



Union of Myanmar
Ministry of Health, Department of Health

NATIONAL AIDS CONTROL PROGRAMME

Behavioral Surveillance Survey 2003 *General Population and Youth*

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Abbreviations

AIDS	:	Acquired immuno deficiency syndrome
ANC	:	Ante natal clinic
ART	:	Antiretroviral therapy
BSS	:	Behavioral Surveillance Survey
HIV	:	Human immuno deficiency syndrome
IEC	:	Information, education and communication
NAP	:	National AIDS Programme
NGO	:	Non-governmental organization
PLWHA	:	People living with HIV/AIDS
STD	:	Sexually transmitted diseases
VCCT	:	Voluntary confidential counseling and testing
UNAIDS	:	Joint United Nations Programme on HIV/AIDS
WHO	:	World Health Organization

Executive Summary

A survey was undertaken during September–November 2003 to assess the knowledge, attitudes and behaviours of the general population and the youth with regards to HIV/AIDS transmission and prevention at seven sites in Myanmar. A total of 9678 individuals (4631 males and 5047 females) were interviewed. Of these, 35% were youth aged 15–24 years. Although 91% of the population had heard about HIV/AIDS, only 35% knew about the methods of HIV prevention and barely 27% were able to correctly reject the common misconceptions about HIV transmission. The youth, women and the less educated had the lowest knowledge about HIV prevention. Less than a quarter of the respondents were willing to buy food from an HIV-infected vendor and just half of them expressed willingness to care for an HIV-infected relative. Only a quarter of those with sexually transmitted disease (STD) symptoms sought treatment; a large proportion of them consulted a private practitioner or took self treatment and only 15% visited a government hospital. About 7% of men had sex with a non-regular partner in the last year; nearly two-thirds of them had unprotected sex (only 54% men used condom consistently with a commercial sex worker and 18% with a casual acquaintance). While 68% respondents expressed the intent for voluntary confidential counseling and testing (VCCT), a meagre 5% actually got tested for HIV infection and received their results.

The findings of the survey indicate the following **programmatic gaps**:

- Knowledge about HIV prevention is deficient
- Extensive misconceptions about HIV transmission prevail
- Negative attitudes towards PLWHA are rampant
- Utilization of STD services is suboptimal
- High-risk sexual behaviours exist and unprotected sex is common
- VCCT needs remain unmet

Key recommendations

1. **Revitalize and scale-up the HIV/AIDS Information Education and Communication (IEC) campaign** by: evaluating current IEC strategies; identifying innovative mechanisms to disseminate key HIV prevention messages; and, targeting IEC to vulnerable groups, such as out-of-school youth.
2. **Accord top priority to reducing stigma and discrimination against PLWHAs** by soliciting support from the administrative and political leadership as well as engaging prominent public figures to convey the message of care and compassion towards PLWHAs; and engaging PLWHA groups in stigma reduction activities.
3. **Improve the utilization of STD services** by increasing community awareness about the importance of early treatment of STDs and sustaining the training of governmental and non-governmental health workers as well as private practitioners in the treatment of STDs
4. **Re-emphasise consistent condom use for sex with all non-regular partners.** Explore additional avenues to increase the access to condoms and undertake formative research to identify reasons for low use of condoms.
5. **Urgently increase access to VCCTs and their utilization** by: further expanding the number of VCCT centres; exploring the possibility of establishing VCCT services in non-governmental institutions; creating awareness in the community about the location of VCCT services; improving the quality of VCCT services; and making the services more client-friendly by training of counselors.

1. Introduction

Myanmar is one of the least densely populated countries in Asia with a total population of 50.1 million in 2004. Administratively, the country is divided into 14 states/divisions, 63 districts and 324 townships. Three-quarters of the population lives in rural areas. Annex 1 provides selected developmental indicators for Myanmar.

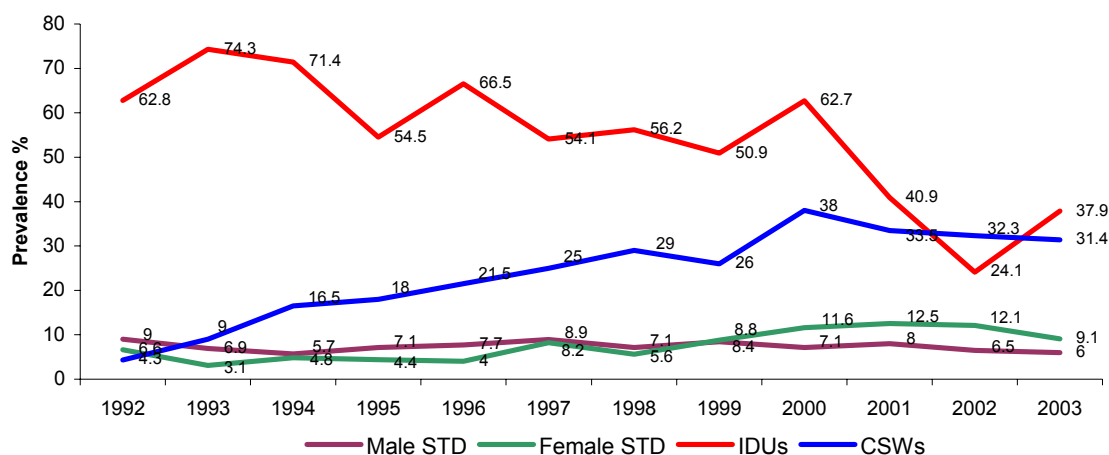
1.1 Epidemiological assessment

The first HIV case was detected in Myanmar in the mid-to-late 1980s. By the end of 2003, a cumulative 7174 AIDS cases and 3324 AIDS deaths have been notified. The male-to-female ratio among the reported cases is 3.5:1. Sixty-five percent of the cases acquired infection by heterosexual route and 26% by injecting drug use. Eighty percent of the reported AIDS cases are in the age group 20–39 years.

The national average prevalence of HIV infection among adults is 1.3%. However, the infection rates vary widely by geographical locations and by population sub groups. Annex II presents data on selected HIV indicators.

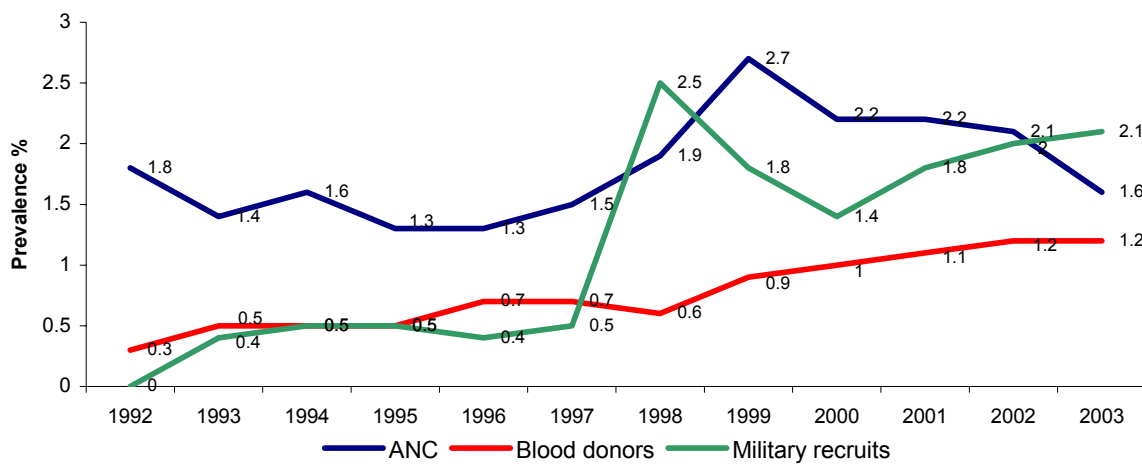
Figure 1.1 presents trends in HIV prevalence among the main high risk groups. Among injecting drug users (IDUs), the median HIV prevalence in the six sentinel sites in 2003 was 48% (range: 23% to 77%) and among commercial sex workers (CSWs), the HIV prevalence in Yangon and Mandalay was 33% and 54%, respectively.

Figure 1.1 HIV prevalence among "high risk" sentinel surveillance groups, Myanmar 1992 - 2003



In 2003, The HIV prevalence among women attending ante natal clinics (ANCs) was 2% and 0.5% in Yangon and Mandalay, respectively and has remained fairly constant over the previous five years in these major urban areas. Outside the major urban areas, the median HIV prevalence in 2003 was 1% with a range of nil to 7.5%. However, in 12 out of 29 sentinel sites, the HIV prevalence among ANC women was 2% or higher. Among military recruits tested in Yangon and Mandalay, the prevalence of HIV infection increased from 0.5% in 1992, to 1.4% in 2000, to 2.09% in 2003. Among blood donors, HIV prevalence consistently increased from 0.3% in 1992, to 1% in 2000, to 1.23% in 2003 (Figure 1.2).

Figure 1.2. HIV prevalence among "lower-risk" sentinel surveillance groups, Myanmar 1992 - 2003



Source: HSS 2003. NAP, Ministry of Health, Myanmar

1.2 National response

HIV/AIDS is accorded the highest priority in the national health plan of Myanmar. The Government of Myanmar established the National AIDS Committee (NAC) in 1989 which has the mandate to formulate national HIV/AIDS policies. The National AIDS Programme (NAP) was created in 1989 under the Disease Control Division of the Department of Health, and in 1991, it was merged with the STD programme. The NAP consists of the Programme Manager's office, a central AIDS/STD clinic and a central AIDS counseling team, four state/divisional offices and 40 district AIDS/STDs teams.

