A SYNTHESIS OF SOCIAL, BEHAVIORAL, AND ECONOMIC RESEARCH STUDIES ON HIV INFECTION AND AIDS CONDUCTED IN MYANMAR

A Joint Research Between HIV/AIDS Project (MYA/96/003) and Human Development Initiative Project (MYA/96/010)

Research Report No. (10)

UNDP, UNOPS

Prepared by Ms. Sahai Burrowes
June 20, 1998
FOREWORD

Under the umbrella of its mandate in Myanmar, UNDP is responsible for the overall management and funding of the Human Development Initiative (HDI) programme. The HDI programme, which is a major cross-sectoral initiative is made up of 10 component projects. These projects are being implemented by different agencies, including the United Nations Office for Project Services (UNOPS). MYA/96/003 - "Enhancing Capacity for HIV/AIDS Prevention and Care" is one of the projects, which is being executed by UNOPS. Another project being executed by UNOPS is the Human Development Initiative Support (HDIS), which in addition to a range of other functions, has been established by UNDP to assist in the HDI by furnishing research support to the various sectoral projects. This current study is the product of a request for research support by the HIV/AIDS project to HDIS.

In Myanmar, serious information gaps on HIV infection and AIDS remain, limiting the effectiveness of HIV/AIDS prevention interventions. This collaborative research by HIV/AIDS (MYA/96/003) Project and Human Development Initiative Support (HDIS, MYA/96/010) was conceived with the knowledge that, despite severe constraints, an impressive amount of local research has already been undertaken. However, to date, very little effort has so far been made to either collate or share this information in a systematic manner. This current research is an attempt to synthesize various research work on HIV/AIDS while simultaneously identifying the research gaps which exist in order to assist quality intervention in future HIV/AIDS research.

The report below focuses mainly on all the available behavioural and economic studies conducted between 1991 and 1998. A desk review of these studies, together with interviews of representatives from research institutions, local and international NGOs has resulted in a synthesis of social, behavioural and economic research studies on HIV infection and AIDS conducted in Myanmar. This synthesis provides an analysis of major research findings, identifies research gaps and documents relevant issues related to the conduct of social, behavioural and economic research in Myanmar. As such, the report is an important document, which can become a basis for future HIV/AIDS programme planning.

Ms. Sahai Burrowes of CARE Australia had been engaged by the HDIS project to conduct the current synthesis of research. Her success in collecting and analysing existing research studies related to HIV infection and AIDS in Myanmar is greatly appreciated by both the HIV/AIDS and HDIS projects, as well as by the overall Human Development Initiative (HDI) projects of UNDP. U Maung Maung Kyaw's (NPPP, MYA/96/003) assistance in tracking down information has also been of great value. Substantial intellectual and moral support was provided by Mr. Peter Ressurrecion, Chief Technical Advisor, for the HIV/AIDS project and Dr. San San Myint, the UNDP Programme Officer for this project. Their assistance and encouragement were extremely valuable and helpful to all involved in this project.

June 1998
One of the suggestions muted, which concerns improving the quality of future research by integrating quantitative, descriptive methodologies with qualitative methodologies to retrieve sensitive information needs to be considered carefully. In fact, participatory information gathering approaches are already gaining popularity in Myanmar. In this respect the more intensive training of researchers to minimise biases and knowledge gaps, to address operational problems and to improve communication and interviewing skills, should be incorporated into future research programmes. Guidance for future policy can only be effective if the quality of research (especially regarding sentinel data) assures us of its reliability. This study also stresses the need for more in-depth studies of high risk groups to gain a more critical understanding of these groups in their natural setting. Another example of a research gap, identified herein, is the need for a more complete survey and analysis of the attitudes, behaviours and practices of various Myanmar ethnic groups.

Despite various gaps in research, the study records a high level of HIV/AIDS awareness among most of the people surveyed so far. However, lingering misconceptions, an uneven distribution of knowledge throughout the country and between genders indicate the need for sustained education efforts, including campaigns to erase misconceptions and to encourage care and counseling activities for people living with AIDS. Another important recommendation is the implementation of inter-sectoral programmes, which focus on creating an enabling environment for behaviour change by incorporating community development and primary health care interventions into HIV/AIDS education packages.

As a contribution to the overall Sustainable Human Development (SHD) knowledge base, the usefulness of this research report, especially to the project "Enhancing Capacity for HIV/AIDS Prevention and Control" (MYA/96/003), cannot be disputed. By circulating this report among concerned groups, it is hoped that the necessary steps in the right direction will be taken to create an environment for information sharing, and the setting up of a database to facilitate future research and studies on HIV/AIDS in Myanmar. It is also hoped, as has been suggested in the study, that a multi-disciplinary research team be created in the near future to identify research needs in the areas of psychological, social and economic determinants and consequences of the HIV epidemic in Myanmar. It is believed that the Myanmar UN Task Force on HIV/AIDS provides the appropriate institutional framework for further use and follow-up of the report.

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HIV/AIDS Behavioral Research Synthesis

The views, analysis and contents of this report are those of the author and not of either UNDP or UNOPS or of MYA / 96 / 003 and MYA / 96 / 010 Projects.
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**GLOSSARY OF ABBREVIATIONS**

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<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immunodeficiency Syndrome</td>
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<tr>
<td>AusAID</td>
<td>Australian Agency for International Development</td>
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<tr>
<td>CARE</td>
<td>CARE Australia (Myanmar)</td>
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<tr>
<td>CSW</td>
<td>Commercial Sex Worker</td>
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<tr>
<td>DoH</td>
<td>Department of Health</td>
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<td>DTC</td>
<td>Drug Treatment Center</td>
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<tr>
<td>ELISA</td>
<td>Enzyme–Linked Immunosorbent Assay</td>
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<tr>
<td>GP</td>
<td>General Practitioner</td>
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<tr>
<td>IEC</td>
<td>Information, Education, and Communication</td>
</tr>
<tr>
<td>IDU</td>
<td>Intravenous Drug User</td>
</tr>
<tr>
<td>KAPB</td>
<td>Knowledge, Attitudes, Practices, and Beliefs</td>
</tr>
<tr>
<td>MCH/FP</td>
<td>Maternal, Child Health, and Family Planning</td>
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<td>MoH</td>
<td>Ministry of Health</td>
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<td>MDM</td>
<td>Medics du Monde</td>
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<td>MSM</td>
<td>Men Who Have Sex With Men</td>
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<td>NAP</td>
<td>National AIDS Program</td>
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<tr>
<td>NGO</td>
<td>Non–Governmental Organization</td>
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<td>PHC</td>
<td>Primary Health Care</td>
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<td>PLWHA</td>
<td>People Living with HIV/AIDS</td>
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<td>PSI</td>
<td>Population Services International</td>
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<tr>
<td>STD</td>
<td>Sexually Transmitted Disease</td>
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<tr>
<td>TB</td>
<td>Tuberculosis</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<td>UNAIDS</td>
<td>Joint United Nations Programme on HIV/AIDS</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNICEF</td>
<td>United Nations Children Fund</td>
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<tr>
<td>VDRL</td>
<td>Venereal Disease Research Laboratory blood screening test for syphilis</td>
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<td>WHO</td>
<td>World Health Organization</td>
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EXECUTIVE SUMMARY

In May 1998, the UNDP selected a consultant to summarize and synthesize the behavioral and socio-economic research studies related to HIV/AIDS that had been conducted in Myanmar from 1991 to 1998 and to give suggestions for a new HIV/AIDS national research agenda for Myanmar. The consultant held interviews with key actors from the UN system, government agencies, and local and international NGOs in which she collected information on past research projects and gathered suggestions for future activities. An extensive desk review of past studies was also conducted.

The quantity and quality of research that has been carried out in Myanmar during the 1990s has been formidable in light of the severe constraints faced by researchers. Most studies to date have been fairly simple, descriptive, quantitative surveys of the knowledge, attitudes practices and behaviors of high-risk groups which were often plagued by methodological problems and poor presentation of findings. Recently these studies have been supplemented by qualitative research projects initiated by international NGOs. The research, which has been completed, has succeeded in providing a rough understanding of the situation on the ground. However our knowledge of the social, economic, and behavioral factors influencing the spread of HIV/AIDS in Myanmar is far from complete. More extensive, sophisticated, and behavioral studies must be carried out to provide guidance for future policy.

The main findings from Myanmar’s behavioral research studies are:
♦ Basic awareness of HIV/AIDS in Myanmar is quite high. Usually more than 90% of respondents in high-risk, urban groups and 60% to 70% in low-risk, rural groups know of AIDS. This level of awareness has remained stable throughout the 1990s.
♦ Misconceptions regarding the transmission of HIV are widespread. Although most respondents can identify some correct modes of HIV transmission they also tend to list false modes, particularly transmission through insect bites and sharing utensils. In addition, the “correct” modes of transmission were often very narrowly defined in surveys (for example transmission through sex with a commercial sex worker (CSW) as opposed to through unprotected sex) masking the true levels of knowledge among respondents.
♦ Condom use is low among high-risk groups and the population at large. In most studies researchers find that less than half of men have ever used condoms. The number of men who use condoms regularly is also low even though many men may frequently engage in extra-marital sex and/or sex with CSWs. Condoms are heavily stigmatized because they are associated with commercial sex and infidelity and are almost never used within marriages.
♦ Perceived risk of contracting HIV is low among most Myanmar people regardless of their behavior. A notable exception to this is intravenous drug users (IDUs).
HIV/AIDS Behavioral Research Synthesis

Information about the characteristics of female CSWs is muddled and there is no information on male sex workers. Female CSWs tend to be young and have slightly higher rates of illiteracy than the general public. Many are divorced or widowed, and most tend to come from large families with broken homes. They are mobile, often traveling from one guest-house to another in high demand areas such as mining towns and transport hubs. There is some (dated) evidence that some women from certain ethnic groups who do cross-border, commercial sex work face little social sanction upon returning to Myanmar.

Men who have sex with men (MSM) are a particularly vulnerable and isolated group in Myanmar. Little is known about their social networks and behavior but studies show that they have disturbingly low rates of condom use coupled with multiple sex partners and low perceived risk of contracting HIV/AIDS.

Based in part upon misconceptions about HIV/AIDS transmission, and in part on AIDS being seen as punishment for immorality, attitudes toward people living with HIV/AIDS (PLWHA) are overwhelmingly hostile. There is a serious need for communication campaigns that focus on care and compassion for PLWHA.

Studies consistently show that extra-marital and pre-marital sex is not as rare as would be expected, especially in urban areas. A significant amount of men surveyed have their first sexual contact with CSWs. Most sexual activity is unprotected.

Different target groups receive health and HIV/AIDS information from different sources. TV and video seem to have the most potential for efficiently disseminating HIV knowledge. Peer education and workplace-based education also seem to be powerful education mediums. Large posters and billboards were frequently cited as important sources of information for transport workers.

IMPLICATIONS

These findings suggest that the government response to the epidemic has led to general awareness in the population about HIV/AIDS, especially in urban areas. However this knowledge is shallow and more HIV/AIDS education is needed. This education must go beyond simply providing basic information about the disease; it must address important misconceptions about transmission and be behavioral in focus. Social marketing of condoms must continue and be greatly intensified. In addition, officials should explore inter-sectoral programs that create enabling environments for behavior change by incorporating community development and primary health care interventions into HIV/AIDS education packages. Ways of including Myanmar’s increasingly dynamic private sector, particularly the transport, trading and construction industries in HIV/AIDS prevention activities, need to be investigated. Backward and forward linkages in HIV/AIDS programming should also be explored by providing HIV/AIDS education in low-risk areas from which migrants are drawn and exploring regional cooperation to conduct health outreach work with high-risk migrants on a cross-border basis.
RESEARCH PRIORITIES

Suggestions for improving the quality of future research include:

♦ Make existing research more accessible. An annual or bi–annual newsletter listing research activities and a central, continuously updated archive/data base of HIV/AIDS research material would be useful in this regard.

♦ Reduce the current reliance on descriptive quantitative studies. Quantitative methodologies should be integrated with qualitative methodologies for larger, more in–depth studies in which data can be cross–checked. Qualitative techniques should be used to retrieve sensitive information about sexual and drug use behavior.

♦ Conduct more intensive training of researchers in:

1. basic HIV/AIDS education; we can not assume that researchers do not face the very biases and knowledge gaps that their studies are supposed to uncover;

2. designing studies that address particular operational problems;

3. selecting appropriate research methodologies to gather different types of program information; and

4. improving communication and interviewing skills;

♦ Create a small inter–disciplinary team that would focus exclusively on developing and evaluating HIV/AIDS research projects.

♦ Improve the presentation of quantitative research findings by improving translation of survey instruments and results and by including survey instruments, frequency tables, full and detailed explanation of sampling procedure, and possible bias of estimates in study reports.

The main research gaps, which should be addressed in the next round of behavioral studies, are as follows:

♦ The need to improve the quality of sentinel data, conduct a new census and focus on large nation–wide studies in order to provide an accurate picture of the scale and trend of the epidemic nationwide. Although the sentinel surveillance system was not reviewed in this study the issue of its reliability was raised time and time again in interviews with HIV/AIDS program personnel and researchers.

♦ More in–depth “audience segmentation” studies of high–risk groups such as CSWs and IDUs in order to gain a more nuance understanding of these groups. For example it would be useful to know the circumstances of low–class versus high–class prostitutes as it relates to HIV/AIDS. This is related to the need for more studies of these groups in their natural setting.
♦ Studies of the cultural mores and social networks as well as the knowledge, attitudes, behaviors, and practices of various Myanmar ethnic groups.
♦ Extensive studies on the attitudes of the behavior of youth and youth culture.
♦ Studies examining the health seeking and sexual behavior of Myanmar women.
♦ Detailed studies of mining areas and transport hubs, particularly the social and health networks that exist there.
♦ Studies of internal migration patterns in Myanmar.
♦ Oral histories of PLWHA to make the disease more visible and to determine the needs for care and counseling.
INTRODUCTION

BACKGROUND

The project “Enhancing Capacity for HIV/AIDS Prevention and Control” (MYA/96/003) is part of the UNDP Human Development Initiative Project authorized by its Governing Council. It is a three–year project designed to prevent further spread of HIV and to address the health and socio–economic needs of those infected, their families and their communities. The project hopes to meet these objectives by building the capacities of local people to respond effectively to the challenge posed by the epidemic through a multi–sectoral, community based approach. In both this and its earlier phase (Support to the National AIDS Programme II) the project assisted local institutions in collecting information essential to increasing the effectiveness of HIV/AIDS prevention interventions.

This report was prepared under the following terms of reference:
1. Synthesize and analyze important research findings and identify research gaps.
2. Document lessons learned that will be relevant to the development of a research agenda on HIV infection and AIDS in Myanmar.
It is hoped that this report will serve as a useful reference for actors designing and implementing HIV/AIDS prevention programs in the region.

AREAS REVIEWED

This report is concerned primarily with behavioral and economic studies. As a result epidemiological studies and the sentinel surveillance system have not been reviewed. A desk review of all available studies conducted from 1991 to 1998 has been undertaken and representatives from research institutions, local and international NGOs, UN agencies, and government health departments have been interviewed. The studies reviewed are listed in Annex 1 along with an abstract.

ACKNOWLEDGMENTS

Thanks are due to the HIV/AIDS program and research personnel who shared their time, insights and research materials. Special thanks are due to U Maung Maung Kyaw of the UNDP for his assistance in tracking down information. The feedback received on the first draft of this document by U Myo Zin Nyunt and Mr. Peter Resurreccion was greatly appreciated. Dr. Owen Wrigley's support in putting together this document was also invaluable.

LIMITATIONS

One of the main findings of this report is that local HIV/AIDS research is extremely inaccessible. There is no national HIV/AIDS research newsletter; nor is there a central, continually updated list of HIV/AIDS studies conducted in the country. Most studies are not widely circulated and often the authors themselves do not have copies of their own studies. Tracking down information is, therefore, a major undertaking in itself and one that was not successfully completed in preparing this report. As a result there are bound to be many studies which were overlooked.
All studies encountered in writing this report are listed in Annex 1 even if their findings were not available to be incorporated into the main discussion here. Summarizing and comparing data was also severely constrained by the lack of consistency in the measurements and categories used in the studies.

MAJOR FINDINGS

Despite considerable logistical, financial and human resource constraints, researchers in Myanmar have managed to produce an impressive amount of research which has provided a rough picture of the situation on the ground and some guidance for the development of behavior change programs. However understanding of the patterns and determinants of behaviors that contribute to the spread of HIV/AIDS in Myanmar is still quite limited. As in other countries, research on sexual behavior and drug abuse received little attention in Myanmar until recently. Similarly research related to health–seeking behavior and the ability to recognize STDs have been rare.

Most studies to date have concentrated on groups of people believed to be at particular risk of HIV infection because of their sexual or drug use behavior or their exposure to infected blood. Thus, much initial behavioral research was focused on health workers, CSWs, IDUs and the people who come into frequent contact with them such as long–distance truck drivers and migrant workers. The concentration of early studies in Myanmar’s two major cities and among health professionals and students also suggests that early research agendas may have been heavily influenced by considerations of access and convenience. Research is becoming increasingly varied in subject and methodology. The scale of studies is also increasing significantly. The table below lists the trends in research since 1991.
AWARENESS OF, AND KNOWLEDGE ABOUT, HIV/AIDS

Almost all studies have found that respondents have high levels of basic awareness about AIDS. People from all socio-economic strata have heard about the disease (usually more than 90% of respondents); know that it has no cure and in many cases are able to identify the modes of HIV transmission. However the quality of HIV/AIDS knowledge is often poor. In almost all of studies reviewed, misconceptions about the way in which HIV is transmitted abound, with frequent citing of transmission by mosquitoes and sharing utensils. Furthermore, the “correct” modes of transmission were often very narrowly defined in surveys (for example through sex with a CSW as opposed to through unprotected sex) masking the true levels of knowledge among respondents. In addition, most people do not understand the difference between HIV and AIDS and many do not know that a healthy looking person can be infected with the virus.

AIDS is strongly associated with prostitution and extramarital sex. This is especially the case in the countryside and border areas. CSWs are the group most frequently mentioned as high-risk groups by survey respondents; and monogamy and avoiding prostitution the most frequently mentioned ways of preventing HIV transmission. In a 1997 study of Myanmar–Thai border areas 80% of respondents knew that HIV was transmitted though unprotected sex but only 25% knew that the virus could also be transmitted through blood transfusions and only 26% that needle sharing was a mode of transmission (Dept. of Psychology 1997). Vertical transmission also seems to be under-recognized. Hospitals, clinics and health centers are frequently mentioned as sources of HIV infection. (Aung Htun et. al.–1 1991; ENVIPRO 1997)

There seems to be both a gender and urban–rural gap in HIV/AIDS knowledge. In ENVIPRO’s 1997 baseline study of low-risk urban and rural areas there was a 13% difference between male and female awareness of AIDS. The study also found that HIV/AIDS and condom knowledge tended to be higher in the more accessible and urbanized Dry Zone and lowest in hilly remote areas of Southern Shan State. The Institute of Economics’ 1997 study also found regional differences in HIV/AIDS knowledge with workers in Kaw Thaung having higher levels of knowledge than their counterparts in Eastern Shan State.

