



Review of the Myanmar National AIDS Programme 2006



**World Health
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Regional Office for South-East Asia

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September 2006

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Acronyms and abbreviations

AFXB	Association François-Xavier Bagnoud
AIDS	acquired immunodeficiency syndrome
ANC	antenatal care
APN+	Asia-Pacific Network of People living with HIV/AIDS
ART	antiretroviral therapy
ARV	antiretroviral drug
AusAID	Australian Agency for International Development
AZG	Artsen Zonder Grenzen (MSF Holland)
BSS	behavioural surveillance surveys
CBO	community-based organization
CCG	condom core group
CDC	Center for Disease Control and Prevention, Atlanta, United States
CHBC	community- and home-based care
CMSD	central medical store depot
CMSSD	central medical sub store depot
DoH	Department of Health
DOTS	directly observed treatment, short course. The internationally recommended strategy for TB control
EQUAS	external quality assurance scheme
FDA	food and drug administration
FHAM	Fund for HIV/AIDS in Myanmar (FHAM)
GDP	Gross domestic product
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GIPA	greater involvement of people with HIV/AIDS
GNP+	Global Network of People living with HIV/AIDS

GP	general practitioner
FHAM	Fund for HIV/AIDS in Myanmar
HIV	human immunodeficiency virus
HSS	HIV sero-surveillance
IDU	injecting drug user
IEC	information, education and communication
INGO	international nongovernmental organization
JICA	Japan International Cooperation Agency
M & E	monitoring and evaluation
MCC	Myanmar Council of Churches
MCH	maternal and child health
MDM	Médecins du Monde
MHAA	Myanmar Health Assistants Association
MMA	Myanmar Medical Association
MMCWA	Myanmar Maternal and Child Welfare Association
MMT	methadone maintenance therapy
MNA	Myanmar Nurses Association
MOH	Ministry of Health
MRCS	Myanmar Red Cross Society
MSF	Médecins Sans Frontières
MSI	Marie Stopes International
MSM	men who have sex with men
MWAF	Myanmar Women Affairs Federation
NAP	national AIDS programme
NGO	nongovernmental organization
NHL	National Health Laboratory

NTP	national tuberculosis programme
NVP	nevirapine
OI	opportunistic infection
PCR	polymerase chain reaction
PEP	post exposure prophylaxis
PMTCT	prevention of mother-to-child transmission
PSI	Population Services International
RHP	reproductive health programme
STD	sexually transmitted disease
STI	sexually transmitted infections
TB	tuberculosis
TCP	targeted condom promotion
TMO	township medical officer
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNICEF	United Nations Children Fund
UNODC	United Nations Office on Drugs and Crime
UP	universal precautions
USDA	Union Solidarity and Development Association
VCCT	voluntary confidential counselling and testing
VDRL	venereal disease research laboratory test
WHO	World Health Organization
WTO	World Trade Organization
WV	World Vision

Executive Summary

Myanmar is one of the countries hardest hit by the HIV epidemic in Asia. In 2004, a workshop organized by the National AIDS Programme (NAP), with support from World Health Organization (WHO) and Joint United Nations Programme on HIV/AIDS (UNAIDS), estimated that 338 911 adults between 15 and 49 years of age were living with HIV. The figure falls within the range of 170 000 to 620 000 HIV-infected adults and children in Myanmar estimated by WHO and UNAIDS for the same year. The NAP, with support from WHO and the participation of UNAIDS and United Nations Children Fund (UNICEF), conducted an external review of the national health response to HIV/AIDS from 27 March to 7 April 2006 as part of the process of development of the National Strategic Plan 2006-2010.

The general objectives of the review were to assess the progress of the national AIDS programme, especially in areas related to health sector responses, and recommend revision of interventions and strategies. The specific objectives were: (i) to review relevancy and adequacy of the National Strategic Plan and existing policies related to health sector responses to HIV/AIDS; (ii) to assess progress and efficiency of HIV prevention, care and treatment activities; (iii) to identify constraints in programme implementation, and (iv) to provide recommendations for future plans and the way forward for programme planning, implementation and collaboration among partners.

A general finding of the review was that significant progress had been achieved in the health sector in Myanmar as a result of the national response to HIV/AIDS. The magnitude of the epidemic had been recognized and the efforts to respond to it had indicated strong commitments of many partners to focus prevention, care and support efforts to the most vulnerable populations. The NAP had successfully coordinated the inputs of national and international partners, and tools and technical guidelines had been produced for a broad range of programme components. Surveillance, monitoring and management systems were in place, and government, non-government and private sectors are fully involved in the national response. The review noted the need for improved mobilization of human resources, including expanding the number of

AIDS/STD teams to cover all priority districts, strengthening local AIDS committees as forums to adapt national policies and programmes to local situations, and strengthening the health sector's response with an enhanced focus on the township level. It also noted that people living with HIV/AIDS were increasingly involved in the response, and that this involvement should be further developed. There had been an incremental increase in prevention efforts, especially those focusing on condom promotion for sex workers and their clients, with the 100% targeted condom promotion (TCP) programme having expanded from four sites in 2001 to 154 sites in 2006, and on drug users, with various elements of a harm reduction strategy implemented in several regions and gradually improving collaboration between HIV programme implementers and police leading to an improved enabling environment. Some effective interventions were in place for mobile populations, the blood safety programme had made good progress, and HIV education was occurring for youth in schools. Voluntary counselling and testing services were available in 43 clinics across the country. Care, support and treatment were gradually being made available including provision of antiretroviral treatment and a prevention of mother-to-child transmission (PMTCT) programme, and home-based care had been rapidly scaled up in many locations in recent years.

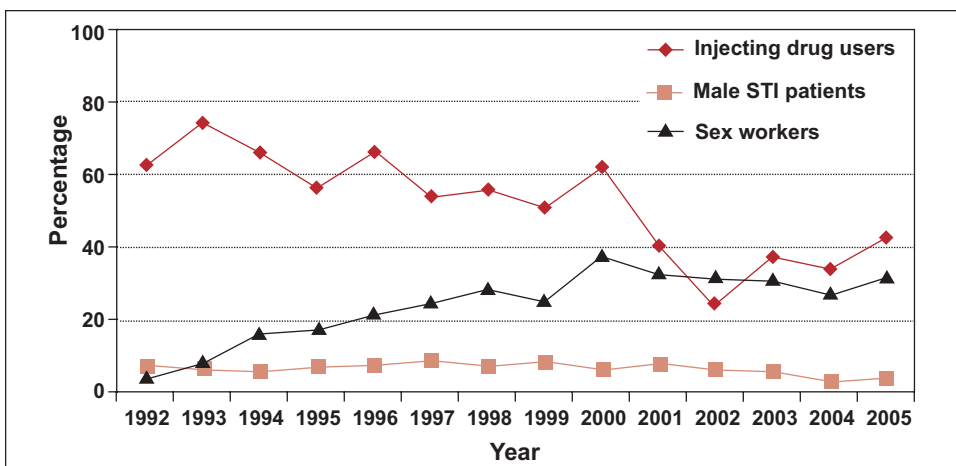
However, the review also noted that the national response needed to become more sensitive to specific local needs. Further limitations included a lack of availability of a full range of services for a continuum of care in each area, a low number of people receiving antiretroviral therapy (ART) with an estimate of only 4% coverage of those in need at the end of 2005, programmes for injecting drug users and men who have sex with men not occurring on a sufficient scale to produce significant impact, and a scarcity of local community based organizations and relatively low participation of concerned communities, including people living with HIV/AIDS in local contexts. Stigma and discrimination had been addressed, but further efforts were needed.

1. Introduction

Myanmar is one of the countries hardest hit by the HIV epidemic in Asia. In 2004, an estimation workshop, organized by the NAP in collaboration with WHO and UNAIDS, estimated that 339 000 adults (15 to 49 years) were living with HIV out of a total population of 53.22 million.

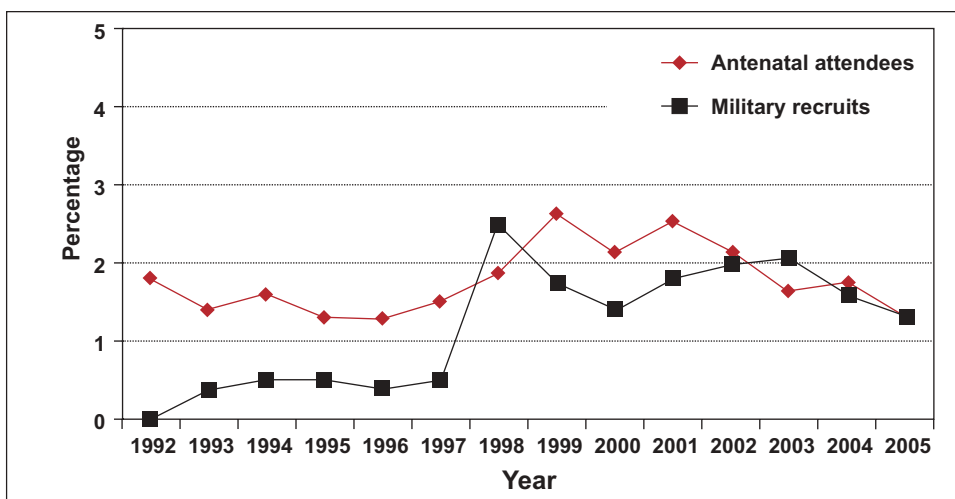
Approximately, 1.3% of the adult population in Myanmar is infected with HIV. As in other Asian countries, HIV is highest in groups with high-risk behaviour; these include sex workers (SW), injecting drug users (IDU) and men who have sex with men (MSM). Among IDUs, the median HIV prevalence in six sentinel sites in 2005 was 43.2% (range:18% - 62%). As in other Asian countries, HIV is highest in groups with high-risk behaviour; these include sex workers (SW), injecting drug users (IDU) and men who have sex with men (MSM). Among IDUs, the median HIV prevalence in six sentinel sites in 2005 was 43.2% (range:18% - 62%). Among commercial sex workers in Yangon and Mandalay, the HIV prevalence was 29.6% and 34.3%, respectively in 2005. Among sexually transmitted infection (STI) clinic attendees who serve as a proxy for clients of sex workers, the median HIV prevalence was 4.1% (Figure 1).

Figure 1: HIV prevalence among population groups with high-risk behaviors – Myanmar, 1992-2005



In 2005, HIV prevalence among pregnant women attending antenatal care (ANC) and military recruits ranged from 0% to 7% (mean = 1.3% and median = 0.75). Analysis of trends in surveillance data indicates that the epidemic peaked in 2000 and then began to decline thereafter (Figure 2).

Figure 2: HIV prevalence among ANC attendees and military recruits – Myanmar, 1992–2005



As part of the development of the National Strategic Plan 2006-2010, the NAP with support from WHO, UNAIDS, UNICEF and the United Nations Office on Drugs and Crime (UNODC), conducted an external review of the national health response to HIV/AIDS, during 27 March-7 April 2006.

2. Objectives

The general objectives of the review were to assess the progress of the national HIV/AIDS programme, especially in the areas related to health sector response, and provide recommendations for the revision of strategies and interventions.

The specific objectives were to:

- review relevance and adequacy of the strategic plan of the NAP and existing policies related to health sector response to HIV/AIDS;
- assess progress and efficiency of AIDS prevention, care and treatment activities;
- identify constraints in programme implementation; and provide recommendations for programme planning, implementation and collaboration among partners.

3. Methods

The review team (Annex 1) first met in Yangon to discuss the terms of reference and the programme, assign individual responsibilities and tasks to team members and finalize administrative and logistic arrangements. The review was conducted through meetings with key partners, document and literature review, desk studies, interviews, focus groups and field visits. It included a series of consultative meetings with governmental and nongovernmental stakeholders, both national and international, including representatives of ministries, departments and institutions, people living with HIV/AIDS, United Nation Agencies and other development partners.

The following seven programme areas were selected for the review:

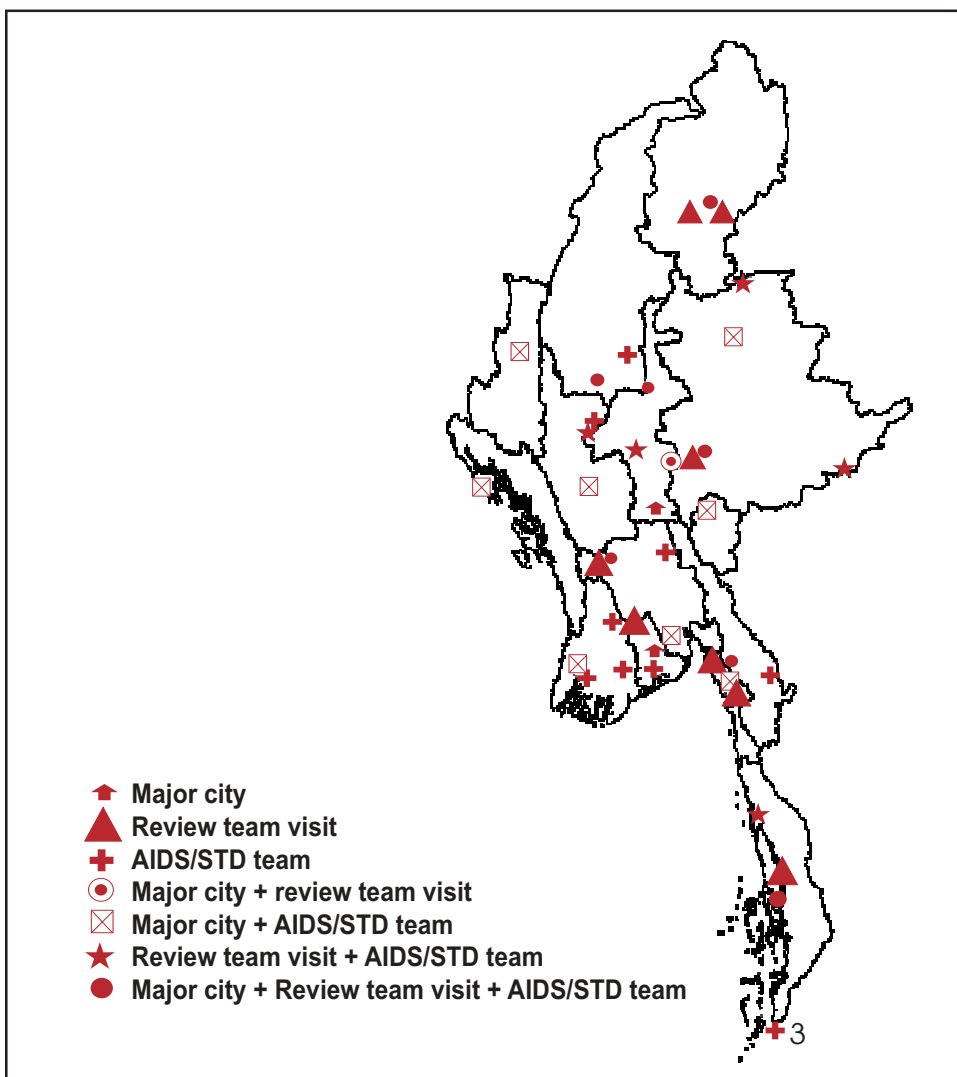
- (1) Strategic information
- (2) Health system infrastructure, services and management
- (3) The role and experiences of people living with HIV/AIDS
- (4) HIV prevention in the community
- (5) HIV prevention in health care settings
- (6) HIV care, support and treatment, and
- (7) Impact of HIV on individuals and the community

For each of these areas, the review team drew up a list of issues to be explored at both the central and peripheral levels. This list was based on the review of background documents (Annex 2), including those prepared by the working groups for the formulation of the National Strategic Plan 2006-2010.

At a consultative meeting held at the outset, the review team presented the objectives and methods to about 20 representatives of national and international NGOs, and staff of health and other ministries.

Members of the review team were deployed in seven zones and visited eight states and divisions, and 23 townships (Figure 3). In these locations, the members met representatives of 20 AIDS committees and 19 AIDS/STD teams, and held both scheduled and ad hoc meetings with NGOs. They visited 24

Figure 3: Map of Myanmar showing AIDS/STD team locations and sites visited by review team



hospitals, 13 blood transfusion facilities, 13 programmes for the PMTCT, six projects on harm reduction for injecting drug users (IDUs) and six youth HIV prevention projects. They also visited 17 project sites for the 100% TCP programme, seven sex workers' sites, 12 groups of people living with HIV/AIDS, nine nongovernmental organization (NGO) sites and urban as well as rural communities.

In the interval between field visits and consolidation of the report, the review team held focused group discussions with NGOs on clinical care, community and home-based care, PMTCT, prevention and treatment of STIs, and injecting drug use. These meetings enabled the review team to complete or revise the information they had received from various sources, benefit from the experience gained by partners and obtain insight into their expectations.

A summary of the review findings and recommendations was presented by the review team to H.E. the Minister of Health, Professor Kyaw Myint, on 4 April 2006.

4. Background

With a population of 53.22 million (2003-2004 estimate), the Union of Myanmar, the largest country in mainland South-East Asia (677 000 sq. km) stretches 2 200 km from North to South and 925 km from East to West at its widest point. About 70% of the population resides in rural areas. The country is divided into 17 states and divisions, 64 districts and 324 townships. The population includes 135 national groups, speaking over 100 languages and dialects. Myanmar has abundant natural resources, including forest and marine resources as well as natural gas, coal, petroleum, gems and other mineral resources.

The national response to HIV in Myanmar began in the mid-1980s, with active HIV surveillance starting in 1985. An intersectoral National AIDS Committee chaired by the Minister of Health was established in 1989 and the first short-term plan for the prevention of HIV transmission was launched the same year.

The first national medium-term plan for the prevention and control of HIV/AIDS was formulated in 1991, followed by the second medium-term plan formulated jointly by the NAP and United Nations Development Programme (UNDP) in 1994. In the late 1990s, several collaborative projects were undertaken with the support of UN organizations and bilateral agencies, such as the Japan International Cooperation Agency (JICA).

In line with priorities set forth by the National Health Plan of Myanmar, the first five-year National Strategic Plan for Expansion and Upgrading of HIV/AIDS Activities in Myanmar (2001-2005) aimed at enhancing nationwide AIDS control and care efforts as a national concern through multi-sectoral collaboration, both private and public, and with the active involvement of the community.^{1,2} This five-year strategic plan called for widespread advocacy and increased behaviour change, development of both public and private human resources with emphasis on rural and high prevalence areas, expansion and sustenance of HIV-free blood transfusion

¹ National Health Plan, 2001-2006, Department of Health, Planning, Ministry of Health, Union of Myanmar.

² National Strategic Plan for Expansion and Upgrading of HIV/AIDS Activities in Myanmar, 2001-2005, Department of Health, Ministry of Health, Union of Myanmar.

programmes, strengthening of medical care, counselling and support of people living with HIV/AIDS, expansion of border areas bilateral programmes, increased surveillance and research, and targeted prevention among highly vulnerable populations. The implementation of the strategic plan was to be led by the NAP of the Ministry of Health (MoH) and supported by a United Nations Joint Action Plan for HIV/AIDS (also known as the Joint Programme) which began in 2003.

In 2005, a review of the UN Joint Programme noted that annual condom distribution in Myanmar had increased from 28.9 million in 2002 to nearly 36 million units in 2005; the percentage of men using condoms in all five last commercial acts had risen from 49% in 2003 to 76% in 2005; half-a-million needles, double that of the previous year, were distributed through drop-in centres in 2004; over 43,600 health education or counselling sessions were conducted in 2004; and 5.45 million information, education and communication (IEC) materials on HIV/AIDS distributed. Also, the provision of voluntary counselling and testing had increased considerably with coverage going up from 800 individuals in 2002 to 64,000 in 2004; the number of community-based care beneficiaries had gone up from 575 People living with HIV/AIDS in 2002 to an estimated 3,800 in 2004; and a number of self-help groups had been established. Similarly, resources for the Fund for HIV/AIDS in Myanmar (FHAM) increased from US\$ 6.5 million in FY 2003-2004 to US\$ 4.7 million in 2004-2005.³ Against this background of progress achieved by the national programme, the report, however, noted persisting gaps meriting further efforts and resources.

In March 2006 the NAP, using a broad-based consultative mechanism, began the formulation of a National HIV/AIDS Strategy for 2006-2010, with participation from national and international NGOs and multilateral agencies.

³ Joint Programme For HIV/AIDS in Myanmar and Fund for HIV/AIDS in Myanmar (FHAM), Progress Report 2003-2004. Annual progress report April 2004-March 2005, United Nations Expanded Theme Group on HIV/AIDS

5. Strategic information

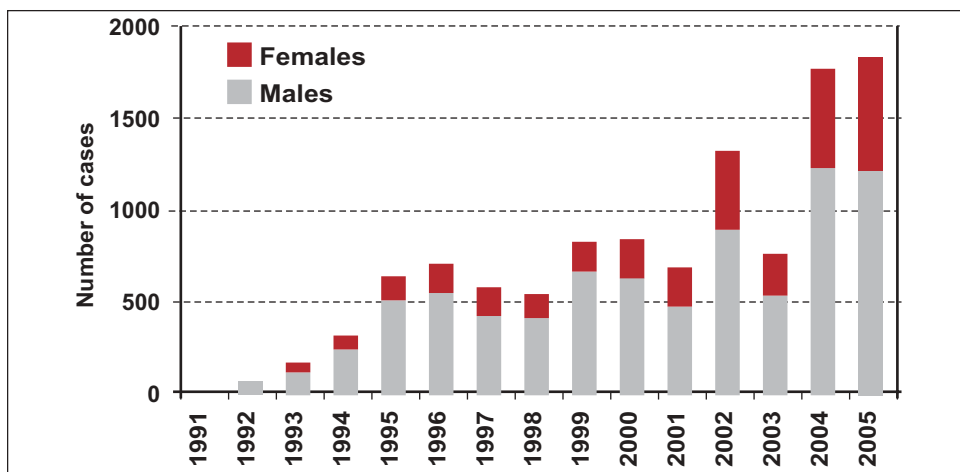
This section highlights the salient features, key issues and main recommendations related to surveillance, monitoring and evaluation and the overall management of information relating to HIV/AIDS control.

5.1 Surveillance

The first case of HIV infection was reported in Myanmar in 1988 and the first AIDS case in 1991. To track the epidemic, the NAP Myanmar has made remarkable progress in implementing several components of the second-generation surveillance system. These include AIDS case surveillance, HIV sero-surveillance (HSS) at sentinel sites, behavioural surveillance surveys (BSS) in selected populations and surveillance for STIs.

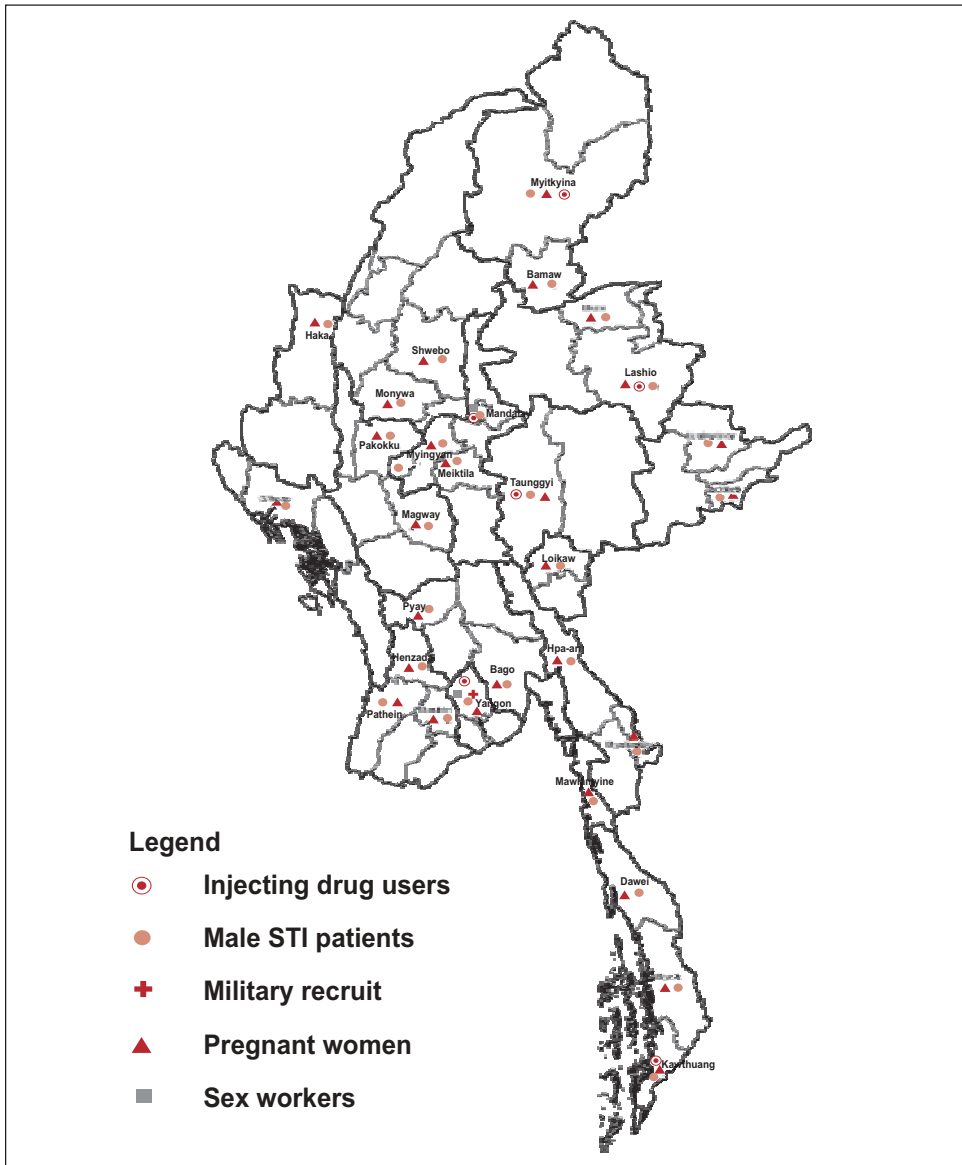
AIDS surveillance: AIDS is a reportable disease in Myanmar. The Bangui AIDS case definition is currently used. All sites visited by the review team, were regularly sending age and sex disaggregated AIDS data to the NAP central office (Figure 4). However, there is gross under-reporting of AIDS cases. Out of the

Figure 4: Reported AIDS cases by sex – Myanmar, 1991-2005.



