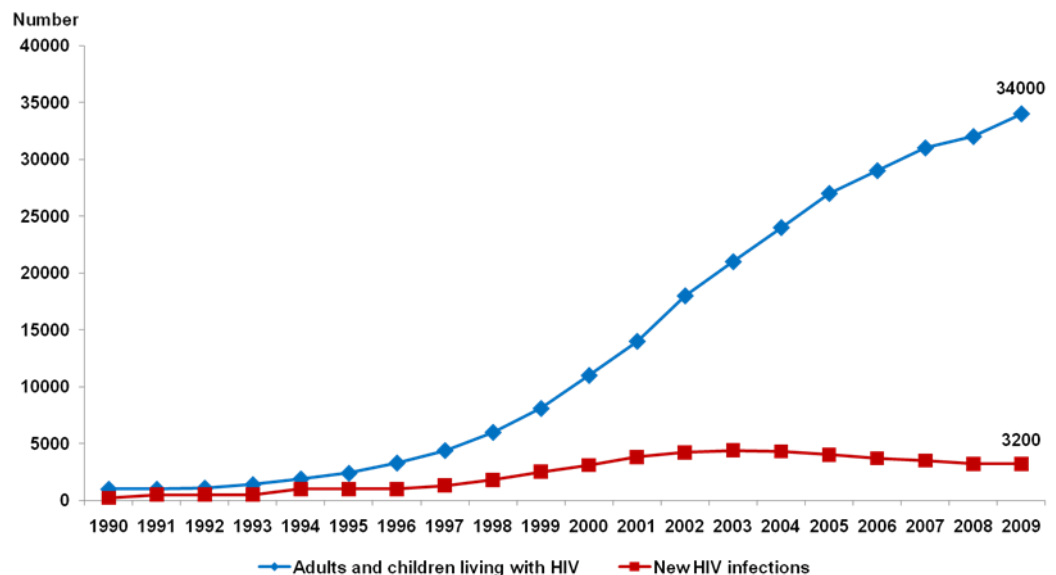


HIV EPIDEMIOLOGY AND TRENDS

The first case of HIV in Papua New Guinea (PNG) was reported in 1987. By 2004, the country had declared a generalized epidemic, the fourth country in the Asia Pacific region to do so.⁷ Although the HIV epidemic in Papua New Guinea is now the largest and the only generalized one in the Pacific, recent analysis shows that the epidemic is starting to level off.⁸

The national adult HIV prevalence in 2009 was estimated at 0.9% [0.8%–1.0%], up from 0.5% [0.3%–0.7%] in 2001. There were approximately 34,000 [30,000–39,000] people living with HIV (PLHIV) in 2009, which is much more than double the 14,000 [9,400–21,000] PLHIV estimated for 2001 (Fig. 1).⁸ The number of women living with HIV also more than doubled from 7,600 [5,100–11,000] in 2001 to 18,000 [16,000–21,000] in 2009.⁸

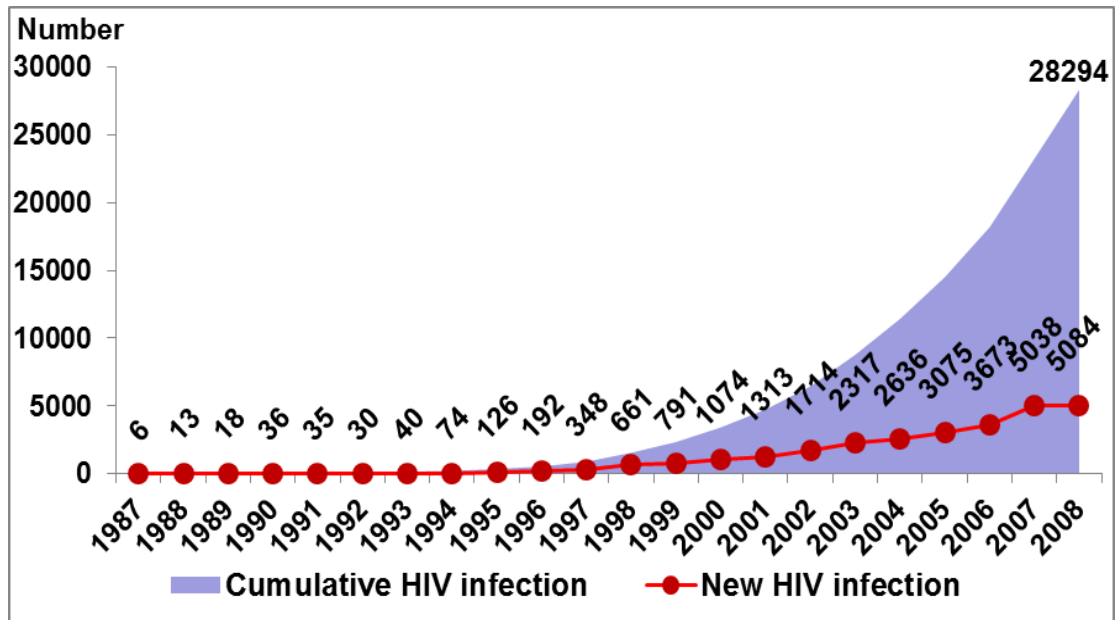
Figure 1: Estimated number of adults and children living with HIV vs estimated new HIV infections, 1990-2009