To monitor the epidemic in the country, the NAP has been conducting annual HIV sentinel surveillance (HSS) since 1992. Currently, HSS is being carried out in 30 sites (townships). The population groups for HSS include high-risk groups (female direct sex workers, intravenous drug users and STD patients) and low-risk groups (antenatal care attendees, blood donors and new military recruits). In addition to HSS, the surveillance system consists of AIDS case notification, STD case notification and behavioral surveillance surveys (BSS).

1.3 Behavioral surveillance survey

BSS is a monitoring and evaluation tool designed to track trends in HIV/AIDS-related knowledge, attitudes and behaviours in subpopulations who are at greater risk of infection, such as CSWs, IDUs, mobile men and youth.

In Myanmar, BSS in the general population is being conducted since 2000. Systematic qualitative surveys in high-risk groups, such as sex workers have begun only recently. Ad hoc surveys among drug users and sex workers, including those under treatment or in detention, suggest very high levels of risk behaviour in these groups. Behavioural research has been done for a number of other groups with risk behaviours, but these studies have not been repeated to measure trends in behaviour over time. Young people are particularly vulnerable and are the key to the future course of the HIV epidemic. They are the essential focus for prevention messages in every sexual health programme. Since most new infections are in young people, even modest changes in behaviour will have significant impacts on the epidemic. Efforts to establish the systematic measurement of behavioural trends in this group is needed so that Myanmar can track the success of its prevention efforts over time.

1.4 Objectives of the BSS

With financial support from WHO, the present BSS was undertaken among the youth and the general population with the following objectives:

1. To strengthen the second generation surveillance system in the country
2. To provide information that can guide programme planning
3. To monitor trends about HIV/AIDS knowledge, attitudes and behaviours among the general population and youth groups, that can be tracked over time
4. To provide data in a standardised format, which will enable comparison with other BSS carried out in other countries

This report summarises the findings of the BSS 2003 conducted at seven sites in the country among the general population aged 15–49 years, and lists the ensuing programmatic implications and recommendations.

2. Methodology

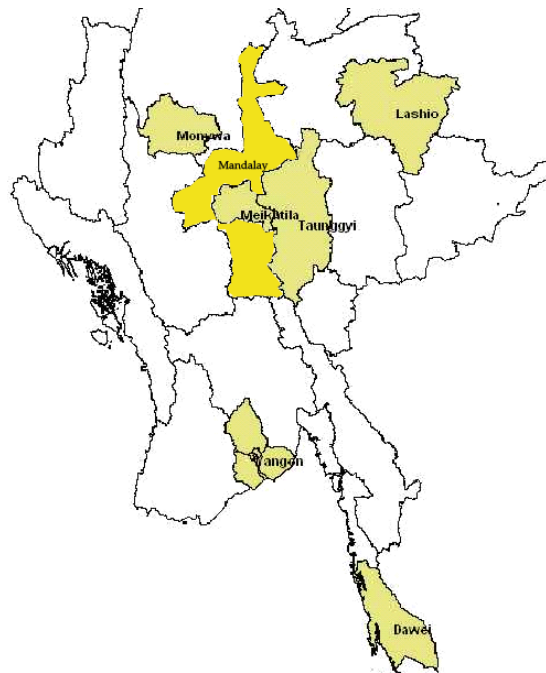
The National AIDS Control Programme was responsible for the planning and implementation of the BSS. The planning process began in May 2003 and the community survey was conducted from September through to November 2003.

2.1 Study sites and population

The study sites were urban and rural communities in seven townships: Dawei and Yangon in the south, Lashio and Taunggyi in the east, Mandalay, Meiktila and Monywa in central Myanmar (Figure 2.1). These sites were selected because: 1) they represent diverse ecological areas of Myanmar; 2) existing data suggest that these regions have a higher risk of spread of HIV; 3) these are sites for targeted HIV/AIDS interventions; 4) HIV sentinel surveillance is being carried out in these areas; 5) it was operationally feasible to implement the study in these areas due to presence of trained AIDS/STD teams.

Two target groups were included in the survey: 1) youth aged 15–24 years, and; 2) older adults aged 25–49 years.

Figure 2.1 Map of Myanmar showing the survey sites.



2.2 Sample size and survey design

For maximum statistical power, it was decided to include 400 males and 400 females each from urban and rural communities, from each study site. Thus, the total sample at each site was expected to be 1600 respondents.

A two-stage cluster sampling design was used to select the required number of respondents from the selected sites. Each township area was divided into urban and rural clusters based on the population size and existing administrative divisions. In the first stage, urban and rural clusters were selected by probability proportionate to size (PPS). For each selected cluster, sampling frames were prepared. Using this sampling frame, the required numbers of households were randomly selected in each cluster. From each selected household, all youth aged 15–24 years and older adults aged 25–49 years were included in the survey.

The sample size at each site is given in Table 2.1.

Table 2.1. Sample size at each site, Behavioral Surveillance Survey—Myanmar, 2003

	15–24 years			25–49 years			All respondents		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Dawei	306	294	600	514	593	1107	820	887	1707
Lashio	298	304	602	504	530	1034	802	834	1636
Mandalay	82	71	153	103	115	218	185	186	371
Meiktila	174	195	369	301	493	794	475	688	1163
Monywa	302	282	584	522	621	1143	824	903	1727
Taunggyi	344	314	658	508	512	1020	852	826	1678
Yangon	201	213	414	472	510	982	673	723	1396
Total	1707	1673	3380	2924	3374	6298	4631	5047	9678

2.3 Key indicators

2.3.1 Knowledge about HIV/AIDS

Ever heard about HIV/AIDS

Numerator: Number of respondents who reported that they had heard about HIV/AIDS

Denominator: Total number of respondents surveyed

Knowledge of HIV prevention methods among youth (age 15–24 years)

Numerator: Number of youth who know that HIV transmission can be prevented by consistent condom use, being faithful to one uninfected partner and by abstinence.

Denominator: Total number of youth surveyed

Knowledge of HIV prevention among adults

Numerator: Number of older adults (age 25–49 years) who know that consistent condom use can prevent HIV and that HIV can be prevented by being faithful to one uninfected partner

Denominator: Total number of adults (age 25–49 years) surveyed

Absence of incorrect beliefs about HIV transmission

Numerator: Number of respondents who correctly answer that mosquito bite cannot transmit HIV/AIDS and that eating together with an HIV infected person cannot transmit HIV and who know that a healthy person can have HIV.

Denominator: Total number of respondents surveyed

2.3.2 STD awareness and prevalence

Awareness about STD

Numerator: Number of participants who had heard of an STD other than HIV/AIDS

Denominator: Total number of respondents surveyed.

Proportion of respondents who reported having genital ulcer

Numerator: Number of respondents who had genital ulcer in the past year

Denominator: Total number of respondents surveyed

Proportion of respondents who reported having genital discharge in the past year

Numerator: Number of respondents who had genital pus discharge in the past year

Denominator: Total number of respondents surveyed

2.3.3. Absence of stigmatising attitude (negative attitude) towards people living with HIV/AIDS (PLWHA)

Willingness to eat with an HIV-infected person

Numerator: Number of respondents who were willing to eat with an HIV-infected individual

Denominator: Total number of respondents surveyed

Willingness to care for an HIV-infected relative

Numerator: Number of respondents who were willing to care for an HIV-infected friend or relative

Denominator: Total number of respondents surveyed

Willingness to buy food from an HIV-infected vendor

Numerator: Number of respondents who were willing to care for an HIV-infected friend or relative

Denominator: Total number of respondents surveyed

2.3.4. Indicators of risk behavior

Youth sexually active

Numerator: Number of youth having had sex in the past 12 months

Denominator: Total number of youth surveyed

Commercial sex

Numerator: Number of male respondents having sex with a commercial sex worker in the past 12 months

Denominator: Total number of male respondents surveyed.

Consistent condom use during sex with a commercial sex worker

Numerator: Number of respondents who used a condom every time they had sex with a CSW in the past one year

Denominator: Total number of male respondents who have had sex with a CSW in the past 12 months

Consistent condom use during sex with a casual acquaintance

Numerator: Number of male respondents having sex with a non-regular partner in the past 12 months

Denominator: Total number of male respondents surveyed.

Consistent condom use during sex with a casual acquaintance

Numerator: Number of male respondents who used a condom every time they had sex with a casual acquaintance in the past one year

Denominator: Total number of male respondents reporting having sex with a casual acquaintance in the past 12 months

2.3.5. Exposure to interventions

Population seeking voluntary HIV testing

Numerator: Number of respondents who have ever voluntarily requested an HIV test, got tested and received the results

Denominator: Total number of respondents surveyed.

2.4 Data collection

The AIDS/STD team leaders at each study site were responsible for the overall co-ordination and management of the survey activities, including quality assurance of the data collected.

Data were collected using a standardised, pre-coded questionnaire based on UNAIDS/MEASURE/WHO tools. The questionnaire was pre-tested among 50 individuals in the Yangon Township and modified accordingly.

The questionnaire was a 68-item tool in Myanmar language (Annex III) organized into the following sections: 1) demographic characteristics; 2) sexual behaviour; 3) knowledge and use of condoms; 4) knowledge about STDs and treatment seeking behaviour; 5) exposure to interventions including voluntary counseling and testing; and 6) knowledge about HIV/AIDS and attitudes towards PLWHA.

Interviewers for this survey were recruited from the respective STD teams of the Department of Health who had previous experience in conducting similar surveys. To build capacity for subsequent surveys, the midwives and health assistants in the study areas were also recruited for data collection. All interviewers were trained or given a refresher training prior to the survey. The training was done using a field manual in Myanmar language.

