A SITUATIONAL ASSESSMENT OF HIV/AIDS IN THE MALDIVES FOR THE YEAR 2000

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(The views expressed in this document are those of the author and are not necessarily shared by the UN Country Team)
Introduction

The Maldives, a small unique South Asian island nation of about 277,000 people, has to date enjoyed relative freedom from the HIV pandemic. Although some 84 documented cases (as of June 2000) are known, the majority of these have been expatriates or Maldivians with a history of travel abroad, such as sailors. This is an expected pattern. In almost all nations, the virus has been brought in through such mechanisms. Eventually, however, internal transmission usually ensues. The threat of continued growth in HIV prevalence in the Maldives depends on the proportion of people engaging in unprotected sex with infected partners, its spread to pregnant women and their babies, and the proportion exposed to unsafe blood-related procedures. While strict religious principles may appear to be protective, HIV is simply a virus and does not distinguish whether the sex act through which it is spread is a moral or immoral, legal or illegal act. Hence, the risks of an epidemic cannot be viewed in terms of the frequency of socially approved vs. socially disapproved sexual behaviour; rather it must be assessed in epidemiological terms as these relate to the frequency of sexual partner change and the sexual networks thereby created. Transmission from mother to child usually follows as the second most common route of transmission when the prevalence of HIV reaches about 3-5% in high risk groups and begins moving into the general population. Transmission via blood accounts for a smaller proportion of all cases, less than 10% worldwide. Blood-related transmission is seldom a major mode of spread, except in the case of injecting drug users (IDUs).

HIV is still an emerging epidemic and spreading more widely and rapidly than previously expected. In Middle Eastern nations, where overall prevalence has been low, there are now high levels among IDUs. The same pattern is unfolding in Pakistan and Indonesia. In nation after nation, the proportion of females becoming infected is rising, in many cases because they are the partners of IDUs or men who have sex with men (MSM) or purchase sex from female sex workers. The major risk factor for women who acquire HIV in India now is simply being married.

HIV finds the cracks in society and follows them. Poor health services, inequitable gender relations, governmental corruption, poverty, war, unstable family life, high fertility, unemployment, high levels of mobility, ignorance - these and many more factors play a role in the HIV pandemic. Any analysis of the HIV situation in a country is in fact an analysis of the social and institutional development of that country. Preventing an HIV epidemic requires far more than dealing with the virus as a pathogen. It requires knowing and understanding the social and environmental conditions that contribute to people's vulnerability to exposure. These include all the factors that make it difficult for people to protect themselves even when they know full well what the virus is, how it is transmitted and that it is invariably fatal. It has been shown repeatedly that knowledge of HIV is not sufficient to provide protection. Prevention programmes must be properly tailored to meet the social realities of a given society. Where denial and stigma reign, these must be defeated.
Aims and methods

In recognition of the need to assess the social and behavioural risk factors for HIV, as well as the responses to date, the Government of Maldives, in cooperation with the UN Theme Group and with financial support from UNICEF and the Resident Coordinator Funds, requested an independent assessment, to be followed by recommendations to address the issues raised.

On 6th June, 2000, the consultant undertook this assignment, which was completed on the 29th June. Assessing risk factors under such short-term assignment conditions can, at best, yield an imprecise, qualitative overview. More accurate predictions or modeling of the potential epidemic in the Maldives cannot be undertaken without quantitative data on the prevalence of sexually transmitted diseases and the prevalence and intensity of behavioural risk factors, particularly among high risk groups. Assessing gaps in prevention services is somewhat more achievable. However, well-planned and designed HIV prevention programmes require the specific targeting of known high risk groups, particularly during the early stages of the epidemic. Hence, even gaps in prevention cannot properly be assessed without evidence as to which groups might be considered most vulnerable, the sizes of these groups and how they may be reached. Because such data are not available at present, this assessment has attempted to construct a likely scenario based on the following sources of information, collected within Male’ and during visits to atolls in the north, central and southern regions:

1. A review of documents relating to social and economic issues bearing on health in general, and specifically on reproductive health and HIV;

2. Interviews with persons representing agencies within and outside of government having particular knowledge of HIV/AIDS and/or reproductive health;

3. Interviews with persons from sub-sectors of society (defined by age, sex, occupation) thought to be at relatively increased risk of acquiring an HIV infection.

The information gathered from these sources is synthesized around focal issues of importance to assess the level of risk among individuals and the potential to sustain an epidemic. Where relevant, any responses carried out in the country are then recounted and the justification for doing more or less in the short, medium or long term is discussed.

Due to the sensitive nature of some of the information sought, most interviews were conducted in private and without interpreters, necessitating at least simple English-speaking ability on the part of respondents. Where this was not possible, small focus group discussions were held using interpreters. As the focus group discussion is not a suitable technique for acquiring information on sensitive or hidden issues, it should be recognized that some information is likely to have been under-reported and false. This problem was handled through triangulation with as many sources of information as could be found in a short period of time (approximately 17 days of interviewing). A list of documents and persons
interviewed can be found in Annexes A and B. For reasons of confidentiality, interview notes will not be presented.

Part One

Issues of Vulnerability

The nation of Maldives, despite severe challenges, has demonstrated remarkable success in a number of important social, economic and health indicators over the past three decades. In terms of indicators immediately pertinent to the usual risks for HIV, literacy, educational coverage, the provision of health care facilities, GDP, acceptance of family planning, life expectancy, and maternal mortality have all shown marked improvements. Progressive action with regard to a number of other health and social issues has been instituted, such as hepatitis B immunization, drug abuse de-addiction services and others. There are, however, areas for concern with regard to income disparity, gender inequality, information restriction, crowding, unemployment, and others. These factors are all variously linked to high levels of mobility, both within the country and outside of it. Migrants are always at greater risk due to loneliness, fewer mechanisms of social control when away from home and general anomie. These factors are also associated with increasing drug abuse among the youth, which in turn may be associated with increased sexual risk taking, to be discussed below. The demographic profile of a rapidly increasing young population in an environment with foreseeable economic limitations sets the stage for a potentially disruptive set of social changes frequently associated with the spread of HIV. The numbers of cases of HIV detected to date cannot depict the epidemic’s potential. Wisdom dictates preparedness based on a careful analysis of available information and the generation of accurate, appropriate behavioural information that will provide the basis for a national programme of HIV/AIDS/STD prevention.

Economic factors

Income

Personal incomes have risen considerably in the Maldives over the past few decades as tourism and fishing have become lucrative sources of national wealth. Increased government spending on education and health have yielded considerable improvement in basic amenities, such as potable water, sanitation, primary health services, and literacy, but a recent study shows that about 15% of the population lives on less than Rf 7.5 (US$0.65) per person per day, with the highest concentration of low incomes in Male’ (1). As the center of gravity for development for all of the Maldives, Male’ exhibits the greatest income disparity. With about 27% of the nation’s population living on 1.8 sq km of land, crowding and its attendant high prices are extreme on Male’. Such relative differences in wealth have well-known detrimental social effects, particularly on youth. Exposure to the consumerism of mass media and over-reliance on formal education can combine to raise expectations of material well-being to unrealistic levels, leading
to resentful and socially deviant behaviour. Income disparity and a sense of relative deprivation produce gradual changes in the social fabric that reduce the impact of normative mechanisms of social control, such as religious principles, family cohesiveness, and the authority of community leaders. Unplanned urbanization and crowding on Maalé contributes significantly to general interpersonal stress. Although the rate of population increase has dropped from 3.4% in 1990 to 2.8% in 1995, a projected population size of .5 million by the year 2020 will seriously stress the nation's resources. All of these factors emanate from an economic situation of considerable vulnerability and insecurity. This creates the backdrop for a predictable increase in risk-taking behaviour, particularly among youth.