39,230 new AIDS cases estimated for 2004,⁴ only 1,747 cases or less than 5% were reported to the public health system. Currently, name-based AIDS case reporting is done. The report includes demographic data, race, address and the likely mode of transmission. Mechanisms to protect confidentiality in the transfer and storage of the information are suboptimal.

Figure 5: Location of sentinel sites by population subgroup, Myanmar



⁴ Report from the Technical Working Group on HIV/AIDS Projection and Demographic Impact Analysis in Myanmar, Yangon, 28-30 September 2005.

HSS: Starting with nine sentinel sites in 1991, the HSS system in Myanmar has progressively expanded to 30 sentinel sites in 2005. The groups with high and lower-risk behaviour included in the HSS as shown in Figure 5.

- IDUs in five sites; a sample of 100 IDUs is included at each site.
- Male STI attendees in 30 sites; a sample of 100 male STI attendees is included at each site.
- Female STI attendees in two sites; a sample of 100 female STI attendees is included at each site.
- Pregnant women attending antenatal care (ANC) clinics in 30 sites; a sample of 100 ANC attendees included in each site.
- Military recruits in two sites, a sample size of 600 recruits at each site.
- Tuberculosis (TB) patients in five sites.

Commercial drivers (taxi and truck) are tested every two years for license renewal, but this group has not been included as part of the population in the surveillance system. Some groups with high-risk behaviours and vulnerability, including men who have sex with men (MSM), mobile population and prisoners, are not part of the surveillance system. Some groups that are vulnerable and have high-risk behaviour at specific locations (seafarers in Mon and Taninthary and miners in Kachin) are also not assessed. Blood safety is one of the priorities of the NAP and it uses data from screening of blood units as an additional source of data for surveillance purpose.

The HSS is conducted once a year from March to April. Sentinel sites have been selected using epidemiologic criteria. However, the sample size for each population group at each site is insufficient to detect measurable changes in prevalence from year to year. The pooling of data from all sites into a single national figure obscures regional differences.

In all major sites included in the sentinel surveillance system, collection of specimens from different population groups was reported to be done according to the standard national procedures with respect to confidentiality. The methodology used for HSS is service-based rather than community-based. For example, drug users are referred from rehabilitation or drug treatment centres, specimens for sex workers are collected from public STI clinics, maternal and child health clinics are used to reach populations of pregnant women, and military recruits are tested when they volunteer for service in the two main training centres in the country.

STI surveillance: STI diagnosed cases by venereal disease research laboratory test (VDRL) or syndromic approach are reported by hospitals to the AIDS/STD team and to the state/division health department (Health Management

Information System). The review team found irregularities in the frequency of reporting of STI data. Except in a few townships, private practitioners and NGOs do not report systematically to health authorities.

BSS: In most sites, BSS among female sex workers was reported to be conducted as part of the 100% TCP programme. In addition, BSS was also conducted among a sample of 100 females and 100 males in urban areas by the AIDS/STD team. The methodology and results of these surveys were not reviewed during field visits. Some NGOs report conducting their own occasional survey, mainly for programmatic purpose, but they are often reluctant to share the findings with the local or national authorities.

AIDS/STD teams and Population Services International (PSI) usually collaborate to conduct social mapping in most of the sites selected for the implementation of the 100% TCP programme. However, at the local level, there is no process to estimate the size of the high-risk groups such as sex-workers, MSM, IDU and mobile populations. Various AIDS committees and some of the AIDS/STD team leaders that the review team met could not explain the magnitude of the epidemic in their area. There is sometimes wide discrepancy in the estimates of high-risk population between NGOs and the public sector.

A national BSS was conducted in 2003 and the results published and made public in early 2006. A comprehensive national BSS, which includes major vulnerable and high-risk groups, has been planned but its implementation has been delayed.

In general, surveillance data collected has not been used or shared with stakeholders at local levels for advocacy or programming purposes, except in a few sites (Taunggyi, Monywa and Meitkhtila). Gaps in technical capacity in basic epidemiology and time constraints seem to be the major obstacles for data use at local levels. Also, surveillance or monitoring of HIV drug resistance has not been initiated so far. Individual patient testing for drug resistance is reportedly performed only in the private sector.

Action points

- After revision of surveillance protocols, training modules should be developed emphasizing operational aspects.
- Minimal additional variables, which provide useful insights into the prevalence situation, should be collected in the HSS, such as age, parity, urban or rural residence.
- Mapping, population size estimation and epidemiological projections should be undertaken with a greater involvement of all partners, including local and international NGOs, and high-risk populations.

Recommendations to strengthen surveillance system

- HIV surveillance system should be updated to respond effectively to the evolving epidemic and to keep pace with new tools and technologies. HSS should be expanded to include other vulnerable population groups and other geographic areas to increase representativeness of data and allow comparison over time.
- Ensure confidential reporting of AIDS cases;
- Data should be analysed primarily at local levels by building capacity of staff and providing technical support from the central office;
- Programme-related information, including surveillance data, should be analysed systematically and disseminated promptly to all stakeholders, especially at the local level. All partners should be encouraged to contribute to a standardized management information system.

5.2 Monitoring and evaluation

There is a structured management monitoring system in place which produces timely information. This information is focused on output such as implementation of services and dissemination of materials and commodities.

The AIDS/STD teams report on a regular basis to the NAP. For this, they use a standard set of indicators covering all major interventions and areas of work covered by the NAP. A questionnaire is regularly sent to the AIDS/STD teams.

For service provision, data is disaggregated by age and sex. In areas where an AIDS/STD team is not operational, data of services relating to HIV/AIDS such as STI services are included in the Health Management Information System, and once centralised at the Department of Health (DoH), a copy is forwarded to the NAP.

Data collected from all AIDS/STD teams is analysed by the NAP but there are some delays in compilation of reports. Also, the reports are not analytical and disseminated to the extent that they should be.

Monitoring visits are organised by NAP to the state/division and township level AIDS/STD teams. These visits are more linked with the programmatic needs of specific programmes, such as 100% TCP or PMTCT, rather than being part of a systematic monitoring programme.

The NAP also organises general programme review meetings twice every year. These are organised at the central level with the participation of all AIDS/STD team leaders. These meetings are an opportunity for the NAP to share and

follow up on programme implementation with the AIDS/STD teams and for the AIDS/STD team leaders to provide feedback to the NAP.

With the support of different UN Agencies such as WHO, the NAP organized reviews and evaluations of specific programmes such as the 100% TCP in 2005. These reviews and evaluations have been deemed important for advocacy purposes and have provided guidance to the NAP and its partners on how to improve such programmes.

NGOs have been reporting activities on a monthly basis to the AIDS/STD teams in some of the sites visited by the review team (except Mon, Kachin and Karen States). There is, however, no consistency in the format used by them for the purpose. This makes it difficult to aggregate information at the national level. In some areas, the NGOs report directly to the local health authorities without informing the AIDS/STD teams. Similarly, public partners are reporting about their activities on an irregular and not systematic basis while the private sector does not report any data. In general, the AIDS committees are not the recipients of reports; the AIDS/STD team is the collecting point of information.

Action point

- Local partners (local and international NGOs, public services, AIDS committees and the private sector) should be requested to report on their activities on a monthly (or quarterly) basis to the local AIDS/STD team in a standardized format, using output and coverage indicators agreed in the national framework. The standard format currently utilized at the national level by all partners can be adapted to the local level. Definition of each indicator should be provided with technical support of AIDS/STD team or NAP monitoring and evaluation (M&E) unit.

All partners are expected to report at the national level to NAP/UNAIDS on standard agreed indicators. However, the review team found the use of these indicators at the local level in only two sites during their field visits (Dawei and Myeik).

Since the Joint Programme for HIV/AIDS began in Myanmar in 2003, UNAIDS has had the role of collecting information from all implementing partners involved in the national response to HIV/AIDS. Although this represents an important positive effort that helped gather a better understanding of the work provided by partners (particularly NGOs), it has also been perceived as a duplication of what the NAP should do as the lead national body in monitoring national response to HIV/AIDS. The Joint Programme mid-term review of 2005 clearly recommended that NAP should play a central role in monitoring and evaluation, ensuring the implementation of the “3 ones principle”.

Recommendations

- The NAP should play a more central role in monitoring and evaluating the national response to HIV/AIDS. The UNAIDS, WHO and other agencies have an important role to play in supporting the NAP in this process.
- Procedures for flow of data from direct implementers to the NAP should be more clearly defined and agreed at the national level. The reporting mechanism to and from the AIDS committees, township medical officers and AIDS/STD teams should be streamlined.
- Regular monitoring visits should be conducted by the AIDS/STD teams to all sectors involved in the local response (NGOs, public sector and, when possible, the private sector). The monitoring visits will primarily seek to enhance the quality of data collected by checking the consistency between activities observed and reports provided. Training and operational tools for monitoring and evaluation should be provided to the AIDS/STD teams.

5.3 Information management and dissemination

Programme description and key issues

National level: Apart from the National AIDS Committee and the Country Coordination Mechanism for the Global Fund, there are no formal and regular coordination mechanisms to engage all the stakeholders for information dissemination. The National AIDS Committee has not been active in recent years and this may have hampered the systematic dissemination of information to the other ministries. However, the NAP and its partners have been meeting frequently over the past year facilitating information sharing among key national partners.

Local level: NGO representatives informed the review team that the AIDS/STD teams usually share information informally with them at the township level. This positive influence on the exchange of data may have been the result of the recent directive from the central office of NAP urging AIDS/STD teams to enhance coordination with local NGOs. However, given the limited data analysis undertaken at the local level, evidence-based planning and programming is not much in practice. Moreover, the AIDS committees have not been considered as a formal forum for sharing of strategic information.

Thus far, the private sector has been excluded as a stakeholder for information dissemination. Also, the review team did not find evidence of dissemination of information to the general public.

Operational research studies: Although numerous studies and surveys have been conducted at the national and local levels by the public sector and by NGOs, there is still reluctance to publish and share this information. This may be due to the rigorous administrative clearances required for publication as well as the sensitive nature of HIV data. The BSS studies conducted by AIDS/STD teams at the local level, for instance, have yet to be shared with the partners. The BSS information can serve as a valuable input for programme planning and monitoring as well as for advocacy at all levels. The example of the behavioural survey conducted in 2004 by Save the Children UK with the approval of the authorities is a good example of successful collaboration between NGOs and the public sector.

Recommendations:

- Data collected at local levels should be aggregated, analysed and shared with all stakeholders, via township AIDS committees and other mechanisms.
- NAP should provide information to the AIDS committees on the epidemiological situation of the country, division and township. This will facilitate sharing of data with stakeholders and local decision-makers, and will strengthen coordination and increase advocacy for the programme.
- Organize a consultation to discuss the rationale and modalities of data collection and dissemination. For purposes of accountability and advocacy, involve all programme beneficiaries, including high-risk and the general population.
- Support partners in designing research studies with the aim of standardizing methodologies and assuring the integration/ ownership of results. It is crucial for partners to conduct project level base-line and end-line studies to assess the impact of their activities. The results of such studies can yield useful information to the NAP.

6. Programme and health system structures

6.1 Programme management system, policy oversight health services and infrastructure

Organizational structure

The National Health Committee has provided guidelines to fight AIDS as a national concern. The National AIDS Committee, founded in 1989 and chaired by the Minister of Health, is a multi-sectoral body-it includes Ministries and representatives of local NGOs-overseeing the development and implementation of the National Strategic Plan. Under it are state/division, district and township-level AIDS committees (see Figure 6).

Health services are delivered through 824 government hospitals (including 324 township hospitals), 442 dispensaries, 86 primary and secondary health centres, 348 maternal and child health centres, 1 452 rural health centres and 80 school health teams.⁵ The 17 state or divisional level hospitals each have a capacity of between 150 and 300 beds, and provide the full range of specialized services. The township level hospitals have a capacity of between 16 and 50 beds, with one to four doctors.

The NAP consists of the office of national programme manager, a Central AIDS/STD team and an AIDS counselling team in Yangon, six state/divisional AIDS/STD offices, and 43 AIDS/STD teams in high-prevalence or vulnerable townships in 35 of the 63 districts.⁶ The state and township AIDS/STD team leaders report to the National AIDS Programme, while working under the supervision of the state/division health director or township medical officer.

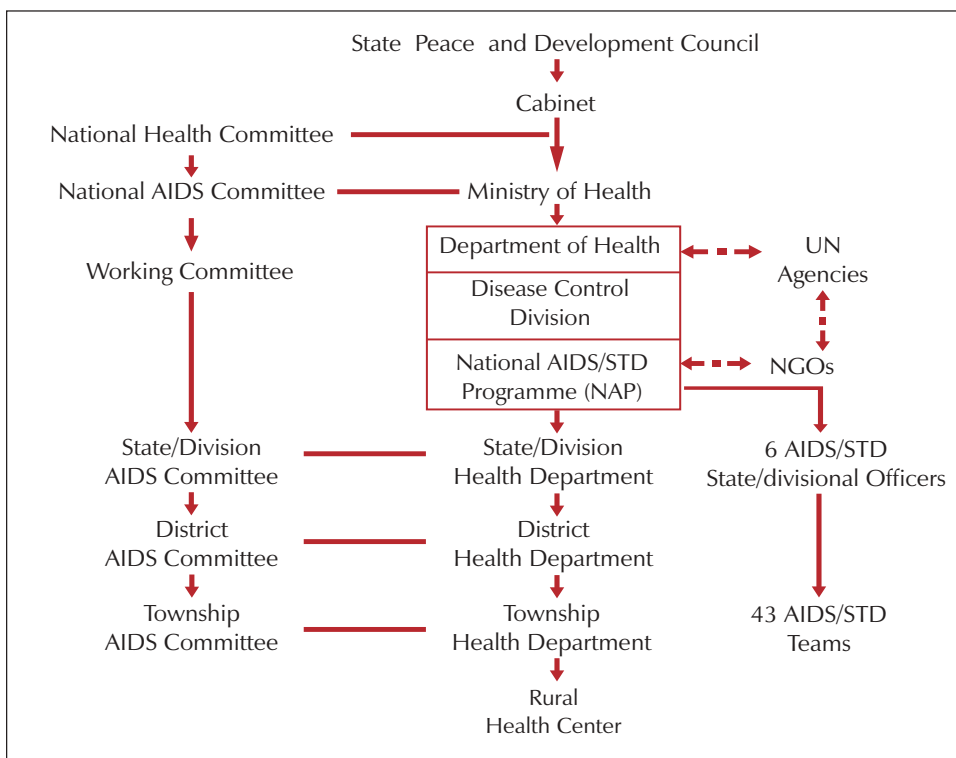
Policy oversight and programme management

The NAP provides the leadership in the national response to HIV/AIDS within the health sector and plays a key coordinating role across non-health sectors.

⁵ Health in Myanmar, 2005. Ministry of Health.

⁶ Administratively, the Union of Myanmar is divided into 17 states/divisions, 63 districts, and 324 townships.

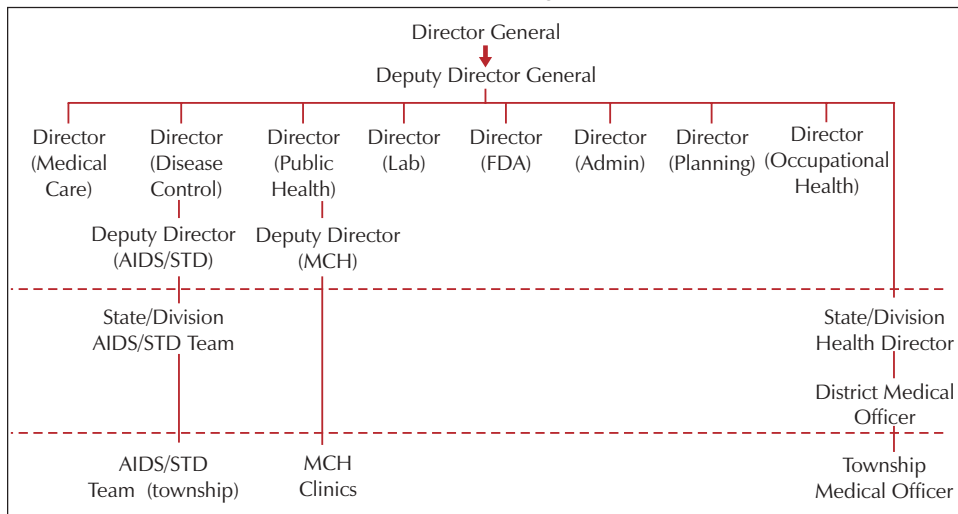
Figure 6: Organizational chart of national AIDS committees and national AIDS programme



The NAP office in Yangon acts as the secretariat for the National AIDS Committee. It is responsible for national-level planning, programme management and resources mobilization. The NAP consolidates individual yearly plans produced by the AIDS/STD teams. It then oversees implementation and facilitates procurement and supply of HIV/AIDS medicines and other related commodities. The NAP also facilitates coordination at the national level with international organizations involved in the national response and represents the national programme outside the country at regional and other international HIV/AIDS forums.

Other Departments also concerned with the implementation of HIV/AIDS related interventions include the Division of Medical Care, Division of Public Health, state/division health committees and health laboratories as well as national and international NGOs, and private-for-profit sector (Figure 7). For example, the DoH, **Division of Medical Care's** drug treatment centres are responsible for harm reduction activities targeting IDUs, particularly drug addiction treatment and oral substitution treatment (methadone).

Figure 7: Schematic representation of the DoH and its relation to the national AIDS programme



The **NGO sector** also plays an important role in providing access to services and particularly to vulnerable and hard-to-reach populations. For example, among international NGOs, Artsen Zonder Grenzen, MSF Holland (AZG), in collaboration with the DoH, started a pilot ART clinic in 2003, PSI plays a major role in the social marketing of condoms and The Myanmar Consortium of NGOs (Consortium) operates an established network of township home-based care services. NGOs are also involved in supporting the provision of community-based PMTCT and a variety of other HIV/AIDS services in many regions. National NGOs such as the Myanmar Maternal and Child Welfare Association (MMCWA) and the Myanmar Red Cross Society (MRCS) are also actively providing HIV related services. Other Ministries such as Education, Social Welfare, Transport, Railways and Home Affairs are also providing specific HIV/AIDS prevention and care services in collaboration with the NAP.

The **private-for-profit sector** is providing ambulatory HIV/AIDS and STI clinical services, including ART and HIV testing. Data from the 2003 BSS show that patients seeking treatment for sexually-transmitted infections predominantly either self-treat, go to pharmacies directly, or to private doctors.⁷ There is little information about the extent to which national guidelines are followed. General practitioners from the private sector are part of the Myanmar Medical Association (MMA), whose representatives in turn communicate with the NGOs and the public sector. The NAP is collaborating with the MMA in organising training programmes in HIV/AIDS care, including ART and management of opportunistic infections (OIs), for general practitioners (GPs).

⁷ Behavioural Surveillance Survey (BSS), General Population and Youth, NAP 2003.

The programme implementation

The NAP operational branches comprise a network of 43 AIDS/STD teams in charge of implementing its public health strategies as well as delivery of certain services, such as voluntary confidential counselling and testing (VCCT), promoting the use of condoms, management of STIs and some basic HIV care. The AIDS/STD teams are responsible for supervision and monitoring of programme implementation and act as the secretariat of the local AIDS committees.

The AIDS/STD teams, however, lack sufficient resources to provide support to neighbouring areas that do not have such teams. In townships without AIDS/STD teams, HIV/AIDS interventions are implemented by other responsible officers, notably the township medical officer. Many AIDS/STD team leaders are stationed in townships that are also district centres and thus provide guidance to all townships that come under its administrative authority. Township hospitals provide basic services on HIV/AIDS clinical management to outpatients where AIDS/STD teams are not present and to patients with advanced HIV and AIDS.

Infrastructure

The infrastructure of the public health sector has been weakened as a consequence of being chronically under-resourced. All stakeholders have reported the urgent need for increased support to improve and often to maintain basic health infrastructure. Hospitals are often lacking basic infrastructure such as uninterrupted supply of electricity, commodities and medicines. This leads to increased costs for patients who often have to pay for supplies and medicines purchased in the private sector.

Encouraging initiatives have been undertaken to streamline HIV/AIDS along with other health programmes though some of these need to go beyond major urban areas or pilot projects to achieve greater coverage and effectiveness.

Recommendations:

- New AIDS/STD teams should be established for each identified priority area and human resources for each increased to meet local needs for prevention and care programmes.
- Division of responsibility for clinical care and public health intervention is not clearly outlined at the AIDS/STD team level. Team structures, functions and skills need to be reviewed, and better referral systems for services with other health structures and service delivery sectors promoted.
- The role of AIDS/STD teams should shift from its current emphasis on care and prevention to a managerial, coordinating and supporting one,

thereby expanding outreach and impact through collaboration with national and international NGOs, the private sector and other governmental sectors.

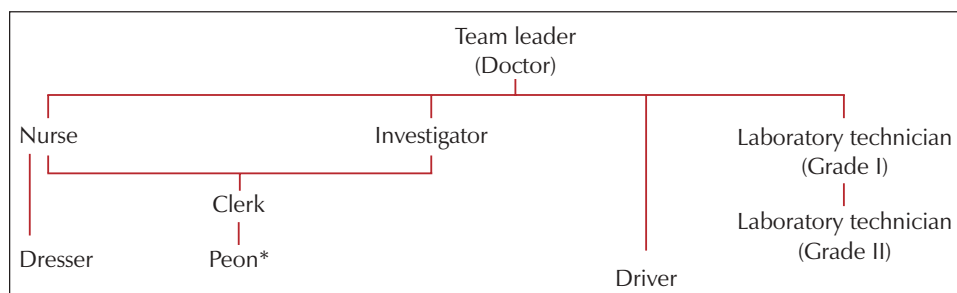
- The private-for-profit sector should be more actively covered with and supervised by the Ministry of Health. This is critical in order to ensure quality of services provided by the sector, particularly in the areas of HIV testing and counselling and HIV/AIDS care and treatment.
- Further substantial investment is also needed for strengthening of the public health infrastructure so that hospitals can provide basic medical care services. Irregular or lack of electricity supply needs to be addressed.

6.2 Human resources

The Department of Medical Science is responsible for generating all categories of health personnel. Training of staff is conducted in four medical universities, two nursing universities, two universities of medical technology, two pharmaceutical faculties, two dental medicine faculties and 43 nursing and midwifery training schools.

In 2004, over 17 000 doctors, 16 000 nurses and 15 000 midwives were deployed in the country. It is acknowledged that there is a lack of health workers such as midwives and nurses at the township and below levels for effective decentralization of health services. A particular important health cadre at the peripheral level are the midwives who deliver essential public health services such as vaccinations, antenatal care, directly observed treatment, short course (DOTS), home care and initiate referral of sick patients to hospitals. Even if additional midwives are recruited, the combined nurse-midwife versus medical doctor ratio is below 2:1.⁸ Of the 17 000 medical doctors, over 6 300 were practising in the public sector. Given the low public sector salaries, doctors working

Figure 8: *Standard AIDS/STD team structure*



* Person who does cleaning of office premises and helps as messenger

⁸ Health in Myanmar, 2005.

in the public sector are also engaged in private practice. This dual public and private practice system has not been used sufficiently for better coordination and referral of patients between the two sectors, thereby increasing coverage and quality of HIV/AIDS interventions in the private sector.

A total of 418 staff currently works for the NAP and its networks of AIDS/STD teams. The NAP in Yangon has a staff strength of 41, including one director (deputy director AIDS/STD), assistant directors, medical officers and other support staff.

Each of the 43 AIDS/STD teams has a staff of 3 to 15 members, including a medical doctor (team leader), nurses, investigator/outreach workers, laboratory technicians and support staff.

The NAP organizes several monitoring visits to its operational branches or the AIDS/STD teams during the year. These visits are usually associated with monitoring specific programmes, such as the 100% TCP programme or the PMTCT programmes. The NAP also organizes regular monitoring and internal evaluation workshops as well as training sessions in Yangon for its staff working in the AIDS/STD teams. Some training programmes in specific issues, such as laboratory work, are implemented by the NAP in collaboration with the National Health Laboratory (NHL).