Source: UNAIDS, Report on the Global AIDS Epidemic, 2010

Regarding reported cases, by December 2008 there were a cumulative 28,294 HIV cases, nearly 60% of which were female. In addition, 40% of the cases were reported from the National Capital District, NCD (Fig. 2).⁹

Figure 2: Reported number of cumulative and new HIV infections, 1987-2008



Source: Prepared by www.aidsdatahub.org based on PNG National Department of Health, STI, HIV and AIDS Surveillance Unit, 2008 STI, HIV and AIDS Annual Surveillance Report

Surveillance systems

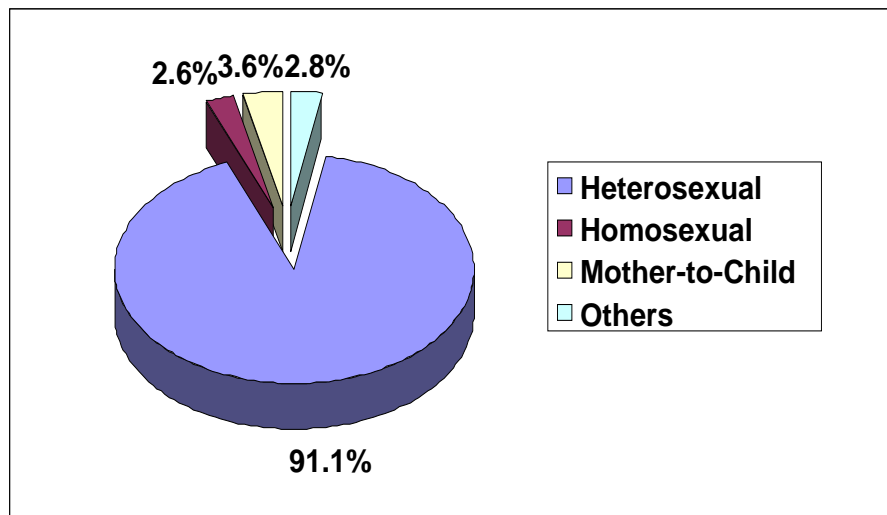
Until recently, surveys had been conducted in an ad hoc manner with a great reliance on program monitoring data (e.g. most knowledge, attitude and practices (KAP)-related indicators for UNGASS 2010 are taken from the Poro Saport project, including prevalence data). However, as noted below, substantial progress has been made in this area.

- Implementation of the 2008-2010 Surveillance Plan has been ongoing, including the formation of Provincial M&E and Surveillance Teams (ProMEST) in 19 of 20 provinces⁷
- With expansion of PPTCT, the number of ANC centers reporting prevalence among pregnant women has increased from one in 2001, to 178 in 2009 covering all four regions and representing all 20 provinces⁸
- The first round of Behavioral Surveillance Survey (BSS) among FSWs and MSM in Port Moresby was carried out in 2006. The first round of an Integrated Biological and Behavioral Surveillance Survey (IBBS) among the general population was to be carried out in 2010.⁷
- However, there is still no HIV Sentinel sero-Surveillance (HSS) system in place for key affected populations; in addition, there is a need for a nationally representative studies among youth on sexual knowledge, attitudes and practices.

WHO IS AT RISK OF HIV IN PAPUA NEW GUINEA?