**Mobility**

Mobility, both in and out of the Maldives, is a feature of life affecting many families. There are about 24,000 foreign workers in the country, 90% of whom are male. About 10,000 live and work on Maalé alone. The sex ratio on Maalé as of 1995 was 2.2:1 males to females (4). Others are mostly employed at resorts and in construction and garment factories scattered about the islands. For a variety of reasons, Maldivians cannot fill all the employment needs of the country, despite being in need of employment themselves. Lower level domestic service jobs, mostly in Maalé, are being filled by Indian and Sri Lankan maid servants and many jobs in shops, restaurants and construction by Bangladeshis, Indians and Sri Lankan men (2). Garment factories employ a small number of local women, but also bring in women from China and elsewhere with known skills in the industry. Expatriate workers also often fill positions in teaching and medicine. In most nations, this type of migrant labour has led to the growth of prostitution to serve these men. Migrant female domestic workers may also be vulnerable either to coerced or commercial sex. There is considerable anecdotal evidence that such a trade exists in the Maldives, especially in Maalé where a floating population of thousands contributes to the anonymity necessary for an illicit trade.

Due to the lack of educational facilities, numerous Maldivian students go abroad for higher education. For shorter periods, many Maldivians go abroad for business or to seek health care or other services not available in the Maldives. Many thousands go to Maalé from the atolls to attend school or for shorter-term purposes. This constant movement of people implies some level of risk for HIV and may require specialized prevention programmes.

About 2000 men serve as seamen, mainly on international cargo vessels. The number has been halved in the past few years. These seamen represent a high risk group by virtue of their occupational conditions and sub-culture.

**Tourism**

Tourism accounts for the main source of national income, but is thought to bring certain problems as well. The main issues that relate to HIV risk appear to be the exposure of Maldivians to lifestyles other than their own and the long separation of men from their families. The movement of men to work on islands other than
their homes is a relatively new demographic phenomenon within the Maldives. There are at least 84 designated tourist islands that remain separate from inhabited islands according to government policy. Few women are involved in the tourist industry as workers, less than 100 out of about 5000 in 1996 (1). All-male residential groups are crowded and many have insufficient shower/toilet facilities for these men. Some inhabited islands have a large number of men away most of the time working at resorts, such as Addu Atoll which had a residential ratio of men per woman in 1995 of 0.83 (4). Men working at resorts may, if the distance is not great, return frequently, but more commonly, visits to families take place only quarterly within the year or even less often. Foreign men on contract can return to their homes only once every two years. Such migratory conditions create considerable vulnerability for the sexual transmission of HIV. Long separated periods, of course, strain marriage relationships and many women consider that the lack of male discipline in the home has led to greater misbehaviour of their children (4). The stress and isolation of living in crowded all-male groups at resort islands contributes to HIV risk. Sexual relations between males (4) and between male workers and female tourists are known to take place at the resorts. Recourse to commercial sex in Male' has been reported for some unknown proportion of these men and expert informants consider that the greatest risk for Maldivian men emanates from conditions on Male', not from the resort tourist.

As the Maldives is not a destination for sex tourists, the great majority of clientele at the resorts are not likely to be persons having sexually transmitted infections, such as HIV. The nations from which the majority of tourists come, i.e. Italy, Germany, Switzerland, Japan, are not generally high HIV prevalence nations. As of 1997 (5), the prevalence of AIDS cases per 100,000 was highest in Switzerland (83.8), followed by Italy (71.5), and Germany (20.7). Japan has very low AIDS prevalence (1.2). These figures do not reflect current HIV prevalence, but as of the end of 1999, this was 0.25 for Western Europe as a whole, less than half of that for S.E. and S. Asia or North America (6). Rates of HIV incidence (numbers of new infections) are far higher for South Asia than for Western Europe. A large proportion of the epidemic in European countries has been due to the early spread among gay men and injecting drug users. While the transfer of HIV from a tourist to a Maldivian resort worker certainly might occur, the likelihood of HIV reaching epidemic proportions via this source seems extremely low. Of greater importance is the indigenous transmission of HIV among Maldivians, should HIV have a chance to accumulate in any one at-risk group.

Social Factors

Gender

Gender discrimination is less pronounced in the Maldives than in many other nations in the S. Asian region, a region in which such discrimination is extreme by world standards. Government's efforts to equalize opportunities for male and female children have been considerable and show impact (11). Differential advantages, however, are evident in several important areas, largely driven by traditional cultural practices and attitudes. Girl children are raised to be more shy and compliant and carry a larger role in daily household responsibilities than boys (7). On the islands, their mobility is constrained to the extent that, after attaining adulthood, such simple activities as swimming are seen to be unseemly. Although one in three households is headed by women, largely by their own declaration, women are under-represented in the labour force and a higher proportion of
women wish to work than can find work. Generally, they are prevented from working by parents and husbands (1,10). Women’s proportional role in productive economic activities has diminished with increasing tourism and changes in the fishing industry over the past several decades that have reduced the profitability of drying fish, dropping from 60% in 1977 to 20% in 1990 (1). Recently, this rate appears to have risen to about 25%. However, on Male’, women’s employment has greatly increased relative to that on the atolls over the years. Nonetheless, 70% of government jobs were still held by men as of 1998 (2). The lack of labor participation among women is largely due to constrained mobility relative to men and to lesser achievement in higher secondary education. Generally, however, girls perform at least as well in school as do boys and, with the exception of grades 10-12, are approximately equally represented (2).

Violence against women as well as sexual abuse of girls and women are under-reported and as such, are left largely unattended as social problems. Recent attention to child abuse has resulted in rising numbers of reported cases, including that of sexual abuse (2). Women’s rights are less well protected than men’s in divorce and less than half of women with children receive financial support from their ex-husbands, as required by law (9). Legal rights and political positions for women are areas yet to be expanded. The social fact that one must obey one’s husband or risk divorce is frequently stated by women, but does not seem to be as great a constraint on behaviour as it is elsewhere in S. Asia. Some women claim that their husbands only, not they, can access condoms from family health workers, though health workers dispute this. Overall, compared to their sisters of similar economic status in India and Bangladesh, Maldivian women are better-off in terms of social, health and educational indicators. But, whatever social or cultural factors exist that create power differentials between the genders such that a woman would have greater difficulty protecting herself from exposure to HIV, these contribute to the steadily rising proportion of infection among females in the world today. If these are operative in Maldivian personal life, they will produce the same effect.

Serial monogamy

Numerous reports point out that the levels of divorce have been very high, creating an overall marriage pattern of serial monogamy. Monogamy, as distinguished from serial monogamy, is the marital union of a couple for life. In monogamous societies, the most frequent cause of marital dissolution is the death of a spouse. Serial monogamy, on the other hand, is distinguished by high levels of divorce and remarriage. Historical records demonstrate that serial monogamy is an old cultural pattern, well documented for at least 400 years (8) and found in the neighbouring atolls of Laccadives and Kerala as well. The age at first marriage for women as of 1990 was 16.5, but there are recent indications of an increase to about 17.9 in younger women (3). Men are married at around the age of 20-21. In 1970 divorce statistics showed 85 divorces for every 100 marriages (8); this dropped to 70 per 100 in 1990. Only 8% of marriages ended through the death of a spouse. Studies have been conducted or information compiled to seek an understanding of this pattern (9, 10,11, 12).

Although efforts to diminish the ease at which men can acquire divorce focus on Islamic legal rights, the cultural pattern of early marriage with rapid remarriage
predates the conversion to Islam in the Maldives. A proportion of remarriages takes place among the same couples who were once divorced, so that women end up having 3 to 4 marriages to 2 to 3 men. On Male', women as well as men seek divorce fairly frequently, unlike on the atolls. Divorced women are not stigmatized. Similar marriage patterns averaging 40-50% divorce rates are found in non-Islamic atoll societies in the Pacific as well and may be more related to the constrictions of atoll life and matrilineal social structures (which probably predated patrilineal structures in the Maldives) than to Islam. Until recently, Maldivians do not seem to have considered this a serious social problem. In terms of modern concepts of reproductive and family health, the problems in such marriage patterns relate to a) possible detrimental effects on children, b) possibly acting as a driving force for high fertility and c) the frequency of sexual partner change.