Data were collected either by interviewing non-literate persons or the questionnaire self-administered for literate respondents. Verbal consent was obtained from each respondent before data collection. Data on personal identifiers, such as name, address, were not collected.

2.5 Data management and analysis

Data entry was done centrally by the NAP. Epi Info version 6.04 was used for data entry. Prior to data analysis, data was cleaned by checking for completeness and internal consistency and the few open-ended responses were coded. Epi Info and Stata version 8 were used for univariate and bivariate analyses.

3. Findings

3.1 Socio-demographic characteristics of the respondents

A total of 9678 individuals (4631 males and 5047 females) from seven township sites were interviewed. Of these, 3380 (35%) were youth aged 15–24 years. The median age of male and female respondents was 29 years and 30 years, respectively. Table 3.1 provides the socio-demographic profile of the respondents.

Table 3.1 Socio-demographic profile of the study participants, by sex, Behavioural Surveillance Survey—Myanmar, 2003

		Male		Female		Total	
		Number	%	Number	%	Number	%
Age	15–24 years	1716	37%	1675	33%	3391	35%
	25–49 years	2948	63%	3388	67%	6336	65%
Marital status	Married	2343	51%	2731	55%	5074	53%
	Single	2267	49%	2254	45%	4521	47%
Education	Non-literate	192	4%	369	7%	561	6%
	Can read and write	340	7%	449	9%	789	8%
	Primary school	1148	25%	1329	27%	2477	26%
	Middle school	1373	30%	1147	23%	2520	26%
	High school	1056	23%	923	18%	1979	21%
	College	269	6%	361	7%	630	7%
	Graduate	239	5%	429	9%	668	7%
Occupation	Farmer	1070	23%	777	15%	1847	19%
	Business	711	15%	930	18%	1641	17%
	Laborer	325	7%	349	7%	674	7%
	Employee	1077	23%	451	9%	1528	16%
	Student	508	11%	497	10%	1005	10%
	Unemployed	281	6%	1700	33%	1981	20%
	Other	628	14%	372	7%	1000	10%
Religion	Buddhist	4275	93%	4701	93%	8976	93%
	Christian	167	4%	186	4%	353	4%
	Muslim	153	3%	150	3%	303	3%
	Hindu	12	0%	6	0%	18	0%
	Other	7	0%	2	0%	9	0%
Alcohol in the past month	Yes	2315	50%	132	3%	2447	26%
	No	2314	50%	4796	97%	7110	74%
Ever tried drugs	Yes	154	3%	63	1%	217	2%
	No	4422	97%	4836	99%	9258	98%

Majority of the respondents were educated; 11% of male and 16% of female respondents had a college-level or higher education.

In all, 53% of the respondents were married (16% youth and 73% of older adults). The median age of marriage for male and female respondents was 23 years and 20 years, respectively.

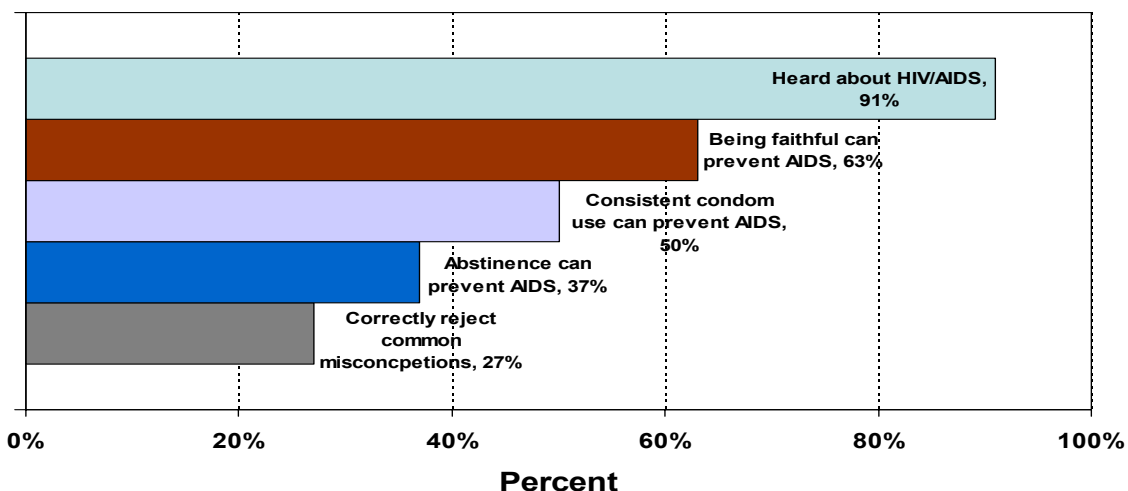
A total of 217 (2%) respondents reported having ever tried drugs and of these 30 (13%) reported injecting drugs in the past year.

3.2 Knowledge and misconception about HIV/AIDS

Overall, 91% of the respondents had ever heard about HIV/AIDS; this proportion varied from 76% in Lashio to nearly 100% in Mandalay and Yangon (Annex IV, Table 1). While 45% (4385) of the respondents knew of someone who had HIV/AIDS or had died of AIDS, about 8% (749) responded that they knew of a friend or relative who had HIV/AIDS. These proportions were the highest in Mandalay, Dawei and Taunggyi.

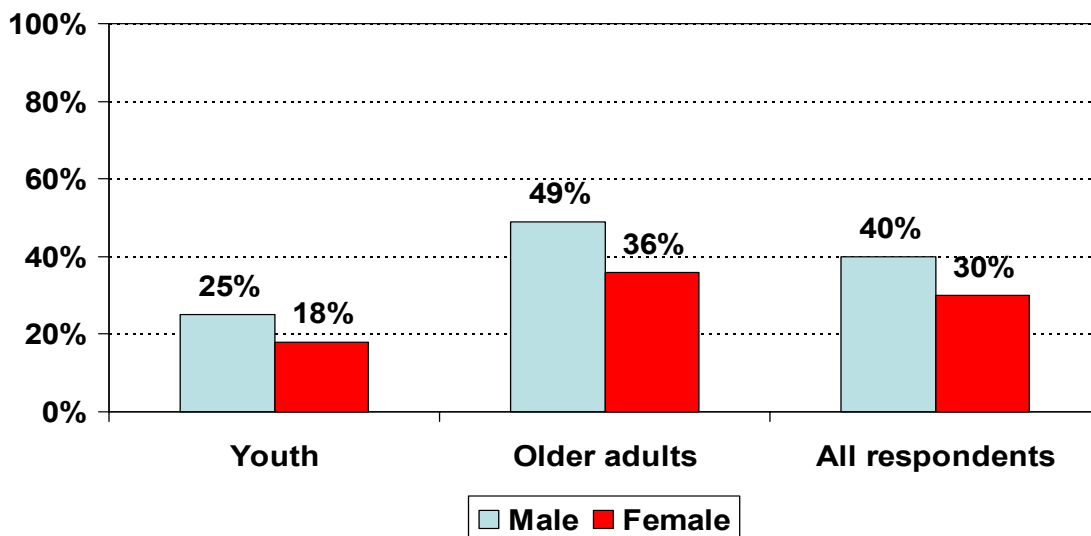
The majority of the population knew about the methods of HIV transmission; 81% of the respondents correctly answered that HIV could be transmitted by contaminated needles. Nearly three-quarters knew that the virus could be transmitted from an infected mother to her child (Annex IV, Tables 2, 3). Although the majority of the population had heard about HIV/AIDS, comprehensive and effective knowledge about prevention methods was low and misconceptions about HIV/AIDS were widespread (Figure 3.1). Sixty percent of the respondents mentioned that HIV infection could be prevented by being faithful to one uninfected partner and 50% knew that consistent condom use could prevent HIV; only 37% answered that abstinence was a method to prevent HIV/AIDS (Annex IV, Tables 4, 5, 6).

Figure 3.1
HIV/AIDS knowledge gap



Across the study sites, knowledge about prevention methods (abstinence, being faithful to one uninfected partner and consistent use of condom) varied from 18% to 35% among the youth and 32% to 53% among the older adults. Overall, only 35% of the respondents were knowledgeable about prevention methods. Youth and women had a relatively lower level of knowledge about HIV prevention (Figure 3.2, Annex IV Table 7). Furthermore, knowledge about HIV prevention methods varied from a lowest of 26% among those with primary or lower education, to 41% among those with a middle or high school education, to 42% among those with college or higher education (Chi square=219; $p<0.001$). A higher proportion of respondents in Mandalay and Yangon were knowledgeable about HIV prevention methods. Youth who had dropped out of school had lower levels of knowledge than the other youth (Chi square=85; $p<0.001$)