Data from 2009 shows that Papua New Guinea's is being driven by sexual transmission (91.1%), specifically unprotected heterosexual intercourse¹⁰ – followed by 3.6% of cases attributed to perinatal transmission, 2.6% to homosexual transmission, and 2.8% to others (Fig. 3).¹⁰ Routine case reporting in 2008 shows that the epidemic affects mainly those under the age of 40, with most cases among those aged 20-29 in women and 25-34 in men. More specifically, the peaks among men and women are found in differing age groups, falling in the 20-24 age range for women, while for men it is found in the 30-34 age group.⁷

Figure 3: Percent distribution of reported HIV cases by mode of transmission, 2009



Source: Prepared by www.aidsdatahub.org based on PNG National Department of Health, STI, HIV and AIDS Surveillance Unit,

Sexually transmitted infections (STIs) are highly prevalent in Papua New Guinea and have been increasing, particularly among young women and rural dwellers as well as in the Southern and Highlands regions.⁷ A survey from 2005 in 10 communities found that 40% of the study population tested positive for at least one STI. Fourteen percent of women and 16% of men tested positive for syphilis. In addition, among those who tested positive for HIV, 43% of men and 29% of women also tested positive for syphilis.¹¹

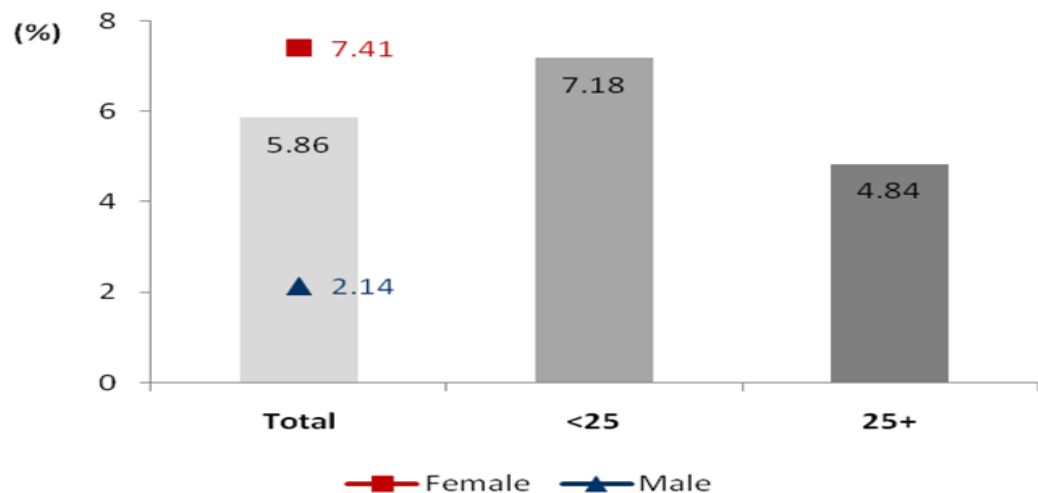
Sex work: Female, Male and Transgender sex workers

Results from 2010 study among people who sell and/or exchange sex in Port Moresby reveals that HIV prevalence rate, although unadjusted, was quite high at 19% among women and 8.8% and 23.7%, respectively, among men and transgenders who sell and/or exchange sex.¹² In comparison, monitoring data from Save the Children Poro Sapot program in Port Moresby in 2009 show HIV prevalence among female sex workers to be 7.4%, overall 5.9%, and 2.1% among MSW, higher in both groups of sex workers under 25 years of age (Fig. 4). Although a general lack of comprehensive population-based survey data creates difficulty in determining the role of commercial sex work in the epidemic, paid sex appears to be commonplace among mobile populations, including migrant workers, transport workers, and military personnel.⁸ In addition, as detailed in subsequent sections, behavioral surveys and program monitoring data reveal risk behaviors and vulnerability factors among sex workers

Table 1: HIV prevalence among people who sell and/or exchange sex in 2009 and 2010

HIV Prevalence	2009 Poro Sapot Program	2010 Port Moresby
Overall SWs	5.9%	17.6%
FSWs	7.4%	19%
MSWs	2.1%	8.8%
Transgender	NA	23.7%

Figure 4: HIV prevalence among female and male sex workers by age group and gender, 2009