Action points

- AIDS/STD teams should include a senior clinical officer and a public health officer (team leader) for better separation of responsibilities and roles.
- Core roles, functions and responsibilities for AIDS/STD team members should be clarified

There is, however, a severe shortage of staff to implement HIV programme activities, particularly at the township level. This includes both AIDS/STD teams and available staff in the public health care facilities. Given the prospect of continuing expansion of HIV programme activities, availability of human resources is and will increasingly become a major constraint. Available skills are also often inadequate on the managerial and programme planning front.

Recommendations

- Adequate human resources need to be mobilized to support the ongoing programme expansion. This includes expanding the number of AIDS/STD teams to cover all priority districts, redeployment of staff within public health care facilities and modification of roles and responsibilities for optimal use of available resources.

- Implementation and coordination of the national health sector's response to HIV/AIDS should be strengthened and improved through sustained training of AIDS/STD teams in programme planning, management, monitoring and reporting.

6.3 Financial resources

Total Governmental health expenditure has steadily increased, particularly since the 1990s. However, the overall health system is still under-resourced. Estimates of per capita health expenditure (i.e., public and private) put it at 26 international dollars (i.e. purchasing power parity) for 2001. Total health expenditure corresponded to 2.5% of the gross domestic product (GDP)⁹ for the year 2001-2002, of which more than 80% was in the private sector. The private sector's share is almost exclusively funded from 'out-of-pocket' payments,¹⁰ imposing an additional burden on the already poor households.

In 2004-2005, the Ministry of Health allocated to the NAP a budget of 78.05 million Kyats (approximately US\$ 68 000). This approximately represents 0.3% of the Ministry of Health's total budget. This allocation was supplemented by financial support received by the NAP from other sources such as the WHO (approximately US\$100 000 per year) and since 2003 by the FHAM. UNICEF has provided approximately US\$ 5.2 million during the last five years to the NAP as programme support for training, supply of commodities and medicines such as HIV test kits for VCCT, PMTCT, universal precautions, PEP starter kits, treatment of STIs and OIs. Between 2003 and 2005, the NAP expenditure of FHAM resources was over US\$ 1.2 million (see Table 1). These resources included pro-curement of

Table 1: Funding from FHAM to the national AIDS programme, 2003-2006

	Budget Allocation (Kyat)	Disbursements				Utilization rate
		2003 (Kyat)	2004 (Kyat)	2005 (Kyat)	Total (Kyat)	
NAP Total	1,828,881	148,516	883,876	198,722	1,231,113	67%
Of which managed by NAP	1,054,866	148,516	685,617	90,994	925,127	88%
Of which managed by UNDP (mostly procurement)	774,015	0	198,259	107,728	305,987	40%

(only 3 quarters)

⁹ Health in Myanmar, 2005.

¹⁰ World Health Report, 2003, WHO.

medicines and HIV/AIDS related commodities, such as HIV test kits as well as services delivered by NAP in collaboration with other health departments. From the services delivery budget, approximately 25% was exclusively allocated to purchasing antiretroviral drugs (ARVs) and medicines for OIs.

The FHAM Round I grant provided significant resources for National AIDS Programme's activities during the fiscal year 2003 (April 2003 – March 2004). The grant of US\$1.8 million was initially planned to be spent over a 12-month period. Procurement of imported commodities, including drugs and equipment, has been undertaken by UNDP on behalf of the NAP. It was reported to the review team that some difficulties exist in the disbursement and expending mechanisms linked to the grant allocated to the NAP through FHAM. Several internal and external factors were responsible for the initial delays in implementation. The disbursement of funds from NAP to AIDS/STD teams was directly linked to specific projects and not to programmes, thus necessitating individual projects. For example, FHAM was only established in 2003 and experienced initial delays in disbursement of first instalments (14 out of 18 implementing partners requested no-cost extensions at the end of the first year). Procurement services by the United Nations system as a whole were sub-optimal in terms of coordination and efficiency, and there was considerable delay in procurement by UNDP. It was also the first time that the NAP had received funds on that scale and it was unaccustomed to managing that level of external resources. Each quarterly obligation of the grant to the NAP had to be completely liquidated prior to receiving the next instalment. The submission of a consolidated financial statement of expenditures and activities was required. The latter was a significant cause of slow spending. In spite of these constraints, the NAP had obligated most of its remaining balance of funds by the end of 2005.

In addition to FHAM, a number of UN agencies and the JICA provide programme support and technical assistance as indicated in Table 2.

Financial resources available to the NAP from both national and international sources have grown significantly in recent years. However, they are still considered insufficient, leaving the health system under-resourced, given the fact that Myanmar is a donor-constrained country. This is especially observed at the township and lower levels. Per capita development assistance is much lower in Myanmar than in neighbouring countries. In 2002, whereas Laos received approximately US\$53 per capita in overseas development assistance per year, Cambodia US\$30, and Vietnam US\$22, Myanmar received

Table 2: Assistance from UN and other development agencies for the NAP disbursements, 2004

Agency	Estimated contribution to Government programme on HIV and AIDS (Thousands USD)	Principal areas of support
JICA	280	Laboratory strengthening, blood safety
UNFPA	1 159 ¹¹	PMTCT, 100% TCP
UNICEF	1 000	PMTCT, VCCT, OI and STI
WHO	956 ¹²	STI prevention & treatment, surveillance, OI and ARV treatment, 100% TCP, laboratory and blood safety

an estimated US\$3 per capita per year.¹³ UNAIDS estimates the expenditure on HIV/AIDS for 2004 by all partners to approximately US\$18 million.

The external donor resources in support of HIV work through both governmental and non-governmental structures are given in Table 3 and Figure 9.

The recent decision of the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) to withdraw its support has also aggravated the situation. This abrupt withdrawal has resulted in further delays in the rolling out of HIV/AIDS care and prevention programmes. Efforts are currently on to develop a new three diseases (AIDS, TB and malaria) funding mechanism and it is expected to be operational before the finalization of the GFATM phase-out plan (end of August 2006). A donor scheme is being studied to mobilize additional resources in support of activities targeted at the three diseases (the "3 Disease Initiative", known as 3D).

At the state/division and township levels, the disbursement of funds by NAP to AIDS/STD teams is often directly linked to specific programmes or interventions and requires reporting on individual project funding by the AIDS/STD team, substantially increasing their paper work. Also, as health facilities and AIDS/STD teams have no reserve funds, delays in transfer of funds (usually reported) further delay of implementation of activities.

Observations made during the review undeniably support the view that the programme is largely under-funded. The quantum and flow of

¹¹ Including a total of US\$959 240 over this period allocated from FHAM.

¹² Including a total of US\$866 500 over this period allocated from FHAM.

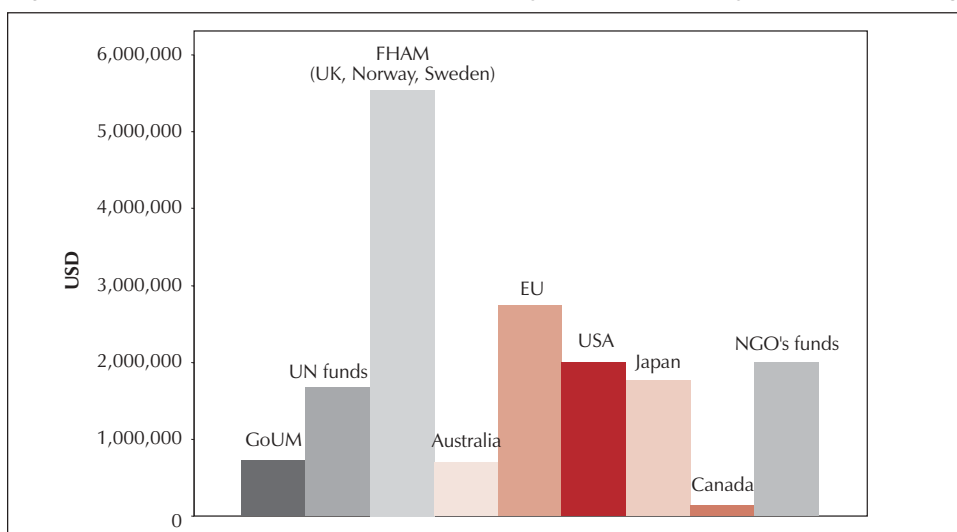
¹³ Global Fund to fight AIDS, TB and Malaria, Country Coordination Mechanism: Myanmar proposal round 5, 2005.

Table 3: Expenditures on HIV and AIDS in 2004

Source of funding	Prevention-related activities	Care and support	Orphan and vulnerable children	AIDS programme costs	Total
FHAM	2 203 184	475 840	10 895	2 859 740	5 549 659
MoH/NAP	620 607	0	0	100 000	720 607
AusAID	259 700	0	88 200	135 100	483 000
EU*	n/a	n/a	n/a	0	2 733 084
USAID	1 775 000	225 000	0	0	2 000 000
JAPAN*	480 000	n/a	n/a	70 000	550 000
UNICEF	1 680 638	148 769	0	174 659	2 004 066
UNDP	143 299	0	13 192	13 732	170 223
UNFPA	396 938	0	0	0	396 938
WHO	0	0	0	311 000	311 000
UNAIDS	0	0	0	400 000	400 000
UNODC	0	0	0	67 900	67 900
INGOs	50 500	1 402 000	0	330 000	1 782 500
Total	7 609 866	2 251 609	112 287	4 462 131	17 168 977

* no breakdown by categories for EU and incomplete breakdown for Japan

Figure 9: Expenditures on HIV and AIDS in Myanmar in 2004 by source of funding



resources to and from governmental, non-governmental and external funding sources, and the allocation of resources across implementing entities, programme activities and regions were insufficiently documented for the team to form an opinion about the current financial situation and make forecasts or ascertain the gaps. This information is needed to assess the adequacy of funding in relation to programme priorities.

Action points

- Advocacy efforts need to be strengthened so the donor community is mobilized to support HIV/AIDS programmes in Myanmar.
- The NAP and state/divisional AIDS/STD teams will benefit if finance officers are recruited so clear accounting systems can be put in place.
- Disbursement and reporting should be consolidated on a quarterly basis and directly linked to prepared work-plans and not individual projects or activities.

Recommendations

- Public allocation for HIV/AIDS as well as for health in general should be significantly increased if Myanmar is to narrow the growing gap between increasing needs and an effective response to them.
- In-depth analysis of funding sources, mechanisms and flow supporting the national response from governmental, international and other sources should be conducted. The availability of this information will enable an assessment of the adequacy of funding for priority areas of the response and the expenditures by different stakeholders, including NAP.
- All stakeholders should contribute to making the “3 Disease Initiative” an effective, sustainable and transparent external financing mechanism.

6.4 Coordination and partnerships

Coordinating structures are functioning with regularity in many states, divisions and townships. The national official coordination structures described at the beginning of this section (i.e. National Health and AIDS Committees) are replicated at the state and township levels. They are chaired by the local administrative authority and meet normally on a quarterly basis. These official local coordination bodies have clear membership, which includes representatives from health and other sectors such as police, education, and transport. They also involve representatives from national NGOs. There is a lack of formal mechanisms of coordination with international NGO sectors at the state/division and township levels thus missing out on the opportunity of development of

critical partnerships at the local level. Coordination with the private-for-profit sector (GPs) is only informal. Similarly, people living with HIV/AIDS do not participate in coordination structures. However, some ad hoc informal mechanisms were observed in several townships visited by the review team.

It was noted that in spite of the great variety of HIV contexts from place to place, the response is rather uniform in all areas visited. This can be explained by an HIV/AIDS response that is nationally driven or project-oriented rather than mindful of local contexts. With greater access to strategic information and adequate training in strategic thinking and action, the local AIDS committees might be the most appropriate forum for adapting national policies to local situations.

It is recognized that the implementation of programmes such as the 100% TCP programme has facilitated the acceptability of condoms and HIV/AIDS programmes by the local communities. Given the sensitivity of some of the prevention interventions targeting sex work and drug use, it is fundamental to sustain and increase advocacy efforts with other sectors such as law enforcement so as to further engage them in support of the programmes.

Recommendations for improving coordination between units and sectors include the following:

- Local AIDS committees should serve as a forum to adapt national policies and programmes to the specific local HIV/AIDS context. Their role should evolve from being purely consultative to becoming more action-oriented.
- Regular coordination meetings between the AIDS/STD teams and national and international NGOs and the private-for-profit sector should be formalized. Such meetings will create opportunities for the sharing of programme information.
- A representative of people living with HIV/AIDS should be included in all coordination mechanisms.

6.5 Logistics (procurement and supply management) and communication

Procurement and distribution

The supply of health products in Myanmar works as a centralized “push” system. The selection of products and allocations in terms of quantity of health products are planned at the central level. Calculations appear to be based on the target population covered by the health facility and fail to take into account the real needs, the previous consumption and stock levels.

All products first arrive at the central level in Yangon and are then dispatched to health facilities through various distribution systems. Health products for the NAP and the AIDS/STD teams are stored at the central medical store depot (CMSD) in Yangon and then sent to the Central AIDS/STD team store in Yangon General Hospital where shipments are prepared for AIDS/STD teams all over the country. There is separate storage space for different programmes/donors. The channel of distribution to hospitals, whether state/divisional or district or township, varies and does not appear to be very clear. Some products are distributed directly from CMSD in Yangon, some products transiting through the central medical sub store depot (CMSSD) in Mandalay and Taunggyi or other transit camps. Though the transit camps are not supposed to do any repackaging, the review team observed that this was taking place in Moniwa transit camp (CMSD distribution system).

It seems that, since 2005, there is a directive that all health facilities have to collect their allocation from the store (mainly at the central level in Yangon). This takes place two-three times a year for most products. For the purpose of proper cold storage, HIV test kits are kept in the NHL. The AIDS/STD teams collect the HIV test kits on a monthly or two-monthly basis.

The AIDS/STD teams and health facilities which have to collect their share of allocated health products from Yangon are hampered by lack adequate transportation means and the ability to maintain cold chain. The budgetary allocation for this purpose is also inadequate.

There is a clear demand from all health facilities to keep a buffer stock at the state/ divisional level or at least in CMSSD (and transit camp).

There does not seem to be any kind of formal collaboration or arrangement between the different health facilities to share transportation means or to help each other. Though it is now mandatory for the health facility to collect the products, it seems that no budget has been transferred at the peripheral level to support such activity.

Action points

- More coordination at the state/divisional level to coordinate travels for collection of supplies;
- Implement buffer stocks at the CMSSD levels; and
- Develop mechanisms to ensure the cold chain is maintained during transportation.

Table 4: Contribution from agencies for procurement of health products for NAP

	ARVs	HIV test kits	Condoms	STI drugs	OI drugs	Heavy equipment	Light equipment	Consumables	Reagents	Current status
Global Fund	Yes	Yes	Yes	Yes	Yes	Viral load machine	Manual CD4, Laboratory equipment	Yes	Yes	GF will terminate its activities by end August 2006
FHAM	Yes	Yes	Yes	Yes	Yes		Laboratory equipment	Yes	Yes	FHAM will terminate its activities by end November 2006
WHO	Yes		Yes		Yes	CD4 facscount	Yes		Yes	Ongoing
UNICEF	Yes	Yes		Yes	Yes	Viral load machine	Laboratory equipment	Yes	Yes	Ongoing
UNDP		Yes (up to end of 2004)	Yes (for 100% TCP for year 2005)							
UNFPA	Yes	Yes	Yes	Yes	Yes			Yes		On-going

Storage and stock management

Though the central level maintains detailed records of all allocations made, it does not receive any feedback on usage and balance of stocks at the peripheral level since reporting channels are weak. The review team observed that stock books were available in storage facilities though these were not always up to date. Some storage facilities maintained stock (bin) cards, again not always up to date. Even when a computer is available at the health facility level, it is never used to keep data on stock levels.

Staff in several facilities have been trained on storage and stock management. The review team, however, observed that in several facilities there was poor store management, with oral and injection products being kept together, and thick external liquids stored on the upper shelves with the tablets being on the lower shelves. In most places, the health products were stored in locked cupboards. In some places, there was a separate room allocated for storage of pharmaceuticals. Most of the time, due to the lack of manpower, only one person was made responsible for the keys and stock management. In Mandalay, in the AIDS/STD team pharmaceutical store, instructions have been issued by the programmes/donors to separately store the products in five different cupboards, each of them with two separate locks.

The security measures appear to be adequate. There is, however, a need to standardise the storage and security measures, and stock management procedures.

Most of the places visited do not have any cold-chain facility (e.g. selected HIV test kits, nevirapine).

Action points

- Draft and implement clear instructions on good storage and security practices;
- Implement general training on stock management followed by strict use of stock (bin) cards.

Reporting

All health facilities (in townships, for example) report directly to the central level, generally with copies to the state/divisional level. However, there is lack of reporting on the quantities received and used, and on the balance in stock. The health facilities do not report on stocks, as there is no mechanism for replenishment of stocks. There is also no reporting on shortages. There is thus a clear need to strengthen the reporting system. Simultaneously, the purpose and usefulness of such reporting has to be clearly outlined to the health facilities.

Action points

- Implement as soon as possible a stock card system, computerized stock data together with monthly reports on stock levels so that data can be compiled and a pull system implemented.
- Make all reporting go through the state/divisional level where data is compiled and sent to the central level.

Transport and communications

Despite the instruction to the health facility to come to the storage level to collect the products, the facility usually does not have any transportation means. As a result, public transportation is used to collect the products.

The communication means are also very weak, but even when they exist, they are not completely used: all hospitals have only a phone line and rarely a fax machine. Sometimes (e.g., the Women and Children Hospital in Mandalay), there is an internet connection. However, all reporting (for activities, finance and stocks) when it occurs is processed through the post office: the lead time for these reports to reach the central level is between one and four weeks, if the report is not lost.

Action point

- Explore means for the reports to reach the central level more quickly.

Regulatory authorities

All drugs for the health sector (public or private) need to be registered and approved by the food and drug administration (FDA). Most of the first-line ARVs, except single dose combination drugs, are registered. There are no registered second line ARVs or paediatric ARVs. UN agencies and INGOs interested in importing non-registered ARVs can apply for permission from the MoH. The process of getting such authorisation often takes several months for the INGOs and a bit less than a month when the health products are for use in the public sector.

Though the health facilities claim that they rarely face shortages, when it occurs they are likely to buy products from the local market. Because the registration mechanism is not strongly enforced, many products on the local market may not meet international quality standards.

Myanmar is a signatory to the World Trade Organization (WTO) but does not yet have an effective patent or intellectual property law. Thus, no patents

have been granted yet and existing patents are no barrier to access medicines. Moreover, as a least-developed country, under WTO rules, Myanmar does not have to grant patents for pharmaceuticals until 2016.

Recommendations

- The DoH should allocate sufficient budgetary provision and/or means of transportation to the state/division AIDS/STD teams and townships for health products. Coordination should also be improved at all levels to rationalise travel to the central storage level.
- The NAP should start the process of converting the procurement process from the 'push' to the 'pull' system as soon as possible. This includes training at the peripheral level on stock management, reporting on stock levels and calculation of needs and implementation of buffer stocks at intermediate levels.
- Increased and improved capacity of the FDA for better control over the quality of health products entering the country, including antiretrovirals and other expensive medicines.

6.6 Laboratory services

The main units at the national level for HIV/AIDS related laboratory activities are the NHL in Yangon and the Mandalay Public Health Laboratory (PHL). These facilities are responsible for: (i) distribution of HIV test kits to medical facilities in need of HIV testing, (ii) training of laboratory personnel, (iii) laboratory services, including confirmation of HIV infection, HIV testing for samples collected from all sentinel sites, testing for CD4 enumeration, and laboratory testing for opportunistic diseases, and (iv) quality assurance.

There is good collaboration and coordination between the NAP and the NHL on laboratory issues. The laboratories visited had adequate staff but often lacked consumables, equipment and other basic infrastructure, such as electricity supply. This undermines, among other things, their ability to ensure proper storage of materials in good cold-chain conditions and maintenance of instruments.

Type A laboratories (around 30 sites at the central, state and divisional levels) are staffed with a pathologist or microbiologist, a medical technologist and grade I and II laboratory technicians, and are supplied with test kits. **Type B laboratories** (around 60 sites) are staffed with grade I and II technicians, and are supplied with test kits for collective testing. **Type C laboratories** (most township and station hospitals) are staffed by a single grade I or grade II technician and supplied with individual HIV test kits for blood screening.

Basic haematology, biochemistry, microbiology and HIV testing was usually available. Ability to perform liver function test varied. Automated CD4 testing is not yet available in the public sector.

HIV testing strategies currently being finalized by NHL/NAP are in line with WHO guidelines. Provision of laboratory equipment and planning for supplies of HIV test kits is based on the size of the respective laboratory. The NHL and PHL are equipped with ELISA machines. Annually, around 200,000 HIV rapid test kits are supplied to medical facilities for the blood safety programme. As all HIV test kits are donated by international agencies (UN Agencies, JICA and some international organizations), the types of HIV test kits in health facilities vary depending on the donor. HIV test kits are not provided to hospitals outside the Ministry of Health. Also, the Ministry's resources are reserved for buildings, personnel and routine laboratory procedures such as diagnosis of malaria, hepatitis and sero-typing of blood as part of the blood safety programme.

The NHL, in collaboration with the NAP, also organizes regular external quality control on HIV serology covering most of its laboratories. The **external quality assurance scheme** (EQUAS) for HIV testing began in 2005 with support from WHO and JICA. Sixty-five sites (public health and hospital laboratories, and AIDS/STD teams) took part in the first round; their number has been increasing in subsequent rounds, which are performed every six months. External proficiency testing has been conducted in collaboration with the National Reference Laboratory in Australia and the US Center for Disease Control and Prevention, Atlanta, United States (CDC).

Action points

- The NHL guidelines should be made available in all laboratories.

Access to **CD4 enumeration** is limited. One Facscount instrument (automated) from Becton Dickinson has recently been installed at the NHL and procurement of an additional Facscount for the Myanmar General Hospital is planned. Three Partec Cyflow instruments are based at AZG clinics in Yangon, Lashio, Kachin State and a fourth instrument is planned for Rakhine State. Some sites, including Mandalay and the MSF-CH clinic in Dawei, are using manual CD4 enumeration techniques. Six sets for manual CD4 counting will be soon provided to various sites with the support of FHAM. There were reports of several automated instruments in the private for profit sector and widespread use of manual techniques. None of the four district hospital ART sites on the border with Thailand has access to CD4 counting unless patients pay for private testing in Thailand.

Currently, HIV viral load measurement is not yet available in the public sector. There is a polymerase chain reaction (PCR) machine in the NHL which is being used for research purposes only. A new PCR machine for HIV viral load has recently been provided by UNICEF to support the national PMTCT programme. Some private medical facilities in Yangon are providing HIV viral load testing.

Recommendations

- Laboratory operation at sites providing HIV care should be strengthened on the basis of the needs of each site. Particular attention should be paid to reagent and power supply, instrument maintenance and staffing.
- A coordinated national CD4 testing programme with a large geographical coverage area should be established with standardized instruments, procedures, maintenance, technical support, reagent supply and quality assurance. The relative benefits of centralized and decentralized approaches should be assessed. CD4 testing facilities operated by the private sector and NGOs should be progressively incorporated into national CD4 quality assurance systems, as these become available.

6.7 Integration of HIV/AIDS management into other health programmes

The NAP collaborates with other programmes of the DoH to streamline HIV/AIDS into their programmes. For example, new initiatives have been taken to strengthen collaboration with the national TB programme. A good example is the project on development of Integrated HIV/AIDS care among TB patients in Mandalay. This project includes offering HIV testing and counselling to all TB patients and provision of HIV/AIDS care and ART when needed. This pilot project is still being field-tested and needs to be adapted as a public health intervention for replication and expansion.

Under the national maternal and child health (MCH) programme, systematic screening for syphilis on all pregnant women attending antenatal care is conducted. This is supported by the NAP with VDRL tests kits. The HIV tests are done at the AIDS/STD team laboratory where available. However, in more peripheral areas, particularly where there is no AIDS/STD team, this screening is not always done due to lack of follow up.

The NAP collaborates with the Department of Occupational Health in the organization of HIV prevention education sessions, including peer education at the workplace. These interventions are implemented in the main urban areas such as Yangon and Mandalay.

The Department of Medical Sciences is responsible for the training of medical, nursing and paramedical students. The NAP works with this Department on integrating HIV/AIDS in the respective training curricula. The NAP organizes a one-year post-graduate diploma programme on STI. This training programme is affiliated to the University of Medicine, Yangon.

Another important collaboration of the NAP is with the NHL. The NHL provides guidelines of HIV testing, facilitates the training of laboratory technicians and organizes regular rounds of EQUAS for HIV testing. The NHL also stores HIV tests kits for all laboratories and is starting to provide viral load and CD4 measurements in support of the ART programme.

The NAP also collaborates with the Department of Medical Research mainly in conducting operational research.

The DoH is responsible for planning of STI care based on syndromic management and STI reporting. The national guidelines on STI syndromic management have recently been updated by NAP and the DoH should ensure that these revised guidelines are implemented in all health facilities. There is still under-reporting of STIs.

