

Chapter VI

Discussion, Conclusion and Recommendations

Discussion

Although there are many assumptions used for the calculations, the results can help the authority concerned in the hospital, and also in DOH and MOH, to consider allocation of the available scarce resources and to plan the budget for the coming year. All the assumptions made in this study should be re-considered whether it is appropriate or fit for the country and if necessary, some prospective ad hoc studies should be conducted.

As this study is a methodologic study, it should be followed by an empirical study to provide better information to the decision makers about how big is the burden of HIV/AIDS in the country. An empirical, field based study is a necessity.

The absence of empirical information is particularly important in considering the impact of AIDS and HIV on households . From a policy perspective, a further understanding of the behaviors of the population will contribute to better design and targeting of interventions to support these actions.

Routine information on unit costs is often not available. Costing of donated inputs, volunteer time and other non-monetary resources is notoriously difficult. All these costs should also be included in direct costs.

Estimating direct costs is rather crude as these costs only reflect a very narrow range of the type of impact which the AIDS epidemic will have. There are two approaches in direct costing (Hanson, 1992). The first uses medical records to determine services consumed. One of the problems with this type of the study is the limited representative nature of the sample, since only a small number of facilities are included in this type of study. Additionally, this type of study often considers only the costs of AIDS, and not the additional costs of ARC and HIV, since many opportunistic illnesses may be treated without the knowledge that the patient is HIV positive.

The second type of study is one which uses decision tree algorithms for the various types of illness suffered by AIDS patients, developed by medical practitioners on the basis of their own practice (where limited time is available for data collection). The estimated cost burden of each presenting condition is then calculated on the basis of informed prediction about prevalence, the number of persons who will present with particular symptoms, and the conditional probabilities associated with each illness. The advantage of this type of study is that it involves less data collection, can be based on up-to date treatment patterns and can be modified to reflect changes in treatment practices and costs. When drug supply is limited, the opportunities to follow standard treatment algorithms may be restricted. Variations in treatment practice between clinicians can not be easily incorporated. This method may however, generate hypothesis which can be tested by more in-depth studies.

However, the picture is complicated by 2 factors: that this calculation does not include the higher medical cost for people with HIV before hospitalization, and that the high % of HIV positive patients who died reduce the average costs of hospitalization. If these factors are taken into account, overall medical costs will be higher.

Many developing countries studies look only at hospital costs, generally because of the lack of treatment alternatives. Very little is known about the medical and other support costs borne by the household of the persons with AIDS. The distortion in cost estimates caused by “convenience” samples of hospital patients may be particularly great in developing countries where access to hospitals may be limited.

If drugs and supplies are limited, there is the difficulty in estimating the cost of providing adequate care, the difference between estimates of actual and ideal cost can be significant.

Forecasting of direct costs is complicated not only by uncertainty about costs in the future, but about patterns of transmission and numbers affected, the range of variation in forecasts will be determined much more by uncertainty in epidemiological forecasts of total numbers affected in the future than in variation in estimates of cost per case. Even if seroprevalence at a given point in time is known, there are still uncertainties in infection, transmission and detection dynamics.

For meaningful comparison, it is necessary to examine the additional or incremental costs that one service or program imposes over another, compared with the additional effects, benefits or utilities it delivers. Incremental cost is concerned with cost differences between services or programs. Since there is no different services or programs in the prevention and control of HIV/AIDS, no incremental analysis is done in this study. If there is alternative strategy, e.g. treatment with antiviral drugs such as AZT, incremental analysis should be performed.

The choice of exchange rate for currency conversion is complicated not only by distortions in exchange rates, but also by rapid depreciation of some currencies, even over the period of the study.

Conclusion

Although this study is a methodologic one, most of the data for the treatment and investigation of AIDS are real data and most of the hypothetical data are very similar to the real situation. Therefore the calculated results can provide information or stimulus to the decision makers in relation to the issues about financing of HIV/AIDS and improving the program in order to achieve reasonable cost-effectiveness in the future.

Given the epidemic's high cost, the need for prevention policies should be accepted. While the provision of information, education and communication (IEC) are important components of preventive measures, policy makers need to recognize that cost-effective IEC must be well designed, targeted, and take into consideration major differences in socio-economic and cultural characteristics within the total population.

The resources available for health care vary dramatically between countries. Any endemic or epidemic disease places a burden on a country's health budget. Whatever the illness, the extent and cost of treatment a patient receives usually depends on the national resources available, except where individuals can afford private treatment. HIV/AIDS is no exception. In many developing countries, treatment for people with HIV is generally restricted to those who are seriously ill, and may extend no further than palliative care. Only rarely are anti-viral drugs available.

The medical care of full blown AIDS cases are provided mainly by the public hospitals. As the number of HIV and AIDS cases increases, the in-patient wards and out-patient departments will not be able to cope with them. It means that the economic burden of caring for HIV positive and AIDS patients will increasingly strain the ability of hospitals and clinics to care for non-HIV related patients.

Although many of the opportunistic infections that occur as a result of AIDS need in-patient treatment, most symptoms can be dealt with at home. Community based and home care for these patients become very important to be considered for the care of HIV/AIDS patients for alternative financing of HIV/AIDS.