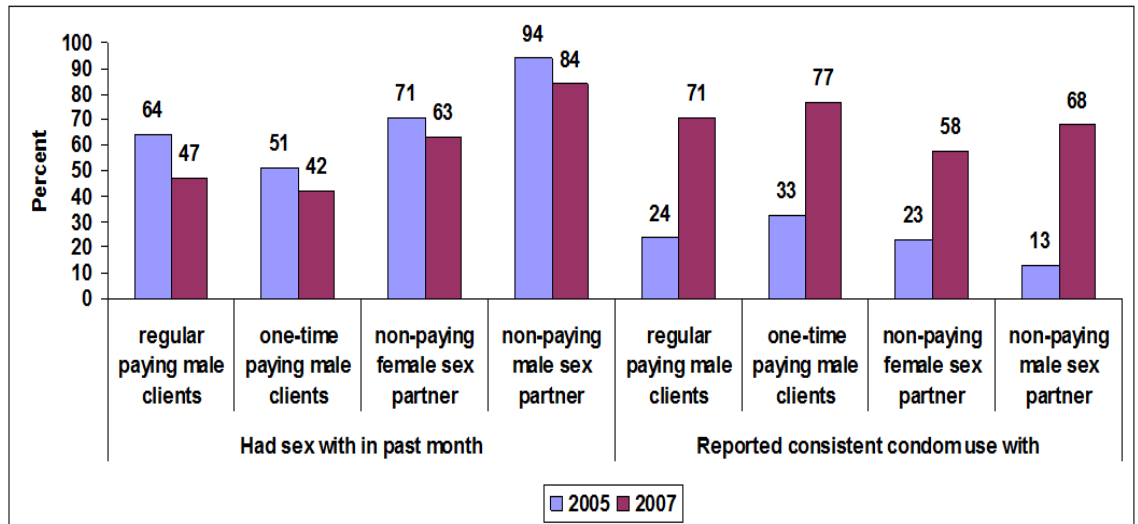
Source: Prepared by www.aidsdatahub.org based on Program monitoring data from Save the Children Poro Sapot Project, NCD, 2009, cited in 2010 UNGASS Country Progress Report: Papua New Guinea

Men who have sex with men

The term MSM in Papua New Guinea has recently been re-considered based on a study by Kelly et al concerning people who sell and exchange sex, where more men identified as either bisexual (42%) or heterosexual (36%) with less identifying as gay and MSM.¹² This finding aside and in light of heterosexual sex being currently the predominant mode of HIV transmission in PNG, a rather high proportion of men are classified as men who have sex with men (MSM).⁷

Studies from 2006 have shown that up to 13% of men in “high risk” occupations (truckers, sugar workers, port workers, military) (n=1408) and 12% of out of school young men (n=788) had ever had sex with other men.¹³ Noticeably, from 2005 to 2007, decreases were observed in the proportions of MSM in Port Moresby who had sex in the last month with regular paying male clients (64% to 47%), with a non-paying male sex partner (94% to 84%) and with non-paying female sex partner (71% to 63%). Figure 5 also shows that the levels of consistent condom use increased from 2005 to 2007, e.g. with regular paying male clients, it increased from 24% to 71%.¹⁴ Based on program monitoring data from 2009, 67% of MSM received an HIV test and received their results, up from 42% in 2007.⁸

Figure 5: Percentage of men who have sex with men reporting sexual partners (by type) and condom use in Port Moresby, 2005 and 2007



Source: Maibani-Mitchie, G, Kavanamur D, Jikian M, Siba P, Evaluation of the Poro Sapot Project: Baseline and Post Intervention Studies. An HIV Prevention program among FSWs in Port Moresby and Goroka and among MSM in Port Moresby, Papua New Guinea. PNG IMR; FHI Research Report to USAID. 2007