Knowledge of HIV/AIDS seems to be higher in high risk groups than in low risk groups. This may be due to the fact that high risk groups tend to be interviewed in institutional settings where they have a greater chance of receiving HIV/AIDS...
information. Moreover the clandestine nature of these groups makes random sampling difficult and brings into question the generalizability of these findings.

Awareness of and knowledge about HIV/AIDS seems to have remained remarkably stable over the last seven years. There is no indication of increasing knowledge or awareness since 1991.

**KNOWLEDGE OF CONDOMS, ATTITUDES TOWARD THEM, AND CONDOM USE**

Condoms are heavily stigmatized in Myanmar. CARE’s qualitative study of urban men in Yangon and Mandalay, *Like a Moth Chasing the Fire* found that men generally associated condoms use with extramarital or “pleasure sex”. (Umemoto, 1998) Similarly, PSI’s 1997 study found that many respondents thought of condoms as a kind of sex toy rather than a prophylactic device. (Dr. Tin Aung and Gregory Widmyer, 1997) Using a condom is often tantamount to admitting extra-marital relations or contact with a CSW. Because condoms are proof of infidelity men are afraid to keep them on hand. (Umemoto, 1998; UNICEF–MMCWA,1998) Many men do not consider it necessary to use condoms if they are not engaging in commercial or extra-marital sex. In addition, condoms are not a popular form of birth control because they are perceived as being more expensive and inconvenient than depo-provera injections and contraceptive pills. (UNICEF–MMCWA, 1998)

As a result of these beliefs condom use among men is disturbingly low. In ENVIPRO’s study of (relatively) low-risk areas only 53% of men and 31% of women surveyed knew what condoms were. There was a large urban rural split in the level of condom knowledge with only 44% of men and 26% of women in rural areas knowing of condoms compared to 70% of men and 41% of women in urban areas. Only 9% of men and 3% of women in the study had ever used condoms (ENVIPRO 1997). The numbers are equally grim for high-risk men. In a 1992 survey of truck drivers it was found that 79% had never used condoms (Myo Thet Htoon et. al. 1992). Forty five percent of urban men in CARE’s 1998 study had never used condoms (Umemoto 1998). In the Department of Psychology’s 1997 study of workers on the Thai–Myanmar border, 57% of men drawn from pools of transport workers, migrant workers and the general population had never used condoms. In another survey of fishermen, traders, and IDUs and CSWs, researchers found that 91% to 88% of men did not use condoms regularly when having sex outside of marriage (Soe Win et. al. 1993). These figures are supported by the numbers found in the recent behavioral surveillance survey in which only 9% of blood donors and 8% of male STD patients reported regular condom use. (NAP 1997)

The most common reason given for not using condoms is decreased sexual sensation. Other frequently cited reasons are not having condoms on hand; being too ashamed to buy condoms; fear of rejection from partners; lack of trust in condom quality; and drunkenness. (Umemoto 1998; Aung Naing 1997; Dr. Tin Aung and Gregory Widmyer, 1997) There also seems to be some lingering suspicion that condoms are damaging to the internal organs of women (UNICEF–MMCWA, 1998) or that having prolonged sex with a condom produces harmful friction, “heat” or “burning” (Umemoto, 1998).
People seem to have little faith in the ability of condoms to prevent STDs and HIV transmission. The proportion of survey respondents who list using condoms as a way to prevent HIV infection is often very low. For example, in a 1991 study of married couples only 2% of the respondents said that using a condom during sex would prevent the spread of HIV (Aung Htun–1 1991). In a 1997 KAPB survey conducted by PSI, respondents cited monogamy (86%) and use of clean needles (81%) as preventative measures, but much fewer cited condom use (61%) (Dr. Tin Aung and Gregory Widmyer, 1997). In addition, 53% of people surveyed by PSI either did not know or did not think that condoms could prevent HIV/AIDS. In ENVIPRO’s 1997 study only 9.1% of women and 3.2% men surveyed strongly agreed with the statement that the use of condoms could prevent HIV infection.

These findings suggest that condom use is not being promoted as a HIV/AIDS prevention method as effectively as it could be. Other “prophylactics” like taking injections of anti–biotics before and after sex are still considered more effective at preventing STDs than condoms. The poor quality of many condoms on the market and the fact that few people seem to know how to use condoms properly may also contribute to their perceived ineffectiveness. Among the few people surveyed who actually used condoms regularly, problems with breakage and tearing are frequently reported. (Umemoto 1998; Dr. Tin Aung and Gregory Widmyer, 1997) This suggests that future social marketing must be coupled with improved quality control and better instructions on use.

Condoms seem to be widely available even in fairly remote areas (ENVIPRO 1997). However the locations at which condoms are sold and the times when they are sold are often inconvenient. (Umemoto 1997; Dr. Tin Aung and Gregory Widmyer, 1997)

Men usually make decisions regarding condom use; women, especially female sex workers have limited power to negotiate condom use. (UNICEF–MMCWA, 1998; Umemoto 1998) There is a large gender gap in condom knowledge and surveys show that women almost never buy condoms themselves. (PSI 1997)

**PERCEIVED RISK OF CONTRACTING HIV/AIDS**

There are extremely low levels of risk perception among most groups surveyed with the exception of IDUs and some CSWs (Umemoto 1998; Dr. Tin Aung and Gregory Widmyer, 1997). For example, half of the men surveyed by the Department of Psychology in 1997 felt that they had no chance of contracting HIV even though a significant amount of them engaged in high risk behavior. In a PSI study, 71% of all respondents and 24% of CSWs said that they had no chance of becoming infected. (Dr. Tin Aung and Gregory Widmyer, 1997)

Low risk perception is especially marked among married women who generally do not engage in high–risk behavior and who tend to have unquestionable faith in the fidelity of their partners (UNICEF–MMCWA 1998, ENVIPRO 1997). ENVIPRO found that 68% of women surveyed were afraid of AIDS compared to 81% of men. The lack of worry in the women is in contrast to Dr. Donald Goodwin’s findings that women of child-bearing age represented the largest reservoir of HIV
infection in Myanmar. (Goodwin, 1997) This lack of risk perception means that there is little motivation in the general public to change dangerous behavior.

SEXUALITY AND SEXUAL BEHAVIOR

Findings from studies suggest that extra–marital affairs and pre–marital sex among males are not as uncommon as perceived. The use of CSWs may also be more widespread than would be expected. Although the numbers vary from group to group, it seems that a significant portion of married men have engaged in pre–marital and extra–marital sex. A large amount of these encounters are with CSWs. In CARE’s 1998 study of urban men, only 25% of men surveyed said that their first sexual partner was their wife, implying that the majority of respondents had engaged in pre–marital sex. (Umemoto 1998) A study of male STD patients revealed that most respondents mixed commercial sex with non–commercial extra–marital relations. Even if these men used condoms with CSWs they rarely used them with their other lovers. (Khin Thet Wai et. al. 1993)

Seventy–six percent of truck drivers reported having extra–marital relations in the 12 months previous to Myo Thet Htoon et.al.’s 1991 survey. Similar figures for “ever having extra–marital affairs” were 13% for military trainees (Thein Myint Thu et. al. 1994); 14% for high–risk men in Myeik (Aung Naing 1997); 26% for hospital attendants in Mandalay (Khin Ye Myint et al. 1996); 21% for a sample of transport, migrant and general workers (Dept. Psychology 1997); 29% for transport workers, 16% for migrant workers and 16% for general workers in Kaw Thaung and Eastern Shan State (Institute of Economics 1997).

ENVIPRO’s 1997 study of low–risk, mostly rural couples support the numbers found in studies of high–risk, predominantly urban men. Two percent of women and 18% of men in ENVIPRO’s study had had pre–marital sexual experiences. On average, urban males had their first sexual experience a year before marriage, while rural men had theirs 7 to 8 months before marriage. The study also found that 8.5% of married men had extra–marital relations during their lifetime. Men in urban areas were twice as likely to engage in such activities as rural men (the rates were 12.4% and 6.5% respectively). Seven percent of men said that they had had sex with a CSW. (ENVIPRO 1997) With the exception of CSWs the research studies seem to suggest that most women are monogamous. (Dr. Tin Aung and Gregory Widmyer 1997; NAP 1997) However not enough research has been done to draw any firm conclusions on this subject.

Men seem equally likely to engage in high risk activity regardless of marital status. Transport workers do, however, seem more likely to engage in extra–marital sex and have contact with CSWs than workers in other professions (Dr. Tin Aung and Gregory Widmyer 1997; Dept. Psychology 1997).

It seems that young men may visit brothels as a kind of coming of age ritual. (Dr. Tin Aung and Gregory Widmyer 1997; Umemoto 1998; UNICEF–MRC 1998) In the Department of Psychology’s 1997 study, 19% of men said that they had their first sexual encounter with a CSW. In CARE’s study the figure was 21% (Umemoto, 1997). In another study CSWs told surveyors that 29% of their clients were students.
(Dr. Tin Aung and Gregory Widmyer 1997) Visiting brothels is often a social activity done by groups of men after a night of drinking. In ENVIPRO’s study as many as half of the men who had ever had sex with CSWs or with other men, did so under the influence of alcohol. Sixty one percent of the men who had visited CSWs did so with a group of friends. (ENVIPRO 1997) In general, alcohol use is strongly associated with seeking commercial sex and the inability to practice safe sex (Umemoto 1998, Aung Naing 1997).

Although both men and women admit that it is common for men to have extra–marital affairs and sex with CSWs, women tend to have unquestionable faith in their husbands and see no reason to discuss condom use with them. (UNICEF–MMCWA 1998; Dr. Tin Aung and Gregory Widmyer 1997; ENVIPRO 1997). Although men often talk about sex openly in groups, communication about sex and discussions about contraceptive choice between the sexes are rare.

Monogamy and faithfulness are held as an ideal by most men studied. However, men also seem to think it natural to have extra–marital relations when they become bored, dissatisfied or separated from their wives (Umemoto 1998).

There are signs of a gradual change in marriage patterns in rural areas. ENVIPRO’s found that most marriages were no longer arranged by parents as they had been in earlier times. (ENVIPRO 1997) The practice of living in separate houses after marriage seemed to be increasing. Remarriage of a widowed or divorced person to a virgin/bachelor was also increasingly recognized. (ENVIPRO 1997) Family planning was widely accepted as a good practice even in remote areas. In another sign of change, men in CARE’s study said that they felt increased exposure to Western culture; particularly Western pornography was encouraging sexual freedom among youth (Umemoto 1998).

ATTITUDES TOWARD PEOPLE LIVING WITH HIV/AIDS

Attitudes toward PLWHA are overwhelmingly negative in almost all studies conducted. For example, 64% of truck drivers in a 1997 survey said that they would not or did not know if they would help an HIV positive person. (Hlwan Moe et. al. 1997) Seventy–five percent of respondents in a study in Myiek said that PLWHA should be separated from the community at large. (Aung Naing, 1997) ENVIPRO’s survey found that 57% of respondents said that they would not help an HIV positive person. Negative feelings toward HIV positive people seem to be uniform among all groups. PSI found that female workers held harsher views than other respondents in regard to PLWHA; however, other studies do not support the hypothesis that women are more conservative than men on this subject (Dr. Tin Aung and Gregory Widmyer 1997; ENVIPRO 1997; UNICEF–MMCWA 1997).

Perhaps the most troubling findings come from early studies of medical students and people working in the medical profession. In a 1992 study only 53% of medical students said that they would be willing to care for an HIV–positive patient (Nwe Nwe Win 1992). Only 33% of doctors in a 1991 survey said that they would care for HIV–positive patients and 45% said that HIV–positive cases should be isolated. (San Hla Mu et. al. 1991) These studies are quite old and it would be interesting to see if attitudes have softened since they were done.

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Feelings toward HIV infected children seem more mild than those directed toward PLWHA in general (San Shwe 1991). People also seem less negative toward PLWHA when they give unprompted responses in qualitative studies rather than choosing pre-determined choices in a quantitative survey document. (Umemoto 1998) Much of the hostility felt toward people with AIDS seems to result from unwarranted fear of contamination based misconceptions about disease transmission. However, cultural mores which value community rights more than individual rights may also play an important role in shaping views (Dr. Tin Aung and Gregory Widmyer 1997).

CARE’s 1998 study also found that that the high value placed on one’s reputation in society and the reputation of one’s family makes fear and shame extremely important forces in shaping behavior in Myanmar. Dying of AIDS–related illnesses is considered shameful, “bad” dying (Umemoto 1998). The dishonor of having AIDS taints the entire family, not just the individual. Buddhist teachings about karma and fate may also serve to encourage beliefs that AIDS patients are suffering the consequences of past immoral behavior and therefore deserve little compassion.

Despite the grim findings cited above, there is no evidence that PLWHA are being abandoned by their families and communities. In its studies of the socio–economic impact of AIDS, the Institute of Economics found that families pulled together to care for their relatives, selling assets and taking out loans to pay for medical care. They also took in the orphaned children of their relatives. There was also some evidence of communities contributing toward health care costs and funerals. It seems that the strength of family bonds in Myanmar tempers fear of the disease. (Institute of Economics 1994; Institute of Economics 1997; Tin Hla Kyi et. al. 1997). UNICEF and the MMCWA also found that women and youth who underwent direct and multiplier education training expressed positive attitudes towards PLWHA. (UNICEF–MMCWA 1998)

**CHARACTERISTICS OF VULNERABLE, HIGH–RISK GROUPS**

**CSWs**

CSWs who work Myanmar tend to be poorly educated young women from broken homes. A high percentage of CSWs surveyed are illiterate (38% Khin Win Thin et. al. 1991; 50% Khin Maung Than et. al. 1992; 22% Myo Thet Htoon et. al. 1992; 31% Aung Naing 1997). However there is no evidence that CSWs have higher levels of illiteracy than their peers. CSWs are more likely to be divorcees than the population at large—57% were separated in Myo Thet Htoon–2 et. al. 1992; 95% were separated or divorced in the Dawai Township STD Team’s 1996 study; 31% were separated in Aung Naing’s 1997 survey; and 47% were separated in Dr. Tin Aung and Gregory Widmyer’s 1997 study. In the one study that inquired, it was found that 69% of CSWs surveyed had children (Khin Win Thin et. al. 1991).

CSWs in Myanmar are highly mobile, often traveling between high demand areas like mining towns and transport hubs for one to three month stays at guest houses. This means that outreach efforts must be continuous in order to access the...
constant new influx of women at different sites. Different parts of the country seem
to have different commercial sex structures. Brothel structures tend to predominate
in border towns; while in major cities there tends to be more street prostitution.
(Khin Win Thin et. al. 1991) The brothel system seems dominant however. In border
areas many apparently legitimate operations such as restaurants and night–clubs
are covers for commercial sex operations. Women in brothels usually keep only a
quarter of their earnings plus tips. Many are bound to work in the brothel until they
pay off their debt to the middle man who recruited them. (Khin Win Thin et. al.
1991; Medicine du Monde 1998) Trishaw drivers and taxi drivers often act as
brokers for brothels or pimps. PSI found that trishaw drivers help clients find CSWs
and often sell condoms (Dr. Tin Aung and Gregory Widmyer 1997). Little is known
about the differences between the working conditions and structure of high–class
prostitution versus brothel and street prostitution. So far we only have a very fuzzy
picture of how the commercial sex industry in Myanmar works.

Sex workers who work in brothels seem to have relatively good access to
health care through regular mandatory check–ups. (Aung Htun et. al.–2, 1991)
However the quality of this care and appropriateness of CSW health seeking
behavior is questionable. Care is provided almost exclusively through private clinics
and mostly consists of anti–biotic injections. Women usually pay for this treatment
out of their earnings. The fact that even this meager amount of care is demanded is
encouraging as it suggests that brothel owners might be willing to mandate the use
of condoms if they thought it was the best way to protect their clients and women in
their care. In a 1992 study most CSWs questioned (62%) said that they learned
about condoms from brothel owners (Myo Thet Htoon–2 1992). In another early
study it was found that some pimps in Ayeyawaddy Division already demand the
use of condoms with their CSWs (Khin Win Thin et. al. 1991).

CSWs tend to have high levels of HIV/AIDS awareness and knowledge with
the usual misconceptions about HIV transmission. Most have heard of condoms and
know its purpose, but rates of condom use are fairly low and inconsistent. Sixty–two
percent of CSWs used condoms in Khin Win Thin et. al.’s 1991 study. Sixty percent
use condoms regularly in Khin Maung Than et. al. 1992; 35% in Myo Thet Htoon–2
et. al. 1992; 34% in the NAP’s 1997 behavioral sentinel survey and 41% in Dawai
Township STD Team 1996. It is unclear if most CSWs actually know how to use
condoms properly. MDM’s experience in Kachin State suggests that many may not

There is evidence that some CSWs are managing to convince men to use
condoms. Of the men who used condoms with CSWs in ENVIPRO’s study, 17% had
been asked to do so by a CSW. Researchers also found a rising trend in CSW
awareness of condoms. During the year prior to the study 23% of men used condoms
at the request of the CSWs, compared to 15% in earlier years. (ENVIPRO 1997)
There were similar findings in a Department of Psychology survey that found that
among the men who used condoms with CSWs, approximately 10% were convinced
to do so by the CSWs themselves (Dept. of Psychology 1997). This means that there
is some small precedent for the negotiation of condom use in Myanmar’s sex
industry. Condoms are available in brothels but often at a high markup price which
discourages their use (Dr. Tin Aung and Gregory Widmyer 1997; Dawai Township STD Team 1996).

Economic difficulty is the reason usually given by women for entering the sex-trade. Quite a few women, especially those in Kachin State and Tanintharyi Division say that they were tricked into working at brothels (Medicines du Monde 1998; Dawai Township STD Team 1996). Several women say that they are rape victims. (Khin Win Thin et. al. 1991)

There is sign of drug use among CSWs but no specifics are provided about what kind of drugs are being used and whether drug use is a cause or result of commercial sex work (Khin Maung Than et. al. 1992; Khin Win Thin et. al. 1991; Soe Win et. al. 1993; NAP 1997).

An early study of CSWs, their parents and their peers in the Shan State found that little stigma is attached to sex work among women from the Shan ethnic group. (Khin Maung Than et. al. 1992) According to the survey, women who had done sex work abroad faced no discrimination upon return. Eighty three percent of the CSWs interviewed said doing commercial sex did not affect their dealings with local people. The attitude of CSWs’ parents toward sex work was also ambivalent; 38% had no objection to it, 38% were slightly against it and only 25% said that they were “bitterly” against it. All of the respondents in this survey held extremely materialistic views and voiced sentiments such as “earn money by any means,” “poverty is as miserable as AIDS,” and “[It is] worth selling sex to pay back the debt of gratitude owed to parents.” Boyfriends seemed willing to marry girls who had done sex work abroad (only 18% of CSWs were married before they went abroad, 67% were married after they returned). If these findings are valid they suggest that traditional HIV/AIDS education messages which simply relay the dangers of unprotected sex may not be effective with these women and their families. More studies of the sexual mores, gender obligations, social values and the economic situation of the Shan and other ethnic groups would be useful in confirming or denying these controversial findings.