With respect to HIV, the issue to be considered is whether such a marriage pattern allows a high level of overall partner change, with overlapping concurrent partners. As HIV has a long silent period, one infected man (or woman) could conceivably infect several spouses before showing signs of AIDS. Particularly for the first few marriages, time periods between partners may be quite short, with one document reporting 20% of marriages becoming divorced in less than one year (10). In another study, 21% of both men and women queried gave infidelity as the reason for divorce (9). If these statistics correctly describe high levels of concurrent partners, then high levels of divorce could be seen as an indicator of risk behaviours supportive of an HIV epidemic.

There are other factors to consider. First, recently, with increased education and modernization, divorce rates appear to be diminishing, in direct contrast to patterns in developed nations, such as the USA (17). Second, marriage patterns remain largely endogamous (among persons from the same island) for the first marriage (57%) but become increasingly less so with subsequent marriages (10). As elsewhere, women generally marry men older than themselves and the age gap also increases with subsequent marriages. Thus, the sexual networks in which married people are involved are under change, with both positive and negative forces present with regard to their ability to drive an HIV epidemic.

Overall rates of sexual partner change remain the more important and easily documented determinant of HIV epidemics. These are far greater wherever sex is commercialized or commodified. If HIV were to rise to 2-5% in a group of women selling sex to divorced or separated men (or conversely, if divorced or separated women were more likely to sell sex than others), then the pattern of serial monogamy could become a cultural feature contributing to the spread of HIV.

At the present time, without knowing the rates of casual sex that accompanies such a marriage pattern, it is impossible to estimate the risks involved. However, spread through such a mechanism is far more likely than is the accumulation of cases needed to sustain an epidemic. In other words, the pattern is risky but does not define a high risk group.

Sexual behaviour

"Dhivehi society combines a rigid legalistic and prudish attitude toward sex at the ideal level, with a remarkably open attitude at the behavioural level" (8:367). The same observation was recorded in the year 1611 (16) and appears as true today.
as it was then. All sexual behaviours that spread HIV are found in the Maldives, but the frequencies and numbers of persons involved are yet unknown. Foreign and Maldivian sex workers can be found in Male’, as can standard S. Asian patterns of homosexuality. Large numbers of male workers away from their homes create a pool of potential commercial sex clients. Maldivian men as well as expatriate men frequent sex workers but what proportion of the general male population does so and how frequently are unknown. Key informants indicate that sexual networks among men who have sex with men (MSM) may be far larger than among men and women practicing casual sex. Fears of discovery and legal prosecution may limit these practices, but do not diminish them entirely. Because ease of access to women appears to be more common in the Maldives than elsewhere in S. Asia, dependence on sex workers, particularly among the young and unmarried, may be less frequent than in some neighbouring countries. This could prove to be a protective factor for HIV, in that fewer men may be likely to be exposed to women in whom HIV could easily reach high levels of prevalence, such as sex workers. But again, if HIV were to become concentrated to any extent among those who do sell sex, the spread from their clients to other women would be assured.

Also of importance is the fact that the majority of MSM are likely to be married, in keeping with the S. Asian pattern. Anal intercourse, whether practiced by males and females or males and males, has a far greater risk of transmitting HIV than does vaginal intercourse (17). If HIV were to enter this sub-group of men, transmission to female spouses would be highly likely.

Youth always comprises a particularly vulnerable group for HIV. Maldives has a young population with about 47% under 15 years old. These are the youngest who will have to cope with the coming years of the epidemic and experts estimate that we are only about one-tenth through this pandemic of HIV. Those who are young and reaching ages now at which sexual activity is more likely, 15-25, comprise another 20% of the population (2). With a median age at first marriage of 17 among girls, at least 50% will definitely be sexually active. Among those who are not married estimates of premarital sex guessed at by those interviewed for this exercise ranged from 50% to 75%. Whatever the reality may be, some proportion of young people experiment with sex before marriage and all will do so at some time. By the age of 21, the average age at marriage for young men, it is likely that a very high proportion will have had sexual intercourse at least once. AIDS prevention messages must accommodate the reality of young peoples’ lives.

Information restriction

Parents and relatives do not teach anything about sex, sexual relationships, marriage, reproduction, STDs or related issues to their children. Neither the primary nor the secondary school curriculum covers more than the biological aspects of reproduction. Most young people report they learn about sex from other youth, sometimes siblings, and TV. Others say they learn from no one. Despite the reality that satellite television brings the usual messages of commodified or casual sex and pornography is readily accessed on the Internet and elsewhere, no effort is made to provide alternate or complementary models of healthy, responsible sexuality. On many islands there are no book stores and it is doubtful if useful books on these topics can be easily found, even in Male’. Family
life skills or life skills education is not carried out by any NGOs, schools or government departments.

Similarly, personnel working on AIDS prevention appear to have little or no access to up-to-date information on the epidemic, its epidemiology, the social and behavioural aspects of human sexuality, theory and practice in behavioural change, best practices in prevention programme design and execution, recommended surveillance methods, etc. AIDS-related scientific journals are not apparently acquired by the Department of Public Health or any other agency. Suitable persons are often not selected (and less suitable ones are) to attend international meetings sponsored by WHO, UNAIDS, or others. Web-based information sources are still quite expensive to access and not frequently used in the Department of Public Health or in some of the UN agencies.

In Male’, 48% and in the atolls, 55% of the population have no radio at home (1). The comparable figures for TV are 45% and 86%. Newspapers are transported to the islands but on an irregular basis. On Male’ both newspapers and magazines are more widely available. Despite high levels of literacy, functional literacy is far lower. All media are subject to the national censorship board, except satellite TV and the Internet.

The nature of surveillance as case detection, as opposed to research to detect trends in infections and behaviours, does not lend itself to publication and dissemination. Public and official dissemination of the results of all the testing is extremely limited. This approach is counter to improving awareness and leads to mistaken rumours, sometimes in the direction of exaggerated numbers. Surprisingly, in an exercise conducted as part of the Master Health Plan, to rank health priorities through discussions with many stakeholders, AIDS ranked first (18). The lack of accurate information amongst the public can also lead to a situation in which HIV is not taken as a serious threat and to a belief that caution is not necessary. The public’s health is not well served by limiting the information available about HIV in their country or region.

A recent survey on reproductive health reveals inadequate knowledge about STDs among health workers. About 31% could name a symptom of STDs, but none mentioned that most STIs are asymptomatic, associated these with infertility, ectopic pregnancies or pelvic inflammatory disease (PID). More than half (68%) felt STDs were rare in their communities. It appears they assume the population rarely has STIs because few people come for treatment. Knowledge of the symptoms and consequences of STIs is similarly low among the general public (3), although many readily admit that such diseases exist in their community and that people go abroad for treatment. Due to widespread awareness campaigns and TV exposure, most of the public does know that HIV is a virus that is sexually transmitted and fatal. Fewer know it can be transmitted through blood contact and very few understand mother-to-child transmission. A common misconception is that classic STDs, if left unattended, can develop into HIV. Few doctors know how HIV disease may present clinically in men and women nor are there treatment guidelines available for HIV disease, AIDS or the reduction of perinatal transmission. Some health workers and many lay people alike appear very interested in learning more about the biological aspects of STDs, including HIV. As most people have no experience discussing sex and it does not appear that health workers are given training in taking a sexual history even in their pre-professional training, the social and behavioural aspects of STD
counseling are nearly totally lacking. Except for two persons sent out for training (who are not now active in the programme), professional training in STD or HIV counseling has not taken place for health workers or others.

Drug abuse

The epidemic of drug abuse is itself, in addition to HIV/AIDS, a major social and health problem in the entire S. and S.E. Asian region. In the Maldives, given the lack of accurate information available, evidence gathered during this assessment points to drug abuse associated sexual behaviour among youth as the single most obvious potential risk factor for HIV. This is simply because the sale of sex for drug money (or the exchange of sex for drugs) is a more likely scenario than others to bring about frequent partner change and the potential for accumulation of HIV infections. The street price of a single piece (one dose) of heroin in Male' is relatively high at 100 Rf., 5 times the price in Bangladesh and India. Depending on the disposable income of young people, several doses per day could easily become a difficult financial strain. Female sex workers, i.e. who make a living from selling sex on a regular basis, in most countries have between 200 (Indonesia) and 1000 (Cambodia) clients per year (though these may not all be different men). The chance of being exposed to HIV is so much greater among these women than women in all other situations. They, of course, acquire HIV from infected clients and can then infect other clients, if condoms are not consistently used. In most of S. and S.E. Asia, professional sex workers are not generally regular drug abusers, as they are in, for example, New York.