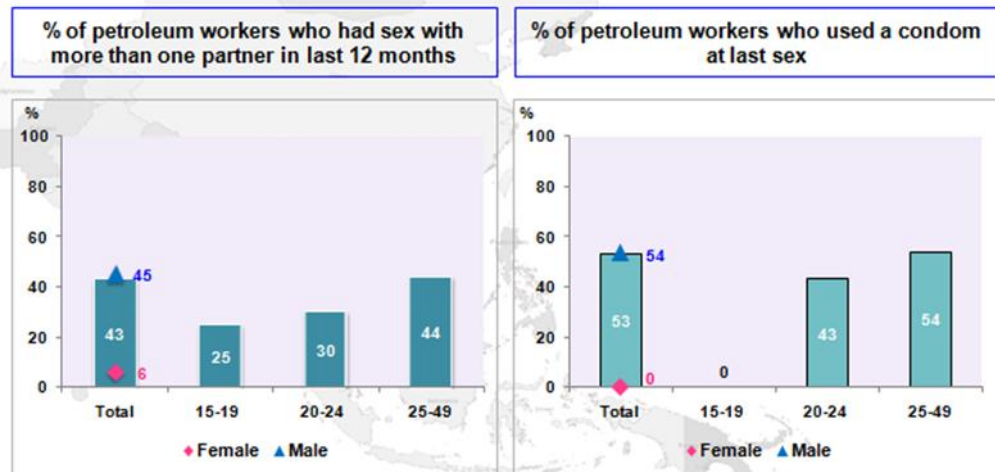
MSM at a Glance

HIV reported cases, 2009¹⁰	<ul style="list-style-type: none"> MSM make up 2.6% of the total number of reported HIV infections
Selected behaviors, 2007⁷	<ul style="list-style-type: none"> 51% reported the use of a condom the last time they had anal sex with a male partner 67% of MSM had an HIV test and got the results 71% of MSM had comprehensive HIV knowledge.
National response, 2007⁷	<ul style="list-style-type: none"> Male-to-male sex is illegal in Papua New Guinea MSM are not formally organized 10% of MSM were reached by HIV prevention programmes in 2007 Special interest group consultations conducted with MSM for development of the current National HIV and AIDS Strategy 2011-2015

Other populations

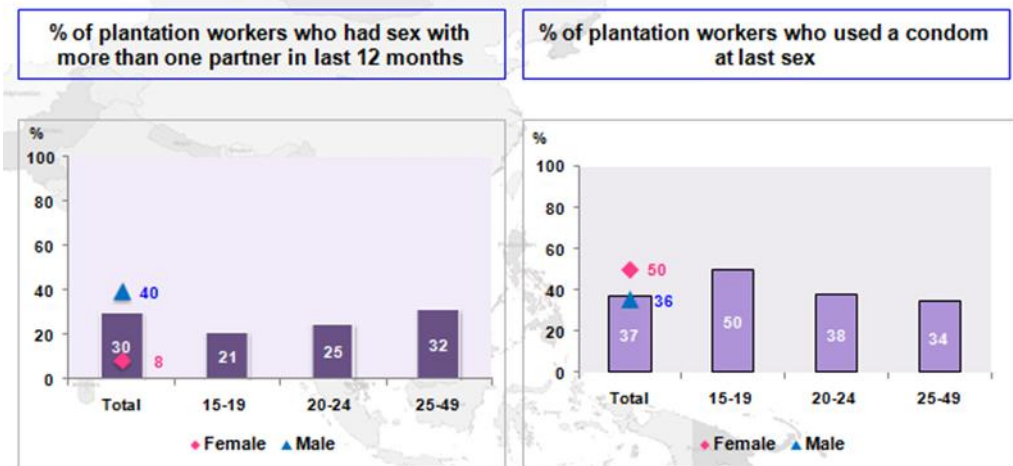
The 2008-2009 Behavioral Surveillance Study (BSS) among two groups of 'enclave' workers, in petroleum development and on plantations, have shown relatively low levels of knowledge about HIV prevention, (44% among petroleum workers, an even lower 19% among plantation workers), high levels of high risk sex (43% of petroleum workers had sex with more than one sexual partner in the last 12 months, only half of those who had had high risk sex used a condom at last sex, and 24% had had transactional sex in last 12 months (Fig. 6). Plantation workers had lower levels of high risk sex (30%), but also lower levels of condom use at 37% (Fig. 7).

Figure 6: of petroleum workers (15-49) who had sex with more than one partner in the last 12 months and those who used a condom at last sex, by age group and gender, 2008-09



Source: Prepared by www.aidsdatahub.org based on National Research Institute Behavioral Surveillance Surveys, 2008-2009, cited in PNG UNGASS Country Progress Report, 2010

Figure 7: of plantation workers (15-49) who had sex with more than one partner in the last 12 months and those who used a condom at last sex, by age group and gender, 2008-09



Source: Prepared by www.aidsdatahub.org based on National Research Institute Behavioral Surveillance Surveys, 2008-2009, cited in PNG UNGASS Country Progress Report, 2010

General population are also at risk. The 2010 Country UNGASS report shows data from a population-based survey 7.8% of young women and men had sexual intercourse before the age of 15.⁷ Data from the 2006 DHS shows 7.5% of men and women (2% among women) in the general population aged 15-49 have had multiple concurrent sexual partners (proxy indicator for high-risk sex).¹⁵ More recent research by the Institute of Medical Research (PNGIMR, Kimbe Study, 2008), although with a much smaller sample (n=501), shows high percentages at 22% among study population in Kimbe, 15% among women attending ANC in Port Moresby General Hospital and even higher among STI clinic attendees in Lae (37% overall, 24% among women) reported sexual intercourse with more than one partner in the last 12 months.⁷ Among those with multiple partners in Kimbe study, only 39% reported using condom during their last intercourse.