MSM

Research on MSM is rare but the few studies that have been conducted suggest that MSM are an extremely vulnerable and isolated group. The community has very low levels of condom use and low–risk perception. Only 2% of men had ever used a condom in Myo Thet Htoon et. al.’s 1993 survey. The majority of these men were sexually active (80%); and most had had more than five sex partners during the previous year. In another study conducted in 1997, only 19% of men had ever used a condom. (Aung Naing 1997) Although men know about AIDS they think of it as a heterosexual disease linked to prostitution (Umemoto 1998).

There is little evidence of a large–scale commercial sex trade among MSM, although CARE’s study suggests that informal exchanges of “pocket money” or presents in return for sexual favors is common (Umemoto 1998). Dr. Wrigley’s field trip to the Taungbyon festival in Mandalay (a religious festival which draws large numbers of MSM from around the country) also found signs of commercial sex. MSM
tend to have multiple sexual partners, although many are “married” to other men and have fairly stable relationships (Aung Naing 1997, Umemoto 1998).

The impact of low condom use coupled with large numbers of sexual partners is already making itself felt in the community. The Mandalay STD team has found that rates of HIV sero–prevalence among attendees of the Yadanagu festival grew exponentially since they started collecting figures in 1993. The sero–prevalence rate increased from 8% in 1993 to 15% in 1994 to 21% in 1995 to 32% in 1996, the last year in which figures were collected (United Nations Development Program 1996).

The dynamics and internal structure of the MSM community in Myanmar is still poorly understood. Many men who have same–sex relations do not consider themselves “gay” and are not considered to be so by the effeminate (transvestite) men who make up the core gay or homosexual subculture. (Aung Swe, 1997, Umemoto, 1998) Many of the masculine MSM are “covert gay men”; married to women, with children. Because all studies of MSM have only interviewed self–identified gay men (for the most part transvestites) there is almost no KAPB information about the “masculine” segment of the MSM community. There is also little information about how masculine and effeminate MSM interact with each other. A small, but significant minority of men surveyed in other studies said that they had had same sex encounters. This included 7% of military trainees in Thein Myint Thu et. al.’s 1994 study and 13% of fishermen, 10% of traders and 21% of drug users in Soe Win et al.’s 1993 study.

The transvestite and effeminate gay male community is somewhat difficult to access but seems to be very cohesive and well–connected. For example, many effeminate men work in the fashion and hair–dressing business. (Umemoto 1998) Homosexuality is fairly well accepted in Myanmar culture because of the role transvestites play in religious rituals; however, there is evidence that MSM face occasional harassment from authorities for lewd conduct and therefore may not always be willing to disclose their status to outsiders. (Aung Swe, 1997) These findings suggest that peer education is the most appropriate means of contacting this group.

Transport and Migrant Workers

Most research that has examined transport and migrant workers has only looked at levels of HIV/AIDS knowledge and sexual behavior. Very few have looked at the patterns of migration or the structure of the trucking industry. (A notable exception is Douglas Porter’s excellent study, Wheeling and Dealing: HIV and Development on the Shan State Borders of Myanmar) These descriptive behavioral studies suggest that truck–drivers are more likely to practice high risk sexual behavior than other men (education, age, and other variables are usually not controlled for in these studies). Not only do they have high rates of extra–marital sex, many of these encounters are with CSWs (Myo Thet Htoon et. al. 1992, Department of Psychology 1997). There is even mention of drivers taking CSWs with them on long distance trips (Dr. Tin Aung and Gregory Widmyer 1997). Transport workers tend to have high levels of knowledge about condoms and HIV/AIDS although it does not seem that this knowledge results in higher rates of condom use.
In his examination of the trucking industry in Northern and Eastern Shan State, Douglas Porter found that one of its most important features with regard to HIV/AIDS transmission was the high number of overnight stops on the Muse, Lashio, Mandalay route. These stops often have guest houses, restaurants and video parlors that cater to the drivers. Reasons for the large number of overnight stop points included:
- bad road conditions,
- frequent breakdowns of trucks,
- truck terminal handling facilities where the volume of trucks greatly exceeded handling capacity, particularly at Muse Customs point and
- a desire of truckers to avoid places where official regulation or conscription of vehicles might occur.

Porter concluded that these overnight stops make mounting an effective AIDS awareness camping difficult since resources must be spread across a number of locations. He therefore suggests that expenditure to improve truck terminal facilities, or actions to reduce the rent-seeking behavior of officials may prove a more effective use of resources than traditional HIV/AIDS education through the health system. (Porter 1995)

According to Porter another development in the trucking industry with implications for HIV/AIDS is the concentration of trucking activities in the hands of a few companies. This provides a good opportunity to access key players and gain support for HIV/AIDS interventions in the sector. (Porter 1995)

Migration seems to be a fairly common practice in Myanmar. In ENVIPRO’s survey 3.5% of the females and 23.4% of the males had worked outside of their home village or town without their families. The main reason for doing so was “to obtain better income.” (ENVIPRO 1997) Much of this migration was local.

The Institute of Economics also found that intra–regional migration was stronger than inter–regional migration in populations along the Thai border. Most migrants in their study in Tanintharyi Division came from Tanintharyi (42%) or Yangon Division (30%). In Shan State most migrants were from Shan State (30%) and Mandalay Division (24%); there are also large minorities from Yangon (11%) and Tanintharyi (11%). They found a southward flow of migration from Yangon Division and Mon State to Kaw Thaung and an eastward flow from Mandalay Division to Tachileik. Economic reasons turned out to be stronger than non–economic reasons for migration to these border areas. The majority of migrants said they moved either to earn more money, save money, or get a job (76%). However a significant minority also said that friends (19%) and family (28%) influenced their decision to move (Institute of Economics, 1997).

Porter found that in Shan State migration behavior was not directly related to household socio–economic status contrary to local official opinion. Instead, he found that migration was determined by a complex array of factors, including rising expectations for social mobility, gender responsibilities, language and ethnicity. A sense of obligation to one’s family and village were also listed as possible influences on the decision to migrate. Although Porter found that migration is not solely a
function of circumstances forced by poverty he admits that for some household migration may be the only escape from chronic indebtedness, or means to meet cultural or family financial obligations.

**Intravenous Drug Users (IDUs)**

Reliable KAPB data about IDUs is scarce since all studies have interviewed IDUs in institutional settings where respondents were more likely to have received HIV/AIDS education. There is basically no information about the life and knowledge of an IDU on the street except what addicts in treatment centers tell us retrospectively.

Studies have found that older IDUs usually came from fairly middle-class backgrounds and were mobile. (Thein Hlaing et al. 1993, Stimson 1994) There is no data on whether these characteristics have changed. Most IDUs in institutional settings seem to have high knowledge of HIV/AIDS with the exception of those interviewed in Stimson’s 1994 report. New users tend to share needles more than old users but they also clean their equipment more thoroughly (Thein Hlaing et al. 1993). Needle sharing is the norm among drug users (Umemoto 1998). The September–October 1997 behavioral sentinel survey found that 59% of IDUs shared needles and 36% used professional injectors. (NAP 1997) According to IDUs syringes are available but they are too expensive to purchase on a regular basis. (Umemoto 1998) Furthermore possession of a syringe is grounds for imprisonment. Users may not use syringes at all, instead they use homemade devices which are impossible to sterilize properly. (Stimson 1994) Studies found that sexual activity is low among IDUs but that much of it is high risk. (Thein Hlaing et al. 1993) IDUs in the behavioral sentinel survey report have 0-5 partners in the six months prior to the survey. Only 29% of them said that they used condoms regularly. (NAP 1997)

In early studies, HIV sero-prevalence was found to be positively related to time spent in jail, duration of drug use, and the number of people with whom needles were shared. IDUs who had spent time in jail were four times as likely to contract HIV than those who had not (Thein Hlaing et al. 1991). The fact that prisoners are not allowed reading material means that it is difficult to provide them HIV/AIDS education.

Stimson found that many of the HIV positive drug users he encountered at drug treatment centers had traveled through and injected drugs in mining areas. This suggests that there is a great deal of high risk behavior taking place in these areas. IDUs become infected soon after they start injecting drugs which means that any experimentation with injecting drugs is extremely dangerous. (Stimson 1994) Since drug treatment centers offer little harm reduction information to patients and approximately 85% of addicts relapse after detoxification, current drug treatment centers are largely ineffective at preventing HIV spread (Stimson 1994).

**SOURCES OF HIV/AIDS INFORMATION**
The high rates of basic awareness found in surveys are probably due to the government’s past information campaign. Many surveys and focus group discussions found that respondents could repeat government slogans such as “We know A.I.D.S. AIDS” and “AIDS AIDS AIDS the dreadful disease” (ENVIPRO 1997; Umemoto 1998).

As expected, different groups get their health information from different sources. For example, it seems that women get information from posters and from TV and radio while men tend to get information from newspapers and TV (Aung Htun et. al.–1 1991). Billboards and posters seem to be the most effective way to reach truck-drivers (Dept. of Psychology 1997). Newspapers are not widely read in rural areas, but are popular with urban middle-class men.

In general, the studies suggest that TV and video are the most effective tool for broad-based HIV/AIDS education and that it is especially popular among young men. (Umemoto 1998, Aung Htun et. al.–2 1991, ENVIPRO 1997, San Shwe et. al. 1991, Dept. of Psychology 1997) In ENVIPRO’s study TV was the most popular form of mass media among both rural and urban respondents. Sixty percent of respondents had watched TV during the past month compared to the 33% who had listened to the radio during the last month. (ENVIPRO 1997) Tea shops and video parlors seem to be good places to disseminate HIV/AIDS information and organize activities, especially for young men. In low-risk, urban areas 60% of male respondents go to teashops regularly, more than the number who listen to the radio or read newspapers regularly. (ENVIPRO 1997) Video parlors may also be the most effective way to reach CSWs as it seems to be a popular source of entertainment for them (Dr. Tin Aung and Gregory Widmyer 1997).

The number of people who get information from health workers varies widely from study to study, therefore the utility of conducting education through this channel is unclear. Among female respondents in ENVIPRO’s study, about 26% in both urban and rural areas had ever been to the health centers (ENVIPRO 1997). Friends are a significant source of health information in all groups of people studied.

The efficiency of creating printed materials in various ethnic languages is still debatable. In an early study of the Shan State, most of Shan CSWs said that they could not read Shan and that they preferred pictorial posters. Interviews with HIV/AIDS program personnel produced conflicting reports on this issue. This is an area for future research. (Khin Maung Than et. al. 1992)

**METHODOLOGICAL CHARACTERISTICS**

Logistical difficulties, policy restrictions, and the shortage of human resources have limited the ability of researchers to carry out large-scale, in-depth behavioral studies. Much of the early research has been small-scale, descriptive and quantitative in nature. Small KAPB surveys of high risk groups predominate while
detailed studies of migration and sexual behavior are rare. As learning has taken
place and more resources have become available, the quality and depth of studies
conducted have improved dramatically. The international NGO community has also
entered the arena producing several studies which have served to both validate
earlier findings and to introduce new methodologies to the research community.

Nevertheless, even the best studies have been plagued by methodological
problems. As expected when exploring sensitive issues of sexual behavior, the
selection of small and biased samples tends to limit the generalizability of the
findings. This problem is compounded by the difficulties that researchers have
accessing marginalized and underground populations such as IDUs and CSWs.
Difficulty randomizing the sample is made worse when the authorities determine
sample respondents or try to influence their choice. In interviews for this report,
HIV/AIDS research personnel frequently reported problems finding large enough
sample sizes for their studies.

Another problem encountered is the presentation of study findings. The
wording of early surveys was very unclear and sometimes seemed to be perpetuating
the very misconceptions about HIV/AIDS that they were supposedly trying to
uncover. For example, when asking people about how HIV was transmitted many
surveys had as a possible answer “through sex with a CSW” as opposed to “through
unprotected sex”. This reinforces the notion that AIDS is a disease that only
concerns prostitutes and their clients and that caution must only be exercised with
CSWs as opposed to all non–monogamous sexual relations with people who have not
been tested for HIV. Some researchers focused on sexual transmission of HIV to the
extent that they did not list transmission through unclean needles as a possible
answer to survey questions.

Several observers have also noted that the ethical soundness of earlier
studies is questionable. Many early behavioral studies included sero–logical surveys.
It is not clear if consent for HIV testing was gained in all studies; nor is it clear that
the confidentiality of test results was upheld. There is no evidence that discussions
about what “consent” means in an institutional setting or about the necessity of
giving HIV/AIDS information to people engaging in risky behavior have been held.
This suggests that there is a need not only for an ethics committee but also for
training of research personnel.

Studies have tended to look at HIV/AIDS in a vacuum. In general all survey
questions and focus group discussions have revolved around HIV/AIDS knowledge
and individual sexual behavior while more complex questions about social and
structural forces that contribute to HIV/AIDS are left unanswered.

Yet another problem with early studies is the variety of KAPB measurements
used in surveys which makes it difficult to compare the findings of different studies.
This also makes it difficult to track changes in indicators over time since a slightly
different indicator is used each year. Hopefully the introduction of behavioral
sentinel surveillance data collection will aid in the tracking of basic indicators and
will produce a standard set of questions for quantitative studies.
Many studies seem to have been pulled together quickly, by simply copying the design of an early study and seem to be without reference to a specific operational objective or community need. This lack of attention to the objectives of research and lack of originality in designing studies has, in turn, lead to the most serious problem with the studies encountered in this report—the over reliance on often inappropriate quantitative survey techniques.

Face to face quantitative surveys are not suggested for use in retrieving sensitive information on drug use or sexual behavior. Quantitative surveys may also be slow, expensive, and without careful design may produce useless information. Another problem with using surveys in the Myanmar context is the culture of politeness which motivates respondents to try to find the “right”, often positive, answer which will make the researcher “save face”.

Researchers have tried to get around some of the difficulties posed by interviewer–led surveying by relying instead on self–administered surveys. This technique may be more effective at retrieving sensitive information from the sample since respondents don’t have to share their answers with interviewers. However, because returning surveys is often left to the discretion of the respondent this method can introduce selection bias into sampling by weeding out the illiterate, and the busy, the shy, etc. It should also be noted that self–administered surveys need very careful questionnaire design since questions cannot be clarified by an interviewer. Other limitations of this method are the need to have closed questions and not having interviewers to ensure that all questions are answered.

Qualitative studies and participatory information gathering approaches are now gaining popularity in Myanmar due in large part to the work of NGOs like World Vision and CARE Myanmar in promoting them and training people to carry them out. This is a positive development but researchers must be warned that qualitative research has its own rigors and pitfalls. What is important is not valuing one methodology over another but carefully thinking about what specific problem is being addressed by the research, which questions need to be answered to address the problem and what methodology is best suited to ask the questions. Qualitative and quantitative research methods are not in competition with each other and may often compliment each other. They are often appropriate for different phases of the same research project. For example, conducting informal interviews with members of the target group may aid researchers in designing more effective survey instruments. What is important to remember is that no one method can be universally employed. There is a need for multiple methods and a multidisciplinary approach to HIV/AIDS research.

**CONSTRAINTS ON CARRYING OUT RESEARCH**

According to HIV/AIDS project and research personnel interviewed for this report the main constraints on carrying out methodologically sound research is as follows:

1. Lack of training and shortage of human resources remains the largest obstacle to producing quality research. Lack of time may be as crucial as a constraint as lack
of formal training since many academic and government officials have multiple commitments and therefore cannot devote much time to research. There is a need for a core group of full time researchers from different fields to work together to develop projects.

2. Access to high-risk groups like CSWs and IDUs is a serious obstacle for many researchers.

3. The reluctance of people, especially women, to talk about sexual behavior is another frequently mentioned problem in carrying out studies.

4. Presenting controversial or negative research findings has been a problem for some researchers particularly those in state–run institutions.

RECOMMENDATIONS

• Do not assume that researchers have sufficient HIV/AIDS knowledge or appropriate attitudes about the epidemic. HIV/AIDS education should be given to researchers in order to prevent their misconceptions from affecting the choice of measurements and the wording of study reports.

• Develop a standard set of KAPB measurements to facilitate comparison of data in different studies. The presentation of frequency tables in reports would also aid the analysis and comparison of data.

• Take the time to make sure study methodology is appropriate to the target population and the kind of information that is being solicited. Well conducted focus group discussions are perhaps best at extracting sensitive sexual information.

• Give researchers more comprehensive training, in which communication skills and interviewing techniques are given as much weight as sample design and data analysis. The trainings should also include instructions on the strengths and limitations of different methodologies at collecting different kinds of information.

• Create a small interdisciplinary team of researchers whose sole focus is to carry out HIV/AIDS related studies. Possible members include staff from the Department of Psychology, the Department of Anthropology, and the Department of Medical Research in addition to members of the National AIDS Program.

• Utilize existing regional resources such as research organizations/universities in Thailand and China.

• If possible, strengthen links between the Department of Medical Research and the National AIDS Program.

• As stated above, quantitative studies may not be the most appropriate method of collecting information about all behavior relating to HIV/AIDS. But if researchers choose to use quantitative studies they must respect the methodology and include the information needed to assess the quality of the data, as well as to replicate the results. At minimum this requires a detailed description of sampling strategies and response rates. While it may be sufficient to simply state that respondents in a study were selected randomly it is much more useful to a reviewer and future researchers if studies detail exactly how the sample was randomized. Quantitative studies should also present calculations on the precision and the bias of estimates.
Attention must be paid to the translation and wording of survey questions. Much of the wording in the earlier surveys is ambiguous at best and incomprehensible at worst. One way of checking the accuracy of translations is to do a “triple translation” in which for example an English survey question would be translated into Myanmar and then back into English to see if the Myanmar translation matched the original English version. More use of professional translators may also be appropriate. If possible, researchers should also reproduce the entire survey schedule in studies.

Review the widespread use of self–administered surveys.

Promote the use of more audience–centered research and participatory rural appraisal techniques as compliments to traditional quantitative survey methods. Methods which not only attempt to find answers to predetermined questions but which also retrieve unprompted responses about what communities think of their own positions should be encouraged. It is very important to know how communities define their own situation when creating HIV/AIDS interventions. Even if traditional research methodologies are used, care should be taken to report research findings back to the affected community if possible, in order to aid them in developing their own responses to the epidemic.

SUGGESTED RESEARCH PRIORITIES

AIDS in Myanmar has been seen primarily as a medical problem rather than a sociological or development issue. Therefore, most research has been carried out by medical professionals. Until recently there was not an adequate amount of truly behavioral research. There are therefore many gaps in our knowledge of behavior which lays the foundation for all prevention and care activities.

QUALITY AND ACCESS

Interviews with actors implementing HIV/AIDS prevention activities in Myanmar revealed that improving the quality of data collected and increasing the availability of existing information is as important a priority as collecting more information. If work is not done to address methodological problems and the relevance of studies new data will not be very useful. Reducing methodological problems will entail increasing the level of training and increasing access to high–risk groups. It will also involve committing resources to more in–depth studies of traditional target communities. Most studies to date have treated high–risk communities like homogeneous groups, failing to explore the existence of sub–groups or the differences between group members. For example, all CSWs are treated the same even though the circumstances of a street worker may differ significantly from that of a high–class woman working in a brothel. Similarly little effort has been made to differentiate between groups in the MSM community. There is, therefore, a need for more detailed audience segmentation studies of traditional high–risk communities. Such studies should improve the accuracy of targeted interventions.
Unless efforts are made to increase the communication of research findings and the flow of information among the HIV/AIDS prevention community, many of the people who need information the most will not have access to it. Research efforts will be duplicated; wasting scarce resources. Steps should also be taken to increase the access of native researchers to behavioral studies produced in neighboring countries.