Recommendation

- Although encouraging initiatives have been taken to streamline HIV/AIDS into other health programmes, these need to be expanded beyond major urban areas and pilot projects to increase coverage of services.

7. Living with HIV

Activities aimed at ensuring the greater involvement of people living with HIV in HIV/AIDS-related decisions and programmes have gained momentum and generated rising demand for greater participation of this section of the population in related developments. It is well documented globally and in Asian countries that the participation of People living with HIV/AIDS in decision-making is important and a key to success of those programmes. Such participation will also help people living with HIV/AIDS feel valuable and productive, and ultimately will counteract stigma and discrimination. People living with HIV/AIDS have the same capacity and potential as everyone else in the community. They are representative of all sectors of the community and society. They can continue to work in all areas of the workforce and participate fully in society and community life.

The review team was able to meet people living with HIV/AIDS in different places, more than 32 persons outside Yangon and 14 in Yangon. The meetings were arranged at NAP or AIDS/STD team offices or in hospitals. There were also individual meetings with people living with HIV/AIDS during the review. The review team observed and heard reports that people living with HIV/AIDS are becoming more visible in different activities. People living with HIV/AIDS also expressed their desire to be more involved in the process of prevention and care. At the same time, fear of disclosure is still a vital issue for many living with HIV, including those already in support groups. Stigma, discrimination and a lack of understanding of their potential contribution to prevention and care are key factors limiting their involvement. Support, compassion, acceptance and understanding are what they offer to others and what, according to them, they seek themselves.

In Mandalay, for example, a support group initiated by the AIDS/STD team was started in early 2005 with 20 people. Within one year, the group increased to 200 members. At the same time, fear of disclosure is still an issue for many people living with HIV/AIDS even among those who are already in support group.

The role of Buddhist, Muslim, Christian and Hindu clergy and communities in developing positive attitudes and supportive actions towards HIV/AIDS guided by understanding, compassion, acceptance and support is also important, and is starting to occur in different parts of Myanmar, although it is not well documented.

Box 1: Personal story of a person living with HIV.

Ko Htoo (name changed) was tested for HIV because he applied for a job in Malaysia. He was tested in a private clinic in Yangon and was denied the job because of his HIV serostatus. His parents-in-law suspected that he was HIV-infected because of his unsuccessful application. They investigated the result and on learning about it, they discriminated against his wife. She became pregnant but died 48 days after giving birth to her third child. Although she was enrolled in a prevention of mother-to-child transmission programme, the baby was HIV-infected.

Discrimination of children in school and in the community is a concern for HIV-affected families. During a group discussion with people living with HIV/AIDS in 2006, one counsellor received reports that the people living with HIV/AIDS were still being kicked out of their houses and being stigmatized by immediate and extended family members. However, in some places the review team was told that ignorance, stigma and discrimination have decreased over last few years. Stigma and discrimination clearly remains a major challenge. Major efforts towards attitudes of understanding, compassion, acceptance and support have to be advocated for and developed. HIV-infected people are still reluctant to disclose their status even to their own families. Out of the cumulative 63,238¹⁴ people tested HIV-positive (from 1988- Sept 2005), 2,400 of them are already organized in self-help groups. This is an important start and it reflects the potential for further expansion of these groups. The NAP and AIDS/STD teams have shown their commitment to work with People living with HIV/AIDS self-help groups in prevention and care, and reducing stigma and discrimination.

There has been a gradual expansion on ART since it started in March 2003 and now it covers 21 sites with 2 518 people. The private sector is estimated to be providing more people with ART but data are not available.

The review team met 25 people living with HIV/AIDS on ART from INGO and the NAP programmes. Several review members reported the growing participation of people living with HIV/AIDS and their wish to be more actively involved in prevention and care activities. Expansion and coverage of the ART programme is increasing the visibility of people living with HIV/AIDS and their willingness to disclose their status.

¹⁴ NAP, Jan 2006, (in Myanmar Language)

People living with HIV/AIDS self-help groups in townships visited were mostly convened by AIDS/STD teams, hospitals and INGOs (Table 5). In bigger cities, the availability of ART was a factor contributing to greater visibility, action and participation on the part of people living with HIV/AIDS in self-help groups. There are already more than 30 groups, with 10 of them having a relative large membership of more than 100 persons. Some smaller groups are part of the state level network/group. Many people living with HIV/AIDS told the review team that support groups need more backing and that there should be better coordination between people living with HIV/AIDS groups and other institutions. They said they would seek more independence from institutional care and support, and be more active at the community level. The level of involvement of people living with HIV/AIDS is limited to participation in monthly meetings organized by the supporting organization. People living with HIV/AIDS are not yet engaged in developing the structure and management of the groups. However, important beginnings have been made. A few people living with HIV/AIDS have had the opportunity to engage in NGO HIV/AIDS prevention and care activities, including peer education, counselling and home-based care. People living with HIV/AIDS from groups at risk, such as IDU, MSM and sex workers, have been working as peer educators and in behaviour change communication. The level of participation varies, depending on the individual's capacity, skills and the employing organization. Some people living with HIV/AIDS have received training and are involved as adherence counsellors and as counsellors in VCCT centres.

In Mandalay, the support group initiated by the AIDS/STD team reported that it needed more space to accommodate more people in the monthly meetings and money to cover the transport costs of people living with HIV/AIDS. In 2006, the Myanmar Council of Churches (MCC) supported the formation of MNP+ (Myanmar Network of Positive People) in Insein township, a separate office not attached to an NGO. The AIDS Alliance has also started activities to promote greater involvement of people with HIV/AIDS (GIPA) principles. This group has 10 board members (people living with HIV/AIDS) from different support groups with defined roles of secretary, finance officer and coordinator, and a secretariat in the Alliance office in Yangon. They have monthly invitation meetings to promote GIPA involving people living with HIV/AIDS from different support groups (in each meeting, they invite different people). They have also conducted positive prevention training for people living with HIV/AIDS. Three GIPA members were supported to attend the International Conference on AIDS in Asia and the Pacific (ICAAP) in Japan in 2005. Another is going to Bangkok for two months as a volunteer worker in the office of Asia-Pacific Network of people living with HIV/AIDS. This participation in international conferences and capacity building is quite a new phenomenon and needs to be strongly reinforced.

People living with HIV/AIDS also need greater access to services, especially VCCT and ART. They can make a significant contribution to prevention and care through increased involvement in related activities and decision-making. Furthermore, HIV support groups can be more effective with a more participative structure.

Table 5: People living with HIV/AIDS - area, size and involvement¹⁵

State or township	Institution involved in support group	Frequency of meeting	Support groups	Size of group	Activities
Yangon	MCC		1	10	Health education
Yangon	"SEG", AFXB [§]	Monthly	2	600	Support at hospital, nutrition
Yangon	MDM	Weekly	1	200	Peer education
Yangon	AZG		5	150	
Yangon	AIDS/STD team			100	
Yangon	Meta sawai, PSI,		1	30	Peer education
Mandalay	WV, "Linn Young Chi"	Monthly	1		Individual and family counselling
Mandalay	MDM	Weekly	1	300	Peer education
Mandalay	AIDS/STD team,	Monthly,	1	200+	Behaviour change communication, peer education
Tachilek	Hospital, WV	Weekly, monthly	2	200+	Home based care
Taunggyi	AIDS/STD team,	Not regular	1		
Myitkyina	MCC	Male/female Weekly	1	300	Peer education
Myitkyina	AZG		1		
Mawlamyaing	SEG, AFXB		1	120	Peer education, home based care
Mawlamyaing	CARE	*	1	5	Peer education
Kyaik Khami	CARE	*	1	5	Peer education
Hpa-An	CARE	*	1	5	Peer education
Dawei		WV		2**	Health education
Dawei		MSF-CH		7**	Health education

[§] Association François-Xavier Bagnoud

* Majority are women; ** small village level support group; Some of the people living with HIV/AIDS may be double counted

¹⁵ Sources: information from a person living with HIV/AIDS in interview and group discussion

Involvement of people living with HIV/AIDS in coordinating bodies

The NAP has set criteria for enrolment of people living with HIV/AIDS in the nationally supported ART programme. Committees have been established in Yangon and Mandalay to decide on eligibility for ART, and these include clinicians and health officials, and one person living with HIV.

A person living with HIV was on the GFATM Country Coordinating Mechanism (CCM). It was reported to the review team that this representative lacked knowledge, support and the appropriate structures and mechanisms to represent existing people living with HIV/AIDS support groups in the country.

There are guidelines from the NAP about membership in township and district AIDS committees. These guidelines do not include people living with HIV/AIDS. There is a lack of understanding about the principles of GIPA, the nature and contribution of networks of people living with HIV/AIDS, and the benefits of their participation in prevention and care. For example, when discussing the involvement of people living with HIV/AIDS with one township AIDS committees, the comment was made that one of the committee member's family was affected by HIV, so there was no need for other people living with HIV/AIDS to be involved.

In conclusion, remarkable initiatives for the greater involvement of people living with HIV/AIDS in Myanmar have been started in recent years. Much more can be done at the level of inclusion and participation in formal coordinating bodies. Involvement at the decision-making levels requires much effort from all stakeholders. To promote such involvement, capacity building for people living with HIV/AIDS needs to be supported.

Table 6: ART provision per area and institution at the end of 2005

Area	Institution	Coverage at
Yangon, Kachin, Shan,	MSF- NL	1,888
Taninthary	MSF CH	324
Yangon, Mandalay, Kawtaung, Dawei, Myawaddy, Tachilek	NAP	234
Yangon, Kachin	MDM	59
Yangon and Mon state	AFXB	18

Note: GPs are also providing ART to People living with HIV/AIDS in many areas but data are not recorded nor reported.

Action points

- Separate activities on stigma and discrimination at all levels of work by all stakeholders in all HIV work. We have observed that education is not the only activity for reducing stigma and discrimination. Targeting moral judgement and attitude with information can be effective.
- People living with HIV/AIDS are beginning to help each other; they should be the core of NGO/INGO and NAP training to promote positive living and life skills to people living with HIV/AIDS.
- Support capacity building and training for people living with HIV/AIDS; engage them in the programme and involve them in decision-making.

Recommendations

- Increased access is needed to services, including treatment for opportunistic infections (OIs), ART and VCCT for those who want to know their status. This is likely to increase the visibility and involvement of people living with HIV/AIDS as it cuts across care, treatment and VCCT issues.
- People living with HIV can make a significant contribution to its prevention and care through increased involvement in activities and decision-making.
- HIV support groups will be more effective with a stronger and more participatory structure.
- A practical framework should be developed for the establishment of support groups that meets the needs of people living with HIV/AIDS and coordination linking to a national network. This can be achieved collectively by NAP, NGOs and INGOs collectively.
- NAP and other NGOs/INGOs should give due importance to and allocate separate funds for positive prevention.

Positive prevention

Positive prevention is about helping people living with HIV/AIDS to prevent re-infection with other HIV strains, to prevent STI, promote condom use to prevent transmission to their partners and give information on HIV transmission through pregnancy for HIV-infected women.

Positive prevention is generally given low priority. The review team observed the misconception that people living with HIV/AIDS do not need to be addressed

by HIV prevention programmes as they are already HIV-infected. Pre- and post-test counselling also gives information about the importance of a positive lifestyle, which is part of positive prevention. However, it is important to note that post-test counselling is given for only a limited period after diagnosis. The introduction of ART programmes have also given a new life to people living with HIV/AIDS, and can lead to new opportunities for starting and maintaining sexual relations, including re-marriage and visiting sex workers.

Some review team members noted that in some townships AIDS/STD teams and some INGOs were engaged in positive prevention activities with People living with HIV/AIDS. In Yangon, the NAP and a number of agencies, including local and international organizations, are supporting people living with HIV/AIDS to meet and provide prevention education and commodities. The AIDS Alliance conducted training on positive prevention for a group of people living with HIV/AIDS in Yangon in February 2006.

Box 2: Personal story of sex worker on positive prevention

The team met 15 sex workers from one pimp house in the AIDS/STD team office, West Bago. The sex workers reported catering to 7-8 clients a day (1,000 Kyats for a session, 5,000 for full night, 50% going to the pimp). Half of the clients were reported to be young students. One of the sex workers was HIV-infected (She learnt of her HIV-status during screening in prison two years ago). She was then referred to the AIDS/STD team and Marie Stopes International (MSI), who provided her with information on positive living. She has been working in this trade for seven years, looking after a sibling at her parent's house. She married a construction worker two years ago. He is HIV- negative and they use condoms consistently although he doesn't know about her HIV status. She is comfortable coming to the hospital.

The review team noted the need to create more opportunities and support for local community action, particularly by people living with HIV/AIDS. The people living with HIV/AIDS representatives expressed the desire to be more responsible for their own well-being and to help other people living with HIV/AIDS. This was seen as a significant development of their response to their HIV status. In parts of the Shan State, including Taunggyi and Tachilek, there was a strong and heartfelt request by people living with HIV/AIDS, widowed mothers with young children, HIV positive fathers with young children, single and married young men and women, to have an opportunity to be more directly involved in self-help and mutual support, including positive prevention activities (especially between husband and wife and from mother to child). In both cities, people living with HIV/AIDS expressed their trust in and reliance on the health sector and on NGO services and support. Simultaneously,

they said that they saw this as a beginning and not a replacement for the development of more local and more independent group formation, social mobilization and action by people living with HIV/AIDS in prevention and care.

Recommendation

- NAP as well as NGOs/INGOs should give due importance to and allocate separate funds for positive prevention.

8. Prevention

8.1 Policies and strategies

The “*National Strategic Plan for expansion and upgrading HIV/AIDS activities in Myanmar [2001-2005]*” defined the following areas for prevention:

- HIV and STI prevention education
- Interventions:
 - Prevention of sexual transmission of HIV and STIs
 - Prevention of HIV transmission among IDUs
 - PMTCT
 - Provision of safe blood and blood products
 - HIV prevention in health care settings

The NAP announces national policies, strategies and directives to state/divisional, district and township health officials and AIDS committees. The peripheral level officials and committees are responsible for informing about NAP directives, coordination and implementation. The state/divisional, district and township health officials and AIDS committees are working with lower levels of administration to apply new policies and strategies. The AIDS committees at all levels, particularly at the township level, are responsible to inform other departments about new policies, strategies and initiatives, and multi-sectorial coordination of the HIV/AIDS prevention and control programme. Implementation remains largely within the health sector. While international organizations, including INGOs, work in conformity with their particular memorandum of understanding or agreed country programme, several HIV/AIDS team leaders mentioned receiving instructions to conduct regular coordination meetings with all NGOs, including international organizations.

Several changes and new initiatives are having a significant impact in improving reach and impact of prevention and care services. For example, state, division and township AIDS committees reported that their follow-up on changes in the law regarding possession of condoms no longer being used as evidence of

prostitution had positively influenced access to and availability of condoms. New initiatives such as the 100% TCP strategy, harm reduction for IDUs, including needle and syringe exchange component, and methadone maintenance therapy, PMTCT and antiretroviral treatment have all required substantial additional training to support implementation and coordination. Initiatives such as the ART programme include townships along the Thailand border under the bilateral cross-border programme. Some AIDS committee members and AIDS/STD teams reported that these new initiatives have encouraged and helped them to think and act more strategically regarding the response in their areas. Review team members observed that few AIDS committees and health sector officials encourage a local active role. Instead, in most AIDS committees, the capacity for strategic thinking and action was limited. Chairs of AIDS committees at state and township levels in the northern, eastern and southern Shan State emphasized the need for development of locally informed effective strategies and action to reach out to communities, and to support people living with HIV/AIDS.

Recommendations

- At the township level, the AIDS/STD teams and township medical officer should establish mechanisms for using local strategic information derived from programme implementation, including information from affected communities and other stakeholders to guide decision-making of local AIDS committees.
- AIDS committee members, particularly at state and township levels, and key stakeholders, especially people living with HIV/AIDS, should jointly formulate township strategic frameworks for prevention and care.

8.2 Implementers and stakeholders

A range of implementers at the township level reported being responsible to varying degrees for decisions concerning programme focus, target populations and approaches. Implementers include health staff in and out of hospitals, national organizations such as MRCS, MMCWA, MMA, Myanmar Nurses Association (MNA) and international NGOs. There are a small number of local NGO programmes initiated mostly by concerned local doctors and business persons, and operating as charitable organizations with support from local business and people, focusing mostly on orphans and children trafficked or involved in sex-work – for example, the AZG orphanage and education programme for vulnerable and abused young girls in Tachilek, and another NGO providing community-based support for infants and young children orphaned

by HIV/AIDS in Taunggyi. The participation of Buddhist, Christian, Muslim Hindu and religious institutions in providing accommodation and support for orphans and young children was also reported to review members. Most of these different organizations and interventions are supported by UN, other international organizations and international donors.

International experience has shown that effective health sector strategic and technical leadership needs the effective participation and action of people living with HIV/AIDS, of people with experience in using and then stopping using drugs, and of those who have experienced risk behaviours and situations.

Despite Myanmar's great diversity in terms of the HIV situation and local conditions and resources, the national response remains somewhat uniform. This is because of the national project-based approach, the lack of locally responsive strategic frameworks and operational plans, scarcity of local community-based organizations (CBOs) and initiatives, and the low level of participation of concerned communities, especially people living with HIV/AIDS.

There is a need to strengthen capacity for local strategic thinking such as for programme planning, and implementation, particularly in areas of targeted interventions, mapping of spots at high risk for HIV transmission as well as programme monitoring, data collection and analysis.

There are limited behaviour change materials to support behaviour change interventions. While technical skills were observed across different interventions, most review members reported implementers citing the need for more specialist technical training and support, especially with most aspects of linking HIV prevention to care, facilitating more community-based group activities.

Recommendations

- The NAP should coordinate operational research and enhance documentation to inform programme planning, priority setting and implementation.
- The AIDS/STD teams and township medical officers should lead in the development of an annual operational plan together with all prevention and care stakeholders. The operational plan should outline accountabilities, responsibilities, targets and coverage. It should be reviewed on a regular basis.

8.3 Targeted interventions

Sex workers and their clients

Sexual transmission of HIV continues to be the main mode of transmission (70%) in Myanmar.¹⁶ The main reason for the high sexual transmission of HIV is the existence of organized sex work driven by the demand of clients, who are traders, truck drivers and fishermen. Sex work exists in most townships visited by the review team and the number of sex workers per site varied. The types of sex work reported include brothel-based establishments and some indirect types like massage parlours, karaoke and guesthouses. Indirect sex workers are considered highly mobile and often hidden, as they are not operating in brothels but are street-based or in entertainment establishments.

Interventions targeting sex workers include the following:

- The 100% TCP programme;
- IEC for behavioural change in sex workers;
- Peer education through self-help groups; and
- STI services.

The 100% TCP programme

Based on NAP records, the 100% TCP has expanded from four sites in 2001 to 154 sites today. The main activities include advocacy, training of township staff, formation of condom core groups (CCGs), geo-social mapping, condom distribution and programme monitoring. The programme was reportedly implemented in most townships visited by the review teams, although for scheduling reasons few teams were able to observe the programme activities.

Many sectors are involving in the implementations of the 100% TCP. The main implementers are the AIDS/STD teams, local medical officers and representatives of local agencies (including the police, NGOs and entertainment establishment owners) who coordinate activities through the CCGs. The review teams were informed in several townships that the police force supports 100% TCP by active participation in the CCGs.

Sex workers undergo regular physical and serological check-ups, including VDRL testing. HIV testing is reported to be voluntary. They did not have to carry a card indicating whether they had complied with check-up requirements or the result of tests.

¹⁶ NAP, 2005.

Condom supply is a main component of the programme. In some areas condoms are available and displayed in a “condom box” at the reception or in the rooms of hotels and guesthouses. Condoms are distributed by the AIDS/STD teams and many NGOs. In Mon State, the number of condoms distributed in 2005 varied from 60 000 (in Mawlamyaing) to 200 000 (in Thaton). Condoms are distributed to guesthouses, military units, taxi drivers, truck drivers, factory workers (a cement factory in Kayin State), and during public festivals.

At the national level, UNAIDS estimates that 40 million condoms were distributed in the country in 2005, of which 6-7 million were distributed by NAP while the remaining were mainly distributed through social marketing by PSI. This represents 0.8 condoms per capita per year (compared to 1.1 in Laos and 2 in Cambodia and Thailand).

There is limited data on the use of condoms in sex work. Reported condom use rates by sex workers from the NAP in 2004 were around 62% in Yangon, 90% in Mawlamyaing Township of Mon State and 50% in Hpa-An Township of Kayin State. In Myeik stakeholders and the divisional STD/AIDS officer stated that condom use among brothel-based sex workers had increased (close to 90% consistent condom use) on the basis of declining rates of STI in sex workers. Although most sex workers attend private clinics, data from key clinics are collected by the divisional AIDS/STD officer. The stakeholders also thought that condom use in the general population had increased primarily as a means of contraception.

Key challenges in the 100% TCP implementation include the limited capacity of implementers, the lack of active partnerships with key sectors (such as the police), limited data on the quality and the effectiveness of the programme, and the limited coverage.

A **key barrier** to effective implementation of the programme is the continued disruption caused by police arrests of sex workers. INGOs reported that this happens particularly towards the end of the month when the police have to meet their monthly targets as part of the programme to control sex work. At that time, attendance by sex workers to drop-in centres declined. In one district, stakeholders and the divisional AIDS/STD officer reported that sex workers are harder to access now due to (a) the shift of sex work from brothels to other entertainment establishments and freelance work; and (b) the continual movement of sex workers due to police activity and migration. The divisional AIDS/STD officer estimated that consistent condom use in entertainment establishments was less than 50% in that state/division.

In some areas, the 100% TCP does not cover all types of sex work. In Pyay, for example, the programme is targeting women entertaining in beer halls. The review team observed that in some areas there was still strong resistance to admitting the existence of sex work. For example, some AIDS committees stated that commercial sex was not a problem.

In July 2005, a review of the 100% TCP in Myanmar was conducted by NAP with support from the WHO. The review made 26 recommendations for improving programme implementation, and specifically to propose adjustment in the coverage, quality and approaches of the programme. The review report was widely distributed to stakeholders at the national level.

Recommendations

- The recommendations of the July 2005 review of the 100% TCP are endorsed by the review team. The NAP should make every effort to implement and monitor these recommendations.
- The NAP should advocate and support nationwide implementation of the programme. Efforts should be made to ensure that the programme covers all direct and indirect sex work, including entertainment establishments.
- Provision of comprehensive HIV/AIDS/STI services to sex workers and clients by NGOs and grassroots level organizations has increased accessibility to these services. There is a need to further increase the number and reach of quality AIDS/STI services. The NAP should take the lead in promoting the engagement of other sectors (NGOs, GPs and pharmacists) in order to reach these services to where they are needed most.
- Self-help groups among sex workers are effective means to build awareness on HIV/AIDS and empower sex workers in the area of HIV prevention and AIDS/STI care. The establishment of these groups should be advocated and supported.

IEC for behavioural change in sex workers, including the promotion of peer education through self-help groups.

As a part of the 100% TCP, IEC activities for sex workers were regularly conducted by the members of CCGs. Many NGOs and INGOs have outreach programmes targeting sex workers. It is also conducted in conjunction with other services

such as STI syndromic management. During the first six months of 2005, 15 000 sex workers (out of the estimated number of 40 000¹⁷) were reached by various NGOs providing health education sessions, condoms and STI services.

The formation of a self-help group among sex workers was observed by a review team. The actual scale of self-help groups is not known, but it is believed to be small.

Some AIDS/STD teams have done some work to mobilize the hotel, guesthouse and entertainment owners association, and held HIV education sessions with female entertainment workers.

The review team observed that some townships, although participating in the 100% TCP, have not mapped sites for indirect sex work, not done the size estimation exercise and have no programme to reach indirect sex workers. Instead, they have limited their activities to condom distribution.

Box 3: Personal story of a sex worker

Mahla (name changed) is a sex worker in a gold mining area at Singu. The team met her at the Mandalay AIDS/STD office. She wants to know her status because her pimp told her about HIV risk from sexual intercourse. She mentioned that most of the clients agree to use condoms and it is either sold by the pimps to the clients or sometime offered free. The pimps are getting education and condoms from Myanmar Red Cross Society. She travelled by bus to come to Mandalay, so the AIDS/STD team arranged to get the result same day. She has already received HIV pre-test counselling. She plans to practice safety means after knowing her result.

Recommendations

- Reinforce and expand partnership by NGOs and grassroots level organizations that provide comprehensive HIV/AIDS/STD services to groups of sex workers and clients, as these have contributed significantly to expanded access.
- Promote self-help groups among sex workers as an effective means to build awareness on HIV/AIDS and empower sex workers in the area of HIV prevention and STD care.

¹⁷ Estimated range between 20 000 to 40 000 sex workers in Myanmar. Estimation Workshop, NAP/UNAIDS/WHO, 2004.

STI services

STI care is available at AIDS/STD control teams at the state/division and district levels. Currently, there are 43 AIDS/STD teams in the country: four in central Yangon and 39 in states/divisions and districts. Activities of AIDS/STD teams include outpatient case management, STI contact tracing and partner notification, regular screening for VDRL and *Treponema Pallidum* hemagglutination assay (TPHA) in antenatal care, civil service employee, taxi driver licensing, health education, STI surveys, teaching and training, sentinel surveillance, and STI laboratory services.