It is not known to what extent young female drug users in the Maldives are engaging in frequent partner change. It is clear, however, that the number of drug related offenses is steadily rising, with a 40-fold increase between 1977 and 1995 (2). The first drug arrest was for possession of marijuana, which had been introduced to the Maldives via a tourist. Then hash and hash oil was introduced. In 1993 brown sugar, a highly adulterated form of heroin suitable for inhaling when heated, but not for injecting, began to enter the country. While expatriates bring it in from its source in Pakistan and Afghanistan via Colombo, these expatriates are not tourists, nor are they linked to the sex trade directly. It is said that the spread of heroin into the islands is facilitated by the safari boats. In some of the capital islands, heroin use appears to be established among young people, but most access is on Male'. When the supply is low on the islands, agents go to Male' for more. A drug sub-culture has emerged marked by language, clothing styles and probably music preferences. Much of this behaviour is said to be modeled after that seen in films and TV. Clearly, many young people are trying heroin and many are getting addicted, at increasingly younger ages. Drug rehabilitation officers say that the average age of first heroin use is now around 12-14.

Examples exist of the recovery of needles from sites of arrest. Drug rehabilitation officers confirm that about 5 persons have come through their facility who had injected. Presumably they injected the brown sugar heroin (which can be injected when dissolved in lemon juice) or obtained white powder heroin through Bangkok.

At the moment injecting is not the main mode of administration. The spread of injectable buprenorphine use from India/Pakistan would seem to be a future threat and needs to be monitored carefully. Disposable needles and syringes can be purchased over the counter in pharmacies and the possession of such
paraphernalia of drug use would not stand in court alone, but must be accompanied by a drug positive urine test for conviction.

Current drug control approaches include a Narcotics Control Board, established in 1997, life (i.e. 25 years) imprisonment for drug dealers and 3 years imprisonment or institutional rehabilitation for first offenders. Several psychiatrists are associated with the programme at which the addict remains for 4 to 15 months. Presently there are about 120 persons in the programme, 9 of whom are female, and there are plans to double its size very soon. Although there is no detoxification or other biomedical service during which a blood test might be taken (e.g. liver function assays), mandatory testing for HIV is planned to begin soon. Some persons, about 20%, have entered the drug rehabilitation facility on their own, without coming through the court system. If an addict is caught by police a second time, there is no chance to return to the rehabilitation programme; they receive a 15 year sentence. As support systems after release are not in place, the relapse rate is estimated to be 70%. Primary prevention to date has consisted of seminars conducted on 5 atolls to teach parents how to detect if their children are using drugs.

Plans are underway to improve the drug rehabilitation and prevention system, devise a real drug control policy and conduct a rapid assessment of the extent of drug use around the country. Such information and improvement of the programme are sorely needed and should be linked directly to targeted HIV prevention for female users. At present, while HIV is known as a threat by the female users in rehabilitation, they, like other young people in the country, claim they could not use condoms because their boyfriends would feel such use would diminish pleasure.

Condom accessibility and condom use

Condoms are accessible through family planning registration and 36 are given at a time. Registered married couples can access more if traveling. The NGO known as the Society for Health Education (SHE) and government facilities everywhere in the nation, are able to give them free. Accessibility of condoms is not seen by most young people as a major problem as they seem to know condoms can be bought at pharmacies. Many adults do not know this. It is possible that condoms cannot be accessed on some small islands. Condom supply at the medical storerooms in Male' appears sufficient, has standard quality condoms and these are well stored. Shipments are made to the islands every 6 months, where storage may not be as suitable. UNFPA purchases different brands for the reproductive health programme according to availability and those decisions are made elsewhere. Sometimes a particular brand presents problems and there are complaints. UNFPA has been responsive to this issue in the past.

Use levels appear typically low in the reproductive health programme, with only about 6% of registered couples using condoms (3). It is possible that the health workers at the end of the chain of distribution (e.g. Family Health Workers) are not promoting condom use very strongly, despite the fact that side effects account for the most common reason (34%) for discontinuing the use of other contraceptives. In addition, community women seem to worry about the confidentiality of their choice of contraceptives. Family health workers have received information about HIV, but appear to know little about other STDs. Assumptions are made that
married couples are generally without need of discussions regarding STDs or protection through condom use. It does not appear that human sexuality education takes place within the reproductive health programme. It is noteworthy that all adolescents interviewed in the recent UNFPA reproductive health survey as well as all interviewed for this assessment, knew about condoms for family planning or birth spacing. Several, however, stated that condoms were not trustworthy for avoiding AIDS as they have holes in them. In general, those with higher levels of formal education understand more and this is equally true for males and females.

Female condoms are known by some but there is little experience with them in the country and they are not available at pharmacies. They have a growing acceptance in many areas and have recently been reviewed for re-use, with WHO considering recommending their re-use up to 5 times with washing. This would bring the price down considerably and make them a real option. Their acceptability in the Maldives might be rather high, as women seem to like to take control of their lives. An acceptability study would be valuable.

**Biological Factors**

**Prevalence of Reproductive Tract (RTIs) and Sexually Transmitted Infections (STIs)**

The prevalence levels of RTIs in a population can indicate the likelihood of enhanced HIV transmission. For those infections that are sexually transmitted, this information would also provide an estimate of the number of persons exposed through unprotected sex. There is a cross-over in this issue because such conditions as bacterial vaginosis, a common RTI, are not sexually transmitted yet are associated with enhanced HIV transmission. As significantly higher prevalence levels can be found by laboratory screening of persons who show no symptoms (even upon examination) as well as those who do not recognize the symptoms they do have, only a randomly sampled community-based study can reveal the true levels in a society. No such information is available for the Maldives. All STDs are reportable diseases in the Maldives. As there is considerable fear of being discovered to have an STD (since government workers would be obligated to report the disease and illicit sex could be suspected, leading to shame and possibly punishment), only rare persons would bring STDs to a government facility. This is especially true in Male’ where private health care offers more options. Yet, even private physicians claim that people presenting with STD symptoms always state they did not have sex with anyone but their spouse. Under a legalistic and social system such as that of the Maldives, STD or RTI symptomatic infections are likely to be treated in other ways, or if severe, taken abroad for treatment. In one atoll, people gave the author a local term, kihunu, for a known type of genital discharge in both men and women. Some thought it was equivalent to noria, or gonorrhea. A document from the 1970’s (8) states gonorrhea was common in a set of islands and was regularly treated by hakims. In another area the local term of thiyanga bali refers to genital discharge and pain when urinating. The extent of treatment though traditional medicine or over-the-counter drugs or even pharmacist-given prescriptions is not known for the Maldives.
Extensive testing for syphilis (to be discussed) indicates very low syphilis levels. Hepatitis B levels appear to be around 6%. PID, ectopic pregnancies, cervical cancer and genital discharges are well known to exist. At one Regional Health Center, there had been 5 PID cases the previous month. RTIs were reported as common on some islands in one large survey of women’s health (13). Informants at IGMH state that ectopic pregnancies seem fairly common. The numbers of cases at government hospitals or clinics can be recovered from in-patient records only. Genital herpes is also known and can be tested for in the country. Levels of resistance of STD pathogens to commonly used drugs is not yet known. Currently syncronic management is being promulgated within the reproductive health programme. Where STDs levels are low, syncronic management is not appropriate for women, leading to a high proportion of over-treatment as well as many missed asymptomatic cases. Given that laboratory facilities are limited and cannot be available at all sites, syndromic management guidelines can be adjusted to fit the epidemiological picture in the community only after a proper STD survey takes place.