**NATIONWIDE STUDIES/DEMOGRAPHIC DATA**

Many NGOs are reluctant to carry out their own large-scale research studies because they want to maximize the amount of resources going to their beneficiaries directly. Formal studies are seen as costly and time consuming. Instead, HIV/AIDS program personnel rely on quick, informal means of gathering information about their project area such as key informant interviews, mini-surveys and participatory rural appraisal techniques. This sort of information gathering is increasingly being built into the design of projects. Therefore, for NGOs priority at the government and United Nations level should be placed on conducting the large-scale, major studies that NGOs do not have the funds or the access to do by themselves. In general, HIV/AIDS project staff think that they have the ability to collect the information needed to carry out their project activities effectively. What they want is an improved policy environment and mobilized health officials. This they believe could be brought about by better quality sentinel data, a new census, and large nation-wide studies, which would provide an accurate picture of the scale and trends of the epidemic in Myanmar. Developing an honest picture of what is happening on a nation-wide basis is the most urgent research priority facing the country.

**ETHNOGRAPHIC STUDIES**

Research is urgently required to learn about the various ethnic groups of Myanmar. Researchers need to explore the cultural and behavioral norms of different ethnic communities, particularly their sexual behavior; family and social networks, social support systems and the extent to which these affect risk behavior. Suggested areas are Kachin State, Shan State, Chin State, and Saigaing Division. Ethnographic information is necessary in developing appropriate IEC materials for different ethnic groups. Although the Anthropology Department at the University of Yangon is small and rather underdeveloped it could be a very useful partner in carrying out HIV/AIDS related ethnographic research. The History Department along with counterparts from Thailand also could cooperate to develop methodologies and conduct cross border studies.

**YOUTH**

Extensive studies are needed to develop and evaluate programs aimed at youth. Although basic KAPB information is still needed especially with regard to risk behavior like CSW visitation and casual drug use, studies need to go beyond simple KAPB/B surveys to explore youth culture at large. A huge generational shift
has taken place in the last decade in Myanmar. Myanmar youth now live simultaneously in two radically different worlds—the traditional, religious Myanmar world and the liberal, consumer culture world. HIV/AIDS education activities that do not acknowledge the bifurcated existence of today’s youth will be doomed to failure. Studies of youth should examine leisure activities, values, what youth read, what kind of movies they like, popular music, their hopes, and attitudes towards family, friendships, relationships and sexuality. (UNICEF, EAPRO, 1997) Both qualitative and quantitative research using in–depth interviews, key informants, focus groups, and structured observation should be used. Young people should be involved as data collectors and key informants. (UNICEF, EAPRO, 1997)

WOMEN

More studies are recommended which examine the health seeking and sexual behavior of Myanmar women especially young women. Women had the lowest levels of risk perception in surveys yet were constantly put at risk by the sexual behavior of their husbands. Ways of accessing these at–risk women, and designing educational services and STD interventions specifically for them must be explored. Studying the nuances of women’s roles in Myanmar society would also be useful in designing condom promotion campaigns and safe sex negotiation techniques.

HOT–SPOTS AND MIGRATION PATTERNS

Detailed interdisciplinary studies of mining towns such as Mogok in Mandalay Division, Phar Khant in Kachin State, and Monghsu in Shan State as well as transport hubs such as Monywa, Magway, Pakokku are required. Northern Shan State and the Indian border are also places that have been relatively neglected in past studies. Information should be collected on the working conditions, family and social networks, health problems, knowledge about disease, access to medical care; and the predominant behavioral and sexual risks taken by migrant mine workers and transport workers which makes them vulnerable to HIV/AIDS. More mapping of truck routes and situational analyses of economically dynamic towns in Myanmar would also be helpful in designing appropriate targeted interventions. In addition we need to know what resources, services and activities exist in mining communities. We also need to know where people are coming from, where they are going, and what do they do during off–season periods for employment. The focus of these studies should be to gather information on the ability of people in these communities to respond to the epidemic.

PLWHA

Oral histories of PLWHA are needed to chronicle the epidemic; to make it more visible to the public and to determine the needs for care and counseling. The huge stigma attached to HIV/AIDS points to the need for more intensive media campaign, which includes stories from AIDS patients themselves. The disease must be personalized. It must be seen as something that affects ordinary, real people not.
just an abstract evil that only affects the immoral. More studies of the socio–economic impact of AIDS on individual households and local economies may also be important in advocating policy change.

IMPACT ASSESSMENTS

There are few studies of the effectiveness of existing health education programs. Collecting information on lessons learned in various projects and the development of a set of indicators of behavior change are crucial to maintaining dynamism in HIV/AIDS prevention activities.

CONCLUSION/RECOMMENDATIONS

The behavioral research conducted to date has raised the awareness about the potential for the spread of HIV/AIDS in Myanmar. It has also provided an indication of where the high–risk behaviors are concentrated and what actions would be the most effective in addressing these communities. However the knowledge base on which HIV/AIDS prevention activities is to be built is still woefully incomplete. More research needs to be done. In particular there is a need for studies which address the research gaps listed above. However the most important need is to assure the methodological soundness and relevance of future studies. This means taking more time to ask, “What is the problem that I am seeking to address?” “What kind of information do I need to address this problem?” “What will this information be used for?” “What is the most appropriate methodology to collect this kind of information?” Resources should not be devoted to research that does not have clear operational links. Studies should therefore take as much time discussing the implications of their findings as they take in listing them.

In addition the information that is collected must be widely available to people implementing projects. Recommendations made by the UNDP HIV/AIDS project assessment team two years ago are still relevant:
- Create a national multi–disciplinary research team drawn to identify research needs in the areas of psychological, social and economic determinants and consequences of the HIV epidemic. The team would also have responsibility for ensuring ethical standards are upheld in future research activities.
- Circulate an updated list of AIDS related journals that are received at all UN agencies, and government agencies.
- Compile an annual listing of current and proposed research projects, in order to avoid duplication of effort. (United Nations Development Program, 1996)

Finally reliable sentinel and census data is needed as a baseline against which to judge and interpret study findings and to gage the effectiveness of programs.

The findings from the studies conducted so far point to the need for the following actions:
Continued Education

Although most people surveyed have high levels of HIV/AIDS awareness, their knowledge about the epidemic is shallow and riddled with misconceptions. The surveys also indicate that knowledge is distributed unevenly throughout the country and between genders. Furthermore, people often complain about the one-time nature of past education efforts and seem to want sustained education efforts. (Umemoto 1998) Ongoing education is necessary to keep the threat of AIDS fresh in the mind of people. New campaigns should focus on erasing misconceptions and encouraging care and counseling activities for people living with AIDS.

Education must also be tailored to the need of special groups. For example, members of the medical profession, medicine sellers and pharmacists need more training on STD management especially with regard to women. Care, counseling and ethics training for health workers in contact with HIV positive patients is also needed. Education for CSWs should be offered at brothels and should be ongoing since the populations are so mobile. It should include extended instruction on condom negotiation. Very basic information on female sexuality may need to be created for young women.

While the current strategy of focusing activities on high risk groups makes sense in terms of targeting interventions efficiently, it may also send the wrong message to the public if they infer from it that only people in high-risk groups are vulnerable to HIV. Education efforts need to stress that experimenting with intravenous drug use or having unprotected sex just once puts one at risk of contracting HIV. Past education material which were full of pictures of IDUs and CSWs may have allowed people to distance themselves from the disease, contributing to low levels of risk perception found in the studies. Future education efforts aimed at the general public must hammer home the point that anyone regardless of occupation, morality or appearance can transmit and contract HIV.

Although increased education is necessary it is not sufficient to stem the tide of the epidemic in Myanmar. Education must be linked to condom promotion, increased access to health care and community development initiatives.

Increased Social Marketing of Condoms

- There must be increased social marketing of condoms. Although the use of condoms as a reproductive health device in Myanmar is limited because of its higher cost relative to other contraceptives, joint marketing of condoms may decrease some of the current stigma attached to condoms and make people more willing to purchase them. If condoms are only marketed as a means to prevent HIV infection the negative attitudes towards them may actually increase.
- Education campaigns must also acknowledge the fact that much unsafe sex takes place under the influence of alcohol in a festival atmosphere. Condom promotion should encourage men to always carry condoms with them before going out drinking. Promoting safe fun may be more effective than promoting monogamy or abstinence.
• Social marketing of condoms must also address issues of quality control and include frank, detailed instruction on how to use them.

More Effective use of Mass Media and Existing Resources

The findings in the studies reviewed support the IEC recommendations made by the UNICEF East Asia Program Regional Office (UNICEF EAPRO, 1997). Namely:
(1) Create a video drama on HIV/AIDS which could be distributed at video parlors along with IEC material. Studies found that video parlors were very popular particularly in rural areas among young men.
(2) Develop a drama based community service announcement for TV with a focus on care and compassion. This is important to make the disease more visible.
(3) Develop HIV/AIDS entertainment programs for television that can accommodate educational messages about HIV/AIDS in ethnic languages. This would be most effectively done with cross border collaboration e.g. Thai language TV shows in Myanmar and Myanmar language shows in Thailand.
(4) Make comics for youth and other target groups such as truck drivers and IDUs.
(5) Create a live radio show where viewers could call in or write in health questions. Studies found that people in rural areas are hungry for information (UNICEF–MMCWA 1998). They have a lot of health questions but no one to address them to.
(6) Explore the use of Buddhist networks in community education and caring for PLWHA.
(7) Promote HIV/AIDS awareness in the trucking industry through workplace education—truckers are hard to reach by traditional media because they are so mobile.
(8) Conduct health outreach at festivals which may reach rural populations that would otherwise be difficult to access.

Peer–education/Research

Health workers are not always the best people to deliver HIV/AIDS information to the public. There are networks within the high–risk groups themselves that may be capable of creating innovative, community–based responses to the HIV/AIDS epidemic if properly mobilized.

Future prevention work must focus on identifying these networks, gaining access to them and working with them to develop new HIV/AIDS prevention activities. Brothel owners and CSWs themselves should be designing programs for CSWs. Young musicians and artists should be developing approaches for youth. Trucking companies should be designing interventions for their employees. Shan community leaders on both sides of the Thai–Myanmar border should be addressing problems posed by the sex trade in their communities. The lack of research in mining towns means that little is known about operations there. The businesses operating there are perhaps the best sources of information and should be actively recruited to assist in AIDS prevention work.

Inter–sectoral Community Development Projects
Risk behavior is heavily influenced by social, environmental and structural factors. HIV/AIDS interventions that operate solely at the individual level are unlikely to be successful at inducing behavior change. Inter–sectoral programs, which focus on creating an enabling environment for behavior change by incorporating community development and primary health care interventions into HIV/AIDS education packages (along the World Vision model), should be explored. For example, projects that include income generating activities to empower at–risk women particularly divorced women and young widows could be useful. Loan programs to assist families with HIV positive and AIDS patients may also be of use. Reinvigorating the educational system in key areas of the country like Eastern Shan State may keep many more children off the streets and give youth options besides migration for unskilled work. Traditional rural development projects will probably not stem the tide of migration since few projects can offer the financial compensation that industries in Thailand or China offer. However, targeted programs to help at–risk women, or heavily indebted families e.g. a debt restructuring micro–credit project for small scale female vendors may complement other HIV/AIDS prevention work.

Backward and forward linkages in programming should also be explored by giving HIV/AIDS education in low–risk areas from which migrants are drawn and exploring regional cooperation to conduct health outreach work with high–risk migrants on a cross border basis.

Next Steps
Hold a UNAIDS/NAP research centered meeting in which the following topics should be discussed:

- Reviving the past effort by the WHO to set up an HIV/AIDS database at the Department of Medical Research.
- Circulating this report and a simple list of HIV/AIDS research projects in the pipeline. If this report is not cleared for circulation then Annex 1 alone should be circulated to all HIV/AIDS program offices as a separate document.
- Whether resources exist for creating multi-disciplinary research team and if so how resources can be shared between the UN and government groups.
- Based on available resources and policy climate figuring out what studies can be conducted at what time.
ANNEX 1: ANNOTATED BIBLIOGRAPHY

BEHAVIORAL AND SOCIO–ECONOMIC STUDIES

1991


Sponsor/Affiliation: Department of Medical Research, Department of Health
Status: Published
Type of Study: Quantitative KAPB study
Content: Background, methods, findings, discussion, 5 references, and 19 tables.
Location of Study: Dagon and Thaketa Townships, Yangon Division
Methodology:
594 married couples were selected randomly using cluster sampling techniques to choose study Townships and wards. The couples were then surveyed using a pre–tested KAPB questionnaire directly administered by interviewers. (Response rate was 78%)

Abstract:
Only 43% of the sample could identify high–risk groups. CSWs where the most frequently mentioned group (68%), followed by IDUs. Women tended to cite CSWs more than men. A significant number of respondents (27%) named hospitals and clinics as places where one could contract HIV; in comparison, 38% cited brothels. 64% said that avoiding sex with CSWs was a way of protecting oneself from AIDS. However only 2% mentioned using a condom during sex and only 3% mentioned using sterilized needles. Most respondents believe that you cannot get AIDS if you remain monogamous. Only 6% of men had ever used a condom. The main sources of information on AIDS for women were AIDS posters (26%), radio (23%), newspapers (23%), and TV (14%). The main sources of information on AIDS for men were newspapers (54%), AIDS posters (16.3%) and radio (13.8%).


Sponsor/Affiliation: Central Health Education Bureau
Status: Published
Type of Study: Quantitative KAPB study
Content: Background, methods, findings, discussion, 7 graphs, 9 references, and 26 tables.
Location of Study: Eastern Shan State
Methodology: Unknown
Abstract:
A study of psychosocial and behavioral factors related to AIDS among 196 (male 98 and female 98) community members from four urban wards and six villages of Eastern Shan State. Interviews consisted of seven specific sections: (i) Exposure to mass media, (ii) AIDS perception and knowledge, (iii) personal choice behavior, (iv) condom utilization, (v) perception on sexual contact, (vi) basic personal

∗ Marked entries indicate studies for which original copies could not found, their abstracts are from the Review of HIV Related Epidemiological Research Conducted in Myanmar, 1991-1995 compiled by Khin Ohn Mar San, Bo Kywe and DJ Goodwin for the III International Conference on AIDS in Asia and the Pacific; September 17-21 1995; Chiang Mai, Thailand.

June 1998
characteristics, and (vii) possession of mass media instruments. 90% of respondents had heard of AIDS. TV was the major mass media instrument, but interpersonal communication was most effective for receiving AIDS information. AIDS was seen as life threatening but correct HIV transmission modes were not mentioned by most. 20% stated AIDS could not be cured. Acceptance of AIDS patients was low.

Aung Tun Thet et al., (3) A Study on Prevention and Control of HIV/AIDS Infection in Selected Border Townships Read at Medical Research Congress 1991. (No information available)

Khin Win Thin et al., A Study on Knowledge Attitude Practice and Behavior (KAPB) of Commercial Sex Workers (CSWs) Implications for HIV/AIDS 1991.

Sponsor/Affiliation: Department of Planning and Statistics, Ministry of Health
Status: Published
Type of Study: Qualitative KAPB study
Content: Background, methods, findings, and discussion
Location of Study: Yangon, Yangon Division
Methodology: 73 female inmates at the Adult Training Home for Women in Yangon who were detained for engaging in commercial sex work were interviewed by staff of the Department of Planning and Statistics using case study methodology.

Abstract:
72% of the CSWs interviewed were 15 to 24 years old. They were mostly form Yangon and Ayeyarwaddy Division. 38% were illiterate, 31% had primary–school education, and 21% had a secondary–school education. 42% were single; the rest were either separated divorced, widowed or married. 69% of the married CSWs had children. Most of the women were from broken homes with parents who were casual laborers and approximately half came from families with five to nineteen siblings. 45% of the women became CSWs between the ages of 15–19 and 38% between the ages of 20 to 24. They said that virginity is sold at a very high price (1000 to 13,000 1991Kyat) and the younger their age the higher their earnings. Most became CSWs because of financial problems (51%), but family problems (38%) and peer pressure (16%) were also mentioned. 15% became CSWs after having been victims of rape.

The women worked in three different kinds of environments: with pimps (78%), in guest–houses (19%) and individually in public places (3%). CSWs at guest–houses usually receive 25% of what clients pay them and out of this they must pay for food and regular medical care. The women usually rotate their stays at guest–houses moving from Mandalay, Beik, Mogok, and Bago. CSWs working through pimps get 50% of their fees. They usually work at public places like parks, cinema halls, railway stations, bus stops and wharves. The women said that 70% of their customers are alcoholics but few are drug users. The average number of customers for CSWs in guest–houses is 10 to15 per night. For CSWs working individually or through pimps the average is 3 to4 customers per night. 62% of CSWs surveyed claim that they use condoms but women also said that they do not refuse customers who do not use them. Some pimps protected their CSWs by insisting that customers use condoms. 47% of CSWs had knowledge of HIV/AIDS and STDs. Those with some health education (mostly those who worked at guest–houses) took Depo–Provera injections every three months, and monthly penicillin injections. Treatment and monthly checkups were conducted at private clinics. 19% had STDs, and 1% was HIV–positive. The women were aware that they could contract HIV from customers but were not aware that they could transmit it also. 14% used various kinds of drugs.
Sponsor/Affiliation: Department of Medical Research
Status: Published
Type of Study: Quantitative KAPB study
Content: Background, findings, discussion, 5 graphs, and 9 tables.
Location of Study: Yangon, Yangon Division
Methodology: 378 medical doctors (230 female) answered anonymous, self–administered questionnaires. (Response rate was 88.9%. There is no discussion of sampling procedure)

Abstract:
There was a high level of AIDS awareness (99% had heard of AIDS) but there was lingering confusion on the difference between HIV and AIDS—21% said that there was no difference between the two—and about the mode of transmission —16% said that the disease could be contracted through shared utensils. 87% knew using condoms was an effective way of preventing HIV/AIDS. Only 12% of doctors surveyed had a comprehensive understanding of counseling. Attitudes toward PLWHA were negative; doctors feared catching the disease from their patients. Only 33% said that would take care of HIV–positive patients and 45% said that HIV–positive cases should be isolated. Magazines were the most frequently cited source of information on HIV/AIDS. Doctors pointed to the need to educate patients not to demand injections for minor illnesses as a prevention measure.