Based on the 2003 behavioural survey, only a quarter of people with genital discharge or genital ulcers sought treatment. There were various sources of treatment for STIs. The most common source was a private clinic, (36%) followed by self-treatment (31%); only 15% of the patients with an STI consulted a governmental hospital (see Figure 10 and 11).

The number of new STI patients varied. For example, in 2005, the number of patients in Mawlamyaing district was 336 and in Thaton 76. The number of STI cases at Station level (Kyaik Khami) is lower (7-9 per month – mostly sex workers). The AIDS/STD team in Hpa-An has around 20 cases week. Treatment is provided mainly based on syndromic diagnosis. Syphilis testing (VDRL) is conducted regularly. The positive rate in various groups varies from 1-4%.

Figure 10: Proportion of respondents seeking treatment of sexually transmitted infections among selected population groups

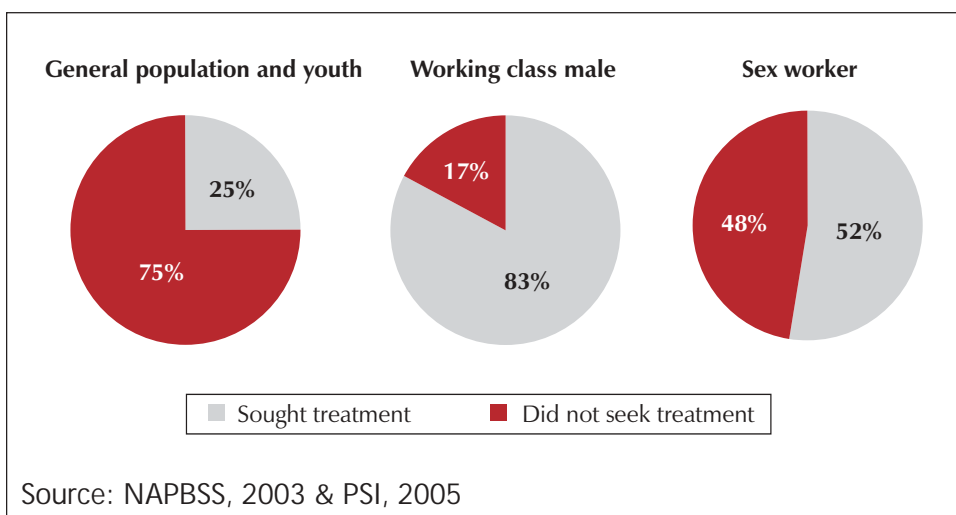
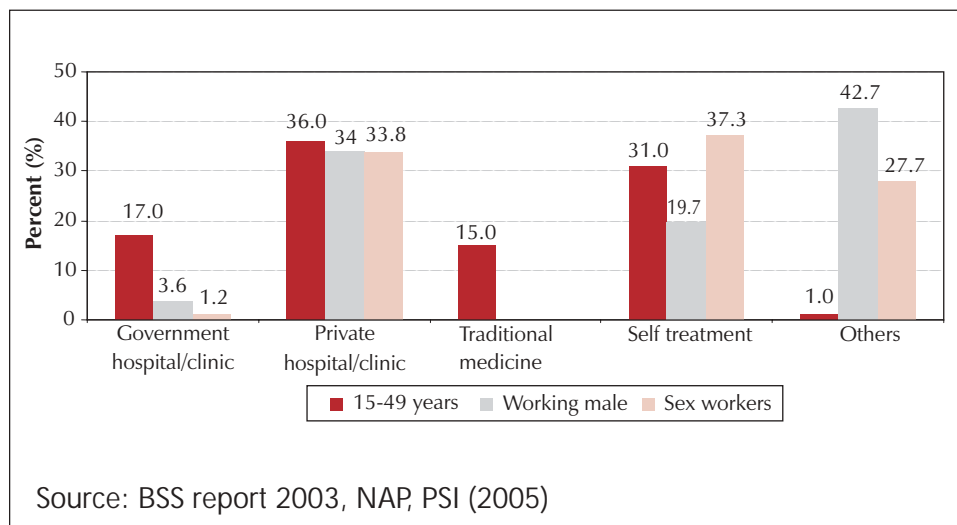


Figure 11: Source of treatment of sexually transmitted infections among selected population groups



Sex workers rarely present to public health services for management of suspected STIs. Outreach STI services (syndromic management) are implemented by INGOs (MSI, CARE and PSI) in collaboration with some national NGOs (such as MMA). MDM and PSI also provide services for sex workers, including STI treatment and condom distribution.

In one district, the District AIDS/STD team reported that most sex workers do not come to the AIDS/STD clinic because they are not allowed to by establishment owners. In addition, some do not come because they are worried about the stigma associated with attendance at the clinic.

Recommendations

- Increase the insufficient number and inadequate reach of quality STI services. The NAP should take the lead to promote the role of other sectors (NGOs, GPs and pharmacies) in order to bring these services where they are most needed.
- Promote the role of STI services to support implementation of the 100% TCP through an investigation into the sources of STI among male patients within the existing system for contact tracing and partner notification.

Drug users and harm reduction

Injecting drug users form a major risk group for HIV infection and transmission in Myanmar. Based on AIDS case reporting from 2002, it has been estimated that 30% of cases are attributable to injecting drug use (IDU). In 2005, HIV prevalence was 43.2% among the IDU population,¹⁸ with higher prevalence rates in some regions, particularly Shan and Kachin States.

Various elements of the IDU harm reduction strategy have been implemented to some extent in some regions, particularly in those with higher prevalence of injecting drug use. All these activities have been mainly implemented by NGOs under the coordination of the Ministry of Home Affairs (Central Committee for Drug Abuse Control – CCDAC) and the support of UNODC with little involvement of the health sector and the NAP or other departments of the Ministry of Health, apart from VCCT and drug treatment. These activities include health education (on safer injection and sex), outreach, primary health care, needle and syringe programmes, and to a lesser extent, income generation and social/recreational activities in drop-in centres, condom distribution, peer education and production of IEC materials. In 2005, UNAIDS estimated that only 6 200 injecting drug users were covered by programmes while more than one million needles-syringes were distributed with a return rate of 80%.

There are now approximately 70 patients on methadone maintenance treatment in the country. The drug treatment centres of the DoH are implementing the programme in collaboration with NGOs involved in harm reduction. This recent good work is an encouraging start. Documentation of the results and outcomes will enhance the process of increasing the scale and coverage of oral substitution therapy.

Drug treatment is provided within the Ministry of Health in drug treatment centres. Treatment consists mainly of detoxification with opium tincture combined with rehabilitation programmes. Various stakeholders and clients report that relapse rates after detoxification are extremely high (in some cases over 90%).

Since March 2006, the MoH has started a pilot programme of substitution maintenance therapy with methadone in four townships (Yangon, Lashio, Myitkyina and Mandalay). The programme's recent initiation and its pilot status means that methadone maintenance therapy (MMT) is provided only to a very small number of people (approximately 70). However, it should be stressed that the fact that the programme has started in Myanmar is a major accomplishment

¹⁸ HIV Sentinel Surveillance, NAP, 2006.

in itself. The review team had the opportunity to visit two of the four drug treatment centres (Yangon and Myitkyina) and was impressed by the quality of care provided and commitment of the staff.

Some NGOs and INGOs reported that the environment of work on harm reduction has improved in the last year thanks to closer collaboration with the police in some townships and that the possession of syringes is no longer a cause of arrest or harassment, while others reported that arrests and harassment were still a feature of the environment. There was tolerance stated by governmental authorities towards needle and syringe programmes but there were also common breaches to this approach, reportedly on the initiative of individual officers.

Advocacy meetings have been organized by various stakeholders, but will need to be continued and expanded to a larger scale, and collaboration with the police and the departments of Law Enforcement and Criminal Justice remains crucial.

Both the public sector and NGOs are involved in harm reduction interventions. Needle exchange programmes and outreach as well as drop-in centres are most often run by NGOs, while drug treatment is given by public centres. Both at the Central level in Yangon as well as at the township level, examples of good collaboration and coordination between various stakeholders were reported. In such cases, various representatives meet in committees on a regular basis (mostly monthly) and include both NGOs and INGOs engaged in interventions for IDU and harm reduction, as well as government representatives. The aim of these committees is to share information and plan programmes, and discuss the division of tasks. A good example of this is Lashio township, where various NGOs have allocated work among themselves after geographically dividing the township among themselves.

Methadone maintenance has been initiated in drug treatment centres in addition to general hospitals and some NGOs (MDM in Mogaung-Katchin State) will be involved in the daily dispensing of methadone when patients are discharged from the inpatient induction phase to the maintenance phase. This collaboration with NGO programmes will ensure a more comprehensive package of support services to patients under methadone and will increase the possibilities of success of the programme.

Monitoring and evaluation form an integral part of most programmes and interventions. While information on the numbers of syringes distributed, their return rate, or the number of people in treatment is available, it is insufficient on the extent, coverage and regularity of the harm reduction activities. Several NGOs

reported lack of information about the size of the target population and as a consequence their inability to evaluate the coverage of their programmes.

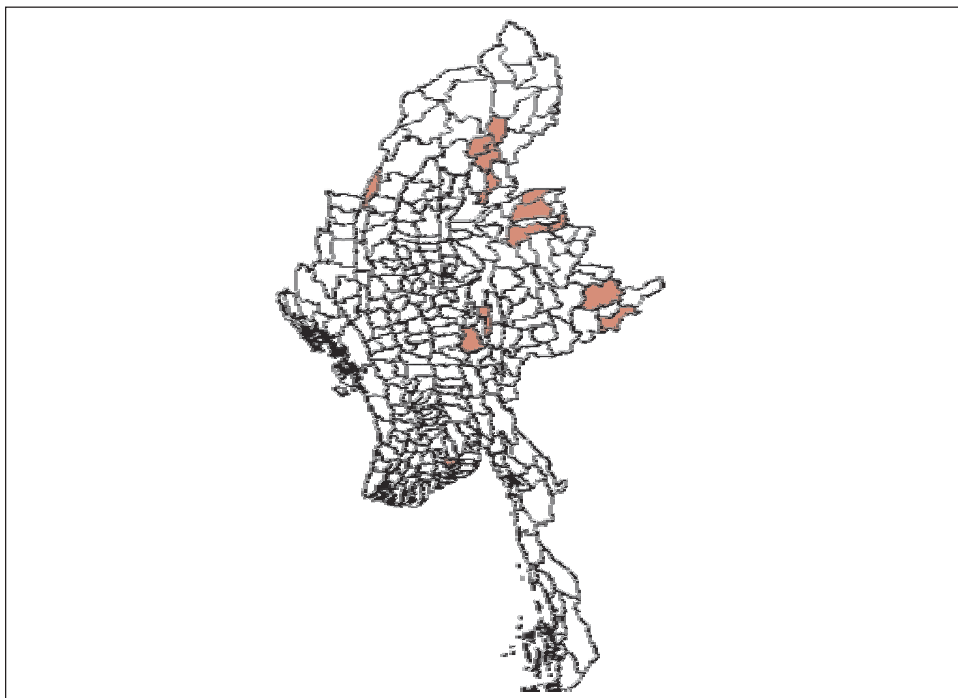
Some townships have estimates on the prevalence of drug users, but it is not clear what these are based on (for example, in Mogaung, one NGO estimates to reach 50% of the drug using population in the township with its interventions).

NGOs emphasized that harm reduction efforts, in particular outreach efforts and needle and syringe programmes, are still hampered by legal constraints (1960 Act), which also causes misunderstandings regarding their effectiveness in HIV/AIDS prevention among various stakeholders.

In spite of the reported increase in harm reduction interventions in recent years, it is important to highlight that they reach only a small part of the target group and their coverage remains very limited in most regions.

Figure 12 shows that harm reduction interventions are carried out in 20 of the 325 townships in Myanmar in 2005. These townships are identified as priority areas given their high prevalence of drug users.

Figure 12: Map of Myanmar showing townships with interventions targeting injecting drug users (20 out of 325 townships) in 2005



Access to ART for injecting drug users is scarce. Some NGOs exclude drug users from ART, even when they are stable on methadone. However, it was encouraging to meet four drug users on methadone maintenance in the Yangon Drug Treatment Centre who were on ART (through NGO or private GPs) and who reported to have fully adhered to the ART regimen, even when they were still actively injecting drugs.

Recommendations:

- The MoH and in particular the NAP need to become more involved in support of harm reduction interventions in collaboration and coordination with various stakeholders, including the Ministry of Home Affairs (CCDAC) and in particular the departments of Law Enforcement and Criminal Justice to guide the development of a joint operational framework which outlines geographical coverage and division of labour between stakeholders.
- The NAP needs to ensure a comprehensive package of harm reduction interventions, including outreach, health education, needle and syringe programmes and drug treatment (in particular methadone maintenance therapy), social welfare (vocational training and income generation) and access to ART.

Men having sex with men

Prevention efforts with men having sex with men (MSM) commenced in 1997, with CARE Myanmar undertaking behavioural research to inform planning of targeted interventions. For a few years, MSM have also received services from PSI and MDM through drop-in centres and targeted outreach, including with trans-gender populations. Prevention work has been effective, but activities have been on a small scale, addressing a relatively small population in limited geographical areas.

The perceptions of the authorities on the extent to which MSM contributes to new HIV infections vary very much. In some areas, for example, Dawei and Myeik Districts of Taninthayi Division, there were consistent statements from multiple sources, including the AIDS/STD teams that MSM were a large and growing population at risk. In some cases, there were reports of adolescent males selling sex to other males. In Pyay, female sex workers reported the phenomenon of male sex work. In other areas, local authorities reported that the MSM population was small and not relevant, (Mawlamyaing, Hpa-An, Myitkyina, Taunggyi, Tachileik, Aungban, Kalaw, Mandalay, Monywa,

Meikhtila, Nyaung-U). Local authorities and stakeholders, however, frequently acknowledged that they did not have sufficient evidence on which to base their analysis (for example, the population size of MSM in Mandalay was estimated to be anywhere between 300 and 1 000). Young people, including those living with HIV and current and former drug users in Taunggyi and Tachilek, reported that they had male friends who had worked/were currently working in the sex industry in Thailand, and who returned to Shan State every six to seven months.

In most, if not all, geographic areas visited by review team members, neither mapping of MSM nor population size estimations had been undertaken or were planned. MSM had not been included in surveillance (HSS, BSS, and STI). MSM are frequently stereotyped and identified as males demonstrating effeminate behaviour only: a very narrow perception, as MSM are a complex and heterogeneous¹⁹ population.

Local stakeholders in a significant number of areas consistently reported that the MSM population is hidden and difficult to access, although in urban centres, there was evidence of clearly-defined geographic areas where males (married and single, ages ranging from 15-49 years) “cruise” for sex and where there are visible groups (for example, in Myeik District, “Kandu” who run beauty salons, some of whom are openly homosexual or bisexual men). In Yangon, it was reported that wealthier MSM met at one nightclub to network for sexual partners.

In some areas, there were reports of discrimination against MSM. For example, in Mandalay, MSM have been accused of spreading HIV infection. In Muse, male sex workers had been asked to leave the town.

Field observations show that at meetings of township AIDS committees, members were self-censoring when discussing sexual behaviour, especially concerning MSM.

Review team members reported that targeted interventions for HIV prevention with MSM were either non-existent or when undertaken, not having

¹⁹ The SCF UK Youth Survey (2004) reported that 5% of male youth had sex with males in the last twelve months. This data supports the findings of the 2005 regional MAP report which estimates 3-5% of men have sex with other men on a regular basis in Asian countries. If this figure is used as a proxy indicator for the adult male population, then the approximate estimate of the size of the MSM population for the country is 680,800. At the 30 September 2005 National Estimation Workshop, Dr. Tim Brown (East-West Centre, Hawaii) presented the following assumptions on MSM behaviour in Myanmar: 2% of males are having sex with males - 25% engaged in anal sex on average, once a week in the last twelve months; 50% used condoms; 25% have regular female partners; 20% visit male sex workers; and 10% visit female sex workers. Male sex workers: 50% engaged in anal sex an average of 3 times a week with 50% condom use. 50% visited female sex workers.

the frequency, quality and scale for sustainable impact. Prevention work²⁰ is generally being undertaken by international NGOs in project mode (for example, in Dawei District, MSF-CH has recently started a peer education project; in Myeik District, World Vision has trained MSM peer educators to undertake outreach work and provide condoms; in Myitkyina, MDM is providing a range of prevention and care services to MSM; in Pyay as well as in many other parts of Myanmar, PSI is promoting condoms, lubricants and supporting peer and other outreach education programmes). Condom demonstration, safer sex education and STI/HIV education is also being provided to MSM in Mandalay. In Tharyawaddy township, the TMO was providing condoms to Nat Kadaws.

Field visits by the review team confirm that in the absence of sufficient and robust evidence (provided through population size estimations, social mapping, biological and behavioural linked surveillance, operational research), the prevention needs of MSM will remain significantly underserved by the national AIDS programme. Currently, services that specifically address male sexual health needs do not exist; however, such a strategy (for example, through PSI Sun Clinics) could enable MSM to be reached with appropriate strategic behaviour communications and services in a safe, non-stigmatizing and discrimination free environment. Currently, behaviour communications do not adequately address specific risk behaviours (anal sex) within a heterosexual or MSM environment and MSM remain significantly underserved for STI treatment and care, where aetiological diagnosis is essential, especially for anal STI.²¹

Recommendations

- The NAP should include the category of men having sex with men in the national surveillance system. This needs to be supported by other strategic information for proper advocacy and programming.
- Existing community peer-based programmes focusing on men having sex with men should be expanded in collaboration with NGOs.

Cross-border populations/migrants/seafarers

Mobile populations are an important and critically vulnerable group at high-risk for acquiring HIV. Large and increasing numbers of young people and families

²⁰ UNAIDS Myanmar reported that in the first six months of 2005, approximately 7,500 MSM were reached by health education sessions.

²¹ An HIV infected MSM with non-ulcerative STI will transmit HIV once in 10 anal sex acts, while a HIV infected female sex worker with non-ulcerative STI will transmit HIV once in 100 sex acts. An HIV infected MSM with ulcerative STI has a 30% chance of transmitting HIV in one single anal sex act.

from all of Myanmar, but especially from the border areas (such as Dawei District, Mon, Shan and Kachin States), migrate to work in various industries within Myanmar and to other countries (Thailand and China). Men tend to work in the fishing industry, rubber plantations, ruby, gold and jade mines, and transport (truck and bus drivers), while smaller numbers of women work in agricultural processing plants and shops. Concerns for high-levels HIV transmission among these populations are based on the reported occurrence of high-risk behaviours, including sex work and injecting drug use. Trafficking of women for the sex industry was also reported in some areas (Myeik).

There are some good examples of successful initiatives to facilitate access by these populations to effective prevention. These include health education and prevention, special awareness programmes, distribution of leaflets and condoms, STI treatment, VCCT, mainly by AIDS/STD teams and NGOs (and in the transport sector by the Ministry of Transport) and in some cases, needle and syringe programmes and the provision of ART and OI treatment by INGOs, e.g. AZG.

Access to information and services by these populations (and by women in particular) is problematic in view of the geography of the various areas, the difficulty to access some communities, the multiplicity of local languages and dialects, and low levels of literacy.

Cross-border meetings have been held with Chinese officials also but details of any resulting coordinated activities could not be ascertained. Similar meetings with the Thai government have led to cooperation programmes, particularly condom supply and increased access to ART for border areas. A point of note is that the last meeting of the Northern Shan State AIDS Committee had focused on cross-border populations.

There is no data on the actual risk associated with cross-border migration and on the size of these populations. It was reported that cross-border interventions take place on an ad hoc basis and by various organizations. With the caveat that actual risk and size of populations are not quantified, it seems that the current intensity of interventions is inadequate for the large and concentrated numbers of people moving through the states, divisions and townships.

Migrant workers are recognized as having high-risk behaviour, but there is also a tendency to look at HIV as a problem localized to them.

Access to areas with high concentration of migrant workers (Phakant) is currently restricted to expatriates working for INGOs.

The current interventions remain limited in size and scope (project focused) because of the great diversity of mobile populations, insufficient social mapping, lack of a local operational framework for action, problematic access and lack of services targeting specific populations.

Recommendations

- The NAP needs to be resourced to coordinate rapid assessments of local patterns of mobility and related vulnerability and risk behaviours, and convene stakeholders at the township level and between states, divisions and townships.
- The NAP must play a lead role in developing local operational plans which address the information and service needs of priority populations.

Uniformed services

Police Force

The review team reported that the Myanmar Police was engaged in HIV prevention work in various locations. For example in Lashio, Muse, HIV prevention was being addressed in police academies, with structured, regular lectures on HIV focusing on risk analysis and response, and on support to people living with HIV/AIDS and their families. Training was being provided to female police officers in handling sexual violence cases. In Pyay, the AIDS/STD team leader conducted regular HIV education sessions at the Police Academy. In Mawlamyaing, the AIDS/STD team promoted condoms among the police force and in Myitkyina, the review team reported that the AIDS/STD team had conducted a limited number of prevention sessions with the police (including condom demonstration and distribution). The AIDS/STD team was providing education and condoms at both police and military camps four times a year (it is, however, doubtful that this would enable and sustain behaviour change). All these interventions are of low intensity (coverage and impact). Trainers were trained in the police force in Padaung to conduct HIV related health sessions with young people at the village level.

Military

Most review sub-teams were not able to assess the prevention, treatment, care and support response in the military during field visits. However, in Myitkyina, the AIDS/STD team was working with the military and had arranged health

education sessions covering 500 soldiers and their families. In Aungban, Kalaw and Tachilek, STD officers reported that they had carried out prevention education and condom promotion and distribution with the military.

The review team met with Lt. Col. Tin Maung Hlaing of the Directorate of Medical Services and Lt. Col. Nay Soe Maung, Professor and Head of the Department of Preventive and Social Medicine in Yangon. The military medical services in each state and division provide basic HIV education to recruits and servicemen as well as promote and provide condoms, although the supply was reported to be insufficient to meet demand. Military hospitals routinely screen blood in blood banks in state and division military hospitals, but did not have sufficient test kits. Military hospitals offer VCCT, but do not have sufficient commodities to provide comprehensive service on sufficient scale to meet demand. As a policy, servicemen testing HIV-positive and in need of OI/ART are provided treatment after discharge for a period of seven years. However, it was reported that the military have not yet commenced an ART programme and at the current time, there were no trained HIV physicians in the military medical service. The medical directorate is coordinating a DOTS programme with servicemen through its network of hospitals. The Department of Preventive and Social Medicine is training public health staff in HIV prevention and related issues.

A behavioural assessment is done with all new recruits in order to better understand and address risk behaviours. It was reported that young servicemen in isolated postings were especially vulnerable and at high risk to HIV, and were routinely clients of sex workers. For example, the presence of a military base near Padaung Township suggests a considerable client base for indirect and direct sex workers. It was reported that on occasion, a whole platoon of soldiers would have sex with one sex worker.

There is a strong commitment on the part of the military to expand and upscale their prevention, treatment and care efforts with servicemen and their families. With strategic inputs, for example, technical exchanges with other military health services in the region responding to HIV e.g. China, commodities (test kits, condoms) and technical partnerships for capacity development (e.g. for the development of peer education programmes which involve servicemen, their spouses and families), the military response would be significantly enhanced. This should be seen as a priority, given the size of the military population (approximately 500,000 men as well as spouses and families). It is notable that a recent policy decision has been taken to allow the military to have technical cooperation with INGOs.

A comprehensive, nation-wide peer education programme (focusing on behaviour) needs to be instituted in all military bases in Myanmar.

Continued cooperation between the AIDS/STD teams and the uniformed services needs to be fostered (including with military hospitals) to support and encourage all elements of the response from prevention to treatment and care, and to ensure that the uniformed services, especially the military, have direct access to good practice in these areas and put them into action.

Recommendations

- The NAP should support the development and implementation of a national peer education programme that focuses on behaviour change, within the military and the police force.
- The NAP should facilitate access to technical assistance by staff of the uniformed services to expand VCCT, STI treatment, access to condoms, OI and ART treatment services and follow-up.

Institutionalized populations

It is well documented internationally that prison populations are at high risk of HIV infection and transmission through injecting drug use and high-risk sexual practices. In the absence of adequate prevention measures, the likelihood of significant numbers of inmates returning to the community and transmitting HIV is high. There are 41 prisons in the country and in 2001, the total prison population was estimated at 62 300 (14% women).²² There was no information regarding other types of closed settings.

It was reported that some district AIDS/STD teams regularly visit the prisons in various districts to give health education, STI testing and treatment to inmates and staff. The AIDS/STD team organized 4-5 health education sessions in Myitkyina prison (400-500 inmates) in 2005, offering information on STI and HIV/AIDS.

In some institutions, inmates can request an HIV test (about 2000 Kyats). In some areas, TB treatment is provided or patients are referred to the hospital for test confirmation.

Tharyawaddy prison is the third largest prison in Myanmar, having around 3 000 inmates, with a significant proportion of drug injectors from Yangon. Also, 31 prisoners have been reported to be HIV positive.

²² Ministry of Labour/UNFPA, 2004.