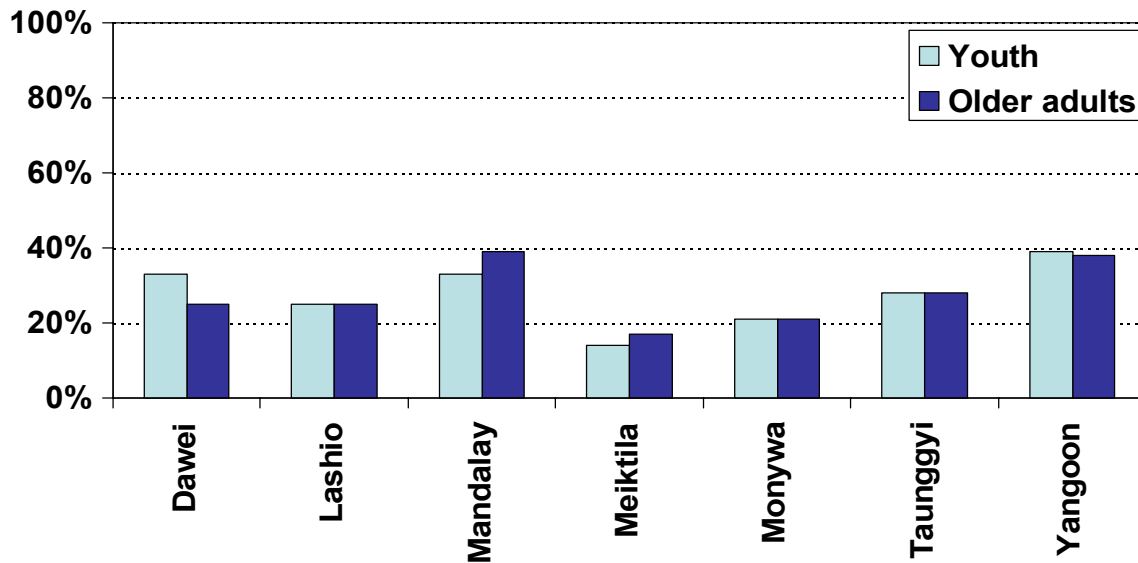
Figure 3.2
Proportion of respondents who knew the “ABC” of HIV/AIDS prevention, by age and sex



A=Abstinence
B=Being faithful
C=Consistent condom use

Nearly three-quarters of the population had one or more misconceptions about HIV/AIDS (Table 8). Across the survey sites, only 16% to 38% of the population correctly rejected the three common misconceptions about the spread of HIV/AIDS; this proportion did not vary by age or sex but was significantly associated with education—the lower the education level, the higher the proportion of respondents with incorrect beliefs (Chi square= 825; $p<0.0001$). However, even among those with a college degree, half of the respondents held incorrect beliefs about HIV/AIDS. The proportion of respondents who correctly rejected the common misconceptions about HIV transmission was the highest in the two biggest cities—Mandalay and Yangon (Figure 3.3).

Figure 3.3
Proportion of respondents correctly rejecting common misconceptions about HIV/AIDS transmission

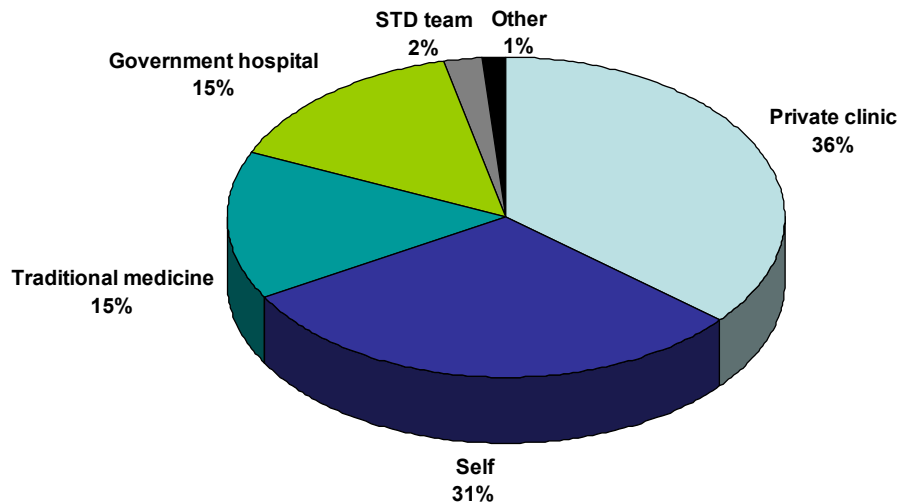


3.3 STD awareness, prevalence and care-seeking

Overall, 70% of the respondents were aware of an STD other than HIV/AIDS (Annex IV, Table 9). However, less than 30% were aware of one or more symptoms of an STD.

The self-reported prevalence of genital ulcers among males and females was 1.6% and 1.1%, respectively. The proportion of men and women with genital discharge was 1.5% and 18.3%, respectively (Annex, Table 10, 11). Among those who had genital discharge or genital ulcers, only a quarter sought treatment. Figure 3.4 shows the various sources of treatment for STDs. The most common source of treatment for STD symptoms was a private clinic, (36%) followed by self treatment (31%); only 15% of the patients with an STD consulted a governmental hospital.

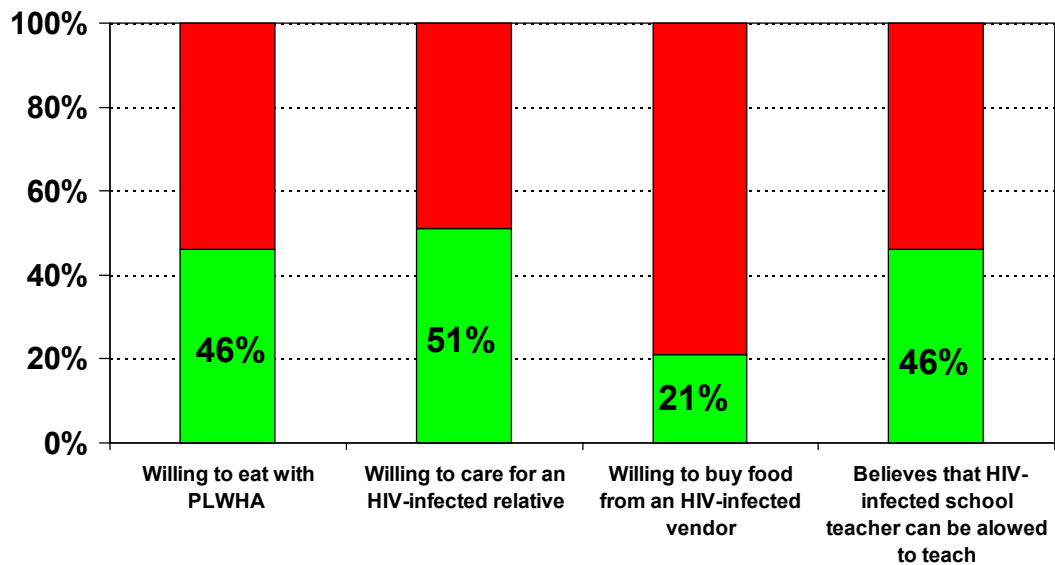
Figure 3.4
Source of treatment for sexually transmitted diseases



3.4. Stigma and discrimination

There was widespread stigma and discrimination against the PLWHAs at all survey sites. Overall, only half of the respondents expressed a willingness to care for an HIV-infected person and 46% were willing to eat with an HIV-infected person (Figure 3.5). Only a fifth of the respondents (21%) were willing to buy food from an HIV-infected vendor (Table 12). These attitudes were reflected by the youth and older adults and by both sexes across all sites. Stigmatising attitudes were the highest among the non-literate and decreased with increasing education level (Chi square=238; $p < 0.001$).

Figure 3.5
Proportion of respondents with a supporting attitude towards People Living with HIV/AIDS



3.5 High risk behaviour

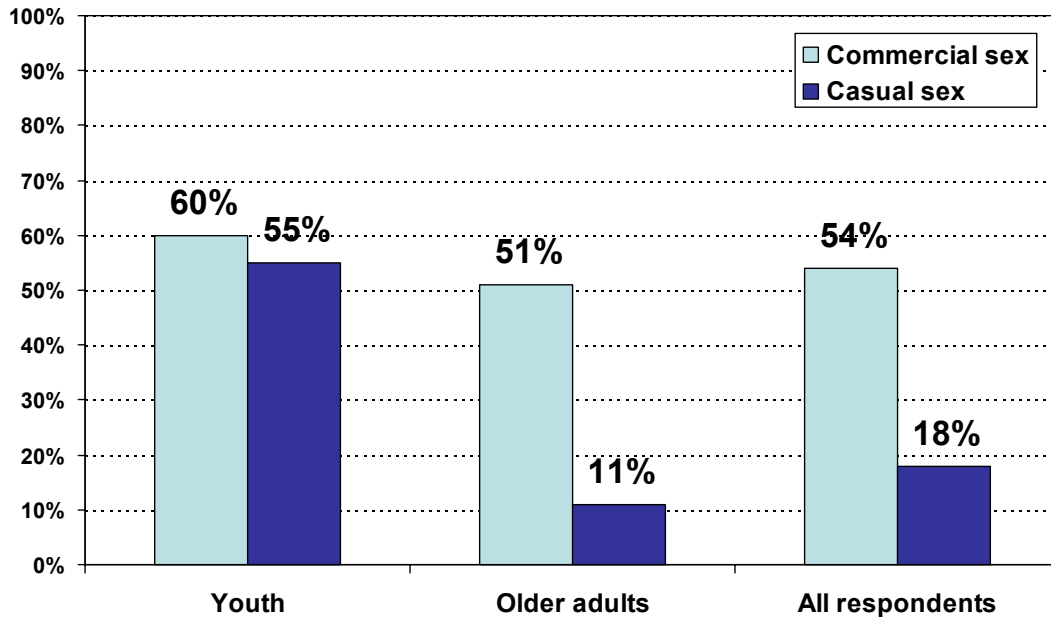
In all, 16% of the youth and 61% of the adult population was sexually active (Table 13).

The median age at first sex reported by male and female youth was 22 years and 19 years, respectively. In all, few respondents reported having had sex with a commercial sex worker or having had sex with a casual acquaintance in the past year. Only 53 of 1707 youth (3%) and 106 of 2924 older men (4%) reported having sex with commercial sex workers in the past year. The proportion of men who reported using condoms consistently with CSWs was 54% (60% youth and 51% older men) (Figure 3.6).