Blood-related transmission

Worldwide, less than 10% of HIV infections have been spread by blood or blood products. In the Maldives, where transfusions are common due to a very high prevalence of thalassaemia, thorough screening of blood donations was instituted early in the HIV control programme. Strong efforts have been made to install universal precautions for infection control in health facilities and these efforts greatly diminish the risk of spread in this manner. Disposable needles and syringes are used throughout the health system. It is clear, however, that although the materials needed, such as latex gloves, are available, not all health workers use them consistently. It is also clear that some laboratory workers are unaware that re-capping needles is not recommended in order to avoid needle stick injuries. The behavioural aspects of infection control among health workers requires repeated inspection and monitoring in order to attain full prevention of the iatrogenic spread of blood-borne infections.

The possible exposure of Maldivians to HIV through medical procedures sought elsewhere, as in India, cannot be ruled out. But the number of such cases is likely to be very few and could not alone create the force of infection necessary to sustain an epidemic.

Foolhumas (traditional birth attendants) have been advised to use latex gloves. Some concern has been expressed about the use of razors for men’s shaving in commercial salons in Male’. It should be stressed that these and the myriad other possible exposures to blood have no epidemiological importance. While it is technically true that moist infected blood transferred on sharp implements or to the broken skin of a second party in some way can carry HIV, such events are extremely rare and should not be a significant concern of the National HIV Programme. Of course, in public education about the disease it is valuable for people to know that such transmission is possible; it is more valuable for them to know that wiping any surface with bleach that is wet with blood would obviate all risk. Once dried, blood spots cannot sustain live HIV.
Part Two

Responses

Government

The Government of Maldives has shown considerable concern about HIV since the first case was discovered in 1991. Even earlier in 1987 it had established a National AIDS Control Programme. Later a National AIDS Council was formed as a multi-sectoral body with the intention of developing a response across many sectors of society. Day-to-day operations of the programme take place in the Department of Public Health, staffed with a single AIDS Activity Manager and Programme Assistant. During its first years the programme carried out a considerable number of awareness raising activities among seamen, tourist resort workers, secondary school students, health workers, school teachers, religious leaders, and many others. Funds from various donors, including UN agencies, were accessed for both training and specific activities. Surveillance was instituted. During the past 4-5 years, the momentum has dropped, possibly because surveillance revealed very few cases. Since then, the primary activity has been the continued extensive mandatory testing of an increasingly larger proportion of the population.

While it is understandable that some people were alarmed when the first few cases of HIV were found, it is unfortunate that the epidemiological expertise was not available to inform a more useful program effort. Much time and money has been wasted in testing low risk people, in an unsound plan, and not using the available resources for adequate research and prevention. It is noteworthy that a previous consultant for WHO in 1997 reviewed the system and made very similar comments (35). Overall, the work accomplished to date has certainly raised awareness of the disease among the nation’s people, but it has relied on the fear to accomplish prevention. Throughout the world experience has shown that fear does not motivate lasting behaviour change, although many nations have tried it.

To date it appears that HIV prevalence remains very low, despite the proximity of India and its rapidly growing epidemic. This is fortunate and provides an additional window of opportunity for the Government of Maldives to prepare itself and adjust its prevention program in accordance with sound data produced through proper surveillance and research.

Surveillance

The philosophy underlying the present surveillance system is case detection. In many ways, it represents an over-reaction to a few cases found early in the programme. One recent table (undated) shows a total of 226,195 persons having been tested. Such extensive testing does not fulfill the requirements of contemporary second-generation or expanded surveillance. As it is presently unlinked to prevention services, an epidemiological rationale needs to be developed to prove its value to the nation.
Mandatory screening for HIV began early in 1989. All blood donors were included. At that time WHO recommended screening antenatal clinic patients and sailors. The Maldivian AIDS Council further included all major surgical patients, anyone getting a medical check-up, thalassaemia transfusion recipients, and incoming migrant workers, the latter at their own expense. Because one man with HIV died of TB, TB patients were also included in surveillance. Some people with STDs and domestic maids as well as tourist resort workers have also been tested. A category called 'contacts' was also tested. In 1995-96 the only unlinked anonymous testing took place as a random one-off sample of various groups. Now students or others who have been abroad for about a year are also tested. Some informants believe students must be tested before acquiring a visa to travel abroad as well. While government facilities test all antenatal patients, ADK states that they only test those who will deliver at their hospital. Seamen are tested after being out at sea for 6 months or more.

Mandatory linked screening, often without informed consent, and always without pre-test or post-test counseling (except for post-test counseling if HIV is confirmed by Western blot in a Maldivian citizen) continues without change at central and regional hospitals, although the experience worldwide with HIV surveillance since the 1980s has led to alterations in recommended procedures. If pre- and post-test counseling had been done for all the tens of thousands of people who have been tested, how much better HIV prevention would have been served! An enormous opportunity has been missed, which is one of the reasons such testing is not recommended (30,31).

Although both HIV and other STDs are reportable diseases, the programme does not produce a regular summary report, except recently for counts of those tested monthly and annually and those found positive for HIV. Until 1995, no records were kept or collated on those tested. Some groups are not reported; others are ill-defined. Although syphilis testing takes place (variously said to be RPR or VDRL) in all or many of the groups, no reported test results are documented on these. Surveillance documentation does not provide any information on the socio-demographic characteristics, such as age or sex, of those tested or those tested positive for HIV. No sampling protocols have been made available to participating clinics, although one does exist that suggests inadequate sample sizes and some questionable procedures. In any event, this document is not followed by those participating.

Laboratory workers follow the directions in the test kits, mostly several different types of HIV spot tests purchased by WHO. These require linked names as they do not draw enough blood for confirmation; the patient must be called back. This is not a suitable test for surveillance, but may be appropriate for blood donors if Western blot confirmation is skipped and the blood of anyone positive on the first ELISA is rejected. No one should be bled in a linked manner without pre- and post-test counseling. All positives are confirmed at IGMH, the chief government hospital, with a second different ELISA test, followed by a Western blot. In the case of in-coming migrant workers, confirmation is not performed and they are simply rejected for a work visa due to health reasons. No other explanation is given.

TPHA confirmation of syphilis can be done at IGMH, the central government hospital, but ADK sends their samples out of the country. Quality control has been
set up for the National Thalassaemia Centre via Australia’s National Serology Laboratories, and is planned for IGMH. The Thalassaemia Center will soon have PCR capacity in order to detect thalassaemias in utero; it is possible that the machine could be utilized in a proper STD screening study.

Most importantly, HIV testing is not linked in any way to STD screening, risk behavioural surveillance or prevention activities. Because the surveillance is conceived as a net in which to catch or detect positives for the protection of others, the National AIDS Programme in Maldives has limited evidence of the extent of the epidemic in the nation and no way to evaluate the impact of its own activities. With a serious HIV epidemic rising in some parts of neighboring India and an overall continuing rise in Asia as a whole, the nation of Maldives is obliged to face the great need for improved information. Proper surveillance is the basis of all disease control efforts and, while difficult where diseases are sexually transmitted, is possible in the most unlikely socio-political environments wherever public health authorities enlist the political commitment to do so.

Policy Aims and Programme Activities

The policy statements contained within the Health Master Plan constitute the guidelines for the National AIDS Programme. Some aims have been accomplished, such as widespread awareness raising, thorough blood donor screening, instituting infection control, and some degree of condom distribution, while others have not. Some aims were a bit confused at the time they were written, making execution quite difficult. For example, the document states that testing will be with informed consent but without pre-test counseling. Until HIV counselors were trained, only unlinked anonymous surveillance should have been allowed as proper informed consent is not possible unless a person is given a full understanding of the implications of being tested. This is especially true where treatment is not being offered. Numerous constraints, particularly with regard to trained personnel, have caused a slowdown in activities. A renewed effort will require a different approach to policy-making.