KNOWLEDGE, VULNERABILITY & RISK BEHAVIOURS

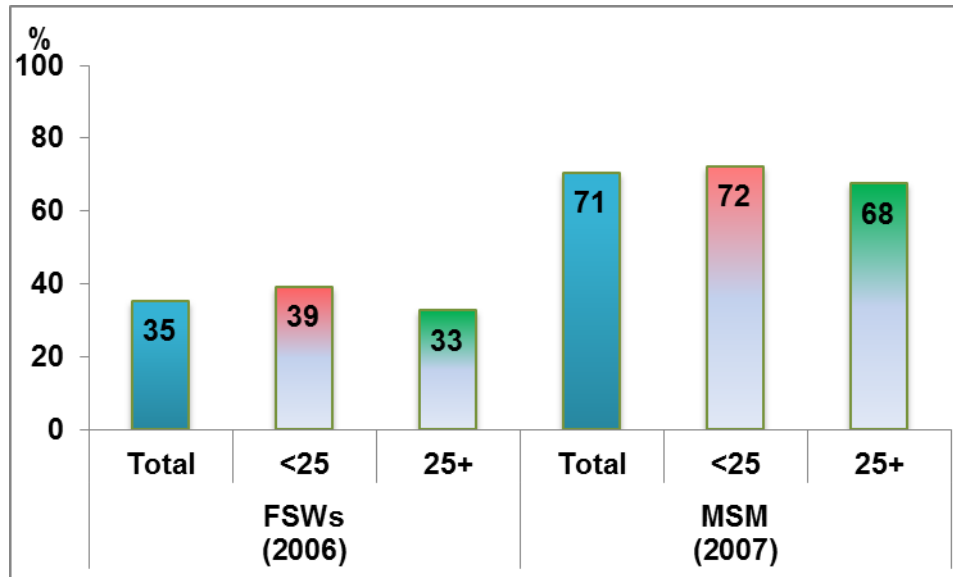
Vulnerability factors

- The illegality of commercial sex work makes female sex workers particularly hard to reach with interventions and to sample¹⁶
- Low condom use among the general populations, particularly in rural areas¹⁶
- Increasing rates of sexually transmitted infections, particularly among young women and rural dwellers⁷
- A wide range of risk behaviors taken by youths, including multiple pre-marital and extra-marital sex partners and early first sex⁷
- Gender inequality and gender-based violence,¹⁷ including high incidence of rape, sexual aggression and other forms of violence against women.¹⁸

Knowledge about HIV

The percentage of FSWs and MSM with comprehensive HIV knowledge (both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions) appears to be slightly better in the young people aged under 25 for both groups; overall, among MSM it is relatively high at 71%, however, FSWs have substantially lower levels of knowledge, less than 40% in both age groups (Fig. 8).¹⁹

Figure 8: Percent of key affected populations with comprehensive HIV knowledge by age group, 2006-2007



Source: Prepared by www.aidsdatahub.org based on PNG NACS, First Round Behavioral Surveillance Survey, 2006-07 cited in UNGASS Country Progress Report, 2010

Condom Use

A 2006 study of 3,407 men and women in urban and rural areas found that condom use at last sex with a non-regular, non-commercial partner was low in both regions. Specifically, in rural Wewak, results were 18% among males and 11% among females. In the capital city of Port Moresby, figures were 16-24% among males and 12-13% among females.²⁰ According to the central surveillance unit at the National Department of Health (NDoH), 4.3% of ANC clinic attendees at Port Moresby General Hospital reported having sex with more than one partner in the last 12 months and used a condom at last sex in 2008.⁷

Based on data from sex workers and MSM who have had contact with prevention programs (i.e. Poro Sapot in Port Moresby, Save the Children, 2009), condom use has not been very high and it is less than 50% among either group.⁷ Another survey carried out with a different purpose along with a different methodology among MSM in 2006 and FSW in 2008 found condom use to be 88.5% and 94%, respectively.⁷

HOW MIGHT HIV AFFECT PAPUA NEW GUINEA IN THE FUTURE?