The International Committee of Red Cross used to visit and provide prevention education and some sort of medical care, but this was recently suspended. Prisoners and inmates of other institutionalized centres have limited or no access to health education interventions, or to prevention materials such as condoms and sterile needles and syringes, or to treatment for STI, OI or ART.

There are reports that prisoners suspected of having homosexual behaviours are isolated. Those who “accept sex” are also isolated with the former (“after punishment”).

Recommendations

- The Ministry of Health should advocate with and support the Home Ministry to build better understanding and reduce barriers to prevention efforts in closed settings.
- The NAP should facilitate the work of prison authorities (especially medical services) towards introducing and expanding implementation of HIV/STI prevention education, services and commodities among prison inmates and staff.

Young people

Young people in school

The review team noted that the national lifeskills programme²³ (lifeskills based HIV and substance use education for students 10 years and above) was well integrated into the core curriculum. The consistency of application across grades (primary, secondary and educational colleges), quality, coverage and impact of the programme needs review and assessment. For example, in Pyay Township, the programme was only being taught in the primary grades (no reason was given as to why it was not being taught in secondary grades, although it is known that an estimated 45% of the students who enrol drop out before completing primary school, and therefore the emphasis on the primary level is an appropriate strategy), while in other townships of Bago-West Division (notably Padaung) the programme was being taught across the primary and secondary grades. In Lashio and Muse, the review team noted that sexual and reproductive health education was taught as part of the regular curriculum. However, promotion of condoms was considered by several NGOs as a culturally sensitive matter and it was often opposed by community elders. In Padaung Township (Bago-West Division), the

²³ 2.14 million pupils were reached by the national lifeskills programme in the first six months of 2005.

township education officer considered condom promotion in school inappropriate because “it may encourage starting sexual activity.” More attention needs to be given to the developmental needs of adolescents in sexual and reproductive health. In Lashio and Muse, several NGOs are also complementing the lifeskills curriculum with in-school peer education projects; with attention being paid to reduction of HIV related stigma and discrimination.

Young people out-of-school

In Pyay Township, AIDS committee members and other stakeholders indicated concerns for the increasing levels of risk behaviours for out-of-school youth, confirming some of the findings of behavioural assessments undertaken by both the NAP in 2003 and Save the Children (UK) in 2004.²⁴ In Pyay Township, this observation was corroborated by the review team’s interviews with a group of 15 sex workers, who indicated that 50% of their client base comprised of students (late high school and tertiary education attendees). In several townships, review sub-teams reported that AIDS/STD teams provided HIV education sessions to students in tertiary institutions (including condom promotion). However, there is no structured and regular programme for HIV education sessions to students.

Review sub-teams in a number of sites (Pyay, Taunggyi, Tachileik) reported that prevention strategies are falling significantly short of addressing reduction of risky behaviour with the targeted audience and age-specific strategic behaviour communications strategies and methodologies, aimed at developing and sustaining behaviour change. The review team met with a group of young male and female Red Cross volunteers who raised questions about how effective their current work was in achieving behaviour change. At the same time, the review team noted their enthusiasm, dedication and frank approach to condom demonstration and distribution with sex workers and other people with high-risk behaviour. Capacity for behaviour communication strategies needs to be developed and programmes initiated and expanded. These efforts need to be reinforced by appropriate mass media work, including, for example, narrow-cast messaging, soap operas (radio/ television) and adolescent/young people’s messaging at traditional festivals and events aimed at various youth audiences, including working youth.

²⁴ 18% of young males (56% of respondents were 15-19 years and 44% were 20-24 years) indicated their first sexual partners as sex workers. Approximately 5% of young males reported having sex with other males in the last 12 months. 78% of those males who reported to be sexually active in the last 12 months, 7% reported multiple sexual partners and only 43% reported consistent condom use.

Some of the review sub-teams (Mandalay, Monywa, Meikhtila, Nyaung-U, Taunggyi, Tachileik, Aungban, Kalaw) noted that a significant proportion of township AIDS/STD team, NGO and INGO effort is focused on increasing knowledge through a classical health promotion model or on methods that focus only on awareness rather than behaviour change. This work is infrequently combined with condom distribution. Some review sub-teams reported hesitancy on the part of NGOs to talk about sex. As a result, information provided may not be practical, or to the point and therefore useful for out-of-school youths who are demonstrating high-risk behaviours (low condom use, multiple partners, including as clients of sex workers, MSM, substance use – alcohol, amphetamine sulphate). One review sub-team interviewed youth volunteer health educators of the Myanmar Red Cross; they recognized that while they could provide information, referral and useful condom use instructions and distribution to at-risk, out-of-school youth, this work was unlikely to influence change in the risk behaviour patterns of these young people, especially MSM, IDU and sex workers.

Review team visits in Dawei, Myeik, Taunggyi, Tachileik, Aungban, Kalaw observed various peer-based education programmes (by language, by work, and by activity). These were reported to be more effective than the health promotion model favoured by many NGOs and AIDS/STD teams.

Population size (disaggregated by age and sex) and coverage targets have not been developed at the local level, nor systematic behavioural assessments undertaken, in particular with out-of-school youth who are especially vulnerable to and at high risk for HIV infection, including school dropouts, working children, young people working in small enterprises or rickshaw drivers or tea-stall workers, to inform local advocacy and coordinated programming.

None of the review teams reported evidence of youth friendly health services (with the minimum package of five elements for HIV prevention: information, HIV counselling and testing, condoms, STI diagnosis and treatment, and harm reduction). Discussions with the DoH indicated that establishment of special clinics for young people were constrained by severe resource limitations.

There is an absence of a coordinated, operational framework/strategy at the township level that brings all the key actors together to promote scaling up of out-of-school youth prevention programmes (including targeted interventions for especially vulnerable and at risk young people, for example entertainment workers, sex workers and strategies to improve access and stimulated demand for VCCT). The AIDS/STD teams should focus their efforts on facilitation and coordination of the operational framework, rather than direct implementation out-of-school youth programming.

Recommendations

- The NAP should reinforce its collaboration with the Ministry of Education and NGOs to ensure quality and expand coverage of the in-school life skills-based HIV and substance use programme.
- The NAP should reinforce collaboration and coordination with various stakeholders – including the Ministry of Education, the AIDS/STD teams and NGOs – to guide the development of local joint operational frameworks to reach out-of-school youth (particularly 15-22 year olds) with behaviour change programmes and relevant services to improve access and coverage.

Women of reproductive age

The Essential Reproductive Health Programme and, to a lesser extent, the Comprehensive Reproductive Health Programme are vehicles for the campaign against HIV/AIDS. The estimated number of women of reproductive age who are HIV infected has declined, from 118 570 in 2001 to 101 950 in 2005. This is out of a total population of 13.5 million women of reproductive age in Myanmar. The Essential Reproductive Health Programme includes adolescent reproductive health (ARH) in addition to a number of antenatal and postnatal components. ARH started with health education and now incorporates counselling and behaviour change communications and life skills for males and females aged 15 to 24 in 100 townships under a DoH and UNFPA supported project. Some review team members were informed of youth information corners attached to rural health centre service outlets at the township level in 22 of the 100 townships. All concerned with this programme deliberated on the challenges ahead in expanding the reach of youth clinics in terms of finding suitable locations, adequate space and sufficient resources. Youth clinics have not yet been established within the purview of this programme.

Township informants, including MRCS volunteer educators gave details of the training they had received as part of township training. The training manual includes approximately 50% content related to HIV/AIDS prevention and care. Master training takes place in Yangon and Mandalay, and then at the state and division level, with multiplier training then being carried out at township level, including that of ARH trainers. Collaboration is mainly between NAP, AIDS/STD teams, MRCS, MMA and MMCWA who then carry out prevention activities with women of reproductive age in a number of settings at the township level. MMCWA reported to review team members that for married women they also included husbands in this training. These activities target women with different social backgrounds, including sex workers, and women working in entertainment

establishments, restaurants and hotels. The activities include condom (male and female) promotion and distribution. AIDS/STD teams have a key role in coordination and training at the township level. As with PMTCT, services for women of reproductive age are an opportunity for women to remain HIV-negative.

Review team members did not receive any data on coverage of services.

Recommendation

The NAP should coordinate systematic integration into MCH and family planning services at the township and station hospital level, and in rural health centres of a defined package of HIV prevention (VCCT, STI, counselling and information, female and male condoms).

9. Prevention in health care settings

9.1 Blood safety

HIV transmission through blood transfusion was reported although it was not common. Most reported cases contracted HIV during the early phase of the epidemic when blood safety was not well established.

The blood safety programme, which includes donor selection, donor deferral, and HIV screening of blood donations, has made good progress in many areas. Screening procedures include universal (100%) testing of either replacement donors (in hospitals at the township level) or blood donations (in hospitals at the state level). HIV testing is conducted in hospitals with the supply of test kits from the NAP through the NHL. It was reported to the team that 95.19% of the overall blood units transfused in 2004 (191 120 units) had been screened for HIV.

Screening for blood units follow WHO/UNAIDS testing recommendations. Many brands of test kits obtained from donors provided to or purchased by the NAP were use. No shortages of test kits were reported in recent months.

Practices of HIV testing in blood transfusion services are of two types: (i) testing of blood donations (in general hospitals where the blood bank is functional), and (ii) testing of blood donors (in small hospitals where there is no blood bank or no regular electricity thus preventing any stocking of blood units). In the latter case, donors are recruited in a donor pool and tested for HIV. If negative, fresh blood is collected and transfused to the patient. In Dawei district, the USDA has helped recruit 320 volunteer blood donors in the donor pool. The district hospital pathologist reported that all blood is stored in a blood bank and there is good supply of kits in order to test for HIV. In Myeik district, the divisional hospital is able to perform HIV, hepatitis B and hepatitis C screening of blood, but no longer has a blood bank because the laboratory refrigerator has not been operational for the last six months. Testing of HBV and HCV are at the charge of the patient. Test kits for HBV and HCV are procured locally without control and are often not available in the market.

The main responsible sector for blood safety is in the public health care sector. Other stakeholders include the Myanmar Red Cross Society and Voluntary Blood Donor Association, mainly for promoting blood donation.

Voluntary non-remunerated donation is promoted although a significant proportion of replacement and paid donations has been reported. In 2004, 25% of all blood collected was from voluntary non-remunerated donors. Replacement blood donations have been observed to have higher prevalence of HIV and other transfusion-transmissible infections.

One major obstacle to strengthening blood safety is the current lack of infrastructure capacity. Many laboratories at the state/division and township level are unable to stock blood units in proper cold-chain conditions due to inadequate supply of electricity and lack of appropriate equipment. Some hospitals have to run a small generator almost 24 hours/day. There is also a lack of resources for test kits for hepatitis screening.

There is still a significant proportion of replacement blood donors. It was reported to the review team that replacement donors often recruited from a pool of regular blood donors, are referred for counselling if found HIV-positive.

HIV prevalence in blood donors and blood donations was gradually increasing until 2003. Since then, a reduction has been observed, probably due to efforts made in increasing the proportion of voluntary donations and to reduce the proportion of replacement and paid blood donations. In Mawlamyaing Township, 2 990 units of blood were tested in 2005, and 23 (0.7%) were HIV positive. In Thaton Township, 818 units of blood were tested in 2005, and two (0.2%) were positive. In Lashio and Muse, the HIV prevalence in blood donors was at 0.19% and 2.2%, respectively. In both places, the VDRL rate was at 0% in 2002-2005. The total absence of VDRL positivity in both Lashio and Muse donor population contrasts with the presence of HIV. A quality assessment of VDRL and HIV laboratory practices will be useful.

In one division, the divisional AIDS/STD officer expressed concern regarding the availability and quality of HIV test kits for blood screening in smaller hospitals, especially station hospitals, due to poor cold chain during transportation of test kits from NHL by township staff and poor storage conditions. There, local purchase of kits, when collection from NHL is not possible, seems to be a common practice.

The NHL addressed all these issues in a proposal prepared in 2005 that aimed at strengthening blood services in the country. This comprehensive proposal, which requires funding, has strategies that are in line with international best practices. The proposal included four specific objectives: (1) centralizing

and consolidating blood safety services, (2) increasing recruitment and retention of voluntary non-remunerated blood donors, (3) improving quality and efficiency of laboratory services, and (4) promoting rational use of blood and blood products. Although the proposed blood safety activities included in the proposal are very relevant to Myanmar, unfortunately the proposal did not reach the review panel of the Global Fund as it was presented at the time when the Global Fund decided to stop its support to Myanmar.

Recommendations

- To improve the safety of blood transfusion services, the Ministry of Health should rigorously enforce policy to prohibit paid blood donations in conjunction with the promotion of voluntary blood donations.
- Township hospitals, in collaboration with the Myanmar Red Cross Society, should continue their efforts to reduce dependence on replacement donors by increasing voluntary contribution and donor deferral, and ensure that all blood donations and blood products are screened for HIV. The timely, efficient and quality supply of sufficient HIV test-kits is essential.
- Funding should be sought to support the implementation of the NHL proposal on strengthening blood services in the country.
- The cold-chain for proper storage of blood and HIV test kits should be secured through the selection and procurement of locally appropriate equipment (e.g., solar electricity, inverters, stand-by generators).

9.2 HIV testing and counselling

The following HIV testing practices were observed or reported:

- (1) Screening of blood units and donors (see section on blood safety);
- (2) HIV testing for diagnostic purposes:
 - (a) VCCT in a variety of settings;
 - (b) VCCT during antenatal care as part of the PMTCT programme (see section on PMTCT);
 - (c) HIV diagnostic testing in hospitals for patients who present with symptoms suggestive of HIV/AIDS;
 - (d) HIV testing ordered by private providers;
 - (e) Routine HIV testing for taxi and truck drivers.
- (3) HIV testing for the purposes of surveillance (see section on HIV surveillance).

The number and quality of VCCT services (available in 43 AIDS/STD clinics across the country) has increased in recent years with the establishment of counselling facilities and staff training, particularly through the national PMTCT programme. Nevertheless, the degree of availability of this service to the general public or most-at-risk populations remains extremely limited. Key barriers to better uptake of HIV counselling and testing, as highlighted by many AIDS/STD teams and other stakeholders, include the fear of stigma and discrimination associated with attending AIDS/STD clinics and being identified as a person living with HIV; the limited number of VCCT services; lack of adequate financial support for transportation to these services; issues related to consent and confidentiality; and improper HIV test kit supply management.

VCCT is provided in a number of settings. Within the public sector, the majority of VCCT is performed as part of the PMTCT programme in health centres/sub-centres and hospitals. VCCT is also available in all AIDS/STD clinics, some hospitals and a small number of other public health care settings, including some TB centres. VCCT services are often free, but a charge of 3,000 Kyats was observed at some sites. Overall, the number of clients coming to AIDS/STD clinics for VCCT was very low (Figures 13 and 14).

As observed in other settings, the proportion of HIV-positive test results in self-referred patients or referrals for diagnostic testing is high. In 2004, the total number of clients testing HIV positive was 26.1% for men and 22.1% for women²⁵ out of 7 350 persons HIV tested.

Figure 13: Use of HIV test kits in public sector, 2004, (43 AIDS/STD clinics)

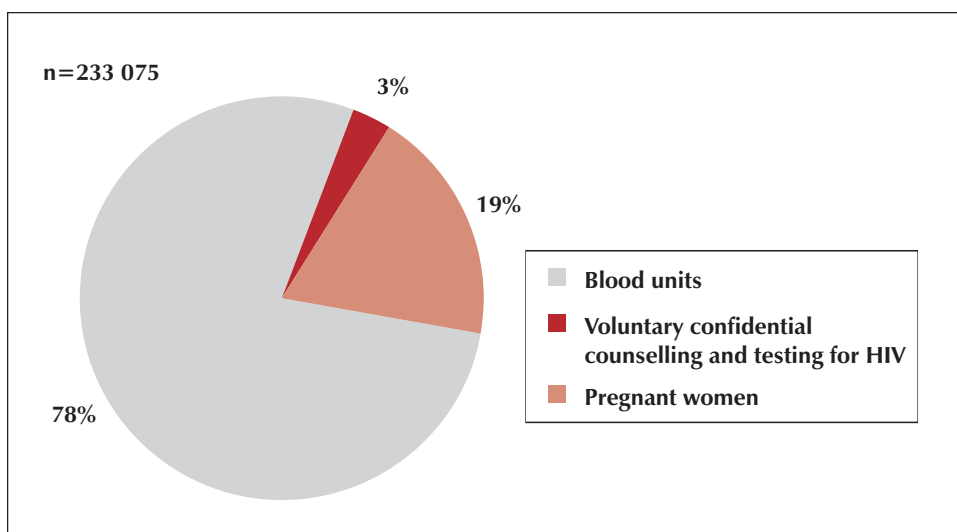
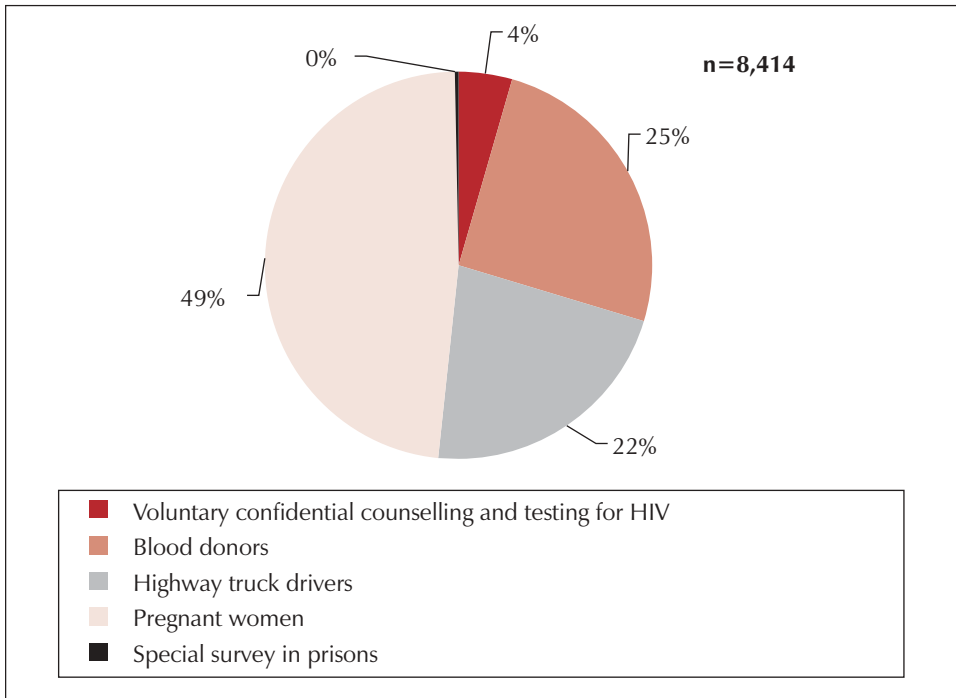


Figure 14: Proportion of HIV tests by different population groups, Mawlamyaing district, 2005



The total number of HIV tests in one AIDS/STD clinic in Mawlamyaing was 8,414 out of which only 4% were for VCCT. A large proportion was used for screening of highway truck drivers.

Some township AIDS committees in Padaung and the AIDS/STD team in Dawei attributed this to stigma associated with attendance at AIDS/STD clinics. Transportation costs for clients, HIV test kit supply and the relatively low number of clinics also contributed to the low testing volume. Although national data on volume of VCCT by site was not available, the review team observed client volume by site ranging from 12-16 per month in Dawei to 350 per month in Mawlamyaing. The total number of persons tested for HIV in Mon State as reported to the health director was 740 out of which approximately half were tested at the only AIDS/STD clinic in the state during 2005. The AIDS committees in Dawei and Padaung expressed the desire to expand VCCT services in their districts once resources become available.

²⁵ NAP data.

All AIDS/STD clinics have at least one **trained staff member** who provides pre- and post-test counselling to drop-in clients. No assessment of the quality of counselling or counselling training was made.

Most clients are **self-referred**, with there being more men than women. Some patients were reported to be referred from private clinics, but very few patients are referred from community and home-based care (CHBC) services, TB services or inpatient departments. HIV testing is usually performed within the clinic using two rapid tests. The HIV test results are usually available within one to two days. Referral to available HIV care and support services for HIV positive clients is not routinely offered. The BSS implemented in 2003 reported that although many respondents (68%) expressed the desire to have confidential HIV testing, only 5% sought the services of a VCCT centre. This stresses the need for expanding VCCT services through different modalities, including NGOs.

Action points

- VCCT is a critical entry point for HIV prevention and care activities. All VCCT clients should be offered post-test counselling and referral to and from VCCT services should be strengthened within a continuum of care approach.
- HIV test kit procurement needs to be significantly increased to support current and future demand, and HIV test kit supply management needs to be improved.
- Private sector HIV testing practices should be improved with a combination of regulation and training. Private clinic staff should be trained in pre- and post-test counselling. Private sector laboratories should be mandated to use two quality-assured rapid tests. When this is not done, GPs should be trained to refer patients with single reactive HIV test results from private laboratories to public sector VCCT for confirmatory testing.
- As VCCT services become more available, intensified efforts should be made to increase awareness on the benefits of knowledge of HIV

Diagnostic HIV testing is conducted in hospitals for patients with suspected HIV related clinical symptoms. Up to 10% of HIV test kits provided to hospitals for blood screening are authorized to be used for such purpose using a single test strategy. If the first test is reactive, blood samples were previously sent to the central level for a second HIV test, but hospitals are now advised to refer patients with a single reactive test for VCCT. Some hospitals are using cost-sharing funds to locally purchase HIV test kits of unknown quality for diagnostic purposes. Hospital staff and People living with HIV/AIDS in most hospitals visited reported

that pre- and post-test counselling was provided. Some hospital staff reported that they informed the patient's family of the HIV test result and asked them to tell the patient.

Until recently, NGOs were not authorized to conduct HIV testing and so provide pre- and post-test counselling and draw blood, which is sent to AIDS/STD clinics for HIV testing. During the first six months of 2005, the total number of clients, including pregnant women, having had pre-test counselling in non-profit private sites was 16 168. Data on number of persons HIV tested was not available. Around 10 866 clients received post-test counselling.

Private sector HIV testing is reported to be widespread, reportedly because of the lesser stigma associated with private clinic visits. Staff at NHL reported that larger private laboratories perform two HIV tests, but results are often released following a single HIV test by small laboratories.

HIV testing for taxi and truck drivers is mandated by the Ministry of Transportation every two years at the time of registration renewal. The review team did not have the opportunity to assess the content of pre-and post test counselling in this setting. The review team also received reports from People living with HIV/AIDS of deviations from the national VCCT policy in the form of compulsory HIV testing in workplace settings.

Recommendations

- Clear policy guidance from the central level is needed to ensure that all health staff understand the importance of consent and confidentiality with regard to HIV testing. Routine/mandatory testing of any targeted population group should be discontinued.
- Access to both client-initiated and health provider-initiated VCCT should be expanded through the opening of health centre/sub-centre VCCT to the general public, establishment of hospital VCCT teams, including "drop-in" access for the public, routine offer of VCCT for TB patients, increasing the number of AIDS/STD teams, expanding the number of approved private, not-for-profit VCCT services and establishing outreach VCCT for most-at-risk populations.

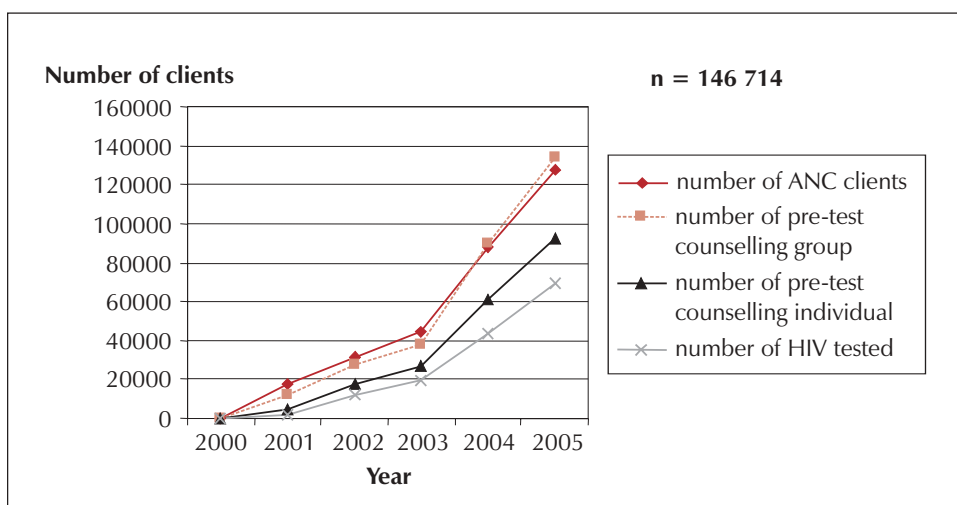
9.3 Prevention of mother-to-child-transmission

In recent years, a standardized and successful PMTCT programme has been implemented. The key components include VCCT, prevention counselling and preventive use of a single dose nevirapine to the mother and the baby. The

health centre-based programme began in 2000 and hospital-based services were added in 2004. The programme has been expanding at the rate of about 5-10 townships per year and will soon cover 79 townships, of which 17 include hospital-based services. An evaluation of the hospital-based programme is planned for late 2006. Prior to the cessation of Global Fund support, PMTCT programme expansion was planned to accelerate to 40 townships per year.