While policy statements have been written that stigma will be reduced (18,27), no efforts have been made to bring HIV positive people into the prevention efforts of the country. Older notions that maintaining confidentiality alone will reduce stigma no longer are valid. In many countries, it has been shown that overemphasis on maintaining confidentiality increases stigma. Much of what is done as part of the HIV control programme, particularly in surveillance, contributes directly to the stigmatization of the disease and the people who may acquire it, though this is not recognized. Considerable fear and denial seems to motivate these activities. As a result, institutions such as one Centre for the Elderly and Disabled, have built special rooms for the isolation of people with HIV (2). A serious effort must be made to reverse this trend. Even without exposing the few individuals with HIV in the Maldives, much greater humanization of people living with HIV/AIDS can be accomplished through the media and in other ways.

The policy states that the spread of HIV will be prevented, but methods by which that might be accomplished have never been well-articulated, other than providing safe blood to those in need and creating awareness. Throughout all health documents, including those on AIDS, one reads that IEC (information, education
and communication) will be used to bring about behaviour change. All evidence in the literature on health-related behaviour change, whether this is in relation to sexual behaviour or hygiene-related behaviour or to nutrition and stress-related diseases, shows the contrary. While information is necessary, it is not sufficient to alter behaviours. While awareness has been achieved through lecturing, these have been essentially one-off events with little follow-up. Even sailors, for whom STD/AIDS education has been institutionalized as part of their formal training, only hear about it once every 5 years when they are required to undergo in-service training to be re-licensed. Again, all evidence from recent prevention trials indicate the need of repeated sessions with any individual, with 7 contacts as a minimum to achieve short-term behavioural change. Sustaining behaviour change requires more effort. Up-to-date behaviour change programming knowledge and skills need to be developed in country.

In addition to continued efforts at facilitating behaviour change through effective modes of communication with the individual, such as peer-based methods, structural barriers to altering lifestyles within the community at risk often must be removed. This entails policy changes, law reform, the building of self-run organizations, and growth in self-efficacy among target group members, among other interventions. Maintaining safer sex and injecting behaviours over time is enhanced where community norms are also changed.

Message development requires adequate formative research so that the preventive messages can be tailored to the lives of different people. The Maldivian HIV prevention message is seen as a generic one for all, i.e. to maintain mutually faithful monogamous relationships, in spite of an essentially non-monogamous marriage pattern and the clearly recognized reality that unmarried persons engage in sex with presumably several partners before marriage. The promotion of greater fidelity either in marriage or in premarital relationships is possible with carefully designed life skills programmes.

Condoms are mentioned as protective, but are not to be promoted. Some young persons appear to have been told that condoms are frequently defective ("have holes") and cannot be trusted. Even AIDS education conducted for seamen does not take up the demonstration and teaching of condom skills. Yet, one very important move has been accomplished with regard to condoms, i.e. making them available at private pharmacies. Even without public promotion, many persons have become aware they can buy them at such shops.

Several activity reports (24, 28) mention planned research activities, some with regard to behaviour and others on STDs. It does not appear that any have taken place.

There is an over-reliance on fear of detection and arrest to control sexual behaviour. Although legal prosecution for illicit sex (all sex outside of marriage) is relatively uncommon, informants state that the crowded conditions on Male lead to numerous disputes amongst neighbours, creating conditions in which people may be turned in to authorities out of vengeance. More women than men are actually punished (some reports state by whipping and banishment or house arrest) for illicit sex by the law. Among sentenced youth (here defined as persons 15 to 29), young women predominate over young men, representing 73% (661/802) of non-drug related arrests in 1997 (15). The three main offences for which these persons (males and females) were arrested were simple theft, illegal
coitus and assault/misbehaviour. These figures seem to indicate that sexual offenses by females are increasingly attracting the attention of the law. This legalistic approach to sexual behaviour is not likely to improve the situation. The trend since 1990 shows an increasing number of young offenders sentenced by the courts.

**United Nations Agencies**

UN agencies have attempted to coordinate activities with the National AIDS Council. As might be expected, WHO has been the most involved since the mid-1980’s. WHO has provided technical support, sent public health staff to meetings and training programmes and funded awareness activities. In addition it has supported the purchase of testing kits for surveillance. As WHO’s Global Programme on AIDS turned over to UNAIDS in 1996, funding shifted to WHO’s regular programme budget. In 1996 a UN Theme Group was started to unite all UN agencies in an AIDS prevention effort. While some activities did take place, funding and role difficulties thwarted greater action. In 1997 A WHO consultant made a review of the surveillance system (35). The UN Theme group was renewed in early 1999 with the inclusion of the Director General of the Ministry of Health and has been the mechanism by which this assessment was formulated and funded. UNFPA has played a role in the leadership of the UN Theme Groups as well as its major role in carrying out reproductive health research and programmes. These activities indirectly support HIV prevention through education and the purchase of condoms. UNDP has played a leading role for a time in the UN Theme group and funded training as well as the attendance at meetings for health officials. Its role will increase through the support of the development of a drug policy, a rapid assessment of drug use, improved drug abuse treatment and prevention. UNICEF has had no direct AIDS programme, but any work done to improve the position of women, adolescents and children has societal repercussions on HIV prevention. UNICEF, however, has contributed to the support of the current assessment and is likely to become more involved in the future. The UN Resident Coordinator has funds that have been used for AIDS related activities over the past years, including sending two persons to Bangkok for training in counseling, the production of educational materials and campaigns, and the production of a rock concert for youth to commemorate World AIDS Day 1999 (33, 34).

**NGOs**

NGOs have not, to date, played a large role in HIV prevention. NGO development in the Maldives is at an early stage. Their roles, complementary positions vis-à-vis government, funding, staffing and management issues need to be worked out. Nonetheless, expertise and experience within the small NGO sector does exist and must be utilized. SHE conducts a sizable programme on reproductive health, and can refer patients with RTIs to IGMH. Counseling is available from both SHE and Fashan. SHE, Fashan, and KIDS have participated in various ways in awareness building, along with the Department of Public Health. Their involvement in the building of AIDS awareness throughout the country has been recognized and could be expanded.
Monitoring and evaluation

Evaluations of the different efforts in HIV prevention made so far have not taken place. One might consider the results of the UNFPA reproductive health study as good evidence that a large portion of the population knows something about HIV but little about other STDs, indicating a positive impact on HIV awareness of the total efforts made to date. In the future, proper baseline studies and monitoring is needed to assure that investment is not wasted.

Part Three

Recommendations

The following recommendations are based on the above review and an assumption that, given the apparently high level of awareness about HIV in the population and low level of infection, there is no urgent need to act without preparation. Most of what will be recommended will require several years of preparation and implementation time. In view of the fact that HIV represents a threat in the Maldives, rather than a real current epidemic, the emphasis will be on monitoring trends, gaining understanding of factors leading to vulnerability and designing, funding and implementing, cross-sectorally, programmes aimed at reducing that vulnerability. For those involved, it should seen as a learning and change process through which new options may emerge for protecting the population from a disease such as HIV, that follows society’s fault lines. The activities here described will have a direct benefit across many sectors.

\[
\text{ desarrollar una nueva política de prevención de HIV.}
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The previous set of statements in the Health Master Plan do not constitute a real policy based on a thorough review of contemporary options. They were narrowly cast as medical and possibly moral issues. Economic, social, political, gender-related, educational and other aspects were omitted. These options could include a) research opportunities; b) options in surveillance modes; c) options for meeting the needs of youth; d) treatment options for those infected; e) review of legal issues related to HIV; f) options for prevention of perinatal transmission; g) options in targeted interventions for high risk groups, including drug addiction treatment and prevention and voluntary testing and counseling; h) options for general population education, including social marketing approaches; i) options for developing expertise in-country; j) options in long-range planned social change to reduce vulnerability.

Step 1. Gather the human resources needed for the process. Plan the process with the aid of a specialist advisor, and coordinated from the central position of the Ministry of Planning. In that position, a wider view of vulnerability can be encompassed than it can when seen simply as a problem of health. Help with recruitment of such an advisor in AIDS policy development may be directed to USAID or Department for International Development (DfID, UK) as the funding source. An organization known as the Futures Group, (located in both the US and the UK) has spent several years reviewing the national AIDS policy-making
processes in developing countries, with a view to distilling lessons to be learned. They may be helpful. Their documents are certainly worth examining.

