EDITORIAL

Taking Stock of Two Decades of the HIV/AIDS Epidemic in Malaysia

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It has been approximately two decades since the first case of the Acquired Immunodeficiency Syndrome was reported in Malaysia [1]. Following a small increase in the number of new reported cases of HIV infection and AIDS in the few ensuing years, a rapid explosion of the epidemic took place in the mid 1990s with 4000 and latterly close to 7000 new HIV infections reported annually [2]. The cumulative total reported HIV cases to September 2004 was 61486, with 8955 AIDS cases. The number of deaths due to AIDS to date has totalled a staggering 6665 cases [2].

As is known, the main route of transmission for HIV infection in this country is through injecting drug use, which has consistently accounted for more than 75% of all reported HIV cases[3]. At present HIV prevalence in the general population remains low as measured by the low prevalence rates in blood donors (0.03%) and antenatal mothers (0.04%) [3]. However, the proportion of reported HIV infections transmitted through sexual transmission has been noted to be increasing with a 46% increase in infections attributed to heterosexual transmission recorded in 2002 compared to the previous year. The rate of infection among women is also steadily rising [3]. Although data on HIV prevalence in specific risk groups other than drug users are scant, a special survey conducted in 2000 indicated that the HIV prevalence rate among commercial sex workers was more than 10% in selected areas in Kuala Lumpur[3]. Furthermore, sexual transmission of HIV from injecting drug users (IDU) to their sex partners looks certain to feature more prominently in our epidemic. In a survey of more than 6000 inmates from 26 Pusat Serenti across the country, more than half of respondents including those who were aware of their HIV status admitted to having sex with partners other than their spouse or with commercial sex workers. The rate of condom use in those surveyed was very low [4].

It is prudent that as we approach the third decade of the epidemic that we seriously examine our prevention, treatment and care efforts to date. In the area of prevention for instance we need to take stock of our present strategies and look at approaches that would determine a more favourable outcome in the trend of the HIV epidemic in this country. It is clear that despite the undisputed link between the escalating HIV epidemic to unsafe injecting practices and sexual behaviours amongst drug users in this country, effective programmatic efforts to control transmission in this specific group of the population have not been undertaken largely due to policies which tend to preclude harm reduction approaches such as provision of sterile injecting equipment and condoms.

A large body of evidence exists to indicate that the HIV epidemic associated with injecting drug use can be slowed, stopped or even reversed through comprehensive harm reduction measures [5-9]. These measures include programs such as education and information to discourage people from using drugs, making an expanded range of drug dependence treatment available including appropriate substitution therapies, outreach programs and peer education for IDUS informing them of the risks, provision of sterile needles and syringes distribution and disposal programs. Significantly, the adoption of these measures, in particular needle and syringe programmes, have not been associated with negative consequences as widely feared[5]. Harm reduction measures which have thus far been associated with developed and western countries are increasingly being

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adopted by developing as well as Muslim countries including Indonesia, Iran, and Pakistan. Recent evidence has in fact shown that in addition to controlling the HIV epidemic, these measures are cost-effective and have also been associated with reduction in crime rates [10,11].

In addition to prevention measures targeted at injecting drug users, programmes to address the changing scenario of the country's socio-demographics and its relation to the HIV epidemic need to be established or expanded. These programmes are needed to address for instance the rising rate of infection in women, the increasing rise in commercial sex trade as well as the large number of migrant workers, some from countries with high HIV prevalence in a specific and targeted manner.

An area of prevention that was instituted with good success is the HIV screening and administration of prophylaxis therapy to antenatal mothers for the prevention of mother to child transmission (PTMCT) which began in 1998. By the end of 2002, more than 1.4 million antenatal mothers were screened of whom 45 women were found to be HIV positive. This programme had successfully tested more than 90% of antenatal mothers attending government antenatal clinics and hospitals throughout the country. As previously mentioned the overall prevalence of HIV infection amongst ante-natal mothers was 0.04% in 2002. Of the babies born to HIV positive mothers, 4.5% were subsequently diagnosed with HIV infection[12]. It is important to ensure that antenatal mothers attending non-government hospitals and private clinics and hospitals will also benefit from such prevention measures.