Analysis of the potential impact of the global economic crisis on HIV incidence and diagnoses in PNG shows respective increases of up to 17% and 11% over the next 3 years. Decreases in VCT and education programs were the factors that could be of greatest concern; in addition, a reduction in the rollout of antiretroviral therapy could increase the number of AIDS-related deaths (by up to 7.5% after 3 years).²¹

The same research group also developed a mathematical model of HIV transmission, which evaluated the expected population-level impact of reductions in ART availability in PNG due to the actual reduction in funding (see Economics of AIDS section below). If the number of people on ART fell to 10% of its current level, then there could be an approximately doubling in annual incidence and a more than doubling of AIDS-related deaths (an additional 12,848) over the next 5 years; if ART provision were halved, then annual incidence would increase by more than two-thirds (68%), and there would be a 85.7% increase (an additional 10,936 AIDS-related deaths).²²

NATIONAL RESPONSE

Law and policy related issues

Legal issues relating to HIV in Papua New Guinea include the following:

- The HIV/AIDS Management and Prevention (HAMP, 2003) Act contains provisions regarding discrimination against people living with HIV (PLHIV), confidentiality, issues of prevention, counseling, care and treatment and provides avenues for redress for infringements to these rights and services²³ However, the general population is not particularly familiar with the HAMP Act and would find it a tough task to access legal assistance to follow up on infringements to their rights⁷
- The minimum legal age for accessing sexual and reproductive health services is 18 (yet girls between the ages of 14 and 17 are usually not denied these services if they try to access them)²⁴
- The Constitution guarantees protection for equal rights for all, but stigma and discrimination against all people living with HIV remains high²⁵
- Sex work is illegal by virtue of Summary Offences Act 1977, Sections 55, 56, and 57 and Section 123 of the Criminal Code Act 1974 (living off the earnings of prostitution) and attempts by FSWs to formally organize themselves have resulted in violence and police harassment.²⁶
- Homosexuality is illegal due to the Criminal Code Act 1974, Section 120, which deals with the offence on sexual penetration, “against the order of nature”, while section 212 covers acts of “gross indecency between male persons”⁷

Governance

Political leadership has been waning since 2007; furthermore, operational barriers such as poor planning and coordination, inappropriate prioritization and low human and institutional capacity to track and show results of programs and a lack of accountability have hampered the management and delivery of HIV programs, particularly in scaling-up services.⁷

Despite the recently diminished political leadership in combating HIV and AIDS in the country, the Government had previously undertaken several significant steps, among which include the following:

- Establishment of national structures to manage and carry out HIV&AIDS policies and programs:
 - The National AIDS Council (NAC) and the National AIDS Council Secretariat (NACS) in 1997;
 - Special Parliamentary Committee on HIV/AIDS in 2004.
- Development of key policies to guide the national response to HIV and AIDS in the country:
 - HIV and AIDS Management and Prevention (HAMP) Act 2003 that provides legal framework for addressing discrimination, stigmatization and mandatory screening with respect to HIV;
 - PNG Medium-Term Development Strategy (MTDS) 2005-2010, which includes HIV and AIDS as one of the 6 expenditure priorities of the Government;
 - National HIV and AIDS Strategic Plan (2006-2010), and followed by annual operational plans;
 - National Gender Policy and Plan on HIV and AIDS 2006-2010;
 - National Leadership Strategy in 2007;
 - National Education Plan 2005-2014;
 - National HIV Strategy (2011-2015).
- Establishment of national strategies and programs on HIV & AIDS:
 - '3x5' initiative to introduce ART in PNG in 2004;
 - High Risk Setting Strategy implemented by civil society groups under the management of Burnett Institute in 2005;
 - Provider-initiated HIV testing and counseling to scale up HIV testing in health sector in 2007;
 - National Surveillance Plan 2007-2010 with substantial support from bilateral and multilateral partners and research institutions.
- Establishing HIV surveillance and monitoring and evaluation (M&E), although not currently prioritized and lacking sufficient institutional and human resource capacity.
- Systematic Literature Review of HIV & AIDS Research in 2007 and 2008 synthesized many of the socio-cultural and bio-behavioral dimensions of HIV and AIDS, including family values, economic and gender perspectives. The Review also calls for a new approach for the national response, which currently has 'some positive aspects, but not providing the intended effect, response, or change at the community and population level.'²⁷