Step 2. Prepare for policy discussions. Conduct advocacy regarding the need for a policy, with visits to Uganda, Indonesia, possibly Egypt for influential leaders. Gather together the latest sources of information on the topics to be covered; allow people to learn all that is known to date about the epidemic. Access the Web. Take the time to prepare a core group of well-informed persons, but set a date for moving on to the next step.

Step 3. Lead discussions across sectors and regions, listen to people’s needs, especially those of the youth; develop policy and action plans to meet those needs.

With regard to research, some might be carried out during the period of policy development, which would enable policy makers to construct a more realistic document. In-depth, qualitative research is needed in order to understand the meaning and context of risk-taking behaviours and to develop good prevention programmes based on the findings. Quantitative surveys (baseline and follow-up) should also be done in order to measure the impact of prevention programmes. The behaviours to be studied are not only sexual, but also include reasons for not using condoms when needed, STD-treatment seeking, beliefs about sex, reproduction and STDs and the terms used, the drug sub-culture, acceptability of the female condom, attitudes towards HIV-infected persons, and others. Where there is considerable fear of disclosure and high levels of literacy, anonymous questionnaires may be the best approach. Studying changing levels of knowledge is somewhat less important than studying changing attitudes and accompanying behaviours, such as talking about STDs with a sexual partner. Understanding the real beliefs and attitudes of health workers is very valuable. An HIV and Development Research Sub-committee could be set up and priority areas for research decided among all concerned parties. Efforts simply to enumerate the number of high risk persons, such as sex workers, should be resisted, unless a programme by which HIV can be prevented among them is undertaken. Ultimately, it is high risk behaviour, not high risk persons that must be prevented.

An RTI/STD study could take place after the PCR machine is available. This is because PCR tests of urine can easily detect both gonorrhea and chlamydia and are less intrusive and subject to less error than cervical or urethral swabs. Other vaginal infections are more easily diagnosed and such diagnostic capacity already exists in the country. It might be possible to include PAP smears as well. UNFPA has an interest in contributing funds to such a study and external expertise in setting it up could be accessed through USAID at the Centers for Disease Control and Prevention in the USA, or alternatively from Family Health International, Bangkok. WHO can help with accessing tests and reagents. One well-designed random sample community-based study of this sort among all men and women over 18 years of age would serve the nation’s reproductive health programme as well as its HIV prevention needs. As all detected infections would be treated, it would also serve the public’s health. In addition, in order to carry out such a study, communities have to be mobilized to understand the nature of RTIs/STDs. This effort would fill the informational needs of the many people who wish to know more about these important diseases.
Re-vamp surveillance

With the help of a trained epidemiologist, the national surveillance should be re-considered. A great deal of money and time is being wasted testing very low risk people. When HIV prevalence is less than 1%, only high risk groups should be under surveillance and this should be done in an unlinked anonymous manner. Proper data gathering and analysis skills must be put in place and sampling designed so that change can be detected over time. Expanded second-generation surveillance methodology should be followed as closely as possible (30,31). It is possible that UNAIDS, WHO or USAID/Family Health International could provide technical assistance.

Protect the tourist industry

It is understandable that there has been fear that HIV could do damage to the tourist industry. However, this fear does not seem justified. Tourism has not dropped off in any affected country, even Thailand, due to the local HIV epidemic. However, a few simple activities could assuage those fears. It would be simple to place condom vending machines in the toilets of resorts and hotels. Most owners and managers of these businesses would see the value of such a service to the public. The Department of Public Health could put together a Travel Safe Campaign similar to that of Australia, but adapted to the Maldivian situation, including warning Maldivians going abroad about risks in seeking health care.

Develop AIDS-related expertise

In all nations, as the AIDS epidemic arrived, governments found themselves unable to respond, most often because the expertise to deal with a host of new issues simply was not present. It is not surprising that the small nation of Maldives is without the needed social science, specialized counseling, clinical, and epidemiological skills. Some of this educational need may be met through formal training programs, either short or longer term, while others may be met through on-the-job training with technical assistance provided.

1. Laboratory skills and equipment may focus on PCR diagnostics, in order that a proper STD study can be carried out.
2. Clinicians may prefer a visit to a hospital where HIV and other STDs are seen regularly, in order to learn more about these diseases and about infection control.
3. Whatever evolves in the drug situation in Maldives, evidence shows that the philosophy of harm reduction yields the greatest benefits for drug users and society. Those involved should try to learn as much about this as possible.
4. Counselors need to be trained who will provide the nation with the capacity to do pre- and post-test voluntary counseling. Such persons could serve as counselors in other risky behaviours, such as drug addiction.

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5. An epidemiologist is needed for helping to conduct studies of hospital records, design an improved surveillance system and implement a community-based RTI study.
6. If the basic social science skills can be found, technical assistance should be sufficient to carry out proper studies to gain an understanding of the real level of behavioural risk in different groups within the community. Studies will have to be designed in which full protection of informants can be assured. NGOs may be the best type of agency to carry this out.
7. Behavioural change programming expertise starts with understanding theory and will require people with backgrounds of various sorts, including education, psychology, communications and marketing, graphic arts, and others. Peer education, rapid needs assessments and other assessment techniques, project design, monitoring and evaluation skills need to be developed.
8. Exposure visits to successful projects utilizing the family life skills approach for youth, often carried out by UNICEF, would be very helpful.
9. Examples in community-based or school-based drug use prevention activities could be visited as well.
10. As social and behavioral research identifies the behaviours that put Maldivians at risk, specific options for addressing them carried out elsewhere would provide a starting point for adaptation of methods to the Maldivian context.
11. The production of materials for all media requires the development of local capacity.

* Improve the knowledge of health workers and school teachers.

People in the community look toward health workers and school teachers as respected sources of information. Equip them with the knowledge they need to provide answers about HIV, STDs, human sexuality and reproduction. Keep them abreast of the findings of research related to the issues in their areas, the nation, the region and the world as a whole. Regular in-service updated training should be conducted. In this regard, the Maritime Training College should be included as well as the tourist industry training facility.

Monitoring of infection control could accompany a review of principles for clinic managers and others. Provide basic training and guidelines for physicians on the clinical presentations of HIV disease and AIDS, prevention and treatment of opportunistic infections, and symptomatic treatment.

After community-based health workers and teachers are able, develop peer education programmes using them as trainers of the peer educators. Such programmes in the Maldivian context could include different ones for newly married men and women, for unmarried teenagers, for resort workers, for sailors, for safari boat workers, etc.

HIV positive persons have consistently demonstrated the great value of their being directly involved in prevention. Positive people’s speakers bureaus and other similar services exist in India, Australia and elsewhere. These should be accessed to bring a human face to the disease in Maldives. Such persons could make a tour of high schools and hospitals, an event that would contribute towards greater de-stigmatization of people living with HIV.
The more information people have, the more in control of the situation they will be.

The role of UN Agencies

The UN Theme Group can play a valuable role in helping government identify the right technical assistance, funding sources, sites to visit for the preparation of the national HIV policy. UN agencies need to see their role as facilitating government to take a wider view of HIV as a development challenge. Specifically, the UN should provide access to more information on HIV, not just UN-produced documents and could consider developing an HIV resource library. In order to carry out these tasks more efficiently, a UN volunteer with expertise in HIV programming should be recruited to work closely with the policy-development process, in the first instance, and in the future with the programmes that grow out of this.