San Shwe et. al., KAPB Study on HIV/AIDS Among Attendants in Yangon Children’s Hospital 1991*
Sponsor/Affiliation: Department of Medical Research; Child Health Department Yangon Children’s Hospital
Status: Unknown
Type of Study: Quantitative KAPB study
Content: Abstract: only
Location of Study: Yangon, Yangon Division
Methodology: Unknown

Abstract:
600 attendants of hospitalized children in Yangon Children’s Hospital participated. Interview with standardized questionnaires was applied to obtain information related to KAPB of HIV infection/AIDS. Most attendants (99%) were mothers. 97% had heard of AIDS and accepted it as widely spread in Myanmar. 66% felt that it was a preventable disease and 16% knew the causal agent. Most knew the modes of transmission. Misconceptions about transmission included transmission insect bites, air, and casual contact. Most knew AIDS could be diagnosed by blood test for HIV (89%). 80% obtained information from posters, TV programs and radio. 76% had positive attitudes towards the disease, most perceived AIDS to be preventable and 95% were willing to take care of HIV–infected children. 41% said that they would handle infected material by hand. 70% said AIDS can be prevented by avoiding unnecessary injections, screening donated blood and using properly sterilized equipment for injections. A high correlation was found between KAPB score and socio–economic status.

Thein Hlaing, et. al., HIV Sero–prevalence and Factors Influencing its Level Among Newly Registered Intravenous Drug Users in Yangon 1991
Sponsor/Affiliation: National Health Laboratory
Status: Published
Type of Study: Sero–prevalence survey
Content: Copy of study not available. Unknown
Location of Study: Yangon Division
Methodology: 165 new enrollees at the Drug Dependency Treatment Center in Yangon (all male IDUs) were selected and interviewed. Sampling procedure and interviewing technique are unclear. 136 members of the sample were tested for the HIV antibody. It is not clear that testing was voluntary.

Abstract:
63% of IDUs tested were HIV-positive (CI = 55%–71%). There were statistically significant increasing trends of HIV sero–prevalence by age, duration of drug use and number of persons with whom sharing syringes and needles. In terms of risk estimates IDUs aged 30 years or above had 5 times greater chance of becoming infected that those aged below 25 years. IDUs who had been injecting drugs for over 18 months were at 6 times higher risk than those who had been using drugs for 6 months or less. IDUs sharing syringes and needles with two or more persons had twice higher risk of contracting HIV than those who did not share. IDUs who had visited professional drug injectors for initiation of their habit had 1.5 times greater chance of becoming infected than those who had not done so. IDUs in jail were at four times higher risk than the rest of the addicts.

Sponsor/Affiliation: Institute of Nursing; Epidemiology Research Division,
Department of Medical Research
Status: Published
Type of Study: Quantitative KAPB (comparative)
Content: Copy of study not available. Unknown
Location of Study: Unknown
Methodology: 177 final year diploma students from the Institute of Nursing completed a questionnaire developed by Goldenburg and Laschinger according to Ajzen and Fishbein’s guidelines. (sampling procedure unclear)

Abstract:
Since the majority of previous investigations about AIDS knowledge and/or attitudes had been primarily descriptive in nature, this study used a psychosocial model to scientifically examine attitudes and behavior. The Ajzen–Fishbein theory of reasoned action was used to predict the attitudes, intentions and behaviors of nursing students with AIDS patients. In this theory the intention of an individual to engage in certain behaviors was determined by two components: attitudes towards the behavior and subjective norms. The results were compared with those of Canadian nursing students on whom the same questionnaire was used. The Myanmar students were found to have lower means in the study variables than the Canadians.

(no information found)

Sponsor/Affiliation: Psychology Department, Mandalay University; Department of Health

Status: Published

Type of Study: Descriptive psychological study

Content: Background, methods, findings, discussion, and 4 tables.

Location of Study: Eastern Shan State

Methodology:
40 CSWs who had recently returned from working in Thailand were interviewed along with their parents and 80 people from their peer group (40 boys and 40 girls) using psychological tests and attitude scales. Discussions were also held with religious leaders and local elders.

Abstract:
70% of the CSWs went abroad between the ages of 15–20. Most stayed abroad either less than one year (35%) or to two to three years (33%). Most returned because of adverse conditions (35%) and because they missed their parents and relatives (30%). While abroad they often returned home for religious holidays and festivals. Most (80%) were satisfied with their present jobs and said that they would not return to prostitution (75%). 50% of the CSWs were illiterate but so were 68% of their female peers. The literacy findings and intelligence tests suggest that CSWs are as intelligent and educated as their peers. The educational system in the area, especially the monastery schools were found to be unsatisfactory.

93% of CSWs had heard of condoms; 90% had seen one; 60% used them regularly; and 15% had never used them. More than one–half of CSWs liked using condoms during sex; 88% advised their customers to use them; and 63% always refused partners who did not use condoms. 31% used drugs during sexual intercourse. Most believed that AIDS was a dreadful disease but they were almost equally concerned about poverty as dying of AIDS.

There is no social discrimination toward women returning from sex work abroad. 83% of CSWs said doing commercial sex did not affect their dealings with local people. The attitude of parents toward sex work was ambivalent; 38% had no objection to it; 38% were slightly against it; and only 25% said that they were bitterly against it. All of the respondents held extremely materialistic views and voiced sentiments such as “earn money by any means,” “poverty is as miserable as AIDS,” and “[It is] worth selling sex to pay back the debt of gratitude owed to parents.” Boyfriends were willing to marry women who had done sex work abroad—only 18% were married before they went abroad 67% were married after they returned.

Most respondents, especially women, could not read or write the Shan language and said that they preferred pictorial posters without words. Policy suggestions include establishing markets for locally produced goods, creating jobs opportunities for Shan women, investigating and addressing the shortfalls of the educational system especially the teaching of local languages, supporting Christian groups in their AIDS prevention activities, and exploring the possibility of more active participation of Buddhist monks in prevention and care activities.

Myo Thet Htoon et al., (1) A Study on the Behavioral Patterns of Truck Drivers Plying Long Distances in Mandalay 1992*.

Sponsor/Affiliation: AIDS Prevention and Control Program; STD Control Programme, Mandalay; AIDS Counseling Team, Yangon

June 1998
Status: Published
Type of Study: Quantitative KAPB, serological survey
Content: Background, methods, findings, discussion, 2 references, and 3 tables.
Location of Study: Mandalay Division
Methodology:
300 long haul truck drivers and their support staff were selected and interviewed by STD medical officers. After obtaining consent, blood samples were collected for HIV testing. Testing was done using ELISA (Welcozyme) test and confirmed using a different test system (Serodia) at the National Health Laboratory.

Abstract:
Most study drivers were between the ages of 20 and 39 (67%) and/or married (70%). 76% reported extramarital sex in the previous 12 months. Despite high knowledge of condoms, only 21% had ever used them. Only four drivers admitted to drug use. 1.3% of drivers tested HIV-positive.

Myo Thet Htoon et. al., (2) A Study on Social and Behavioral Pattern of Commercial Sex Workers Returning from Thailand 1992*.
Sponsor/Affiliation: AIDS Prevention and Control Program; AIDS Counseling Team, Yangon; Infectious Diseases Hospital, Yangon
Status: Published
Type of Study: Descriptive quantitative behavioral study
Content: Background, Methods, Findings, Discussion, 5 references, and 14 tables.
Location of Study: Unknown
Methodology:
95 CSWs who were deported from Thailand were interviewed using a questionnaire. (96% response rate)

Abstract:
The majority of CSWs were between the ages of 20 and 29 years old. 22% of them were illiterate and 47% had only a primary school education. 57% were separated at the time of the study. More than half became married while working abroad. Most (69%) became CSWs because of a mixture of economic reasons and influences of other people. This suggests that women may become CSWs because of financial pressures at home. 13% of women became CSWs after their marriages broke up. Most had worked as CSWs for less than a year (97%).

Knowledge of AIDS was high — 94% had heard of AIDS and 72% could correctly identify all three modes of transmission. All of the respondents had seen condoms but only 35% used them regularly. 10% said that they had had STDs. 62% learned about condoms from brothel owners and 17% from clients. Only 7% had learned about condoms thorough health information pamphlets. 73% said that they had no difficulty using condoms. 10% said that their clients did not accept condom use.

Nwe Nwe Win. Knowledge and Attitudes of HIV Infections and AIDS Among Medical Students in Institute of Medicine–I, Yangon 1992.
Sponsor/Affiliation: Institute of Medicine Yangon
Status: Published
Type of Study: Quantitative KAPB study
Content: Background, findings, discussion, 12 references, 4 graphs, and 17 tables.
Location of Study: Yangon, Yangon Division
Methodology:
Purposive sampling of 297 medical students (182 female), using anonymous self-administered questionnaires. (Response rate was under 75%)

Abstract:
Students had high level of HIV/AIDS awareness (95% could list all forms of transmission properly) but lingering misconceptions about disease transmission remained. For example, 11% of students said that HIV could be transmitted through shared utensils. Feelings about PLWHA were very negative. Only 53% of students said that they were willing to take care of HIV–positive patients, only 36% would allow themselves to be in proximity with a HIV–positive person; and only a quarter said that they would observe medical confidentiality. 46% favor isolation of HIV–positive patients. 72% considered doctors and nurses a high–risk group for HIV/AIDS infection. 87% had heard of condoms. 71% knew difference between HIV and AIDS. Only 36% could define counseling correctly. More than half of the 33 students who had had sex had visited a CSW.

Sponsor/Affiliation: Drug Dependency Treatment and Research Unit, Yangon Psychiatric Hospital
Status: Published
Type of Study: Quantitative KAPB study, serological study
Content: Copy of study not available. Unknown
Location of Study: Yangon Division
Methodology:
207 IDUs were recruited from the Drug Dependency Treatment and Research Unit, and interviewed using questionnaires with questions on drug history, infection sharing behavior and sexual history. They were also tested for HIV. (There is no evidence that testing was voluntary. The sampling procedure is unclear.

Abstract:
Sero–prevalence was 71% and was positively related to duration of drug abuse. HIV awareness was unsatisfactory and needle–cleaning practices were inadequate. The rate of condom use was also very low.

1993

Sponsor/Affiliation: Department of Medical Research; Central STD Clinic Yangon
Status: Published
Type of Study: Quantitative KAPB study
Content: Background, methods, findings, discussion, 12 references, and 8 tables.
Location of Study: Yangon, Yangon Division
Methodology:
231 male STD patients were randomly sampled over a three month period at a Yangon STD clinic and then surveyed using face–to–face interviews. There is no discussion of sampling procedure.

Abstract:
64% of the men attending the clinic were married. 63.3% had genital ulcers. Men had a mix of both commercial and non–commercial sex partners. The mean number of commercial sex partners in the year prior to the study was 4.1 ± 2.3. The mean number of non–commercial sex partners was 1.9 ± 1.1. One–third of the single men had more than five commercial sex partners during the previous year, as had 24% of the married men. Neither education level, marital status, nor age had a significant influence on the number of total sexual partners or frequency of encounters.

Most men either did not use condoms at all or used them irregularly. 76% of the men who visited CSWs exclusively did not know how to use condoms properly. Only 22% of the men use condoms with CSWs. Most men cite availability as the main reason they do not use condoms (59%). Most men did not see their failure to use condoms as putting them at risk for contracting HIV. The mixing of commercial sex partners with non–commercial sex partners means that many women are put at risk.

Lwin Nyut et. al., A Preliminary Study on Condom Use Among High–risk Males in Mon State Abstracts of Paper 39th Myanmar Medical Conference, January 21–25, 1993 p. 27. (No information found)

Myo Thet Htoon et. al., (1) A Study on Blood Donors at Central National Blood Bank with Regard to Their Behaviors Relating to HIV Transmission 1993*
Sponsor/Affiliation: National AIDS Prevention and Control Program
Status: Published
Type of Study: Quantitative KAPB study
Content: Background, methods, findings, discussion, 6 references, and 13 tables.
Location of Study: Yangon Division, Mandalay Division
Methodology: Copy of study not available. Unknown

Abstract:
Since the first discovery of HIV in Myanmar in 1988, HIV prevalence among donated blood at the two major blood banks Yangon and Mandalay have been increasing. The National AIDS Prevention and Control Program has spent major resources on blood screening to limit HIV transmission through blood and blood products. This characterizes the behaviors associated with HIV transmission among blood donors so that donor screening could be made more effective. Most donors were young and male; 94% were Buddhist. Most had given blood before, with 22% having donated 26 times or more. Donors engaged in high–risk behaviors despite knowledge of HIV and the modes of transmission.

Myo Thet Htoon et. al., (2) A Study on the Sexual Behavior of Homosexuals at Yandanagu Festival, Mandalay
Sponsor/Affiliation: AIDS Prevention and Control Program
Status: Published
Type of Study: Behavioral interview, serological survey
Content: Background, methods, findings, discussion, 4 references, and 5 tables.

Location of Study: Yadanagu, Mandalay Division

Methodology:
A homosexual festival attendee interviewed 88 men using a short questionnaire. The interviews and HIV sero–prevalence saliva tests were carried out on a voluntary basis.

Abstract:
Gay men in Myanmar are fairly well accepted but there is some intolerance toward them. Most respondents were 20–29 years old (72.2%) and most (94%) were not married (to women). The majority was sexually active—80% had had sex in the year previous to the study. 11% had visited a female CSW in the year prior to the study. Only 2% had ever used a condom and only 35% said that they wanted to use condoms in the future. The majority had had 5 or more sexual partner during the preceding year. Drug use among the men was negligible (1%). 8% of the men in the study tested positive for HIV.

San Hla Mu et. al., A Study on Knowledge Regarding HIV/AIDS, Their Sexual Practice and HIV Sero–prevalence among Highway Drivers and Related Workers in Yangon1993*. 

Sponsor/Affiliation: Statistics Division Department of Medical Research; AIDS Prevention and Control Program, Department of Health

Status: Published

Type of Study: Quantitative KAPB; serological study

Content: Background, methods, findings, discussion, 6 references, and 15 tables.

Location of Study: Yangon Division

Methodology:
This was a study of 326 truck drivers and related persons in July 1993 in Yangon. Issues studied included HIV/AIDS knowledge, sexual practices and VDRL sero–reactive status. 244 persons were tested voluntarily for VDRL status. Unlinked anonymous testing for HIV was also done on the VDRL testing sample.

Abstract:
More than 50% of persons reported high–risk factors; the rate of condom use was 22%. VDRL reactive was 20% and HIV sero–prevalence rate 82%.


Sponsor/Affiliation: AIDS Prevention and Control Program

Status: Published

Type of Study: Quantitative study of practices

Content: Background, methods, findings, discussion, 6 references, and 9 tables.

Location of Study: Yangon Division, Bago Division

Methodology:
249 general practitioners and 50 government health facilities were visited and responsible personnel were interviewed during August to November 1991. (Copy of study not available. Sampling procedure unclear)

Abstract:
Approximately 40% of patients going to government health care facilities and 56% of patients going to GP clinics receive either IM or IV injections. Self–assessment of adequacy of sterilization revealed that 40% of staff in government health care settings and 45% of GPs perceive that their sterilization is adequate. In 64% of
government health care facilities and 56% of GP clinics the initial sterilization of syringes and needles seemed to be adequate if assessed by the criteria of boiling for at least 20 minutes. Among them, only 22% of government health facilities and 41% of GPs kept used needles separately, while in the remaining cases the used syringes and needles were returned to the same container as unused ones, exposing all to recontamination. Possible measures to reduce transmission of blood–borne pathogens and to improve and re–enforce proper sterilization of syringes, needles and instruments in health care settings are discussed.

Soe Win et. al., KAPB Studies on HIV/AIDS Among Fishermen, Traders, Drug Abusers, and Commercial Sex Workers in Kaw Thaung Area 1993*

Sponsor/Affiliation: AIDS Awareness, Education, and Prevention Project, Kaw Thaung; Myanmar Medical Association; World Vision International, Myanmar; AIDS Prevention and Control Program, Department of Health

Status: Published

Type of Study: Quantitative KAPB study

Content: Background, methods, findings, discussion, 4 references, and 5 tables.

Location of Study: Kaw Thaung Township; Tanintharyi Division

Methodology: A base line study for implementing interventions for HIV/AIDS/STD prevention in Kaw Thaung, a KAPB study among 231 fishermen, 263 traders, 24 drug abusers and 31 CSWs was conducted.

Abstract:
Results showed a substantial proportion of all study groups had some correct but incomplete knowledge on transmission and prevent of HIV/AIDS. A high proportion still practiced risky behaviors. 9–12% of males regularly used condoms outside their marriage. 74% of CSWs had STDs in the past. 45% of CSWs also gave a history of drug abuse. Among male respondents, 13% of fishermen, 10% of traders and 21% of drug users had homosexual experiences. The risk of getting HIV/AIDS and STD was high among all these study groups irrespective of their marital status.

Thein Hlaing, et. al., Demography, Knowledge–Attitudes–Behaviors and HIV Infection Among Intravenous Drug Users 1993

Sponsor/Affiliation: Department of Medical Research; National Health Laboratory; Drug Dependency Treatment and Research Unit, Yangon Psychiatric Hospital; WHO/SEARO

Status: Published

Type of Study: Quantitative KAPB study, record review, and serological survey

Content: Background, methods, findings, discussion, 13 references, and 26 tables, survey schedule for record review and KAPB survey.

Location of Study: Yangon, Yangon Division

Methodology:
Patient records from 1986 to 1990 were examined for socio–demographic information. A KAPB study of all eligible IDUs admitted to the treatment program was carried out (198 male IDUs) using face–to–face interviews. 178 IDUs (from the same population) were tested for HIV seropositivity. (Not sure if testing was voluntary)
Abstract:
According to the five year review most IDUs were under 25–years old (50–58%) with middle or high school education and were either students or unskilled workers. They came from middle–class backgrounds as most of their fathers were professional managers (20%–30%) or retired personnel (20%–34%).

In 1986 the main problem at the treatment center was opium and codeine but this shifted dramatically to heroine in 1988 to 1990. The number of once–a–day users increased from 45% in 1988 to 84% in 1990. The use of the IV drug route increased from 16% in 1986 to 79% in 1990. Most IDUs started using through experimentation (90%) and peer pressure.

Knowledge of HIV/AIDS was high; 99% of new and 100% of recurrent IDUs had heard of AIDS. Rates of correct responses about modes of transmission were all above 80%, with recurrent IDUs displaying better knowledge than new users. The respondents knew that the disease was incurable (89% of new and 86% of recurrent) and knew that IDUs were a high–risk group (86% of new and 94% of recurrent). However, misconceptions about the modes of transmission were evident.

Recurrent IDUs seem to have started shooting earlier at an earlier age than new addicts (38% <20–years old versus 29% <20–years old). Recurrent users shared needles less often (41% shoot alone) than new users (84% share) but new users cleaned their supplies more thoroughly (13% of new users boil their equipment versus 5% of recurrent). However, overall level of cleaning equipment was low. 55% of new users and 79% of recurrent users did not use condoms during sex.

60% of IDUs tested positive for HIV. Sero–prevalence trends increased with age, duration of drug use and the number of people with whom one shared needles. IDUs visiting professional drug injectors for first time use were 2.3 times as likely to become infected than those who did not. IDUs who had been in jail had a 2.6 higher risk of being infected than those who had not been imprisoned.