HIV Prevention Programs

As of December 2009, two-thirds (66%, 177 of 270) of health facilities were providing HIV testing and counseling (VCT), up from 44% in 2007.²⁸ The implementation of provider-initiated counseling and testing in healthcare settings is credited to a large extent in the continued increase observed. Moreover, the number of people aged 15 years and older who received HIV testing and counseling and know their results was 159,005 in 2009.²⁸ In terms of prevention, as of 2009, only 32% of FSWs and 10% of MSM were reached with HIV prevention programs.²⁸ Meanwhile, 100% of schools provided life skills-based HIV education in the last academic year, up substantially from 25% in 2007.⁸

Antiretroviral treatment, Prevention of Mother-to-Child Transmission

Based on data from the Towards Universal Access Report 2010, the percentage of adults and children receiving ART in 2009 was 52% (based on 2010 guidelines, 77% based on 2006 guidelines), up from 35% in 2007.²⁸

According to the reported HIV cases in 2009, perinatal transmission was attributable to 3.6% of reported HIV cases.¹⁰ As of December 2008, 7 out of 20 provinces in PNG provided PMTCT services in healthcare facilities. The percentage of health facilities providing antenatal care (ANC) services that offer both HIV testing and antiretrovirals for PMTCT onsite was 17%.

In 2009, 43,942 pregnant women were tested for HIV and received their results (21%), nearly the same as 22% (44,850) in 2008.²⁸ An estimated 13% of pregnant women living with HIV received antiretrovirals (ARVs) to reduce the risk of MTCT in 2009, the same coverage as in 2008.²⁸ Less than one of every seven (13%) infants born in 2009 to women living with HIV received ARVs for prevention of mother-to-child transmission (PMTCT). Furthermore, only 1% of infants born to women living HIV received co-trimoxazole prophylaxis within two months of birth as recommended by international guidelines.²⁸

The recently released UNICEF report – Together, We Can: The success of the Mingende practice model for preventing parent-to-child transmission of HIV in Papua New Guinea (2011) – highlights a number of lessons learned and good practices to create a holistic health care environment with mothers and children, reduce fall-out rates and improve timely ART provision as well as adherence.²⁹ A few brief examples of lessons learned and good practices include:

1. Strong leadership at all levels with support and motivation of staff, including professional development and training through short courses, in-house training and formal studies, which in turn drive excellence
2. Integration of PPTCT and MCH services with a logical flow of patients from General ART to PPTCT and vice versa, or ANC or General Ward or VCT to PPTCT, which allows for timely ART interventions and care and serves to strengthen MCH. In addition, a focal point person is accountable for streamlining with the rest of the services.
3. Efficient system of records maintenance, with a coding system to ensure confidentiality, allows for regular monthly follow-up of mothers, timely interventions on ART and reports on PPTCT outcomes.

ECONOMICS OF AIDS

Prior to 2004, government funding for HIV programs was sporadic.³⁰ In 2005, PNG successfully applied for a GFATM grant of US\$30 million over five years, ending August 2010; however, the round nine grant proposal was unsuccessful.⁷ In addition to the Global Fund, the number of stakeholders in the past two years (2008-2009) has increased and their role has also become more important.⁷ Over the last few years, the Australian Government through AusAID has been the foremost funding agency for national response to the HIV and AIDS epidemic in PNG. Other major donors include the Asian Development Bank (ADB), USAID, the UN system, and New Zealand AID. Other international donors include the World Bank, the Clinton Foundation, the British High Commission and the European Union.⁷

The Government of PNG more than doubled its funding for HIV and AIDS from 2006 to 2007 from PNG Kina (PGK) 7,125,600 (approximately US\$ 2,557,000) to PGK 18,000,000 (US\$ 6,095,000), respectively.³⁰ The contributions of the development partners into the HIV and AIDS response, based on the seven focus areas of the national strategic plan in 2008 and 2009 are summarized in Table 2.⁷

Table 2: Summary of Funds Committed to the National Strategic Plan in 2008 and 2009

Seven Focus Areas	2008 (PGK)	2009 (PGK)	% Change
Treatment, counselling and support	13,682,500	16,827,500	23%
Education and prevention	27,489,000	31,123,000	13%
Epidemiology and surveillance	636,000	910,000	43%
Social and behavioural research	1,703,000	3,335,000	96%
Leadership, partnership and coordination	11,168,000	13,430,000	20%
Family and community support	3,700,000	7,500,000	103%
Monitoring and Evaluation	4,182,000	5,252,000	26%

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