Four percent of men reported having sex with a casual acquaintance. However, less than a fifth used condoms consistently with casual acquaintances (Figure 3.7). In all, only 7% (312/4631) of men reported having sex with a non-regular partner (commercial sex worker or with a casual acquaintance) in the past year and majority of these had two or fewer partners. Only 34% (106/312) of those having sex with a non-regular partner reported consistent condom use. Only 1% of men reported ever having sex with other men.

Reasons for non-use of condoms could not be elicited from most respondents who engaged in high-risk sexual behaviors.

Figure 3.6
 Consistent condom use with non-regular partners in the last year among youth and older men



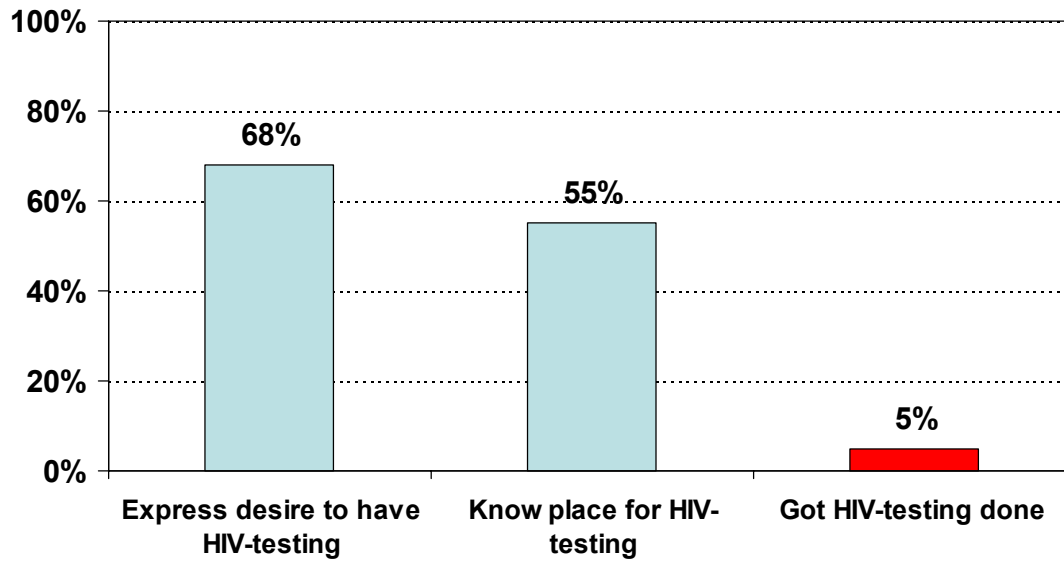
3.6 Exposure to interventions

The majority of the population had access to one or more mass media sources. Sixty-eight percent watched television and nearly 60% read print media (most commonly the newspaper). Though only 23% of the population mentioned that they listened to the radio, the majority reported that the health education messages they received were from the radio.

In all, 71% of youth (1224/1707) and 74% of older adults (2173/2924) had ever seen a condom. However, when asked whether condoms are easily accessible, only 51% responded affirmatively. Respondents reported that condoms were most commonly available at a pharmacy.

Although 68% of respondents expressed the intent to have confidential HIV testing, a meagre 5% of them voluntarily sought VCCT and received the results. Men were more likely to seek VCCT services than women (Table 14). In all, 55% (4660/8557) of the respondents knew a place where HIV-testing was offered but only 3% named VCCT as a place for HIV testing.

Figure 3.7
Utilization of voluntary confidential counseling and testing services



4. Conclusions and programmatic implications

4.1 Knowledge about HIV prevention is deficient and extensive misconceptions prevail

Although most of the population had heard about HIV/AIDS (91%), comprehensive and effective knowledge about HIV prevention was low with only a third of the respondents being aware of the methods of HIV prevention. The less educated, women and the youth were particularly less knowledgeable. Moreover, the majority of the population had misconceptions/wrong beliefs about HIV transmission. Across the sites, only 16% to 38% of the respondents correctly rejected the three most common misconceptions about HIV transmission.

The NAP together with the national and international non-governmental organisations (NGOs) are actively engaged in raising awareness and education about HIV/AIDS using multiple channels such as mass media, school education programmes, peer-peer education, and life skills training. The findings of this survey indicate that while existing efforts have succeeded in creating a high level of general awareness about HIV/AIDS, the key messages about HIV prevention are still not effectively reaching the target groups.

Thus, there is a need to evaluate the current information, education and communication (IEC) strategies both in terms of the coverage and their effective reach to target groups. Formative research may be undertaken to identify how messages can be packaged to create the desired impact and to identify appropriate channels which can best deliver these messages. Non-governmental and private agencies may be engaged in packaging of messages attractively for a greater impact.

The high level of attendance at the recent IEC events, such as the HIV/AIDS exhibitions in Yangon and Mandalay indicate that there is public interest and need for information. To meet this need, innovative channels should be used for disseminating information about HIV/AIDS, such as concerts (Zat Thabin), exhibitions, peer-to-peer education. Furthermore, it should be ensured that the IEC messages are gender sensitive and culturally appropriate.

4.2 Negative attitudes towards PLWHA are rampant

Linked to the existence of wide-ranging misconceptions, stigmatising attitudes against PLWHA were common in the community. Ignorance of the facts leads to fear, which in turn, adds to stigma and discrimination. In this survey, only a fifth of the population expressed willingness to buy food from an HIV-infected person and just half of the respondents expressed their willingness to care for an HIV-infected friend or a relative.

While IEC campaigns should help in reducing misconceptions about HIV/AIDS transmission, eliminating the scourge of stigma is not easy and it requires the full backing of political and administrative leadership. Also, greater involvement of prominent public personalities or social

role models as also religious leaders should be solicited to convey the message of the need for care and compassion for the PLWHAs. The Government of Myanmar is scaling up antiretroviral therapy (ART). It is expected that as treatment and care services are scaled up, stigma against HIV/AIDS should reduce.

People living with, and affected by, HIV/AIDS bear the consequences and face the impact of stigma and discrimination continually throughout their lives. It is most important to engage PLWHA groups in devising programmes for reducing stigma. PLWHAs should be encouraged to share their stories, which may help in humanizing the disease and allow the communities to understand better how HIV/AIDS impinges upon people's lives.

4.3 Utilization of STD services is suboptimal

While 70% of the respondents had heard about STDs, less than 30% of the respondents were able to correctly mention one or more symptoms of STD among men and women. The prevalence of self-reported STD symptoms among the population was low. However, three-quarters of those who reported having a genital ulcer or genital discharge did not seek treatment. As expected, of those who took treatment, 36% consulted a private practitioner, 31% took self treatment, 15% consulted a traditional healer and only 15% visited a government hospital.

The NAP through a network of 40 STD teams situated in different townships is providing STD clinical services. As observed in other Asian countries, an important reason for the low level of utilization of these services by the general population may be the STD associated stigma.

Considering that most patients with an STD consult private practitioners, the NAP has been organising continuing medical education of the general practitioners in the private sector using networks, such as the Myanmar Medical Association. It is important to continue to organise training and refresher training of the private sector while simultaneously improving the quality and reach of these services in the public sector. The newly developed clinical guidelines for the management of STDs should be widely distributed to those involved with STD care. Further, other current NGO initiatives, such as the social marketing of STD treatment, should be supported.

The lack of awareness on STDs among the general population is consistent with the lack of knowledge of preventive measures for HIV infection described above. The education of the community about the link between STD and HIV, the symptoms of STDs and the need for early treatment is of paramount importance.

4.4. High-risk sexual behaviours exist and unprotected sex is common

In all, 7% of the men engaged in high-risk behaviours in the past year, i.e. 3% of the men reported having sex with a commercial sex worker and 4% reported having sex with a casual acquaintance. Consistent condom use with sex workers was just 54% and with casual acquaintances it was less than 20%. Of the 7% men who engaged in high-risk sexual behaviour, two-thirds had unprotected sex.

There is a need to reemphasise the need for consistent condom use with any non-regular partner. Following the example of other countries in the region, NAP began the 100% targeted condom promotion programme in 2002 to reduce HIV transmission among high risk groups, i.e. sex workers and their clients. Since 2002, the programme has expanded gradually and is currently being implemented in more than 101 townships. The findings of this study indicate that the 100% condom programme is yet to have the desired effect. Research should be undertaken to understand better the reasons for low use of condoms. Since only 50% of the respondents expressed that condoms were easily available, there is a need to explore additional avenues and locations for distribution of condoms in the community.

4.5 VCCT needs remain unmet

Overall, only 5% of all respondents voluntarily sought VCCT and received results. Nearly 70% of the respondents expressed the intent to undergo HIV testing and 55% respondents knew a place for HIV-testing; however, a negligible proportion of the population was aware of the VCCT as a site for HIV testing. These findings indicate that there is a demand and need for VCCT but awareness about VCCT and their utilization is low.

At the time of this survey, VCCT services in the country were starting to be scale-up. Since then, VCCT has been expanded to 40 sites in 40 townships where STD teams are located. Counseling services and referrals for testing are provided by NGOs in different parts of the country.

The relatively low utilization of VCCT at the institutional level is of concern as VCCT is fundamental to prevention as well as to facilitate access to HIV care services. There is an urgent need to make VCCT services more accessible to the community by increasing the number of centres and by networking with other agencies that could potentially serve as VCCTs. Furthermore, there is a need to increase awareness among the community of the availability of the VCCT. And lastly, top priority should be given to enhance the quality of VCCT services by training of counselors and making the VCCT services client friendly.