Win Kyaw et al., The Study on Sexual Behavior on Myanmar Males Who Seek Health Care from General Practitioners 1993.
(No information found)

1994

Sponsor/Affiliation: Asian Development Bank
Status: Published
Type of Study: Quantitative socio–economic study
Content: Background, findings, recommendations, case studies, 2 maps, 37 references, 28 tables, 6 graphs.
Location of Study: Kayoing Tong, Mong Phyat, and Tachileik; Shan State
Methodology: Field survey data was collected on 112 households (772 people). 40 of these households where homes of people living with AIDS. Data from households with AIDS patients (the target group) were compared with other households (the control group) in order to assess the impact of HIV/AIDS on household income and wealth. The study area was stratified by Township. For each Township 30% of households
with HIV–positive people was selected by simple random sampling. Only households that were willing to take part in the study were interviewed. The control group was also selected using simple random sampling.

Abstract:
A little more than one–half of the AIDS patients in the survey were female. There were many cases of inter–spouse infection and heterosexual contact was found to be the primary mode of transmission. Factors that influenced migration and risk behavior in Thailand was found to be relative poverty, a natural affinity and exposure to Thai culture, the demonstration effect of people returning from abroad with nice clothes and jewelry, the desire to escape the drudgery of village life, lack of education, and the lack of knowledge about the extent of the AIDS epidemic in Thailand or the risk of getting infected. The pull factor in Thailand is more important than the push factor in Myanmar in determining migration. The monthly household income in Northern Shan State is three times that of Eastern Shan State. Highland hill–tribe people often fill the gap in labor supply left by lowland Shan workers who migrate. Many people have multiple professions, some women who work at shops or as traders may also engage in casual sex work. A government employee may also do trading on the side. Women who return from doing sex work are often able to marry young men in their villages. There were a few cases of parents grooming their children for sex work in Thailand. The availability of workers in the family rather than the size of the household determined migration in households. The majority of parents in the study have low expectations of the long run benefits of schooling because of absenteeism of teachers and the low quality of schooling available.

The HIV/AIDS patients in the study were fairly evenly divided between households of poor, fair, and good economic status. 60% of the patients were illiterate as were 46% of people in the control group. Most of the HIV–positive sample were still working to save money for their families.

The predicted impact of HIV/AIDS is a fall in labor supply caused by increased mortality and falling fertility rates, which would reduce economic output. Agriculture would be affected more than other sectors by an increase in mortality brought about by HIV/AIDS. The main demographic impact of the AIDS epidemic is a drop in fertility in the area as fewer women of childbearing age decide to have children. The impact of HIV/AIDS on savings and consumption of the sample was impossible to calculate due to excessive variation in the income and savings data collected. Most families coped with the additional cost of the illness by selling assets and sometimes borrowing. Most patients did not consult health personnel or go to the hospital until they were seriously ill.

Khin Ye Myint et. al., Study of KAPB on HIV Infections and High–risk Behaviors of Medical Students and House Surgeons from Mandalay 1994*.
Sponsor/Affiliation: Yangon General Hospital
Status: Published
Type of Study: Quantitative KAPB
Content: Abstract only
Location of Study: Mandalay Division
Methodology: Copy of study not available, unknown.

Abstract:
There were class–related differences in KAPB scores. Students could correctly answer the differences between AIDS and HIV as their education advanced. No
difference was found regarding knowledge of AIDS counseling and use of condoms. 77% of students planned to be doctors, 23% did not. The main reason given for not wanting to be a doctor was to avoid treating AIDS patients (39%). 23% believed that AIDS should be prevented by isolating HIV–infected persons. The presence of risk behaviors was similar for the three classes. 27% were sexually active; 51% of these always used condoms for extramarital sex while 10% never used condoms.


**Sponsor/Affiliation:** United Nations Drug International Drug Control Program

**Status:** Published

**Type of Study:** Assessment Report

**Content:** Findings, recommendations, map, 2 tables, 1 graph.

**Location of Study:** Nation–wide

**Methodology:**

Overall situation of drug use and drug injecting with regard to HIV/AIDS was analyzed by reviewing secondary sources, sentinel information, official records and meeting with relevant actors.

**Abstract:**

The levels of HIV infection among IDUs in Myanmar are among the highest in the world. The highest rates of infection are in Myitkyina (91%) Mandalay (84%) and Yangon (74%) The lowest rates are in Shan State in Taungyi (38%) and Lashio (40%).

Risk behavior is very high in mining towns such as Mogok. In almost all of the DTCs visited during the study, addicts had been to, and injected in, mining towns. Among the addicts from the Phar Khant mining area who were treated at the Myitkyina DTC 72% had not heard of AIDS and 91% were HIV–positive.

There continues to be new recruits to intravenous drug use and considerable ignorance about HIV transmission. In Yangon DTC in 1992 most of the patients had started to inject drugs from 1990 onwards. In Myitkyina in 1990 45% of patients had been using drugs for one year and in a sample of addicts from Phar Khant 88% had started injecting since 1991. IDUs in Myanmar become HIV–positive soon after starting to inject. In a Yangon survey, 58% of HIV–positive patients had been injecting for 18 months or less. 47% of HIV–positive IDUs in Phar Khant had used drugs for six months or less. High risk of infection for new injectors occurs because of: (a) the high existing prevalence which means a high chance that shared injections are with a HIV–positive partner, (b) the large number of newly infected cases with high viral levels who are highly infectious; and (c) the high levels of syringe sharing.

Drugs are often injected with a variety of self–made equipment such as blow tubes that are often in poor condition and impossible to sterilize. In Mandalay in 1989 52% of IDUs used self made equipment. Markets in large towns sell syringes openly, however, most IDUs share syringes because it is illegal to own their own syringes, and difficult to hide them form family members. A survey of 174 IDUs in Mandalay in 1989, found that 84% always shared needles and only one person boiled equipment. Injecting shops (colloquially called say bea) are popular. They usually have one set of equipment and addicts pay to be injected.

It is difficult to estimate the size of the drug injecting population in Myanmar. Most IDUs are male. According to the 1992 registration figures 7.7% are between the ages of 15 to 19, 32% are 20 to 24 years old and 31% are 25 to 29 years old. They usually have above–average income and are mobile. Although they are less sexually active
than the general population they do have sexual contact with wives, casual sex workers and commercial sex workers. Condom use is virtually nonexistent among drug users. Among the addicts from Phar Khant 80% had not heard of condoms.

The drug treatment system is concentrated in urban areas located in Yangon (100 places), Mandalay (50 places), Myitkyina (50 places) Taunggyi (25 places) Lashio (10 places) and Kyaing tong (10 places). It has contact with about 1,700 patients per year. Patients are treated on an inpatient basis and detoxification is normally undertaken with tincture of opium syrup containing 1% morphine with a gradual reduction over two weeks. It is estimated that 85% of addicts relapse after detoxification. DTCs and rehabilitation centers are ineffective at preventing HIV transmission.

There are substantial numbers of narcotics offenders in prisons. 70% of 500 prisoners in Lashio and 60% of 300 prisoners in Kyaingtong were convicted under narcotic charges. Narcotics offenders have higher levels of morbidity than other prisoners do and prison medical staff play a major role in the treatment and care of sick drug users. There is no formal health education for prisoners. Prisoners are not allowed reading material so it is not possible to distribute leaflets, display posters or show videos.

The Narcotic Drugs and Psychotropic Substances Law of 1993 prohibits drug use, drug possession, and drug trafficking. It also provides penalties for anyone who aids or abets the abuse of narcotic drugs and prohibits the possession of needles and syringes except for medical use.

All points of contact with drug users (including prison system) need to be utilized as opportunities to provide information about HIV prevention. This HIV information should be passed on through peer education techniques. Early interventions should be developed in the community to discourage injecting and provide harm reduction advice to those already injecting. The dangers of drug injecting shops should be publicized and efforts should be made to influence their injecting practices by educating professional injectors in sterile techniques. Lifetime condom use among IDUs should be promoted. IDUs should have access to voluntary confidential testing. Satellite treatment centers and mobile teams should be established to provide outpatient care. Ex-addict support groups should also be formed. Outreach activities need to be stepped up for IDUs who do not come into contact with the medical and prison system.

**Thein Myint Thu et. al., (1) Sexual Risk Behaviors in Young Soldiers: HIV and VDRL Sero–prevalence 1994.**

- **Sponsor/Affiliation:** Number One Military Hospital, Pyin Oo Lwin; Department of Health
- **Status:** Unknown
- **Type of Study:** Descriptive quantitative study of behavior, serological survey.
- **Content:** Abstract: only
- **Location of Study:** Pyin Oo Lwin
- **Methodology:** 525 military trainees aged 18–35 were selected using systematic random sampling and surveyed using self–administered questionnaires. Unlinked voluntary anonymous blood sample testing was done on 284 soldiers.
Abstract:
73% of respondents were single, 24% were married. Although 37% had had sexual experience with CSWs only 3.4% said that they had always used condoms during their encounters. 13% had engaged in extramarital sex with females (.8% with males) 7.4% had had a homosexual relationship. 1.06% of the 284 soldiers tested were HIV–positive and the VDRL+ rate was 2.46%.

Thein Myint Thu et. al., (2) *Level of Awareness and Perceptions Pertaining to HIV/AIDS and Sexually Transmitted Diseases Among a Selected Military Community*. 1994

Sponsor/Affiliation: Number One Military Hospital, Pyin Oo Lwin; Department of Medical Research; Directorate of Medical Services, Ministry of Defense; Department of Health

Status: Unknown

Type of Study: Descriptive quantitative study of behavior

Content: Abstract only

Location of Study: Pyin Oo Lwin

Methodology:
396 soldiers were selected using systematic random sampling procedure and interviewed.

Abstract:
This study was an attempt to determine the level of awareness and perception in relation to HIV/AIDS and other STDs in a selected military community. 41% of the respondents were below the medium score on the level of HIV/AIDS perception. Education level was found to be the major determinant. Multiple logistic regression was attempted to calculate the odds–ratios of different predictor variables.

1995


(No information found)


(No information found)


(No information found)


Sponsor/Affiliation: UNDP

Status: Published

Type of Study: Socio–economic study

Content: Background, methods, findings, discussion, 145 references, 10 graphs, 7 maps and 21 tables.
Location of Study: Northern and Eastern Shan State
Methodology:
The study employed elements of Rapid Rural Appraisal methodology including key informant interviews, interviews with special interest groups, investment and market surveys, vehicle counts at selected points, village interviews, and migration censuses. Existing data was collected from health, customs, transport and administrative offices and cross–checked through surveys.

Abstract:
The study examines the range of political and economic conditions that have contributed to the spread of HIV in Myanmar. The conditions on which the study focuses include national and neighboring country economic policies, emerging patterns of trade and transport, changing political alliances, and internal and cross border migration.

Significant changes have occurred in the macro–economic policy of Myanmar, China and Thailand since the mid 1980s which have changed the competitiveness of Yunnanese manufactured products and currency exchange rate relations between the three countries. There appears to be a direct parallel relationship between exchange rates of the Thai–Myanmar currency during the early 1990s and the increase in the migration of Shan people to Thailand for employment. Political developments such as the collapse of the Burma Communist Party in 1989, subsequent accords and linked investments, and the expansion of narcotics production and trafficking have opened up have also been significant in facilitating the flow of people and goods across the region. Domestic policies such as the Normal Trade provisions, which led to the concentration of trading in the hands of a few Mandalay and Yangon traders and truckers are also important.

The movement of Shan State people to Thailand for employment is widespread and has accelerated since 1989. This movement is more prominent in areas close to the Thai border–town of Mae Sai but it is also common in small villages far from main transport routes. Between 40% to 60% of households in villages have members either currently in, or recently returned from Thailand. High migration rates are more likely in the more distant Shan lowland villages through to the China border. It is also a feature of Shan villages in the northern study region. Town–dwellers travel to Thailand more frequently but most long–term migrants come from rural villages. Migration tends to occur following the main harvest, when road conditions are most favorable. Migration to Thailand is concentrated among the Shan ethnic group and tends to involve unmarried youths. Migration does not however seem to be gender specific—very few females are literate or able to speak non–Shan languages whereas males frequently have basic education and fluency in Bamar.

There is no consistent pattern in the duration of migration to Thailand. However women tend to migrate for two to five years while men stay abroad for shorter periods of time. Males appear to be more mobile (both in Thailand and in the region) frequently returning home for short, one to three month stays, whereas women have fewer home visits and these tend to coincide with religious festival obligations. Women are also more likely to experience fewer migration episodes. Families with female migrants in Thailand derive greater economic benefits than those with unmarried men. Migration behavior is not directly related to socio–economic status contrary to local official opinion. Migration is not solely a function of circumstances forced by poverty. However, for some households migration may be the only escape for chronic indebtedness, or the only means to meet cultural or family financial obligations. Labor movement is organized by a variety of mechanisms, these include
word of mouth by return migrants. There is evidence of brokerages operating often on a village by village basis and of the pooling of labor for particular contracts such as construction in northern Thailand. At the village level, the geographic and occupational destinations of migrants to Thailand are frequently identical suggesting a high degree of linkage with external agencies.

Key changes in the transport sector with regard to HIV include: 1) road improvements by Chinese and Myanmar governments, 2) improved security in the region, 3) the tremendous growth of Hilux-type transport, 4) relative and absolute decline in passenger prices on major routes over the past two years, 5) reduced Taunggyi–Tachilek trip frequency and increased waiting times for truck operations, 6) establishment of transport loading and warehousing facilities in Taunggyi and Tachilek, 7) deregulation of trucking operations throughout Myanmar, 8) establishment of Thai and joint venture tourist operations linking Mae Sai with Kyaing Taung.

One of the most important features of the trucking industries is the high number of overnight stops on the Muse, Lashio, Mandalay route. Reasons for the stops include road conditions, frequent breakdowns of trucks, truck terminal handling facilities where the volume of trucks greatly exceeds handling capacity, particularly at Muse Customs point, and a desire of truckers to avoid places where official regulation or conscription of vehicles may occur. This makes mounting an effective AIDS awareness camping difficult since resources must be spread across a number of locations. Therefore expenditure to improve truck terminal facilities, or actions to reduce the predatory behavior of officials may reduce the points at which the virus is to be passed to the local population and may prove a more effective use of resources. The concentration of trucking activities in the hands of a few large companies provides a good opportunity for gaining support of trucking industry management for HIV/AIDS interventions.

The relationship between settlements and markets in the border area has changed as a result of the economic and political changes in the area. Kyaing Taung has declined as a trading and transshipment center. Conversely Tachilek has experienced phenomenal growth in trade and investment. The areas south of Mong Phyat have become increasingly integrated into the Thai economy. Similarly Mong la, Hsilu and Mong Yu have become increasingly integrated into the Yunnan economy. These second order towns have also developed closer economic relations with the major settlements. However there has been little change in the linkages between upland, non–Shan villages and lowland villages.


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[UMMT0]41
June 1998
396 soldiers were selected and interviewed using a structured questionnaire. Focus group discussions were also held.

Abstract:
The principle objective of the study was to underscore the significant factors related to behavioral intentions towards condom use among 396 soldiers in Pyin Oo Lwin. A larger proportion of soldiers intended to use condoms. The effect of knowledge attitudinal scores pertaining to condom use was assessed using logistic regression with SPSS. The implication for promoting condom use in the military community were discussed.

1996

Dawei Township, Thanintharyi Division AIDS/STD Team. Commercial Sex Workers and Condom Usage in Dawei Township 1996.
Sponsor/Affiliation: Department of Health
Status: Published
Type of Study: Quantitative survey of condom use
Content: Methods, findings, discussion, and 8 tables.
Location of Study: Dawei Township, Thanintharyi Division
Methodology: 81 CSWs who were visiting the local STD clinic were nonrandomly selected and interviewed by health staff.

Abstract:
Most CSWs were from neighboring Mon State; and had only primary–school (41%) or middle–school education (33%). 95% were separated or divorced. The majority was 20 to 29 years old and cited financial problems as the reason for entering into sex work. 21% were teenagers. Most (59%) had one to three clients per day from whom they earned about 5000 kyats per month (70%). The average price per service was 200 kyats of which the CSWs received 25 kyats plus whatever gifts their clients gave them. They usually stayed at the brothel for one to three months; they had to stay until they paid off their debt to the middlemen who recruited them. Condoms were available in brothels for high prices and at STD clinics and medicine shops. 88% used condoms during the study but only 41% used them consistently. 93% knew that condoms could prevent AIDS. As attendance at the STD clinic increased so did condom use.

Khin Ye Myint, et. al., Knowledge, Attitudes Practice and Behavior Among Attendants of HIV/AIDS Patients in Mandalay General Hospital 1996.
Sponsor/Affiliation: Institute of Medicine, Mandalay; Mandalay General Hospital
Status: Not known
Type of Study: Quantitative KAPB study
Content: Abstract only
Location of Study: Mandalay Division
Methodology: 144 attendants were interviewed with a questionnaire.

Abstract:
Most of the respondents (78%) knew the modes of transmission were by sex, improperly sterilized syringes and needles. 24% of the attendants had never heard of AIDS. In regard to diagnostic criteria 55% could identify weight loss, 31% could identify chronic diarrhea and 31% could identify a fever that lasts for more than a
month as signs of the disease. Only 36% of attendants knew that condoms and 46% knew that rubber gloves could prevent HIV transmission. TV/video (25%) and a third party (20%) were the most frequently mentioned sources of AIDS information. 73% said that AIDS was a disease with a stigma attached to it and that they would become outcasts (73%) or lose their jobs (72%) if they contracted the disease. 65% of attendants did not reject their patients and were willing to stay in the same room with them. 1.4% had used intra–venous drugs at one time. 26% had experienced extra–marital sex but only 3% had used condoms during sex. 65% of people had had their first sexual experience before the age of 25 and 20% before the age of 18.


**Sponsor/Affiliation:** AIDS Prevention and Control Program, Department of Health.
**Status:** Not known
**Type of Study:** Quantitative KAPB Study
**Content:** Abstract only
**Location of Study:** Yangon Division
**Methodology:** 703 medical students (328 women) were sampled randomly and surveyed using an anonymous, self–administered questionnaire.

**Abstract:**
The study demonstrated that there were groups of males who despite their substantial knowledge of HIV/AIDS were still engaging in high–risk behaviors such as CSW visitation, low condom use, alcohol drinking, same sex behavior, and having multiple partners. The females had very low perceived risk of getting HIV and their sexual and condom knowledge was very low. The study recommends more in–depth studies, sex and condom education, and anti–smoking/anti–drinking campaigns.


**Sponsor/Affiliation:** GP Section Myanmar Medical Association; GRGA Project
**Status:** Not known
**Type of Study:** Quantitative KAPB study, serological study
**Content:** Copy of study not available. Unknown
**Location of Study:** Yangon Division
**Methodology:** 120 taxi–drivers were selected using systematic random sampling and interviewed with a self–administered questionnaire.

**Abstract:**
The majority of taxi–drivers knew the modes of HIV transmission but their knowledge of the ways in which HIV was not transmitted was not as good. Most of the drivers did not know how to use condoms properly. None of the respondents were HIV–positive.


(No information found)

Sponsor/Affiliation: Myanmar Medical Association, Japan Grass Roots Assistance
Status: Published
Type of Study: Quantitative KAPB study, serological survey.
Content: Background, findings, discussion, 3 references, 9 tables, map, and photos.
Location of Study: Mandalay, Mandalay Division
Methodology:
Systematic random sampling of 300 CSWs (all female), using anonymous self–administered questionnaires. No details were provided on how systematic random sampling was carried out or the response rates on the self–administered questionnaires.