WHO has an important role to play helping the government set up a more useful surveillance system. The purchase of kits should be linked to a clear plan that fulfills the requirements of Second-Generation or Expanded Surveillance, as discussed in key documents. Provision of TA will be required and might be fulfilled through the advent of an epidemiologist. Short-term access to expertise in HIV surveillance is available in the UN system and in the region.
Annex 1:

WHO Regional Offices' Recommendations

a). A formal review of the National AIDS Program by a multidisciplinary team to assess the achievements; identify constraints still persisting and make recommendations to overcome the bottlenecks in various program areas. The members of the external review should be those outside the national program, composed both national (from Ministries of Health, education, planning, finance or tourism as well as representatives of NGOs etc) and some internationals interested in the national program such as representatives of WHO, UNAIDS, UNDP or any other cosponsors as well as of interested donors. The national program role would be to organize, facilitate the review exercise by providing data, information as well accompany during field visit etc. WHO generally promotes the reviews as a positive exercise to provide an opportunity to see what has been achieved so far, what constraints remain, and how it can be further strengthened. In many countries, this offers also an opportunity for advocacy, which can be very helpful to the program. WHO can support this financially as well as technically. The findings of the review can then be used for developing a Strategic Plan for a multi-sectoral response for HIV/AIDS prevention and care in Maldives. WHO/SEARO recently assisted the theme group and the Government in Sri Lanka in conducting a program review there.

b). Since surveillance has been identified by WHO as one of its priority areas and is within WHO's comparative advantages, in addition to (a), WHO can support through provision of a Consultant to advise/assist in setting up surveillance on HIV/AIDS as well as STI and behavioral aspects.

c). Based on the epidemiological situation in Maldives, one of the major priorities should be to plan and implement prevention interventions among populations considered and found to be at risk for HIV. This would include education of the population groups with risk behavior, integrated with the provision of health services such as condoms and STI diagnosis and treatment. Creation of an enabling social environment would also be important for behavior change to occur.
Annex 2:

Resources

The following is a short list of Web sites, list-servers, organizations and persons that provide specialized expertise and current information on HIV-related topics. UNAIDS and the CDC (Atlanta) have numerous documents available on a wide variety of issues related to prevention of HIV, the care of persons living with HIV and AIDS, etc.

1. Family Health International, a major player (an international NGO, with headquarters in the USA) in HIV prevention, care and surveillance in the region and elsewhere, can be accessed through their Bangkok office. They have very recently published guidelines for behavioural surveillance. They are funded mainly through USAID. Contact:

   Stephen Mills
   Associate Director, Technical
   Family Health International
   Asia Regional Office
   1339 Pracharat 1 Road
   Arwan Building Suite 800
   Bangsue, Bangkok 10800
   Thailand
   Tel 66-2-587-4750
   Fax 66-2-587-4758
   e-mail smills@fhibkk.org

   Their office in India is now executing the type of STD study suggested in the recommendations. He can put people in touch with the actual implementers, as needed.

2. sea-aids is a list serve from Thailand, for the Asian region. One can join by writing 'join' in the subject line and posting to sea-aids@lists.inet.co.th or by browsing at: http://www.hivnet.ch:8000/sea-aids/tmp from where there is a registration page: http://www.hivnet.ch:8000/join/

3. preventionnews-subscribe@cdcpin.org sent in a blank email message puts one onto the CDC prevention news list serve, a very up-to-date source of information

4. Contact MitchellWarren@compuserve.com for female condoms

5. The Indian Network of Positive People or INPPLUS has a leader named Shivananda, a doctor from Manipur who can help bring a human face to AIDS in Maldives. His contact is: inpluus@giacmno1.vsnl.net.in

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6. In Australia, there are many many resources, people, materials, etc. The best way to contact these is through the Australian Federation of AIDS Organisations. Contact Anthony Quan at AQuan@AFAO.org.au

Andy Quan  
International Policy Officer  
Australian Federation of AIDS Organisations (AFAO)  
PO Box 876  
Darlinghurst NSW 1300  
Australia  
Phone: +61 2 9281 1999  
Fax: +61 2 9281 1044  
E-mail: aquan@afao.org.au

Through them one could acquire a set of *Travel Safe* materials and documents about the program, as well as materials on drug abuse prevention. *Tribes*, a national program done locally throughout Australia is well worth examining for a community-based approach to primary prevention of drug abuse.

7. The Australian National University runs a unit via email and through publications and activities on HIV and development. The list serve is hiv-and-development-l@coombs.anu.edu.au

8. For an excellent discussion group try gender-aids@hivnet.ch

9. The Asian Harm Reduction Network (AHRN) located in Chiang Mai is supported by these folks: The director is a man named Nick Crofts.

Paul Deany,  
Senior Projects Officer  
The Centre for Harm Reduction  
Macfarlane Burnet Centre for Medical Research  
PO Box 254, Fairfield, VIC 3078  
AUSTRALIA  
Ph: 61 3 9282 2269  
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Email: deany@burnet.edu.au  
Website: http://www.chr.asn.au

Through them contact the AHRN which runs a list serve, publishes a newsletter, and has numerous meetings and publications, specifically for HIV prevention among drug users in the Asian Region.
Annex 3.

List of Documents Consulted


2. UNICEF. Situation Analysis of Children and Women in the Maldives 1998. UNICEF.


15. Plange, Ni-K. Social Development in the Maldives. Overview and Assessment (draft), 2000


30. UNAIDS. Second Generation Surveillance


Annex 4.

List of Persons Consulted

In Male:
Dr. Sanweshwar Puri, Medical Officer, WHO
Husna Razee, DG Institute of Health Sciences; Exec. Sec., Fashan
Makiko Koriyama, Programme Officer, UNDP
Mohamed Rameez, AIDS Control Programme, DPH
Philippe Zysset, Deputy Resident Representative, UNDP
Dunya Maumoon, National Programme Officer, UNFPA
Laila Ali, National Programme Officer, WHO
Aishath Didi, Project Officer, UNICEF
Naomi Luwanja, UNV, IEC Coordinator, UNFPA
Mohamed Saeed, National Programme Officer, UNICEF
Dr. Abdul Waheed, Director General, Health Services
Aminath Rasheeda, Director General, DPH
Ibrahim Shaheem, Director, Communicable Diseases
Dr. Gafur, National Thalassaemia Centre
3 young men, residents of Male
Dr. Hamid, ADK Hospital
Dr. Abdul Azeez Yoosuf, Director, Medical Administration, IGMH
Sharifa Manike, Laboratory, IGMH
Mr. A. Ghanee Abdullah, Port Health Officer
Commissioner, Narcotics Control Board. Lt. Col. Abdul Shukoor Abdulla
Arifa Abdul Hakeem, Deputy Director, Planning and Coordination, Ministry of
Women’s Affairs and Social Security
Ahmed Khalil, Reproductive Health Program
Manager, Government Stores
Mohamed Amjad, Asst. Dir., Institute of Hotel Catering Services
Rina Gill, Asst. Representative, UNICEF
Ahmed Mujuthaba, Executive Board Member, MATI
Dr. El Kubota, WHO Representative
Hussain Shahid, Maritime Training College
Abdulla Maag, Maritime Training College
Hamid Hameed, Deputy Minister, Planning and National Development
Ahmed Ali, Director of Projects, KIDS

At Kulhudhuffushi:
Saeed Ahmed, Asst Principal, Secondary School, Kulhudhuffushi
Mr. Thadchanamurty, Principal Secondary School, Kulhudhuffushi
Mr. Waheed, Manager of Hospital, Kulhudhuffushi
Officer in Charge, Laboratory, Kulhudhuffushi
Atoll Chief, Kulhudhuffushi
Manager, Garment Factory, Hanimaadu
Island Chief, Hanimaadu Island
Dr. Mausumi, Society for Health Education, Male
Physician in charge, Hanimaadhu Island clinic

Hafiza Abduraman, Asst. Principal, Primary School, Kulhudhuffushi
3 youths, SHAD (NGO), Kulhudhuffushi
At Drug Rehabilitation Centre, Himafushi Island
Counselors, and female clients, Drug Rehab Centre
Ahmed Mohamed, Administrator Drug Rehab Centre

At Alimanttha Resort
Mr. Saeed, Manager
3 foreign workers
3 local workers

At Hithadhoo
4 women, Island Women's Development Committee members, Feydhoo
4 young women from Youth group, Hithadhoo
2 young men, ex-resort workers, on Hithadhoo
2 Family Health Workers, Hithadhoo Regional Health Centre.