5. Limitations of the Study

This large multi-site study was undertaken to strengthen second generation surveillance and to provide information for planning HIV/AIDS interventions. The survey was designed using standard international tools. Top priority was given to quality aspects at every stage.

The findings of the survey should be interpreted in the light of certain limitations. First, stratified analysis for rural and urban communities could not be undertaken due to limitations at the data entry stage. Second, interviewer bias cannot be ruled out as the data were collected by government AIDS/STD teams who are also responsible for implementing the programme. Third, as in any interview-based surveys, it is possible that the respondents may not have accurately answered some of the sensitive questions, or may have had difficulty in recalling information. Since majority of the questionnaires were self-administered and personal identification details were not collected, it is expected that most respondents answered without inhibition or fear. Fourth, the scope of this survey was limited to obtaining quantitative indicators; the questionnaire was structured with limited probes and mostly included close-ended responses which provided little qualitative information. And finally, the findings of this study were based on seven sites using convenience sampling and may not necessarily be generalized to represent the behaviours of the youth and the general population from all parts of the country. The study, however, did include an equal sample from the rural communities.

Despite these limitations, it must be noted that the findings of this survey are consistent with the findings of the previous BSS surveys conducted in the years 2000 and 2001 and also with the findings of the survey from neighbouring countries with similar epidemic profiles, such as India. Therefore, the data generated through this survey is valuable for programme planning and monitoring.

6. Recommendations

6.1 Revitalize the HIV/AIDS IEC campaign by:

- a. Evaluating the current IEC strategies and identifying innovative mechanisms to disseminate key HIV prevention messages, such as youth-youth peer education, concerts, plays
- b. Ensuring that IEC messages are gender-sensitive and culturally appropriate
- c. Targeting IEC on vulnerable groups such as out-of-school youth through youth centres and other local institutions

6.2 Accord top priority to reducing stigma and discrimination against PLWHAs:

- a. Solicit support from administrative and political leadership and engage prominent public figures to convey messages of care and compassion towards PLWHAs
- b. Engage PLWHA groups in stigma reducing activities and encourage them to share their stories in order to humanise the disease

6.3 Improve the utilization of STD services by:

- a. Increasing community awareness about the importance of early treatment of STDs
- b. Sustaining the ongoing training/refresher training of governmental health workers and strengthening collaboration with the private practitioners and NGOs in the treatment of STDs

6.4 Reemphasise consistent condom use for sex with all non-regular partners. Explore additional avenues for increasing access to and availability of condoms for the youth and the general population. Undertake formative research to identify reasons for low use of condoms:

6.5 Urgently increase access to VCCTs and their utilization by:

- a. Further expanding the number of VCCTs
- b. Exploring the possibility of establishing VCCTs in non-governmental institutions
- c. Creating awareness in the community about the location of VCCTs
- d. Training of VCCT counselors, thereby improving the quality of VCCT services and making them more client friendly

ANNEXURES

Annex I. Selected demographic and developmental indicators, Myanmar

Demographic and socio-economic data			
Indicator	Year	Estimate	Source
Total Population (thousands)	2004	50,101	UNPOP
Population aged 15-49 (thousands)	2001	25,855	UNPOP
Annual Population Growth rate	1992-2002	1.5	WHO
% of Urban Population	2003	29.4	UNPOP
Average annual growth rate of urban population	2000 - 2005	3.1	UNPOP
GDP per capita, (US\$)	2001	9440	IMF
GDP average annual growth rate	2001	4.8	IMF
% Government Budget Spent on Health Care	2001	5.7	WHO
Per Capita Expenditure on Health (US \$)	2001	197	WHO
Male adult literacy rate (15 years and older)	2004	89.2	UNESCO
Female adult literacy rate (15 years and older)	2004	81.4	UNESCO
Male gross primary school enrolment ratio	2001 - 2002	90	UNESCO
Female net primary school enrolment ratio	2001 - 2002	90	UNESCO
Male gross Secondary school enrolment ratio	2001 - 2002	41	UNESCO
Female secondary school enrolment ratio	2001 - 2002	38	UNESCO
Crude birth rate (births per 1,000 pop.)	2000 - 2005	24	UNPOP
Crude death rate (deaths per 1,000 pop)	2000 - 2005	11	
Maternal mortality rate (per 100,000 live births)	2000	360	WHO
Life expectancy at birth	2000 - 2005	58.9	WHO
Total fertility rate	2000 - 2005	2.9	UNPOP
Infant Mortality rate (per 1,000 live births)	2000	83	WHO
Under-five mortality rate (per 1,000 live births)	2000	108	WHO

Annex II. Key HIV indicators, Myanmar

HIV Indicators			
Indicator	Year	Estimate	Source
Estimated PLWHA (Adults 15 -49)	2003	338,000 (170,000 – 610,000)	MoH/WHO/UNAIDS
Cumulative reported AIDS cases ¹	2004	53,015	MoH Myanmar
AIDS deaths in adults and children	2003	20,000 (11,000 – 35,000)	UNAIDS
Estimated number of persons receiving ART ¶	2003	1,500	MoH Myanmar
Estimated number in need of treatment	2003	46,500	WHO
HIV T&C Sites:# Sites		40	MoH Myanmar
# Persons tested at all sites		N.A	
Prevalence among ANC attendees	2003	1.6	MoH Myanmar
Prevalence of HIV in adult TB patients %	2002	10.9	WHO
Prevalence among Female Direct Sex Workers	2003	31.4	MoH Myanmar
Prevalence among IDUs	2003	37.9	MoH Myanmar
Prevalence among MSM ²	1996	33.3	EPI Fact Sheet
Prevalence among New military recruits	2003	2.1	MoH Myanmar
Prevalence among blood donations	2003	1.2	MoH Myanmar
Prevalence among TB patients	2002	10.9	WHO

Source: WHO/UNAIDS epidemiology fact sheet, 2004

¹ SEARO member States do not report cumulative HIV cases but only AIDS cases

² Myanmar Epidemiological Fact Sheets on HIV/AIDS and Sexually Transmitted Infections, 2002 Update.

Annex III. Data collection instrument

#	----- Date -----	Township/Village -----	Directive
1.	Date of Birth	Month ----- Year-----	
2.	Age	-----Year	
3.	Race	-----	
4.	Religion	Buddhist 1 Christian 2 Islam 3 Hindu 4 Others 5	
5.	Permanent residence City/ Village	-----	
6.	Duration Month (Year) residence	----- yr	
7.	Education	Illiterate 1 Can Read/Write 2 Grade 1-4 3 Grade 5-8 4 Grade 9-10 5 University 6 Graduate 7	
8.	Occupation	-----	
9.	Days of taking trip last month overnight	----- Days	
10.	Do you read during leisure time	No 0 _____ Yes 1 _____ ↓ Newspaper 1 Journal 1 Magazine 1 Newsletter 1 Novel 1 Cartoon 1 Others 1	
11.	Do you usually listen to the radio	No 0 Yes 1 → Songs 1 Play 1 News 1 Advertisement 1 Education program 1 Others 1	
12.	Do you usually watch TV? Watch-MRTV or MWD	No 0 Yes 1 → What do you watch?	

		<p>Songs 1 Play 1 News 1 Advertisement 1 Education program 1 Others 1</p>	
13.	Where/Whom do you get most of the health knowledge from?	<p>Radio 1 TV 1 Magazine/news letters 1 Health worker 1 Social worker 1 Friends 1 Teachers 1 Parents/ relatives 1 Others ----- 1</p>	
14.	Did you ever drink like alcohol, beer, toddy juice in the past year?	<p>Never 1 Less than once a week 2 Once a week 3 More then once a week 4 Everyday 5</p>	
15.	Have you ever tried any narcotic drugs?	<p>Yes 1 No 2 Don't know 8 Don't answer 9</p>	
16.	Did you try injecting illegal drugs last year?	<p>Yes 1 No 2 Don't know 8 Don't answer 9</p>	
17.	Have you married?	<p>Yes 1 No 2 →</p>	go to Q 20
18.	When were you married?	----- Year	
19.	Current marital status	<p>With spouse 1 With another sexual partners though married 2 Do not live with spouse 3 Currently not married 4</p>	
20.	Have you ever had sex?	<p>Yes 1 No 2 Don't answer 9</p>	go to Q23
21.	Your age at first sexual experience?	----- Year	
22a.	Did you have sex in the <u>past year</u> ?	<p>Yes 1----- No 2 Don't answer 9</p>	go to Q 23
22b.	Sexual relationship <u>last year</u>	<p>Spouse 1 Regular sex partner 1</p>	

		CSW 1	
		Casual acquaintance 1	
23.	Have you ever had sex with a man?	Yes 1 No 2 Refuse 9	go to Q 25 (a)
24.	Did you have sex with a man last year?	# of sexual partner Yes 1 -----# No 2 Don't remember 88 No answer 9 Don't answer 99	

Want to ask about Sexual relation with women

First we would like to ask about relationship with regular partner

25a.	Did you have a regular partner in the <u>past year</u> ?	Yes 1 No 2 No answer 9	go to Q 26 (a)
b.	If so, how many sexual partners in the past year?	----- number	
c.	Did you use condom last time when you had sex with your regular partner	Yes 1 No 2-----> Don't remember 8 -----> Don't answer 9	go to Q 25 (f) go to Q 25 (c)
d.	Who suggested condom to use condom?	Myself 1 Sex partners 2 Both 3 Don't remember 8 No answer 9	
e.	The number of times you and CSWs use condoms	Everytime 1 Almost everytime 2 Sometime 3 Never 4 Don't remember 8 Don't answer 9	go to Q (26) go to Q 26 (c)