The PMTCT programme is the major entry point for VCCT. Of an estimated 1.3 million pregnant women, 146 714 women had been counselled and tested by the end of 2005 (Figure 15). The cumulative number of identified HIV-positive women delivering in programme sites was 1 191, of which 1 091 (92%) mothers and 1,091 babies received nevirapine (NVP) prophylaxis.²⁶ Within the non-profit private sector, 70 mother-baby pairs received single dose nevirapine during the first six months of 2005.²⁷ There is reported to be a low level of PMTCT activities in the private-for-profit sector. More detailed data are not available. The coverage of HIV-infected pregnant women was estimated in 2004 to be 4.8%.²⁸ The estimated number of infections averted in 2005 was 60 (3.4% of perinatal infections).²⁹

Figure 15: National prevention of mother-to-child transmission programme indicators, 2000-2005



²⁶ PMCT national programme report.

²⁷ UNAIDS.

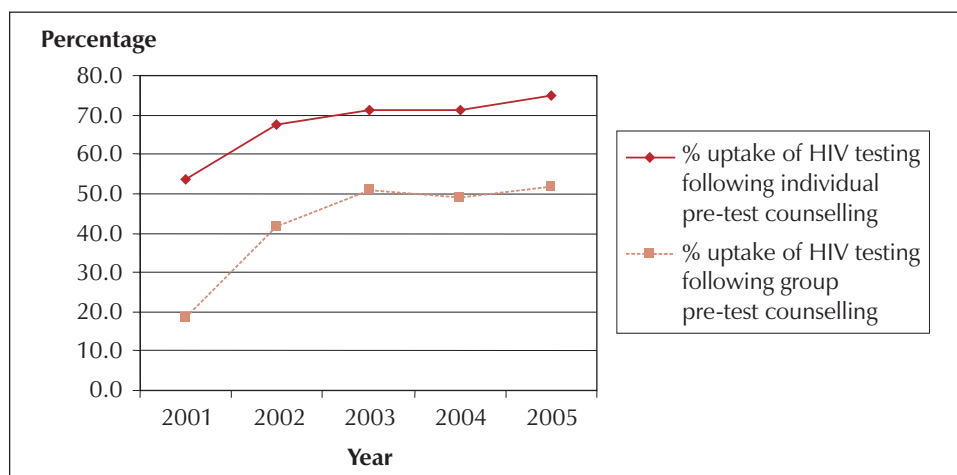
²⁸ Myanmar UNGASS Report, 2004.

²⁹ Estimated using UNGASS assumptions and data from PMCT national programme report and Report from the Technical Working Group on HIV/AIDS Projection and Demographic Impact Analysis in Myanmar, Yangon, 28-30 September 2005.

Initiation of new PMTCT township programmes begins with a five-day training of trainers' workshop for four staff per township and refresher HIV-testing training. The township team repeats the same training to all basic health staff in the township over two-three rounds. There is little linkage between PMTCT training organized by NAP and general training for midwives organized by reproductive health programme (RHP). Prior to implementation, the township medical officer and midwives conduct an advocacy meeting with stakeholders, local authority and community leaders.

In hospitals, counselling is provided to pregnant women as a group and sometimes followed by individual pre-test counselling, depending on the workload. Counselling in health centres is usually provided during individual consultations. Uptake of HIV-testing following initial group counselling is low, increasing from 18.5% in 2001 to a stable level of approximately 50% during 2003-05 (Figure 16). During the same period, the uptake for individuals who went on to receive individual pre-test counselling increased from 53.7% to 75.1%. In 2005, uptake following any form of counselling in hospitals was 84.1%.³⁰ The reasons for the low uptake in health centres are unknown. It was reported by some stakeholders that reasons may include fear of lack of confidentiality within the local community, low perceived risk or fear of blood draw. A study exploring these issues is ongoing. Counselling of couples is promoted and uptake is reported to be gradually increasing from a low level, reportedly constrained by the desire of men to see male counsellors. No data was available.

Figure 16: Uptake of HIV testing by type of counselling in the national prevention of mother-to-child transmission programme, 2001-2005



³⁰ PMCT national programme report.

Provision of counselling and testing is separated with decentralized counselling at in rural health centres and sub-centres, and HIV testing integrated into hospital or AIDS/STD clinic laboratories at the township or district level. Blood specimens, supplies and results are transported by midwives leading to delays in availability of results. This system may also contribute to the common practice of only positive results being reported to health centres. There were reports of some deviation from the policy of coded result forms.

NVP prophylaxis is provided to mothers who test HIV-positive and their babies. In the community-based programme, if the woman plans to deliver at home without a midwife present, she is given a NVP tablet and NVP syrup with instructions on how to use them. The NAP is aware of increasing international data on the implications of NVP resistance following single-dose NVP and is planning to pilot zidovudine/NVP regimens in Yangon and Mandalay later this year. A feasibility study of zidovudine/NVP prophylaxis in the community-based programme is also planned. Combination regimens are used in private non-profit ART clinics.

Action points

- Health centre capacity and availability of HIV test results can be improved by training sub-centre auxiliary midwives, additional rural health centre staff and People living with HIV/AIDS in VCCT counselling and transportation of supplies, specimens and reports.
- Both hospital-based and health centre-based models of service delivery have advantages and the current model of township-based programmes, including both activities, should continue. A decision regarding the optimal antiretroviral regimen for use at the health centre level should be made during 2006 drawing on national and international evidence and experience.

The national PMTCT policy is to provide all HIV-positive mothers with counselling regarding infant feeding options to enable them to make an informed choice. Exclusive breast-feeding is promoted among women for whom replacement feeding is not affordable, feasible or sustainable. A study by the Nutrition Department in 2004 found that 93% of women breast-feed.³¹ Of these only 8% exclusively breast-feed and 74% predominantly breast feed. National PMTCT reports show that 84% of HIV positive women report exclusive breast-feeding,³² but this data was collected at one month post-partum and may not reflect actual infant feeding practice.

³¹ National nutrition centre, 2004.

³² PMCT national programme report.

There are no national data on referral of HIV positive pregnant women for HIV care. Anecdotal reports suggest that this is occurring at a low rate and often not until after delivery.

Reporting consists of a separate PMTCT monthly report by all midwives, which is consolidated at rural health centre and township levels prior to submission to NAP via the relevant AIDS/STD team with a copy to the district medical officer. No copy is sent to the RHP.

During implementation, midwives and health assistants conduct community mobilization visits to villages with low programme uptake in which they meet with village leaders and pregnant women. No mass media promotion has been conducted.

However, with the emphasis on preventing mother-to-child transmission, much more work is required in primary prevention among pregnant women and their male partners, and in the follow-up when women and children test HIV-positive.

Recommendations

- The NAP should conduct an evaluation of the optimal approach for improving the sustainability of the PMTCT programme. Strategies such as integration into other existing health care systems without undermining programme efficiency should be explored.
- At the local level, more efficient programme management is needed to minimize the workload of primary health care staff, particularly of sub-centre midwives.
- Increased attention should be paid to primary prevention activities, particularly universal provision of post-test counselling and increased couple counselling, and to the referral of women for HIV care at the time of HIV diagnosis.

9.4 Universal precautions and post-exposure prophylaxis

Training of public health staff in universal precautions (UP) began in 1994 and awareness of the key concepts is now widespread. Supply of health products necessary for universal precautions was reported to be sufficient though this relied on funds from hospital cost-sharing schemes for local purchase. So far in 2005, one batch of post-exposure prophylaxis (PEP) drugs has been distributed. In some sites, it was clear that despite awareness and available means for protection, the fear of HIV infection persists due to poor understanding of the risk of transmission contributing to the stigma in health care settings. PEP kits are widely available but not fully utilized.

Recommendations

- Practical instructions for universal precautions and PEP protocols taking into account local realities should be developed.
- Additional training on PEP for one to two members of the medical staff of each hospital should be organized. Local protocols should be used for refresher training of health staff by a senior member ('opinion leader') of each hospital, with particular attention paid to the real risks of HIV transmission.

10. Care, support and treatment

10.1 Policies and strategies

Overall, care, support and treatment have gradually found their place in the national strategy. Substantial progress has been made in introducing comprehensive care in government health services, including ART. This progress, as well as the contribution of international and national NGOs to this effort, and the increased involvement of informal networks of people with HIV augur well for further expanded access to quality care and treatment. Specific aspects of care, treatment and support are discussed in further sections of this document.

The Myanmar National AIDS Committee, based on the information provided by and with the inputs from National AIDS Programme, and with the contributions of different departments within the Committee, lays down policies and strategies around HIV in Myanmar. Often the DoH issues standing orders to be implemented by the public health care facilities and their staff, and national guidelines for technical and procedural standardization. There have been some policies and strategies conducive to HIV care, support and treatment, laid down under the guidance of the National AIDS Committee.

Significant standing orders issued by the DoH related to care, support and treatment of HIV include provision of counselling for and maintaining confidentiality regarding HIV infected and AIDS patients,³³ allowing voluntary contraception and sterilization for HIV infected women,³⁴ on receiving AIDS cases in public hospitals and giving humane care,³⁵ and on safe injection and universal screening of blood for transfusion for all public and private health care facilities.³⁶ Medical superintendents of all public hospitals and the local level health director or medical officer were to report back to the central level on the status of implementations of the standing orders.

³³ DOH letter 67/5 (hka) AIDS Counselling/93, dated 4 February 1993.

³⁴ DOH letter Ah-sa-ra-6 (0-77) 94/65, dated 15 February 1994. The order allowed infected women to have easier access to reproductive options while not restricting their rights to get pregnant and have children.

³⁵ DOH letter Ku-tha-2/AIDS/2000 (13), dated 19 January 2000.

³⁶ DOH letter 542/5 (hka) ah-ka-tha/directive/2000 dated 22 September 2000.

With the participation and technical inputs of different partners, some guidelines and protocols have been developed for use by health care facilities and personnel in Myanmar based on general international guidelines designed by different agencies such as the WHO. The Guidelines for the Clinical Management of HIV/AIDS in Adults and Adolescents (December 2004), Guidelines for the Clinical Management of HIV/AIDS Infection in Children in Myanmar (January 2005), National Standard Treatment Guidelines for Sexually Transmitted Diseases (2000, and currently under revision), Safety Precautions and Disinfection Guidelines (2001), Manual for HIV/AIDS Counselling (2002), Guidelines on Methadone Therapy in Myanmar (December 2004), and HIV Testing Guidelines (2001) have been the major frameworks around giving care, support and treatment for HIV infection and other related problems. Currently guidelines on VCCT, PMTCT and PEP are under preparation. Other policy elements, for instance, to include people living with HIV/AIDS in the ART selection committee for the public sector free-ART provision, exist in programme and activity-related documents of NAP rather than as a standing order or a formal policy document.

As laid out in the annual NAP profile booklet,³⁷ strategies related to care, support and treatment include advocacy, targeted interventions around sexual transmission, injecting drug use, mother-to-child transmission and transmission among health care settings; care and treatment of STI and HIV infection; programme management and support; and capacity building. The strategies have been the guiding framework for AIDS/STD team leaders who serve as the focal points for coordinating the response, including care, support and treatment in a locality. Local AIDS/STD teams serve as the hub for coordinating and implementing policies, strategies and guidelines of the central NAP and the National AIDS Committee.

Policies and practices conducive to an effective response have been developed but they need to be effectively disseminated to and reflected at different levels of administration and localities, and implemented by institutions and personnel concerned. For example, People living with HIV/AIDS have been members of the ART selection committees according to the policy of the free-ART programme launched in public hospitals in Yangon, Mandalay and several other towns with the facilitation of NAP, and People living with HIV/AIDS are contributing to the currently on-going National Strategic Plan development. However, their participation in state, division, district and township level policy- and decision-making needs to be strengthened. Perceived as well as actual stigmatization and discrimination, and a lack of access to treatment may have

³⁷ National AIDS Programme, Department of Health, Ministry of Health, Myanmar; 2004.

been deterrents for participation of people living with HIV/AIDS along with insufficiently supportive policy environment.

Monitoring of the compliance with the positive policies, ethical practices and the laid down standard guidelines needs to be strengthened. It was noted by the review team that although anecdotes and interviews indicated that public health facilities operated by the Ministry of Health as well as private sector hospitals mostly received and provided services to People living with HIV/AIDS, discriminatory practices against clients known to be infected with HIV still remains. Refusal to admit a known HIV infected patient and extra or even double to triple charging of known HIV positive cases for services has been common in some hospitals and clinics. Mandatory HIV screening of cases needing surgical operations and ob-gyn care, and extra precautions taken only in service provision to known HIV infected patients were observed despite the policies. Limited information is available regarding safety of blood transfusion in the private sector. Inappropriate initiation of ART, using ineffective regimens such as mono- or bi-therapy, and insufficient or sometimes total lack of counselling, monitoring and support for therapy are also common in the private sector.

Information sharing between different organizations working in care and treatment of HIV, e.g. data flow from the private sector and NGOs to AIDS/STD teams and between partners, was often weak in some areas and that has often led to overlaps and gaps in service provisions. The linkages between different services provided by different partners with varied strengths and expertise also needs to be strengthened and the Continuum of Care model promoted in service provision for the infected and affected.

Observations during field visits often confirmed some of the above findings. Achievements have been made in implementing policies and strategies for effective care, support and treatment for the people infected with and affected by HIV. However, gap areas for improvement, as in many other countries, were identified. Focusing on issues in need of attention, key observations of the field visits related to policies and strategies for care and treatment include insufficient involvement of people living with HIV/AIDS in policy and programme decision-making and action; weaknesses in ethical non-discriminatory practices, the need to strengthen VCCT, particularly in obtaining consent of the clients and counselling; mandatory HIV testing in issuance or renewal of driving licence for truck and bus drivers.³⁸

³⁸ The requirement is for the type "E" (highest grade) licence which permits the holder drive all sorts of registered vehicle including commercial trucks and buses. The licence is issued or renewed regardless of the result which is kept confidential, and the sero-prevalence data obtained are used for surveillance purposes.

Recommendations

- As current plans for gradually increasing access to HIV care, including ART, are implemented, preparations for large-scale access should be vigorously pursued. The development of a supportive policy environment and expanded national and international financial support should be given particular importance.
- The development of a clear National Continuum of Care Policy and operational model is an urgent and critical need. This should facilitate programme expansion based on a standard approach and common understanding.
- Capacity building, standardization, regulation and accreditation of the private sector should be strengthened. Training should continue for GPs, with an emphasis on quality management of people living with HIV/AIDS with limited financial resources.
- Policies and guidelines should continue to emphasise ethical and social aspects of care, support and treatment of people living with HIV/AIDS. This includes issues such as acceptance of people living with HIV/AIDS, equitable charging for services, strict adherence to informed consent and confidentiality of HIV testing, and ensuring safe blood supply.
- There should be greater involvement of people living with HIV/AIDS in CHBC services, including their policy development and implementation. Special emphasis should be placed on career development that will enable volunteers to progress into more senior roles within organizations.
- Dissemination and implementation of policies, guidelines and best practice strategies at the peripheral levels should be strengthened with greater involvement of NGOs and departments other than health.

10.2 Continuum of care

People living with HIV face various and changing prevention and care needs. These needs require continuing, timely and appropriate referrals from one service to another. Over the last several years, increasing attention has been paid to the care and support of people living with HIV/AIDS as compared with the earlier years when the predominant focus was on prevention. Various care and support services are increasingly available, with the review team receiving reports of referrals between hospitals, AIDS/STD teams, home-based care providers and NGOs.

A continuum of care is required for people living with HIV/AIDS as they face various and changing care needs over time. Following diagnosis of HIV, whether it is at an AIDS/STD clinic, ANC clinic, health centre/sub-centre, TB clinic or elsewhere, all people living with HIV/AIDS should be referred to necessary clinical and social services, either clinical or social. They may need extensive psychological support, including counselling and they require continuous medical follow up, including OI prophylaxis. When the clinical stage progresses, they need to be referred to clinicians for treatment of OI, including TB and, if available, antiretroviral treatment. A woman living with HIV should be informed that if she becomes pregnant, she should be referred to a PMTCT service and both mother and baby enrolled for HIV care. Community- and home-based care and support can improve the quality of life of people living with HIV/AIDS but should be closely linked with medical care, with timely referrals between services. Towards the end of life, people living with HIV/AIDS may need to be referred to a home-based care team. In the community, they may need social protection from discrimination and income generation and livelihood support. In order to meet these diverse and changing needs, the “continuum of care” has to be realized. This system can respond to the changing needs of people living with HIV/AIDS and ensure efficient programme management through clear division of roles and responsibilities of each stakeholder.

Action point

- The development of a clear national continuum of care policy and operational model is an urgent and critical need. This should facilitate programme expansion based on a standard approach and common understanding.

AIDS/STD teams are playing an important role to link and coordinate among the available services. These are, however, based on individual arrangements and there is not yet any structure to systematically coordinate these referrals. Participation of people living with HIV/AIDS remains limited. The establishment of continuum of care is also hampered by the lack of availability of a full range of services in each area. The lack of clear operational guidelines, which describe the role of each stakeholder or the responsibilities of each level of health system in the locality, is also an impediment.

Over the last several years, various care and support services are increasingly available for people living with HIV/AIDS. Nevertheless, the establishment of continuum of care is hampered by the lack of a full range of elements of services

in each area. In addition, the lack of clear operational guidelines, which describe a continuum of care model, the role of each stakeholder and the responsibilities of each level of health system, are a significant constraint to rapid programme expansion.

The review team observed or received reports of referrals between services including hospitals, AIDS/STD teams and CHBC providers. The team also observed examples of significant gaps such as the failure to refer people testing positive for HIV for clinical care, including women tested as part of the PMTCT programme. There is some evidence of referral of people living with HIV/AIDS from CHBC services for clinical care, but referral from clinical care to CHBC seems weaker.

Participation of people living with HIV/AIDS has been gradually increasing in the last few years. People living with HIV/AIDS groups have been formed in many places with the support of NGO or health services, but people living with HIV/AIDS are more passive members rather than actively setting up mutual support and self-help groups. They are playing roles as home-based care visitors or health education volunteers. They can also play critical roles in the practice of referral through demand creation. Good local models are emerging in some places to link the services and create partnership with the active involvement of people living with HIV/AIDS (See Tachileik case example).

Recommendations

- A coordinating body should be established at the township level, with the participation of public health, clinical and other stakeholders, including people living with HIV/AIDS, to improve and expand referral practices, identify gaps/weaknesses in continuum of care and enable stakeholders to work collectively for township-based problem solving.
- The coverage of each essential service needs to be expanded since referrals and utilization can be improved only after they become available. Particular attention should be given to expanding access to OI management, ART, community and home-based care, VCCT and PMTCT by increasing use of existing public health facilities, NGOs and GPs.

Box 4: People living with HIV/AIDS group meeting, Tachileik District hospital

In Tachileik, there are small CBOs providing counselling and support to People living with HIV/AIDS (AIDS Support Group, ToKaChandar). World Vision supports a people living with HIV/AIDS establishment and is supporting about 200 persons. Starting 2006, Tachileik district hospital began a weekly meeting of people living with HIV/AIDS. Every Wednesday at the hospital when the physician opens the HIV clinic, this meeting is supported and attended by the physician, nurse, AIDS/STD team leader, medical social worker, NGO/CBOs and about 20-30 people living with HIV/AIDS, some of them on ART and others not. The meeting provides an opportunity for health education, peer support, adherence support and coordinating referrals. Transportation and refreshments are supported by an NGO.

10.3 Clinical management

Substantial progress has been made in several key areas of access to HIV clinical care. The initiation of ART programmes, initially in the non-profit private sectors and more recently in public health facilities, deserves particular mention. Supporting systems are being established at the central level, key protocols and guidelines have been written, training is being expanded and data systems established.

Strengthening of public sector clinical care for people living with HIV/AIDS began in 2004, with training of health staff in general HIV care. The Government-supported provision of ART began in mid-2005, with the initiation of three projects: the MOH/IULTD/Total project for TB/HIV co-infected patients in Mandalay General Hospital, ART implementation at Waibagi Specialist Hospital and Mandalay Hospital with FHAM support, and provision of ART at four district hospitals in Dawei, Kawthaung, Myawaddy and Tachileik districts with support from the Thai government. By the end of 2005, these six sites were providing ART to a total of 231 people living with HIV/AIDS.³⁹ New ART sites have been selected for the year 2006. HIV care is also provided by AIDS/STD teams, but no data are available regarding the number of people living with HIV/AIDS followed through these clinics.

Provision of HIV care in non-profit private sector clinics began in the mid-1990s by Association François-Xavier Bagnoud (AFXB). In March 2003, AZG began to provide ART in Yangon and this has been subsequently expanded to 1,888 people across five ambulatory clinics in Yangon Division and Shan, Kachin

³⁹ NAP national ART report

and Rakhine States. Additional NGOs, including MDM, MSF-CH, AFXB and AMI began to provide ART in 2005. By the end of 2005, total non-profit private sector ART provision was covering 2 284 people.⁴⁰ Cross-sectional treatment outcome data available from two of these organizations show good clinical and immunological responses.

There is widespread provision of HIV care in the private sector by GPs and doctors, whose primary employment is often in the public health sector. Approximately, 75 GPs have been trained by NAP and MMA in HIV clinical management, including ART, but many other doctors and some pharmacies are prescribing and selling ART to people living with HIV/AIDS. Some WHO pre-qualified fixed dose combinations are available in pharmacies. It was reported to the review team that mono- and dual -therapy prescriptions are not uncommon in the private sector. Also, it was reported that the sale of counterfeit drugs have been suspected. Anecdotal reports indicate a large market with a wide range in the quality of care, but more accurate assessments of quality and size of this sector are difficult. Apart from support from Total Company for ART in Mandalay, no other public/private projects or workplace provision of ART exist. Traditional approaches to treatment of HIV are common.

The number of people receiving ART remains very low, with 2,518 individuals in public and not-for profit sites, which is 4% of the estimated 67 000 people living with HIV/AIDS in need at the end of 2005.⁴¹ In general, there are few clinical services available for children with HIV. As of mid-2005, 7% of total people living with HIV/AIDS on ART were children less than 13 years old.⁴² Estimates of the numbers of people receiving HIV clinical care is not systematically collected. Gender and age disaggregated data for ART are not yet available. The same is true for data on HIV transmission risk. Marginalized populations such as sex workers and former IDU are reported to receive ART at a number of sites, including few active IDUs.

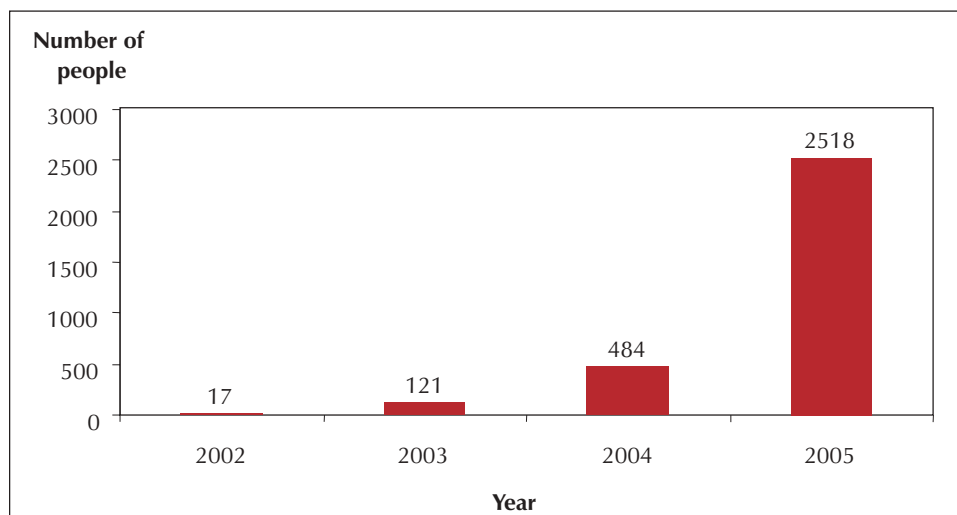
Much work, however, lies ahead in areas of HIV services structures in hospitals, establishing referral linkages to other services within hospitals and care and support services in the community, defining essential packages of care at each level and by type of service, procurement and supply management, development of comprehensive training programmes and systematic support for new and existing ART sites.

⁴⁰ UNAIDS.

⁴¹ Report from the Technical Working Group on HIV/AIDS Projection and Demographic Impact Analysis in Myanmar, Yangon, September 28-30, 2005.

⁴² Ibid

Figure 17: Cumulative number of people who started antiretroviral treatment, 2002-2005



There is no standard structure for HIV care services in public hospitals. In the visited sites, HIV care was usually integrated into general medical inpatient and outpatient services. Some hospitals have infectious diseases wards where people living with HIV/AIDS are often admitted together with TB patients. VCCT, supportive and adherence counselling are usually provided by nurses and social workers, who work in different departments of the hospital. An example of specialized service provision is Waibagi Specialist Hospital, which is the major site for public HIV care in Yangon. The review team observed that the specialized HIV services are not linked to HIV care and support services.