Abstract:
Most CSWs were older than 30 years old (56%). However the biggest block was between the ages of 20 to 29 (38%) Most had received only primary–school education (44%). Knowledge of HIV/AIDS was high—95% knew that AIDS was caused by a virus; and 86% knew that it was not curable. Knowledge of the mode of transmission was also very high with more than 89% or more of respondents were able to identify at least one mode of transmission. The women also knew the methods of preventing the spread of the virus, correctly citing not injecting drugs (89%) and using a condom during sex (90%). 88% knew that having a STD put them at greater risk for HIV infection. 1.5% of women tested HIV–positive, 17.5% VDRL+.

Sponsor/Affiliation: World Vision Myanmar
Status: Published
Type of Study: Quantitative KAPB study
Content: Background, methods, findings, discussion 3 graphs, and 20 tables.
Location of Study: Myeik Township, Tanintharyi Division
Methodology:
100 fishermen, 100 trishaw men, 100 taxi drivers, 48 CSWs and 43 MSM (391 total, 48 women) were selected using systematic random sampling. A self–administered questionnaire was used. There is no detailed discussion of sampling procedure or response rates.

Abstract:
54% of CSWs were married; 31% were separated and 31% were illiterate. 23% of MSM were married to other men. 7% of taxi–drivers and 5% of MSM were university graduates. 78% of fishermen had migrated to Meik.

All respondents were aware of AIDS; 77% knew it was incurable but over 20% thought that it could be cured, either western medicine, traditional medicine or supernatural forces. Knowledge about HIV/AIDS transmission was spotty. 38% of fishermen, 32% of trishaw drivers, 79% of taxi drivers, 52% of CSWs and 37% of MSM knew all four modes of transmission listed in the survey.
25% had engaged in pre–martial sex. 14% had experienced extra–marital sex. According to CSWs 38% of men who had sex with them were drunk at the time. The most common complaints about condoms were that they tore during use (40%); a loss of sensation during use (21%); and rejection by partner (16%). Only 35% of CSWs always used condoms; 50% used them occasionally. 29% of trishaw–men, 50% of fishermen and 81% of MSM had never used condoms. Consistent condom use was the highest among taxi–drivers. 65% of the sample said that condoms were only for promiscuous people. Rates of STDs were high —40% of CSWs, 24% of trishshaw drivers, 23% of fishermen, and 12% of MSM had STDs. Most respondents received their health care from GPs. 68% usually received injections and 20% got IV infusions. Only 21% of these patients always used disposable needles and syringes.

Acceptance of PLWHA was low. 75% said that PLWHA should be separated from the community and imprisoned. Of the 183 people who had known someone with AIDS 64% had not given emotional or physical support to them.


Sponsor/ Affiliation: Department of Psychology, University of Yangon
Status: Published
Type of Study: Qualitative study with quantitative KAPB survey;
Content: Background, methods, findings, discussion, and 24 tables.
Geographical information on Kaw Thaung and Tachilek.

Location of Study: Kaw Thaung, Thanintharyi Division and Tachilek, Shan State

Methodology:
294 migrant workers, 80 transportation workers and 303 members of the general population (total 877 people) were selected. The members of the general urban population acted as the control group. 877 people were interviewed directly using a prepared schedule and interviews. Focus group discussions were held in main town halls. There is no detailed discussion of how respondents were selected.

Abstract:
All three groups were quite knowledgeable about causes and dangers of HIV infection but awareness of condoms, use of condoms and knowledge of the modes of transmission were low. Migrant workers from Kaw Thaung had the lowest levels of HIV/AIDS knowledge. 80% knew of the sexual mode of HIV transmission but only 25% knew the virus could be transmitted through blood transfusions and 26% knew that it could be transmitted through the sharing of needles. 70% thought that the virus could be transmitted through mosquito bites. High–risk groups mentioned most frequently by respondents were people who had many different sexual relationships (89%), CSWs (85%) and IDUs (53%). The migrant workers and transport workers tended to underestimate the risk level of groups. 33% of respondents either did not know or thought that HIV could not be transmitted by someone who showed no overt symptoms of AIDS.

Transport workers were found to engage in high–risk sexual activity more than members of the control group. 8% of all respondents said they had had an STD. 61% said that they used disposable needles at clinics. 57% of men had never used a condom. Usage was slightly higher in the control group than the transport and migrant workers. 17% of respondents had never seen a condom. 74% of the men who had used condoms said that they did not like doing so. Half of the respondents said that they had no chance of contracting HIV yet 79% said that they would like to be tested. Men were much more afraid of contracting STDs from CSWs than their other
sexual contacts. 68% used condoms with CSWs, 40% with causal pickups and 23% with their lovers. Out of the 42% of men who answered these questions, most said that condoms were inexpensive (83%); easy to use (74%); and easily available (77%). However, 55% of men did not believe that “full pleasure could be obtained” with a condom and 30% did not believe that and erection was possible while using a condom. 12% of men said they had used condoms with CSWs at the CSWs suggestion, and 15% used it at their friends’ suggestion.

19% of men had their first sexual encounter with a CSW. Migrant and transport workers tended to have their first sexual encounter at a younger age and tended to have a larger number of sexual partners than the control group. Of the half of respondents who answered questions regarding extramarital sex, 21% admitted having extramarital sex. Transport and migrant workers had more frequent interaction with CSWs than the control group. Men said that they went to CSWs because of peer pressure, because they wanted experience, and because of boredom with or the inadequacy of sex with their regular partner. According to men in focus group discussions, most female migrant workers in Thailand become CSWs. They also said that the people in hilly region cared more about making money than the risk of becoming HIV–infected. The men also said that migrant workers drink a lot and frequently visit CSWs.

Most groups knew the government anti–AIDS slogans, however knowledge in the control groups was higher. Transport workers may not be settled enough to receive AIDS prevention messages given through traditional channels. Newspapers were main source of information for the control group but migrant and transport workers received more information from posters. Only 53% of respondents received information from TV and radio. Half of the men said that they had discussed AIDS with a friend. In focus group discussions men said that AIDS education should be given to youth in rural and hilly areas.


Sponsor/Affiliation: World Vision
Status: Published
Type of Study: Paper evaluating an ongoing project
Content: Discussion
Location of Study: Kaw Thaung Township, Thanintharyi Division
Methodology: Review of project methodology and impact.

Abstract:
Ranong, in Southern Thailand had 120,000 Thai and 150,000 Burmese migrant workers and economic refugees. The major occupations of these migrants consist of fishing and low–paid employment in fishing–related industries. The vast majority of migrants live in extremely difficult circumstances with poor primary health care facilities, e.g., 45% have no access to pipe water and less than 60% have sanitary latrines. Migrants usually do not think the government health services are available to them. The large influx of male migrant workers has created demand for the commercial sex industry. Drug alcohol and other substance abuse are also common.

World Vision’s response had been based on the realization that community mobilization and participation is a key factor in the design and implementation of any HIV/AIDS intervention. According to World Vision the assumption that risk
behavior is based on lack of knowledge must be questioned; programs must go beyond merely providing information and supplies, to focusing on facilitating a response to HIV by individuals, communities and local NGOs. World Vision’s goal has been to implement programs that seek to work with communities to define and develop an enabling environment in which behavioral change can occur and be sustained. The key strategies that have guided interventions are Participatory Learning and Action (PLA) and Participatory Action Research (PRA).

Findings from PLA and PRA exercises are reported back to the community, which enables them to understand the complexity of their situation and develop their own responses. Interventions have included (1) promoting a healthy physical and psychological environment through the provision of primary health care, basic clinical facilities and cultural, community and sporting activities, (2) creating an education program for the community’s children, (3) starting savings schemes for fishermen so that they have a place to keep their money rather than spending it on high-risk activities, (4) extending such saving schemes to the community at large so that women would not have to turn to other partners for money while their husbands were at sea, (5) forming a community steering committee for project activities, (6) recruiting groups of people who have day-to-day access to CSWs such as hairdressers and taxi-drivers encouraging them to do outreach work, and (7) producing a video on the danger of drug use for the estimated 30% to 40% of fishermen who were intravenous drug users. The project has had a significant impact: VDRL status of pregnant women have declined from 11% in 1994 to 4% in 1997. The number of men who said they visited CSWs has been halved and knowledge of ways to prevent HIV infection has increased by more than 10%.


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<tr>
<th>Sponsor/ Affiliation:</th>
<th>UNDP, UNOPS, and ENVIPRO</th>
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<tr>
<td>Status:</td>
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<tr>
<td>Type of Study:</td>
<td>Quantitative KAPB study</td>
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<tr>
<td>Content:</td>
<td>Background, methods, findings, discussion, 24 graphs, and 53 tables.</td>
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<td>Location of Study:</td>
<td>Bogalay, Labutta, and Mawlamyinegyun Townships, Ayerawaddy Division; Chaung U, Townships, Saigaing Division; Kyaukpadaung Township, Mandalay Division; Magway Township, Magway Division; Pindaya, Kalaw, Nyaung Shwe, Pinlong and Ywangan Townships, Shan State.</td>
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Methodology:
6,620 households (33% urban) were selected using two-stage stratified random sampling. In stage one of sampling eight villages and four wards were chosen by probability proportional to size in each Township. From those selected villages and wards 50 households were again selected using circular systematic sampling. Dual interviews were held in each household, one with the husband the other with the wife. Only currently married couples were interviewed.

Abstract:
The educational level of the respondents was low. The majority—nearly 60% had only primary—school or monastic education. However, only 2% of the male and 13% of the female respondents were illiterate. 21% of men and 44% of women got married before the age of 20. 4% of the females and 23% of the males had worked in away from home without their families. The main reason for this migration was “to obtain better income.”
69% of the male and 56% of female respondents had heard of HIV. Nearly 82% of men and 69% of women had heard of AIDS. The awareness of AIDS was highest in the Dry Zone and lowest in the Shan State. Awareness of AIDS mainly came through friends and television. Other sources included radio and wall posters/billboards. Newspapers, magazines, health centers, health talks, pamphlets and handbooks were not major sources of AIDS information. CSWs were the most frequently cited high-risk group (79%). Of those who knew that AIDS was infectious 90% knew that it couldn’t be cured, and 80% knew that it was preventable. There were misconceptions about disease transmission. Nearly 50% of respondents thought that they could contract HIV if they ate with or shared utensils with an infected person. Attitudes towards HIV-positive people were negative. 57% of respondents did not want to look after AIDS patients and 57% said that they would avoid speaking to an HIV-positive person. 53% agreed with the suggestion that HIV-positive people should be placed outside villages to avoid spreading AIDS. Health facilities were often seen as places where HIV could be contracted.

Only 53% of men and 31% of women knew what condoms were. There was a large urban–rural split in level of condom knowledge with only 44% of men and 26% of women in rural areas knowing of condoms, compared to 70% of men and 41% of women in urban areas. Knowledge was lowest Kalaw Township where only 20% of men and 7% of women had never heard of condoms. Only 9% of female and 3% of males surveyed strongly agreed with the statement that the use of condoms could prevent HIV infection.

Two percent of women and 18% of men had had pre-marital sexual experiences. On average, urban males had their first sexual experience a year before marriage. Rural males had their first experiences seven to eight months before marriage on average. The survey found that less than 1% of men had engaged in extra-marital sexual activities during the last three months. In 43% of such occasions condoms were used.

TV was the most popular form of mass media among both rural and urban respondents. Radio was the second most popular form of mass media; 33% of the respondents had listened to the radio during the last month. In urban areas 60% of male respondents go to teashops regularly, more than those who listen to the radio or read newspapers regularly. Among female respondents, about 26% in both urban and rural areas had ever been to health centers. The study found that past IEC campaigns have raised fears of the epidemic without really educating people and suggests that new campaigns must focus on erasing misconceptions and encouraging care and counseling activities.

Women are not generally threatened by HIV/AIDS because they feel that they conform to social norms and customs by living a “simple life” and staying faithful to their husbands. Female respondents also have enormous trust in their husbands.

There were few homosexuals or intravenous drug users encountered in the study; therefore heterosexual transmission is the most likely source of HIV transmission in these areas.


Sponsor/Affiliation: Myanmar Medical Association, Japan’s Grass Roots Grant Assistance
Status: Published  
Type of Study: Quantitative KAPB study; serology study  
Content: Background, methods, findings, discussion, 5 references, and 12 tables.  
Location of Study: Mandalay Division  
Methodology: 
130 male taxi drivers selected using systematic random sampling, answered anonymous, self-administered questionnaires. There is no detailed discussion of sampling procedure or response rates. HIV tests were conducted with consent.  

Abstract:  
Most taxi-drivers were 20 to 35 years old and many (44%) had high school or university education. More than half were married (62%). AIDS awareness was high. 98% know that the HIV virus causes AIDS and 89% know that the disease is not curable. Drivers could correctly select the correct modes of transmission (over 95%) but a significant minority thought that the disease could be spread through insect bites (36%) sharing utensils (29%) and sharing shelter with an infected person (25%). 36% thought that AIDS could be prevented by an existing vaccine. 66% of respondents did not know that a person with STDs had a higher chance of contracting HIV.  

Attitudes toward PLWHA were quite negative, 64% of people said that they would not or did not know if they would help an HIV-infected person.  

97% knew condoms could prevent HIV infection and 99% said that people should use condoms during extramarital sex. However only 25% used condoms regularly when visiting CSWs. 31% did not use condoms at all. 24% of the drivers tested positive for VDRL but none were HIV-positive.  

Sponsor/ Affiliation: Institute of Economics  
Status: Published  
Type of Study: Quantitative Socio-economic and KAPB study  
Content: Background (extensive), methods, findings, discussion, 2 graphs, 60 tables, 10 case studies of PLWHA, survey instruments.  
Location of Study: Kaw Thaung Township, Tanintharyi Division; Kayoing Ton, Mong Phay and Tachileik Townships in Shan State  
Methodology:  
490 migrant workers, 406 transport workers, 360 members of the general public, and 45 HIV/AIDS morbidity/mortality cases (1301 total, 310 women) were selected using simple random sampling from Township records. They were interviewed face to face using pre-tested structured questionnaires.  

Abstract:  
The majority of workers had middle school education but there were more illiterate workers in Eastern Shan State than in Kaw Thaung. Among the migrant workers 23% were ushers, waitresses or hostesses at bars and restaurants (18% in Eastern Shan State and 25% in Kaw Thaung). Most ushers (70% to 80%) are believed to be CSWs. Most ushers also had middle school education contrary to the belief that most CSWs are illiterate The majority of transport workers were married but in Eastern Shan State the majority of migrant workers were single while in Kaw Thaung the
majority were married. Migrant workers tended to be younger than transport workers (42% were between the ages of 20 to 29, 11% were under 20). Monthly household income for all groups in Eastern Shan State was higher than in Kaw Thaung.

Intra–regional migration was stronger than inter–regional migration. Most migrants in Tanintharyi Division came from Tanintharyi (42%) or Yangon Division (30%). In Shan State most migrants were from Shan State (30%) and Mandalay Division (24%); there are also large minorities from Yangon (11%) and Tanintharyi (11%). There is a southward flow of migration from Yangon and Mon to Kaw Thaung and an eastward flow from Mandalay to Tachileik. Economic reasons turned out to be stronger than noneconomic reasons for migration to these border areas. The majority of migrants said they migrated either to earn more money, save money, or get a job (76%) However, a significant minority also said that friends (19%) and family (28%) influenced their decision to move

The majority of workers had an incomplete knowledge of HIV transmission and prevention. There was a direct relationship between the level of education and the degree of knowledge of HIV transmission. There was no significant difference between the HIV/AIDS knowledge of transport workers and that of migrant workers. However all workers in Kaw Thaung seemed to be more knowledgeable than their counterparts in Eastern Shan State. The main sources of knowledge about HIV/AIDS came from billboards and health personnel. Billboards were especially important for transport workers (75% received information from this source). 41% of respondents said that they received information from fellow workers. A significant amount the workers form general public received their HIV/AIDS information from TV (48%).

20% of transport workers, 13% of migrant workers and 20% of workers form the general public had engaged in premarital sex. 29% of transport workers, 16% of migrant workers and 16% of workers form the general public had engaged in extramarital sex. The majority of these transport workers and general workers who had had premarital or extramarital sex had done so with CSWs (76% and 73% respectively). There was a high level of knowledge about condoms among those who had extramarital and premarital sex: 96% of transport workers, 94% of migrant workers and 83% of general workers had seen a condom. 54% of transport workers, 47% of migrant workers, and 72% general workers always used a condom during these encounters. Single men used condoms more regularly than did married men.

Of the 45 AIDS morbidity/mortality cases 27 were married, 43 were infected through sex and two were infected perinatally. 32 were migrant workers and seven were transport workers. In Kaw Thaung all were Bamar ethnicity, in Shan State all except for one was Shan. The total average cost (direct and indirect) of AIDS to households in Kaw Thaung was 119,304 Kyats or seven times a household’s average monthly income. In Eastern Shan State it was 460,164 Kyats or 17 times a households average monthly income. In both areas the cost of illness was borne mainly by household savings although there was evidence of community contribution and the selling of assets.


- **Sponsor/Affiliation:** Population Services International
- **Status:** Internal report
- **Type of Study:** Quantitative market survey
- **Content:** Findings, discussion.
- **Location of Study:** Mandalay Township, Mandalay Division
Methodology:
50 people (all male) who were in the process of buying condoms were randomly selected and interviewed.

Abstract:
The mean age of men in the group was 30 years old. More than 30% of respondents were single and they had on average 1.85 children. Most of the respondents were traders. The strength and durability of a condom was cited as the most important factor in the quality of a condom. Men often bought condoms based upon the recommendations of others. Most (60%) said that they were using condoms to prevent pregnancy; the rest said that they were using condoms for prevention of HIV/STD transmission (30% and 12% respectively). Nearly 40% of the respondents reported that the condoms they bought were for use with partners other than their spouse. Few consumers actually read the “how to use condoms” instruction and educational messages in the condom packages, although they all indicated that these materials should be included in the packaging. This suggests that instructions should be written in simpler and shorter form. Purchasing condoms is almost exclusively done by males.

Tin Aung, Dr., and Gregory Widmyer Condom Social Marketing Pilot Project Phase One Townships Formative Research Report 1997.

Sponsor/ Affiliation: Population Services International, UNICEF
Status: Published
Type of Study: Quantitative KAPB study and Qualitative Consumer Survey and Market Situation Analysis
Content: Background, methods, findings, discussion, recommendations, KAPB survey schedule, 83 tables, and 26 graphs.
Location of Study: KAPB survey and FGD: Monywa, Saigaing Division; Mandalay, Meiktila; Mandalay Division and Taungyi, Shan State
Market situation analysis: Monywa, Mandalay, Taungyi,

Methodology:
There was a quantitative KAPB survey of 63 transport workers, 42 female workers, 108 young men, 34 CSWs using pre–tested structured questionnaire and cluster sampling. Focus group discussions were held with transport workers, young males, young females, transient workers, condom vendors, hotel managers/staff, and IDUs. A market situation analysis was carried out through structured observation, interviews with key informants and market surveys.