Sex with commercial sex part

26a	Did you have sex with CSW in <u>last year</u> ?	Yes 1 No 2 No answer 9	go to Q 27
b	With how many CSW in <u>last year</u> ?	-----number	
c.	Did you use condom at the last-time sex?	Yes 1 No 2 Don't remember 8	go to Q 26 (f) go to Q 26 (e)

		Don't answer 9	
d.	Who suggested to use condom?	Myself 1 Sex partners 2 Both 3 Don't remember 8 No answer 9	
e.	The number of times you and CSWs use condoms	Everytime 1 Almost everytime 2 Sometime 3 Never 4 Don't remember 8 No answer 9	go to Q 27
f.	Why don't you use condom?	Not available 1 Expensive 1 Refused by women 1 I don't like 1 Use other contraceptive means 1 Though not necessary 1 Never thought 1 Others 1 Don't know 1 Don't answer 1	

Would like to ask about sex with CA

27a	Did you have sex with CA last year?	Yes 1 No 2 }-----> Don't answer 9	go to Q 28
b.	How many CA in past year?	----- number	
c.	Did you use condom at the last sex?	Yes 1 No 2 -----> Don't remember 8 -----> Don't answer 9	go to Q 27 (f) go to Q 27 (e)
d.	Who suggested to use condom?	Myself 1 Sex Partner 2 Both 3 Don't remember 8 Don't answer 9	
e.	The number of times you and your sex partner use condoms.	Every time 1 Almost every time 2 Sometimes 3 Never 4	go to Q 28

f.	Why did not use condom?	Don't remember	8	
		Don't answer	9	
		Not available	1	
		Expensive	1	
		Refused by the woman	1	
		I do not like	1	
		Use other contraception	1	
		Though not necessary	1	
		Never thought	1	
		Other reasons	1	
		Don't know	1	
Don't answer	1			

Now will ask about condom

28a.	Have you ever seen condom?	Yes	1	go to Q 28(c) go to Q 31
		No	2----->	
		Don't know	8----->	
b.	Have you ever used condom?	Yes	1	
		No	2	
		Don't answer	9	
c.	Is it easily available?	Yes	1	
		No	2	
		Don't know	8	
29.	The places where condoms are available?	Pharmacy	1	
		Store/ Bazaar	1	
		Betel shop	1	
		Hospital/ Clinic	1	
		Karaoke/ Restaurant	1	
		Inn/Hotel/ Motel	1	
		Health Educator	1	
		Friends	1	
		NGOs	1	
		Others-----	1	
		Don't know	1	
30.	Did you have sex without condom with a woman but not your spouse last year?	Yes	1	
		No	2	
		Don't remember	8	
		Don't answer	9	
31.	Have you ever heard of STD?	Yes	1	
		No	2	
		Don't answer	9	

32.	Do you know any symptoms show in the woman?	Abdominal pain White discharge Itching around the sex organ Pain in urination Dyspareunia Genital ulcer Inguinal lymph swelling Blood in urine Cannot urinate Weight loss Cannot conceive No symptom Others ----- Don't know	A B C D E F G H I J K L W Z	
33.	Do you know any symptoms in men	Abdominal pain Discharge Itchiness around Perineum Pain in urination Dyspareunia Genital ulcer Inguinal lymph swelling Blood in urine Cannot conceive No symptom Others ----- Don't know	A B C D E F G H K L M N	
34.	Did you have pus discharge last year?	Yes No	1 2	
35.	Did you have genital ulcer?	Yes No	1 2	
36.	Did you ever take treatment for pus discharge or genital ulcer last year?	Yes No	1 2 >	go to Q 38
37.	What kind of treatment did you have?	From private clinic Traditional medicine STD Team Govt. Hospital or clinic Others	1 1 1 1 1	

Will ask about HIV/AIDS Transmission

38.	Have you ever heard of HIV/AIDS?	Yes No	1 2	-->End of interview
39.	Do you know any body who is suffering from HIV/AIDS or died of AIDS?	Yes No Don't answer	1 2 9	

40.	Do you know a relative or friend who has HIV/AIDS?	Yes No Don't answer Don't know	1 2 9 8	
41.	Do you think the right use of condom when sex can prevent AIDS transmission?	Yes No Don't know	1 2 8	
42.	Mosquito bite can transmit HIV?	Yes No Don't know	1 2 8	
43.	Abstinence from sex can prevent HIV?	Yes No Don't know	1 2 8	
44.	Being faithful to a spouse can transmit HIV or sex with HIV negative partner?	Yes No Don't know	1 2 8	
45.	Can eating together with HIV-infected person transmit the virus?	Yes No Don't know	1 2 8	
46.	Using contaminated needles or syringes can transmit HIV?	Yes No Don't know	1 2 8	
47.	Healthy men can have HIV?	Yes No Don't know	1 2 8	
48.	HIV Positive pregnant woman can transmit HIV to the baby?	Yes No Don't know	1 2 8	
49.	Can HIV-positive mother transmit the virus by breast-feeding?	Yes No Don't know	1 2 8	
50.	Do you think we can prevent mother to child transmission?	Yes No Don't know	1 2 8	→ go to Q 52
51.	If so, how can it prevent	Taking treatment No breast feeding Section Others----- Don't know	A B C W Z	
52.	How can we know HIV in the body by testing in Myanmar?	Blood Urine Stool Don't know	A B C D	
53.	Do you want to get tested voluntary HIV if it will be done confidentially?	Yes No	1 2	

54.	Have you ever tested for HIV? (No need to disclose your result)	Yes No	1 2	go to Q 60
55.	Did you get tested for HIV last year? (No need to disclose your result)	Yes No	1 2	go to Q 59
56.	Do you know the result?	Yes No	1 2	go to Q 59
57.	Did you disclose the result to other?	Yes No	1 2	go to Q 59
58.	If so, to whom did you disclose?	Sex partner Friends Family member Health worker Peer Others -----	A B C D E F	
59.	Do you want to get tested next time?	Yes No	1 2	
60.	Do you know the place where HIV can be tested?	Yes No	1 2	go to Q62
61.	Tell me which place?	VCT Hospital/Clinic Pharmacy Don't know Others	A B C D E	
62.	If you have done, do you want to disclose the result?	Yes No	1 2	go to Q 64
63.	To whom do you want to disclose?	Sex partner Family member Friends Health worker Peer Others-----	1 1 1 1 1 1	
64.	Can you eat together with HIV patient?	Yes No Don't know	1 2 8	
65.	Do you think HIV-positive student can attend the school?	Yes No Don't know	1 2 8	
66.	Do you want to care an HIV-positive person at home?	Yes No Don't know	1 2 8	
67.	Can HIV-positive teacher teach at school?	Yes No Don't know	1 2 8	
68.	Do you want to buy foods from HIV-positive vendors?	Yes No Don't know	1 2 8	

Annex IV

Table 1. Proportion of respondents who had ever heard about HIV/AIDS, by age and sex, Behavioral Surveillance Survey— Myanmar, 2003

	15-24 years			25-49 years			All respondents		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Dawei	97%	95%	96%	97%	90%	93%	97%	91%	94%
Lashio	68%	80%	74%	71%	82%	76%	70%	81%	76%
Mandalay	99%	97%	98%	97%	100%	99%	98%	99%	98%
Meiktila	89%	87%	88%	91%	84%	87%	90%	85%	87%
Monywa	94%	89%	92%	94%	89%	92%	94%	89%	92%
Taunggyi	98%	94%	96%	96%	96%	96%	96%	95%	96%
Yangon	98%	99%	98%	97%	98%	97%	97%	98%	98%
Total	91%	91%	91%	91%	90%	91%	91%	90%	91%

Table 2. Proportion of respondents who know that HIV can be transmitted by contaminated needles, by age and sex, Behavioral Surveillance Survey— Myanmar, 2003

	15-24 years			25-49 years			All respondents		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Dawei	93%	84%	89%	91%	77%	84%	92%	79%	85%
Lashio	53%	71%	62%	56%	72%	64%	55%	71%	63%
Mandalay	87%	92%	89%	89%	90%	90%	88%	91%	89%
Meiktila	85%	76%	80%	83%	74%	78%	84%	75%	79%
Monywa	84%	80%	82%	84%	78%	81%	84%	79%	81%
Taunggyi	91%	86%	89%	90%	90%	90%	90%	89%	89%
Yangon	81%	92%	87%	90%	90%	90%	87%	91%	89%
Total	82%	82%	82%	82%	80%	81%	82%	81%	81%

Table 3. Proportion of respondents who know that HIV can be transmitted from an infected mother to her child, Behavioral Surveillance Survey— Myanmar, 2003

	15-24 years			25-49 years			All respondents		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Dawei	81%	80%	81%	84%	73%	78%	83%	75%	79%
Lashio	46%	64%	55%	49%	69%	59%	48%	67%	58%
Mandalay	76%	89%	82%	78%	85%	82%	77%	87%	82%
Meiktila	68%	67%	68%	69%	68%	68%	69%	68%	68%
Monywa	70%	65%	68%	68%	67%	67%	69%	66%	68%
Taunggyi	81%	79%	80%	81%	84%	82%	81%	82%	81%
Yangon	75%	81%	78%	78%	81%	79%	77%	81%	79%
Total	71%	74%	72%	72%	74%	73%	71%	74%	73%

Table 4. Proportion of respondents who know that HIV can be prevented by being faithful to one uninfected partner, Behavioral Surveillance Survey— Myanmar, 2003