Advances in antiretroviral therapy have changed the natural history of HIV infection from a disease that resulted in early morbidity to a chronic manageable disease. These remarkable benefits of highly active antiretroviral therapy (HAART) have emerged in both developed and developing country settings. In a retrospective analysis of survival in a cohort of patients from two main HIV outpatient clinics in Kuala Lumpur, the immunological response and survival in these patients who were severely immunosuppressed were comparable to those previously reported from developed countries[13]. Moves to import generic medications by the government of Malaysia in the last two years have meant that the price of HAART has been drastically reduced from an average of RM2200 per month three years ago, to RM220 currently. Heavy government subsidies also mean that patients only pay a fraction of the cost.

However despite these measures, access to HAART remains very limited. It is estimated that at present only 2000 of the 9500 HIV-infected patients in need of treatment are receiving HAART nationwide [14]. The reasons for this low uptake of treatment are multi-factorial. Firstly awareness of the benefits of treatment and the low cost of the medications remains low amongst patients and health-care workers alike. Secondly the number of HIV/AIDS services around the country has also not expanded to keep up with the growing epidemic. There are currently approximately only 30 trained doctors in HIV medicine, or 1323 HIV-infected patients per doctor[14]. Furthermore, access to medical services amongst IDUs, the group most affected remains limited. It is estimated that of those receiving HAART at two major HIV treatment centres in Kuala Lumpur, only 2% were drug users [15]. Finally, contributing to the poor access to treatment is the fact that the majority of HIV patients are diagnosed late in their disease.

Ensuring early and timely diagnosis of HIV infection is not only important for the individual patient's benefits, especially in the era of HAART but also from a public health standpoint. In a cross-sectional survey of patients attending three HIV clinics in Malaysia, the majority of patients who were interviewed presented with a CD4 count of < 200 cells/mm^3. In this cohort, a large proportion of patients did not perceive themselves to be at risk for HIV infection. For some patients the reason for not undergoing HIV testing included fear of loss of employment, social isolation and family rejection [16].

Healthcare-workers are at the forefront of providing treatment and care to HIV positive patients. Although the risk of becoming infected through occupational exposure is extremely small, the costs associated with occupational exposure to HIV-infected fluid are enormous. At this time of the epidemic in Malaysia, it is imperative that all health-care workers are aware of the risks involved and the precautions that need to be taken to reduce the possibility of HIV transmission in the course of performing our duties. Sadly, as indicated in the article by Bairy *et al* in this issue of the journal, awareness of the risks associated with HIV transmission through occupational exposure remains low. In addition, awareness of the existence of

guidelines for the management of post-exposure prophylaxis is also equally low [17]. More efforts need to be undertaken by healthcare facilities to educate their staff members with regards to this occupational safety issue.

Finally scientific research in all fields of HIV/AIDS medicine has been sorely lacking in this country. Encouraging clinicians, public health practitioners, social and basic scientists to engage in HIV-related research is crucial in the development of a local knowledge base of the epidemic. It is through this that informed public policies and programmes should be shaped. It is clear that in areas where research has been conducted, significant findings such as the recent description of a new circulating recombinant form of the HIV-1 subtype in Kuala Lumpur can lead to a better understanding of the molecular epidemiology and patterns of HIV transmission in this country [18].

The trend in the HIV epidemic in this country has to be viewed with great concern by all especially within the medical health profession. In addition to an unchecked explosion in transmission of HIV amongst injecting drug users, there are indications that infections are moving out of this initial group into the general population. Gender inequities, stigma, discrimination, silence, denial and ignorance are widespread, fuelling the epidemic. Factors such as mobility and poverty will further contribute to HIV vulnerability.

Mounting an effective and comprehensive response continues to be hampered by significant social, cultural, religious and legal barriers. Measures with ample scientific evidence of proven effectiveness in reducing HIV-related harm associated with unsafe sexual behaviour and injecting drug use continue to be rejected on the basis of ideological and moral grounds. The medical community needs to show leadership in advocating public health policies based on evidence if we are to achieve success in controlling this epidemic. Additionally attention to building competent and trained human resource amongst healthcare professionals as well as the community in relation to HIV/AIDS is urgently required if we are to continue scaling up prevention and treatment programmes in Malaysia to meet ever-increasing demands.

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