Abstract:
Most of the KAPB survey respondents demonstrated high levels of AIDS awareness (average of 97% for all groups) but the quality of their knowledge was low. For example, 60% thought that they could protect themselves from getting AIDS by avoiding public toilets; 54% by not touching AIDS patients and 58% by avoiding mosquito bites. Many respondents cited monogamy (86%) and use of clean needles (81%) as preventative measures but fewer cited condom use (61%). 53% did not know or did not think that condoms could prevent HIV/AIDS, which suggests that condom use is not being effectively promoted as a HIV/AIDS prevention tool.

Condom knowledge was very low, especially among women — 79% of female workers had never heard of condoms. Furthermore, 25% of men could not identify a condom when shown one. There were large emotional and knowledge barriers to condom use. 74% of respondents said that they would be too shy to purchase
condoms where others might see them. Lack of knowledge of where to buy condoms was cited as the largest barrier to use. The most commonly cited problems with condom use were difficulty putting them on and breakage. Condoms were strongly associated with commercial sex; 80% of men agreed with the statement “I don’t go to prostitutes so I don’t need to use condoms.” Focus group discussions revealed that condoms were seen as a “sex–toy” rather than a reproductive health device. As a result many vendors and GPs were reluctant to stock condoms and condoms were often sold with sexual aids In general, condom use was low and inconsistent. Only 22% of males had ever used condoms. Condom use was higher among those who discussed sexual matters openly and it increased with educational level. Men who visited CSWs did not see the need to use condoms with their wives. Condoms were purchased based on country of origin and price, with higher priced condoms associated with higher quality. These findings point to the need for more condom promotion including detailed condom demonstrations.

Sexual activity among those sampled was low but a significant proportion of it was high–risk. 33% of men said that their most recent sexual encounter was with a CSW. Truck drivers were the most sexually active and had significant contact with CSWs, sometimes taking them along on their journeys. According to focus group members sexual relations in mining towns were very free and most miners had spouses back home. Focus group participants also said that young men often visit brothels in a group as a coming of age ritual. IDUs were not very sexually active. Young women did not engage in extramarital sex and believed that their spouses were faithful. They had very little knowledge of human sexuality.

There is a high level of fear of HIV/AIDS and a desire to isolate AIDS patients. Female workers were the most conservative in this regard with 73% disagreeing with confidentiality for HIV–positive people and 59% saying that PLWHA should not be able to stay on at their jobs. Overall people thought that they were at low–risk of contracting the virus (71% of all respondents and 24% of CSWs said that they had no chance of becoming infected).

Mass media had made little penetration into the groups surveyed. There was high dependence on friends for health education. Peer education is, therefore, probably the best way to communicate HIV/AIDS education messages. Video parlors were very popular, especially among young men and CSWs.

The study suggests that there must be further research on the knowledge, attitudes and behaviors of women using less direct methodologies such as blind interviews and anonymous surveys.

Tin Hla Kyi, Tin Min, and Min Nwe Ni. *Socio–economic Impact of AIDS on Households of AIDS Patients at the Infectious Disease Hospital, Yangon 1997.*

**Sponsor/Affiliation:** Institute of Economics, Yangon; Department of Health; Unpublished

**Type of Study:** Quantitative, Socio–economic study

**Content:** Background, methods, findings, discussion, 12 references, 39 tables,

**Location of Study:** Yangon Division

**Methodology:** 64 AIDS patients (7 women) were selected using purposive sampling and interviewed using a structured questionnaire.
Abstract:
The majority of the patients were 26 to 40 years old and had middle school or higher education. 31% were married. 55% were IDUs and 34% had been infected sexually (including all of the women who had been infected by their husbands). About half of the married men were IDUs. The largest group of patients came from low–risk occupations: 25% were sales people and 19% were government employees. The patients did not have, on average, low income. Their illness caused their household’s monthly income to decrease by half while increasing monthly expenditure 1.35 times. The dependency ratio in the households also increased twofold. The average direct cost of AIDS (including medical care abroad) was 69,306 Kyats and was 3.87 times a household’s current monthly income. Cost of medical care contributed the highest proportion of direct cost. The cost medical care at the Infectious Diseases Hospital was only half of that incurred at private clinics.

The average duration of illness was 7.56 months. The direct cost of illness was borne mainly by the patient’s brothers/ sisters and relatives and was met by selling household assets and spending household savings. Indirect cost of illness (loss of income) per month was 19,964 Kyats. 2.17 times the direct cost of illness and 1.11 times the household’s monthly income. The total average household cost was 29,131 Kyats per month, or 1.63 times the household’s monthly income. The AIDS patients’ families usually take care of them but families are reluctant to tell others of the illness. The children of AIDS patients were also looked after by relatives.

Wrigley, Dr. Owen. The Taungbyon Festival: An Ethnographic and Behavioral Snapshot August 16–18, 1997.
Sponsor/Affiliation: World Vision Myanmar
Status: Internal Document
Type of Study: Ethnographic Field Report
Content: Historical and mythological background, field observations, notes and comments
Location of Study: Taungbyong, Mandalay Division
Methodology: Field observations, secondary source review, informal interviews.

Abstract:
As many as 100,000 people per day converge on the village of Taungbyon every year during the eight days prior to the last full moon of August. The festival honors two nats Sweuwingyi and Shwepynnge who were mythical royal brothers fond of drink and womanizing. The festival appeals to MSM and wealthier Burmese families.

Primarily two kinds of MSM behavior are on display at the festival: daytime cross–dressing for the religious rituals and nighttime behavior which is dominated by transvestites and groups of roaming drunken boys and men. At night trolling for sexual liaisons is open and rampant with sexual interactions taking place in makeshift dwellings. These liaisons usually involve multiple partners with groups of boys taking turns with one CSW. Sexual hygiene was poor or nonexistent and condoms are nowhere to be seen. There is some anecdotal evidence of boys as young as 11 and 12 soliciting sexual favors. The Mandalay Health Department tested for HIV four years in a row and found rapid increases in the sero–positivity among MSM. This testing was banned in 1997.

The wild behavior of festival attendees is not threatening but has an appropriate place in the moral and spiritual map of the people who attend. It is important to understand how this behavior fits into nat cosmological belief system before
designing interventions. As protection of the festival is significant moral responsibility for local officials all future research and serological surveys must emphasize discretion and behind the scenes communication. A specially designed social marketing program allowing small vendors to sell condoms in the bazaar area and a program of health education on STD control targeted to young men would be useful if carried out in a culturally acceptable manner.

1998

**Department of Psychology, Yangon University.** Qualitative KAPB Study in Kyaing Tong with Oral Histories and Focus Group Discussions and a Quantitative survey. (in progress)


- **Sponsor/Affiliation:** Medicines du Monde and UNICEF
- **Status:** Internal Document
- **Type of Study:** Field Report
- **Content:** Brief discussion on constraints and opportunities working with CSWs, quotes from CSWs, background information on sex industry and condom supply. No figures.
- **Location of Study:** Myitkyina, Kachin State
- **Methodology:** Held informal, unstructured interviews with CSWs working at guest–houses. Field observations.

**Abstract:**
Most CSWs are 20 to 25 years old; minors are rare. Most are from other parts of Myanmar especially Shan State and Mandalay Division. They migrate from city to city—especially Hpa Kant in Kachin State, and Mogok and Mandalay in Mandalay Division. CSWs usually come from very poor, large families with a history of divorce or separation. Most do not have sex until they marry (usually age 20). The married women had all divorced after two to three years of marriage. Most said that they had been recruited into prostitution by friends and acquaintances without knowing what kind of work they were getting into.

STD and HIV/AIDS knowledge among women was poor. Most knew about STDs but were unaware of how vulnerable they were to them. They did not know how to use condoms properly. The women were eager for information and asked for advice on negotiating safe sex after receiving health education. However HIV programmers must be aware that the possession of peer education material and large amounts of condoms can be taken by authorities as proof of prostitution. Therefore all condom distribution must be done piece–meal on a daily or weekly basis. Brothel owners often have monopoly on condom selling in areas around brothels which increases the cost of condoms and discourages their use.


- **Sponsor/Affiliation:** Myanmar Maternal and Child Welfare Association; UNICEF
- **Status:** Internal Document
- **Type of Study:** Qualitative project evaluation
- **Content:** Background, findings, 9 tables, quotes
Location of Study: Myitkyina, Kachin State; Lashio, Shan State; Dawei, Tanintharyi Division, Mandalay, Mandalay Division; Bago, Bago Division; Paan, Hinthada, Pakokku, Hmawbi, Yangon Division.

Methodology:
Eight project Townships and one control Township were selected. Focus group discussions and in–depth interviews were held in urban and rural areas with women who had undergone UNICEF life–skills training and those who had not. Women were selected using non–probability quota sampling. Altogether 312 married women participated in the study.

Abstract:
The findings suggest that the training was effective. Knowledge of HIV/AIDS increased and changes in attitudes and behaviors were found consistently as were changes in attitudes toward PLWHA. Knowledge of birth–spacing and reproductive health had been applied to real–life situations in the community. The multiplier effect of training was greater in urban areas than rural areas.

Although participant knowledge of STDs improved, misconceptions about its clinical features and transmission remained. Some trained respondents confused STDs with leprosy–like skin diseases, while others believed it could be transmitted through touching, sharing clothes and seats with infected persons. Sexual decision–making remains dominated by husbands, therefore wives rarely discuss sexual matters with their spouses.

The women believed that it was common for men to have extramarital affairs and sex with CSWs. However they had unquestionable faith in their husbands and saw no reason to discuss STD prevention with them. Condom use was almost nonexistent in these marriages as result. Most women saw condom use as a sign of infidelity and condoms were the least preferred form of contraception because of their relatively high cost. Some women felt that the availability of condoms, contraceptives, and antibiotics encouraged men to visit CSWs. All respondents from Myitkyina, Lashio, and Dawei had seen someone with AIDS. However, some women from remote areas thought of AIDS as a kind of imaginary disease since they had never come into contact with it. Most respondents, trained and nontrained said people should treat HIV–infected people with compassion. The women said that world of mouth communication was the most common and effective means of passing along health messages.
Abstract:
The trained participants had internalized the life–skills concepts and were applying them to day-to-day life. Trained youths were able to follow correct steps towards good decision making and problem solving. Overall knowledge of STDs, its features, transmission and prevention was very high among the trained youths. Similarly knowledge of HIV infection was very high in the trained groups and satisfactory in other groups. Attitudes towards HIV/AIDS infected people were very positive and constructive among the majority of respondents and there was strong evidence that attitudes improved with training. A substantial multiplier effect was achieved through training with trained youths passing on information to their friends.

A sizable portion of male respondents admitted that pre-marital sex was common among youths and that more than half of these encounters were with CSWs. It was not considered proper to have premarital sex, but it was generally accepted among the youths as an act of maturity. Most girls did not accept premarital sex although some consented to it because they wanted to prove their love for their boyfriends, because they had weaker negotiation skills, or because they had blind faith in their boyfriends.

Confusion and misconceptions about STDs remained with youth even after training. The most troubling misconception was that using antibiotics directly before or after sex could prevent STDs. Only a few of the respondents admitted to ever having used condoms. Although all respondents were aware that condoms prevent infection and unwanted pregnancies they were reluctant to talk about them. STDs are called pha kyo (wounded or broken down by a prostitute), lu pyo nar (single male’s disease) kar lu thar (adolescent male’s disease). Respondents said that boys talked about sex with their friends. Girls also talked about sex, but usually with older female relatives.

Sponsor/Affiliation: UNICEF
Status: Published
Type of Study: Project assessment using qualitative and quantitative methods.
Content: Background, methods, findings, discussion,
Location of Study: Monywa Township, Saigiang Division; Magway Township, Magway Division, Taunggyi Township of Shan State, South Okkalapa and Insein Township, Yangon Division, Mawlamyine Township, Mon State; Bago Township, Bago Division.

Methodology:
Lists of all health clinics providing STD care were obtained and eligible clinics were selected for observation of their practices. An anonymous, self-administered questionnaire regarding risk behavior was given to STD patients and interviews were held with health care providers. 79 eligible providers were sampled. A total of 219 observations (157 male and 62 female patients) were carried out. (Selection of patients and health care providers was not random.)
The researchers developed indicators for overall care based upon the number of patients presenting with specific STDs to health care facilities who are assessed and treated in an appropriate way according national standards. This figure was then divided by the number of patients presenting with specific STDs in health care facilities. A control indicator was also calculated which was equal to the number of patients seeking STD having care in health care facilities who received appropriate advice on condom use and on partner notification divided by the number of patients seeking STD care in health facilities.

Most care and control indicators were over 70% with the exception of the treatment indicator, which was very low due to the number of providers who did not practice syndromic management. However the treatment given was adequate to cure the disease in 73% of the cases. The study found that women who have vaginal symptoms will seek care from a male doctor but that only 69% of women received adequate physical examination. The provision of condom advice and advice on partner notification needed improvement. Partner advice was especially lacking for married men, of whom only 57% received advice that their wives required treatment. Ninety percent of these men received condom advice. Condoms were given or sold to 29% of observed patients and a mean of six condoms were distributed to them. HIV/AIDS was discussed on 86% of observed patient encounters.

Five patients were under the age of 18 (one man and four women). 90% of the men who presented STD symptoms said that they had bought sex. The most common occupations among patients were merchants and drivers for men, and sex workers and housewives for women. There were seasonal variations in the number of patients visiting STD clinics with more patients visiting around festival times. Only 14% of all the respondents used a condom on their last sexual encounter although one-third of Monywa respondents did. Half of the respondents had only one sexual partner in the last month, one-quarter had two, and one in five had more than two partners. According to doctors patients wanted the fastest, effective drug and cost is a major factor in choosing treatment. Almost 90% of patients received treatment during the clinical encounter. Patients sometimes requested spectinomycin or kanamycin from GPs, because they perceive it as strong. GPs also get extra income from prescribing more drugs especially injections. Condom supply was not a problem.


Sponsor/Affiliation: CARE Myanmar, UNICEF, AusAID, Myanmar Medical Association

Status: Published

Type of Study: Qualitative Study and Quantitative KAPB survey

Content: Background, methods, findings, discussion

Location of Study: Yangon Division and Mandalay Division

Methodology: The study team conducted contextual mapping and structured observation exercises in Mandalay and Yangon during which geographic and social data were collected. The team decided to segment urban men into the following categories: migrant workers (external), migrant workers (internal), students, homosexuals, armed forces, high–class men, middle–income men, low–income men. Key informant interviews with men from these groups were held using a semi–structured interview schedule. During the interviews, interviewers identified themes and nuances in HIV/AIDS related language which was used to design a quantitative KAPB questionnaire. Participants from the sub–groups were identified through stratified, purposive
sampling. Focus group discussions were also held with men from various groups and with intravenous drug users.

Abstract:
AIDS awareness was high among participants. All focus group participants knew about the disease and most knew that it is spread through sex and activity leading to possible blood to blood contact. However, low–risk activities such as tattooing were often given just as much weight in discussions and in the survey as high–risk activities such as reusing needles. Many misconceptions about HIV transmission still exist.

Men said that they were afraid of AIDS. They were especially concerned with the impact that it would have on the family. AIDS was considered an immoral disease and dying of AIDS was considered bad dying. However the men did express a cautious willingness to take care of relatives if they became infected. Attitudes toward PLWHA were mixed; many men seemed to feel that people with AIDS were being suffering as the result of immoral behavior; while others felt that PLWHA were not to blame for their condition and deserved compassion. Only 17% of survey respondents felt that they could get AIDS. Low risk perception was based on lack of intravenous drug use, sex with CSWs, or extra–marital sex.

AIDS is thought to be spread by quacks, unsanitary health facilities, foreigners and those traveling abroad, and men who visit CSWs. Nearly half of the men surveyed said that they knew someone who was HIV–positive or who had died from an AIDS related illness.

90% of men surveyed had heard of condoms and knew that they are used to prevent STDs, HIV/AIDS and unwanted pregnancy. Most respondents said that men did not use condoms because of decreased sexual sensation. Other frequently cited reasons were condoms not being on hand when needed, being too ashamed to buy condoms, lack of trust in condom quality, drunkenness and reliance on medicinal prophylactics. Many men did not consider it necessary to use condoms if they were not engaging in commercial or extramarital sex. 45% of men surveyed had never used condoms.

Although many men did not approve of commericial sex work they felt that it could not be eliminated. Many felt that it should be allowed to exist openly under controls that allowed for the licensing of brothels, medical check–ups and sex–worker education.

Almost all men felt lucky to be men and agreed that Myanmar culture favors men. The men also felt that it was very common for men to engage in extramarital sex. Only 25% of men surveyed said that their first sexual partner was their wife, implying that the majority of respondents had engaged in premarital sex. 21% of respondents said that their first sexual encounter was with a commercial sex worker. Common reasons given for why men have extramarital sex included inability of wives to satisfy their husbands sexually, strong male sexual desire, the inequality of sex drives between husbands and wives, desire for a variety of sexual partners, family problems, absence from home, and opportunity/circumstances.

Women were generally thought to be socially disadvantaged. Their role in society was seen as being dutiful to their husbands, fulfilling their husband's desires and upholding cultural values. The men said that women have to be more careful in sexual relations because of cultural expectations. The centrality of religious and
cultural values in shaping behavior was mentioned repeatedly in focus group discussions. Men were concerned that misbehavior would bring shame to their family and ruin their reputation in society. Fear and shame were strong forces influencing behavior. Many men mentioned the Buddhist teachings of monogamy, self-control, and moderation. The men believe in Buddhist teachings but do not always act in accordance to them. Many men felt that Myanmar culture was changing with increasing access to Western culture having a negative impact.

The MSM community is divided into two communities: effeminate “gay” men who aspire to traditional female roles and “homosexual” men who are more traditionally masculine and who often do not identify themselves as part of the MSM community. MSM are generally well accepted by society. There is small-scale prostitution in the MSM community. All the men interviewed had had more than 30 lovers. They were familiar with AIDS and knew the modes of HIV transmission. However, most MSM interviewed thought of AIDS was a heterosexual disease and did not feel particularly at risk. Condom use was low and very inconsistent among MSM.

IDUs interviewed said that they often shared needles even after they learned of its dangers because of the expense of needles the risk of arrest when carrying a syringe. Most IDUs thought that they might have AIDS and saw it as punishment for engaging in “stupid” or immoral behavior. Most men had entered into treatment several times and relapsed.

TV was the most frequently mentioned source or reliable health information. IEC suggestions given by the men interviewed were: 1) target the poor, the illiterate and rural dwellers with appropriate media; 2) make AIDS prevention messages sexually frank and easy to understand; 3) make material more lively, dramatic and thought provoking—use more video, dramatizations, plays, movies and novels; 4) scare people with pictures of the disease; 5) create a sustained education effort rather than one time lectures or promotions; 6) begin AIDS education efforts in primary and secondary schools.


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No Date

**Khin Mo Myint.** *Study of Drug Utilization in Mandalay General Hospital.*

(No information found)

**Khin Wai.** *Comparison of HIV/AIDS Related Knowledge Attitude Practice and Behavior of Male Urban Construction Workers and Rural Agriculture Workers in Yangon Division.*

(No information found)

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Khin Mae Ohn. The Status of AIDS at the Medical Unit of the Divisional Hospital in Dawei 1993.


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