	15-24 years			25-49 years			All respondents		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Dawei	84%	64%	75%	81%	59%	69%	82%	61%	71%
Lashio	42%	51%	47%	46%	57%	52%	45%	55%	50%
Mandalay	87%	79%	83%	82%	79%	80%	84%	79%	81%
Meiktila	56%	51%	53%	59%	58%	59%	58%	56%	57%
Monywa	60%	37%	49%	67%	46%	56%	64%	43%	53%
Taunggyi	78%	71%	74%	80%	77%	79%	79%	75%	77%
Yangon	62%	53%	57%	74%	65%	70%	71%	62%	66%
Total	66%	56%	61%	69%	61%	65%	68%	59%	63%

Table 5. Proportion of respondents who know that HIV can be prevented by consistent condom use, Behavioral Surveillance Survey— Myanmar, 2003

	15-24 years			25-49 years			All respondents		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Dawei	72%	46%	59%	65%	41%	52%	67%	42%	54%
Lashio	42%	45%	44%	40%	53%	47%	41%	50%	45%
Mandalay	76%	65%	71%	69%	49%	58%	72%	55%	63%
Meiktila	49%	42%	45%	46%	37%	40%	47%	38%	42%
Monywa	61%	25%	43%	58%	29%	42%	59%	27%	43%
Taunggyi	68%	49%	59%	64%	49%	56%	65%	49%	57%
Yangon	63%	45%	53%	70%	47%	58%	68%	47%	57%
Total	61%	43%	52%	58%	42%	50%	59%	43%	50%

Table 6. Proportion of respondents who know that HIV can be prevented by abstinence, by age and sex, Behavioral Surveillance Survey— Myanmar, 2003

	15-24 years			25-49 years			All respondents		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Dawei	32%	34%	33%	29%	28%	29%	30%	30%	30%
Lashio	30%	32%	31%	31%	42%	37%	30%	39%	35%
Mandalay	56%	31%	44%	50%	36%	43%	53%	34%	43%
Meiktila	40%	37%	38%	32%	40%	37%	35%	39%	37%
Monywa	26%	43%	34%	39%	31%	35%	34%	35%	34%
Taunggyi	46%	37%	41%	43%	46%	44%	44%	42%	43%
Yangon	41%	30%	35%	42%	45%	44%	42%	41%	41%
Total	36%	35%	36%	37%	38%	37%	37%	37%	37%

Table 7. Proportion of respondents with knowledge about effective HIV prevention methods, by age and sex, Behavioral Surveillance Survey— Myanmar, 2003

	15-24 years			25-49 years			All respondents		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Dawei	21%	16%	18%	58%	35%	46%	44%	29%	36%
Lashio	18%	20%	19%	31%	44%	37%	26%	35%	31%
Mandalay	48%	21%	35%	60%	46%	53%	55%	37%	46%
Meiktila	21%	23%	22%	36%	30%	32%	30%	28%	29%
Monywa	25%	13%	19%	51%	24%	36%	41%	20%	30%
Taunggyi	29%	21%	25%	55%	44%	49%	44%	35%	40%
Yangon	30%	15%	22%	59%	42%	50%	51%	34%	42%
Total	25%	18%	21%	49%	36%	42%	40%	30%	35%

Table 8. Proportion of respondents correctly reject common misconceptions about HIV transmission, by age and sex, Behavioral Surveillance Survey— Myanmar, 2003

	15-24 years			25-49 years			All respondents		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Dawei	34%	33%	33%	28%	23%	25%	30%	26%	28%
Lashio	19%	31%	25%	20%	30%	25%	20%	31%	25%
Mandalay	15%	55%	33%	25%	52%	39%	21%	53%	37%
Meiktila	15%	13%	14%	18%	16%	17%	17%	16%	16%
Monywa	26%	16%	21%	27%	15%	21%	27%	16%	21%
Taunggyi	27%	29%	28%	26%	30%	28%	27%	30%	28%
Yangon	34%	43%	39%	39%	36%	38%	38%	38%	38%
Total	26%	29%	27%	27%	26%	26%	26%	27%	27%

Table 9. Proportion of respondents who are aware about an STD other than HIV/AIDS, by age and sex, Behavioral Surveillance Survey— Myanmar, 2003

	15-24 years			25-49 years			All respondents		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Dawei	68%	63%	66%	76%	63%	69%	73%	63%	68%
Lashio	41%	55%	48%	50%	57%	54%	47%	56%	51%
Mandalay	68%	87%	77%	81%	96%	89%	75%	92%	84%
Meiktila	75%	61%	67%	78%	66%	70%	77%	64%	69%
Monywa	61%	66%	63%	76%	69%	72%	70%	68%	69%
Taunggyi	75%	70%	72%	85%	82%	84%	81%	77%	79%
Yangon	78%	70%	74%	83%	80%	82%	82%	77%	79%
Total	65%	65%	65%	75%	70%	72%	71%	68%	70%

Table 10 Proportion of respondents who reported having genital ulcer, by age and sex, Behavioral Surveillance Survey— Myanmar, 2003

	15-24 years			25-49 years			All respondents		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Dawei	1.6%	1.0%	1.3%	1.9%	0.7%	1.3%	1.8%	0.8%	1.3%
Lashio	0.7%	0.3%	0.5%	1.0%	0.8%	0.9%	0.9%	0.6%	0.7%
Mandalay	1.2%	2.8%	2.0%	0.0%	3.5%	1.8%	0.5%	3.2%	1.9%
Meiktila	0.6%	1.0%	0.8%	3.0%	1.2%	1.9%	2.1%	1.2%	1.5%
Monywa	1.7%	1.8%	1.7%	3.1%	0.8%	1.8%	2.5%	1.1%	1.8%
Taunggyi	2.0%	0.3%	1.2%	1.2%	1.0%	1.1%	1.5%	0.7%	1.1%
Yangon	1.0%	1.4%	1.2%	0.8%	1.6%	1.2%	0.9%	1.5%	1.2%
Total	1.3%	1.0%	1.2%	1.7%	1.1%	1.4%	1.6%	1.1%	1.3%

Table 11. Proportion of respondents who reported having genital discharge, by age and sex, Behavioral Surveillance Survey— Myanmar, 2003

	15-24 years			25-49 years			All respondents		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Dawei	1.6%	11.9%	6.7%	1.2%	12.0%	7.0%	1.3%	12.0%	6.9%
Lashio	0.7%	12.5%	6.6%	2.6%	17.0%	10.0%	1.9%	15.3%	8.7%
Mandalay	2.4%	28.2%	14.4%	0.0%	36.5%	19.3%	1.1%	33.3%	17.3%
Meiktila	0.0%	37.4%	19.8%	1.3%	34.5%	21.9%	0.8%	35.3%	21.2%
Monywa	2.0%	25.2%	13.2%	1.9%	21.4%	12.5%	1.9%	22.6%	12.7%
Taunggyi	0.9%	13.1%	6.7%	1.6%	12.9%	7.3%	1.3%	13.0%	7.0%
Yangon	1.5%	11.7%	6.8%	1.7%	9.6%	5.8%	1.6%	10.2%	6.1%
Total	1.2%	18.1%	9.6%	1.7%	18.4%	10.6%	1.5%	18.3%	10.3%

Table 12. Proportion of respondents with positive attitudes towards people living with HIV/AIDS, Behavioral Surveillance Survey— Myanmar, 2003

	% willing to eat with an HIV-infected person	% willing to care for an HIV-infected relative	% willing to eat buy food from an HIV-infected vendor	% reporting an HIV-infected school teacher can be allowed to teach
Dawei	48	61	21	48
Lashio	54	60	31	53
Mandalay	59	70	29	56
Meiktila	44	56	20	47
Monywa	44	47	18	42
Taunggyi	56	59	20	53
Yangon	61	55	27	67
Total	46	51	21	46

Table 13. Proportion of population sexually active, by age and sex, Behavioral Surveillance Survey— Myanmar, 2003

	15-24 years			25-49 years			All respondents		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Dawei	17%	15%	16%	70%	57%	63%	50%	43%	46%
Lashio	12%	13%	13%	71%	55%	63%	49%	40%	44%
Mandalay	22%	21%	22%	71%	73%	72%	49%	53%	51%
Meiktila	11%	15%	13%	65%	51%	56%	45%	41%	43%
Monywa	13%	11%	12%	58%	52%	55%	41%	40%	40%
Taunggyi	19%	25%	22%	67%	65%	66%	48%	50%	49%
Yangon	13%	23%	18%	55%	62%	58%	42%	50%	46%
Total	15%	17%	16%	65%	57%	61%	46%	44%	45%

Table 14. Proportion of population seeking voluntary and confidential counseling and testing, by age and sex, Behavioral Surveillance Survey— Myanmar, 2003

	15-24 years			25-49 years			All respondents		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Dawei	4.2%	2.4%	3.3%	10.3%	2.2%	6.0%	8.0%	2.3%	5.0%
Lashio	1.3%	0.3%	0.8%	4.8%	4.0%	4.4%	3.5%	2.6%	3.1%
Mandalay	3.7%	1.4%	2.6%	9.7%	9.6%	9.6%	7.0%	6.5%	6.7%
Meiktila	5.2%	1.5%	3.3%	7.6%	2.0%	4.2%	6.7%	1.9%	3.9%
Monywa	1.3%	0.7%	1.0%	2.5%	2.7%	2.6%	2.1%	2.1%	2.1%
Taunggyi	5.5%	4.1%	4.9%	9.6%	6.6%	8.1%	8.0%	5.7%	6.9%
Yangon	4.0%	3.3%	3.6%	14.8%	4.1%	9.3%	11.6%	3.9%	7.6%
Total	3.5%	2.0%	2.8%	8.3%	3.8%	5.9%	6.5%	3.2%	4.8%