Essential care packages for each level of health facility are not defined. In practice, rural and urban health centres and sub-centres offer minimal care services. AIDS/STD teams often provide cotrimoxazole prophylaxis and treatment of simple opportunistic infections. Hospitals provide HIV care to the extent of their capacity and interest. This usually consists of treatment of opportunistic infections, particularly tuberculosis and other bacterial infections. The ability to diagnose and manage PCP and cryptococcal meningitis varies widely. Cotrimoxazole prophylaxis was widely known although usually given to all People living with HIV/AIDS, regardless of clinical stage and frequently not available due to stock-outs.

A standardized national approach for selection of people living with HIV/AIDS for ART exists and is well known. This model includes a person living with HIV in the 'eligibility committee'. Non-profit private sector ART services are

required to present patients to public hospital staff or committees for approval to initiate ART. The quality of systems for support of ART adherence at public ART sites is highly variable and a standardized national model has not yet been developed.

National guidelines for HIV care, including ART in adults and in children, were published in December 2004 in English. A number of training workshops have been developed and delivered since mid-2005. A three-day introduction to ART has been delivered to 185 medical officers, AIDS/STD team leaders and nurses. A more advanced workshop on ART, including a small section on paediatric care and given over five days, has been delivered to 90 doctors. In addition, a small number of doctors have attended short courses in Thailand and six doctors, including one paediatrician, have received 12-month training in France. A number of counselling training workshops have been developed, including a one-day workshop for counsellors on ART adherence that has been delivered to 25 staff.

Action points

- Training should be targeted at HIV care team members in current and planned ART and continuum of care sites.
- The role of AIDS/STD teams in the provision of HIV care should be reviewed.
- Capacity for paediatric care should be integrated into training programmes, supply management and PLHA support activities.
- The requirement for non-profit private sector ART services to present patients to public hospital staff for approval should be discontinued.

The human resource situation of hospitals varies significantly. In some hospitals, the number of staff is adequate and is not a significant constraint on future expansion of HIV care services. In others, including at least one in which ART provision has begun, there is extremely limited number of health staff, particularly doctors. This was usually due to unfilled vacancies for junior doctors. It was also reported that due to remuneration rates, health staff must spend a significant part of their working day at their private practice.

As noted elsewhere in the report, procurement and distribution systems are not currently able to regularly and reliably supply sufficient quantities of drugs, reagents, consumables and other products necessary for health facilities to provide care for people living with HIV/AIDS. Access to CD4 testing is limited as described in the section on laboratory services.

A paper-based data system for recording and reporting of ART patient numbers and outcomes has been developed, based on a WHO model. The system is clear and systematic, but time consuming for the limited staff currently available even with the very small numbers of patients under follow up.

Recommendations

- Development and strengthening of health systems to support the provision of HIV care, including ART – with priority on supply management systems – and the development of a comprehensive national HIV care training programme are needed. Continuous and mentoring support for ART sites from the central level and local partners should be provided. Particular attention should be given to the care and treatment for children.
- Definition of a standard hospital HIV care team with clearly earmarked roles and responsibilities should be submitted to the Ministry of Health for approval. Local and central managers should advocate for staff to fill all positions in each HIV care team and devise strategies to retain staff in these positions. Training should be targeted at these teams.
- Local collaborations in support of HIV care in public hospitals with strong ownership by hospital management and assistance by external organizations should continue to be supported.
- Private sector ART provision should continue to be actively managed. Control of the quality of ARV drugs imported and sold is a priority. Regulation and training of GPs should continue, with an emphasis on quality management of People living with HIV/AIDS.

10.4 Community and home-based care

Community- and home-based care for people living with HIV/AIDS and affected families has been rapidly scaled up in recent years throughout the country. There is increasing recognition of these services being a key element of the continuum care required by people living with HIV/AIDS. Many local and international NGOs, and other partners are involved in CHBC and the review team was able to observe many good practices and met many highly committed implementers.

There is marked diversity in the services offered by different implementing organizations. Some organizations provided an extensive package of activities for people living in their target areas. Others provided a much simpler mix of

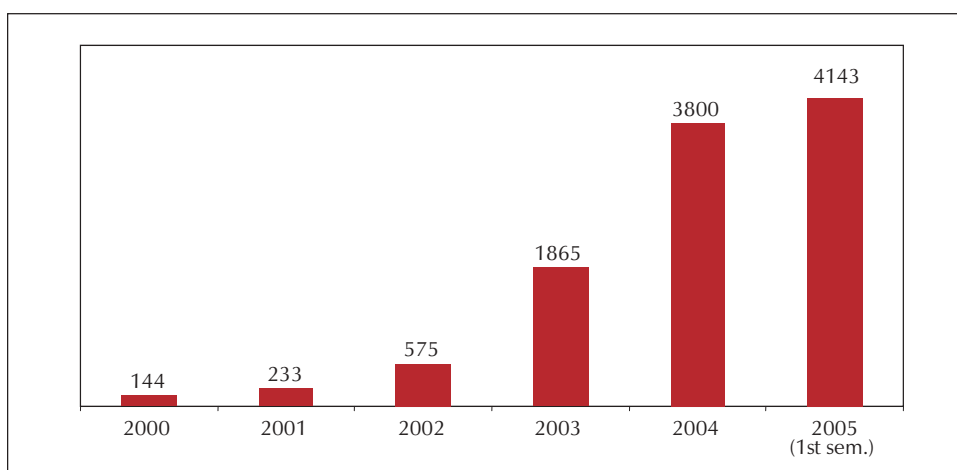
services, sometimes focussing on one particular form of support. Implementation is chronic care oriented and includes advocacy, HIV/AIDS awareness raising, home visits, palliative care for terminally ill, nutritional support, education addressing discrimination, meditation, formation of self-help groups referral to VCCT and HIV care services, and support for transportation costs to health care facilities. Very few partners provide cotrimoxazole prophylaxis, but several are planning to implement this in the near future. There were some instances of specific interventions to support ART, particularly adherence counselling. There are no national operational guidelines on the provision of community and home-based care services.

Most home-based care services are provided by non-health staff trained in certain specific aspects. Protocols and training are not standardized and are usually performed internally by each organization. These were not assessed by the review team. Some partners also engage volunteers in service provision.

There is an increased recognition that people living with HIV/AIDS could and should be more involved in home and community-based HIV prevention and care interventions. At this time, the major role for people living with HIV/AIDS has been in increasing awareness, HIV education for the general community and participation in support groups, usually as volunteers. There were no reports of home visits by local GPs.

Although there is an increasing demand for community and home-based care, and there is an increasing number of service providers, the coverage is still very low (Figure 18).

Figure 18: Number of people living with HIV/AIDS receiving home-based care from 2000 to March 2005



For the majority of people living with HIV/AIDS, the entry point for community and home-based care is self-referral or referral by a family or community member to a local home-based care team. Referral from home-based care to other services was observed in many areas, but linkages with health care facilities are generally weak. There were descriptions of barriers to referral due to the stigma associated with home visiting. This was reported to be less marked if the home-based care team also visited households without people living with HIV/AIDS.

In addition, there seems to be limited coordination of activities and some overlap in services provided to some target groups. There was limited evidence of involvement of people living with HIV/AIDS in community-based care activities apart from their participation in support group activities.

Action points

- People living with HIV/AIDS should be more involved in community and home-based care services, including policy development and program implementation. Special emphasis should be put on career development enabling volunteers to progress into more senior roles within organisations.
- Referral linkages within each district and township, particularly between CHBC services and HIV clinical care services should be strengthened. (See also 'Continuum of Care' section).
- As access to ART is expanded, CHBC services should adapt programming to include increased emphasis on ART awareness and preparedness, ART adherence support primarily through initiation of People living with HIV/AIDS support groups and ongoing support for transportation to HIV clinical services.
- Mechanisms to increase coverage of CHBC services should be explored. This includes increased financial support to enable expansion of geographical coverage of existing providers together with capacity building to enable organisational growth. In addition, more providers may be able to be mobilised, particularly from the local NGO sector. Modifications to existing service packages may enable broader coverage within the same budget. Local collaborations built within the continuum of care model can also strengthen the capacity of providers to increase services.

Recommendations

- Development of a national standardized minimum package for CHBC and operational guidelines may help develop a working consensus

model that could facilitate upscaling, provide guidance to less experienced providers and improve sustainability.

- The roles and responsibilities of the various actors involved in community and home-based care should be defined.
- The role of NAP in oversight and coordination rather than direct service provision should be considered.

10.5 HIV and tuberculosis

Pulmonary tuberculosis is estimated to be the second leading cause of mortality in Myanmar.⁴³ WHO estimates that HIV prevalence among adult TB patients (15-49 years) is 7.1%.⁴⁴ TB is reported to be the leading opportunistic infection in People living with HIV/AIDS, with up to 70% of HIV-infected persons developing active tuberculosis.⁴⁵

A Five-Year TB Strategic Plan 2006-2010 has recently been approved by the Ministry of Health. The national TB programme introduced the DOTS strategy in 1997 and by 2003, all townships had at least one DOTS clinic. Case notification rates (new and relapse) have increased over time from 65/100 000 in 2000 to 193/100 000 in 2004. In 2004, 83% of estimated new smear-positive patients were detected, but the treatment success rate has been stable at around 81% for many years.⁴⁶ The national drug resistance survey in 2002-2003 revealed 4% and 15.5% of multi-drug resistant TB (MDR-TB) among new and re-treatment patients, respectively.

The increase in DOTS notification rate has been due to an increase in both pulmonary and extra-pulmonary TB. In 2004, the case distribution among a total of 100 116 registered TB patients was: 35% smear positive, 39% smear negative and 26% extra-pulmonary. Data on the HIV status are not available.

The National TB Programme promotes the DOTS strategy for the treatment of all TB patients, regardless of their HIV status or site of disease. Category 1 standard treatment regimen consists of six months of a rifampicin-based regimen. According to NTP Guidelines, all HIV positive patients receive a Category 1 regimen. Diagnosis is based on sputum smear microscopy of sputa collected at health centres transported to township hospitals. Diagnosis of smear negative and extra-pulmonary TB is often problematic due to absence of experience at peripheral level and lack of diagnostic facilities, including high quality radiology

⁴³ Myanmar Health Report, 2005.

⁴⁴ Global Tuberculosis Control, WHO Report, 2006.

⁴⁵ National Guidelines for Clinical Management, 2004.

⁴⁶ Global Tuberculosis Control, WHO Report, 2006.

services and histology. Anti-TB drugs are dispensed to DOTS providers (usually a family member, but sometimes a national NGO member), who observe drug intake daily and are supervised by basic health staff twice a month.

A national coordinating group to oversee policy, strategy and implementation of activities related to TB and HIV was established in 2005 and meets at least quarterly. The coordinating group is chaired by the Director of Disease Control, and represented by NAP, NTP and the WHO.

TB and HIV prevention and control activities had been started in five pilot townships in 2000 and include counselling and testing of TB patients, and provision of HIV education and prevention for HIV-infected TB patients. These activities were discontinued due to lack of funding but re-started in two of those townships in 2005 with WHO support. Another pilot project in Mandalay Division started in 2005, as a partnership between WHO, NAP, NTP, IUATLD/TOTAL. The project uses the TB clinic as an entry point to HIV/AIDS care and aims to provide 1000 co-infected TBHIV patients under ART over a five-year period.

A cross-sectional study of HIV prevalence in TB patients is ongoing in Mandalay, Hpa-An, Pyei, Yangon, Nyaung Oo (Bagan). Data analysis had not been completed at the time of the review.

The National Guidelines for the Clinical Management of HIV/AIDS in Adults and Adolescents (2004) recommend counselling and voluntary HIV-testing for all TB patients. The NTP does not have a policy related to VCCT for TB patients. In practice, many TB patients are only referred for VCCT if there is a clinical suspicion of HIV. Data on VCCT referral or offer are not included in NTP reporting systems.

Clinical care of people living with HIV/AIDS involves ongoing assessment of the likelihood of active TB. Routine baseline screening for TB in all People living with HIV/AIDS using clinical assessment, sputum examination and, if available chest X-ray, is recommended by the National guidelines for the clinical management of HIV/AIDS in adults and adolescents (2004). This is usually by referral to TB centres as observed in Mawlamyaing General Hospital, Monywa State Hospital and Meiktila District Hospital.

If active TB is suspected during follow up, initial clinical and in some sites sputum examination is performed by the AIDS/STD team. If a presumptive diagnosis of TB is made, the patient is referred to the TB team for assessment. In most sites visited, it was reported that the TB team usually agreed with the diagnosis and initiates TB treatment, even in smear negative and extra-pulmonary cases. Stakeholders interviewed in Mawlamyaing stated that TB centres accept HIV-infected TB patients for treatment without discrimination. In sites without

HIV care services, there was no evidence that TB services were offering cotrimoxazole prophylaxis to severely immunocompromised HIV-co-infected TB patients as recommended in international guidelines. The review team had no opportunity to discuss TB treatment of HIV-infected TB patients in the private sector.

Recommendations

Action points

- Separate TB/HIV data systems should be avoided. Data on TB should be incorporated into HIV reporting systems and data on HIV should be incorporated into TB reporting systems.
- Simultaneous treatment with TB drugs and ART is often necessary, but complex. Practical mechanisms for co-management of people living with HIV/AIDS during treatment of both diseases should be developed.
- Cotrimoxazole prophylaxis should be available for all people living with HIV/AIDS diagnosed with TB. Preferably people living with HIV/AIDS should be referred to HIV or general medical services for comprehensive care. In situations where this is not possible TB services should provide cotrimoxazole prophylaxis during TB treatment.
- TB patients participating in studies with unlinked anonymous HIV testing should always be consented and offered VCCT.
- Formal collaboration between the NAP and the National Tuberculosis Programme, with continuous information sharing, joint planning and development of policies, protocols and operational guidelines should be continued and strengthened. The coordination of TB and HIV services at the township level should be integrated into the continuum of care mechanisms rather than through separate formal processes.
- There should be rapid application of lessons learned from current pilot projects into programme implementation. The immediate priority at the field level is funding and practical mechanisms to ensure that all TB patients are offered and able to access VCCT followed by referral for HIV care.

Funding for both AIDS and TB programmes needs to be expanded and sustained in order to support optimal management of people living with TB and/or HIV. Funding, implementation and monitoring should be incorporated into existing mechanisms of the national TB and AIDS programmes abrogating the need to establish specific TB/HIV mechanisms.

11. Reducing the impact of HIV on the life of children, adolescents and adults

11.1 Stigma and discrimination

A wide range of activities have been planned and implemented to reduce ignorance, fear, and the resulting stigma and discrimination through mass media, IEC materials, health education/health talks in and out of school, peer education and through the involvement of people living with HIV/AIDS in raising awareness and community education. In the health care, in addition to the standing orders related to receiving AIDS cases to public health facilities, universal precaution practice has been promoted and access to ensure post-exposure prophylaxis expanded.

Due to various efforts, it is encouraging to hear reports that the level of stigma and discrimination may have been reduced in some parts of Myanmar and among some populations in recent years. However, all people living with HIV/AIDS reported that they and their families, including children, continue to experience various levels of discrimination within their family, local community and workplace. In addition, there have been no reliable studies on the nature and extent of stigma and discrimination. That there has been specific training for Buddhist clergy on the need for a compassionate approach to people living with HIV/AIDS and significant community education on this is an indication of the challenge in moving beyond negative perceptions to understanding, compassion and support. Christian, Muslim and Hindu clergy and leaders have also been working to reduced ignorance, stigma and discrimination, and to encourage understanding compassion and support for people living with and affected by HIV.

Stigma in the workplaces is reported as being high and has negative implications for the lives of people living with HIV/AIDS because it leads to the loss of job and income, and also to major difficulties in gaining employment if the person's sero-status is known. Fear of experiencing stigma and discrimination is also very strong, preventing people living with HIV/AIDS from disclosing their

sero status. The review team observed that the level of stigma and discrimination differs from place to place. In places like Dawei, Myeik and Tachileik, the level seems lower whereas it is more serious in Mandalay.

Box 5: Person living with HIV/AIDS

A story relayed by a social worker– A widow (nurse) from Lashio (husband died of AIDS-related illness), with 2 children, lost her job at a private clinic because of her HIV status and was deprived of property by her in-laws. She was forced to leave her house and moved to Mandalay. Her son once had nasal bleeding at school and no teacher was ready to touch him though he was HIV negative. Now she has moved to Yangon for work and is doing better.

11.2 Orphans and vulnerable children

Anecdotal studies and the experience of implementers report that the phenomenon of orphans due to HIV is an increasing problem, especially in high prevalence townships. NGOs working for HIV care and support respond to this need by including support to orphans in their projects. Health officers and people living with HIV/AIDS reported to members of the review team that many of these infants and children are taken care of or rejected by the members of the extended family, some are institutionalized by the Department of Social Welfare. Others are living in accommodation provided by Christian churches, Muslim and Hindu leaders and receive care of NGOs/charitable organizations and individuals. There is varying anecdotal information about the range of care and support that children receive and do not receive in such settings. Care arrangements, remain limited to such settings and there is rising concern of the lack of transparency and consistency of care standards of these different settings.

The way of supporting orphans and vulnerable children varies. It can include support to extended family members, provision of accommodation for the orphans, feeding, and educational support. Widowed mothers living in Tachileik reported to the review team that their children had been discriminated against by other children and their parents upon learning of the sero-status of the child or their family members. There are also reports evidences of orphans facing discrimination at school, in nurseries and in the community. At the same time, there are also many cases of subtle changes in the level of discrimination towards affected children and orphans, and of an increase in understanding and a more accepting attitude from

people in the surrounding community, especially with the support of NGOs, concerned individuals, teachers, and following the intervention and teaching of religious clergy. People from a range of organizations and institutions involved in care and support for affected children and orphans also talked of their concern for orphans and vulnerable children in the context of the continuing need to ensure they received adequate and appropriate protection from HIV.

However, there is a very limited quantitative data available and the magnitude is not well documented. Although it is admirable that the community and individuals provide significant support to orphans and vulnerable children, and that a range of religious institutions and clergy, including Buddhist, Muslim, Hindu and Christian, are also involved, there clearly remains significant lack of attention and information about the numbers, location, situation and needs, and very few advocates for a largely hidden population who are not capable of attracting attention to their situation. The situation of orphans and affected children is beyond the health sector alone and NAP coordination and multi-sectoral engagement is critical.

Box 6: Orphans and community support

A small-scale community-based initiative in Aungban shows the strength, capacity and potential of local leadership. Providing care and support to 34 children who have lost one or both parents to HIV, Pyi Gyi Khin supports children in sibling groups, with extended family and in the care of others. Taunggyi AIDS/STD team and Aungban health officers assist in coordination with health and education services, and the project helps the team to better understand the creativity and capacity of the community. Pyi Gyi Khin has developed links with a network of CBOs and institutions, including Buddhist, Christian and Muslim, with the temple taking in male orphans for summer ordination, and health services collaborating with Pyi Gyi Khin and MMCWA in working with teachers to raise acceptance and compassion, and reduce discrimination towards children from affected families. Pyi Gyi Khin, community volunteers and support network also help mothers living with HIV, who are teaching their children to be self-reliant and to look after younger siblings, in preparation for when they [the mother] die.

11.3 Socioeconomic impact

The AIDS epidemic causes various socio-economic impacts on the life of People living with HIV/AIDS and those affected by HIV, the immediate families, friends

and communities of people living with HIV/AIDS. While it is beyond the capacity and terms of reference of this review to attempt a rigorous and deep investigation and analysis of this impact, and options to reduce/avoid such impact, this issue was an important part of the testimony of people living with HIV/AIDS to review sub-teams in different parts of Myanmar. In particular, people living with HIV/AIDS in different parts of the country reported that they face serious economic problems. Many of them have lost their job due to discrimination or due to their own health problems and others are facing economic hardship due to the loss of key income earners. The numbers of widows as well as the number of infants and children, both living with and not living with HIV is rising. In addition to the loss of income, there are also increasing expenses such as medical expenses and cost of moving and settling to a new place, either looking for job, shelter or antiretroviral treatment. People living with HIV/AIDS report employment/income earning as one of the most important needs. It is an important need for their sense of independence, resilience and to make them feel they are still able to care for the needs of their children and elderly relatives. Most of the people living with HIV/AIDS, who spoke to the review team, including during the lengthy discussions held in Taunggyi and Tachileik, clearly expressed their wish to be independent and self-supportive rather than depending on economic support. They saw this as important in sustaining the respect of the local community.

While various NGOs and INGOs assist HIV affected families to mitigate the socio-economic impact, the Ministry of Social Welfare also provides vocational training to meet this need.

Box 7: People living with HIV/AIDS, an example of local leadership

"We trust the hospital and AIDS/STD team, and need their support and weekly health follow-up, and we also appreciate World Vision outreach, support and monthly meetings, but we also want to help ourselves and help each other and be more than someone's project." Words echoed by 20 people living with HIV/AIDS, mostly widowed mothers of young children, the husbands having died from HIV-related illness. *"I've started visiting people living with HIV/AIDS in my community on Sundays and Tuesdays, and now they're starting to do the same."* The group also talked of their wishes to group together to train and set up a tailoring or production unit, working for their living, their self-esteem and their place in the community.

Recommendations

- Support should be extended to the self-help efforts of people living with HIV/AIDS through capacity building and group formation in the community.

- There must be provision of vocational training, assistance in finding employment and funding for setting up local small-scale, income-generation activities in close consultation with people living with HIV/AIDS.
- Applied research should be conducted to support rapid action responding to the needs of orphans and vulnerable children. Community-based frameworks/ programmes and mechanisms, which bring together faith-based and CBOs and concerned government departments, including social welfare and health education, and are well-linked to the health sector should be encouraged.

Access to ART must be expanded manifold as the most effective way of reducing stigma, preventing orphans and mitigating the socio-economic impact on people living with HIV/AIDS and their families.

Annex 1: Review team members

External review team members:

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Secretariat Team: National AIDS Programme, Myanmar and WHO

Annex 2 – Details of field visits : 27 March - 7 April 2006

State/Division	Township	State AIDS Committee	District and Township AIDS Committee	AIDS/STD Team	Group meeting with NGO/NGO	Specialist hospital	District Hospital	Township Hospital	Station hospital	Laboratory	Blood transfusion	PMCT project	IDU project site	Youth project	100% TCP	Sex worker site	Other at risk group	People living with HIV/AIDS	NGO site	Urban community	Rural community
Bago	Thayawaddy		1				1								1	1				1	
Bago	Pyay	1		1	1		1								1	1				1	
Bago	Padaung		1					1	1											1	
Kachin	Myitkyna	1	1	1	1		1	1			1		1		1			1	1	1	
Kachin	Mogaung		1		1			1			1		1		1			1	1	1	
Karen	Hpa-An	1		1	1						1										
Mandalay	Mandalay			3	1	1	1					1	1	1	1			1			
Mandalay	Meikthilar	1		1			1					1		1	1						
Mandalay	Nyaung Oo			1			1			2		2		1	1						
Mon	Mawlamyaing	1		1	1		1		1		1				1	1		1	1		1
Mon	Mudon		1	1	1						1										1
Mon	Thaton		1	1	1						1										

State/Division	Township	State AIDS Committee	District and Township AIDS Committee	AIDS/STD Team	Group meeting with NGO/INGO	Specialist hospital	District Hospital	Township Hospital	Station hospital	Laboratory	Blood transfusion	PMCT project	IDU project site	Youth project	100% TCP	Sex worker site	Other at risk group	People living with HIV/AIDS	NGO site	Urban community	Rural community
Mon	Thanbyuzayat (Kyaik Khami)		1		1				1		1				1	1					
Sagaing	Monywa	1		1		1						2		1	1						
Shan	Lahio	1		1	1	1	1				1	1	1		1		1	1		1	
Shan	Muse		1	1	1	1	1				1	1			1	1	3	1	1	1	
Shan	Taunggy	1		1	1						1	1	1	1	1	1		1	1	1	
Shan	Nyanshwe		1		1			1				1			1					1	
Shan	Aungban			1	1				1			1			1			1	1		
Shan	Kalaw				1		1					1			1					1	
Shan	Tachilek		1	1	1	1	1				1	1	1	1	1	1		1	1	1	
Tanintharyi	Dawei		1	1	1	1	1			1	1							1	1		
Tanintharyi	Myeik	1		1	1	1	1			1	1							1			
Yangon				1	6	1				1							1	1	1		
Total	23	9	11	19	24	2	14	4	4	5	13	13	6	6	17	7	5	12	9	11	3

The National AIDS Programme with support from WHO and the participation of UNAIDS and United Nations Children Fund (UNICEF), conducted an external review of the national health response to HIV/AIDS from 27 March to 7 April 2006 as part of the process of development of the National Strategic Plan 2006-2010. A general finding of the review was that significant progress had been made in the prevention and control of HIV and sexually transmitted infections. The magnitude of the epidemic had been recognized and the efforts to respond to it had indicated strong commitments of many partners to focus prevention, care and support efforts to the most vulnerable populations. Approximately, 1.3% of the adult population in Myanmar is infected with HIV. As in other Asian countries, HIV is highest in groups with high-risk behaviour; these include sex workers, injecting drug users and men who sex with men. Analysis to trends in surveillance data among pregnant women and military recruits indicates that the HIV epidemic peaked in 2000 and then began to decline thereafter.



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