The extended life span of many people with AIDS may lead to higher cost per patient. The rising number of infected persons will make more heavy burden on national health resources.

Many of the countries now most affected by HIV/AIDS are not able to provide adequate treatment for all cases of curable illnesses, such as malaria; AIDS is now competing for the same resources.

The use of cost analysis frequently will justify the efforts we make. It is an initial attempt to analyze a complex set of issues that require much more detailed research.

The results of this study does not represent the situation for the whole country but the methodology used in this study can be applied in every health sector. As this study is the very first study about prevention and treatment of HIV/AIDS in Myanmar from the provider perspective, it is hoped that this study is a good starting point for further and more in-depth studies.

If calculated and estimated treatment costs in 1994-95 are multiplied by the estimated number of persons suffering from HIV/AIDS in year 2000, the potential total cost is 174 to 189 million kyats for baseline interventions, estimated to amount to 8 to 9% of the public health budget in 1994-95. Total provider costs for the next 5 years will be 644.2 and 560 million kyats for HIV/AIDS with or without screening respectively. Meanwhile, actual spending continues to reflect the resources available.

Policy Recommendations

AIDS has catastrophically costly consequences. AIDS deserves special attention. Failure to control the epidemic at an early stage will result in far more damaging and costly consequences in the future, given the short time it takes infection rate to double in many developing countries (World Bank, 1993). AIDS affects mainly people in their economically productive adult years, has powerful negative economic effects on households, productive enterprises and the country. AIDS poses difficult challenges not only for the health sector, but to progress in development. A carefully targeted strategy of economic analysis will help to ensure that scarce resources are used more effectively.

If the AIDS epidemic continues unchecked, the accelerated demand for health care for AIDS patients will crowd out the needs of other patients. Furthermore, the number of TB cases is increasing dramatically partly as a direct result of HIV and the presence of HIV worsens problems with other STDs. The followings are some policy recommendations.

1. AIDS has to be approached as a national development issue. National leadership is crucial. Strong political will and commitment are essential to effective programs.
2. No single strategy in the fight against AIDS will meet the needs of every country. A combination of strategies, backed up with adequate resources, is required for preventing and containing the spread of AIDS. Crucial elements in these strategies are providing condom use, treating other STDs, and reducing blood borne transmissions.
3. At the national level, it is very important to be honest in admitting the scale of the problem and to make a final clear guideline as to how AIDS patients are to be treated in a situation of scarce resources. To achieve the ultimate success, prevention program should go hand in hand with economic development.
4. Health personnel need continual education and up-dating of the disease and while new areas of counseling and care need to be introduced or strengthened.
5. National HIV/AIDS programs should develop a working group for making estimations and projections for the planning and financing purposes, and should not be restricted in their work only to reported AIDS cases because it does not represent or reflect the actual situation of the HIV/AIDS epidemic.

6. Policy makers need to know not only the economic burden of HIV/AIDS but also effective ways of allocating resources and finding alternative financing methods.

7. Decisions have to be made regarding how scarce health resources should be allocated between prevention and treatment of HIV infection and other diseases.

Recommendations for Further Studies

As mentioned earlier, this study should be followed by empirical study to convince the government to emphasize on HIV/AIDS prevention and control by showing the real economic burden of this disease. Since modes and rates of transmission of HIV infection and interventions for the prevention and control of this disease are different from one risk group to another, separate studies should be conducted for each risk group each year as Table 6.1.

Table 6.1 : Recommended Study for Each Risk Group Each Year

Risk group	Estimated number of HIV positives	Activities (interventions) for each risk group	Unit cost of each intervention	Total cost for each intervention	Financial sources for each intervention
1. IDU - male - female 2. CSW -male - female 3. STDs - male - female 4. ANC 5. Military recruits 6. Blood donors	Estimated from sentinel reports and some ad hoc studies and projected by Epimodel	A. Health promotion a1. pre-screening counseling a2. post-screening counseling a3. health education B. Specific protection b1. condom distribution b2. provision of AZT b3. ? syringes and needles distribution C. Early diagnosis and prompt treatment c1. screening c2. treatment D. Disability limitation d1. counseling d2. treatment	Unit of measurement depends on quantity of output to be measured	Obtained from unit cost times total number of outputs	a. government b. private (out of pocket) c. donations or support (local and international)

Appropriate items of interventions can be added up later according to the strategies implemented in the country. It is very important to keep in mind that the studies should be carried out every year as the results can be changed according to different rates of prevalence, progression, costs, inflation, population structure and growth. Activities (interventions) should be adjusted according to the national strategies against HIV/AIDS. Detail cost items in each activity should also be updated accordingly.

Two directions for further research are suggested.

(1) More basic systematic data collection is needed, especially of socio-economic, demographic, epidemiological characteristics.

(2) A research framework should be drawn up both to develop awareness of the distributional implications of the epidemic and to provide a more detailed analysis of problems, which will eventually lead to the design of more effective preventive measures.

The agenda for future research is constantly being debated, and given the limited resources available, and the need for urgent policy responses, there are a number of questions which must be asked for proposed research (Hanson, 1992):

- Why is the research being undertaken?
- What is the research question? What are the policy implications?
- For whom? Who will use the results? By whom? How? What methodologies will be used? Are data gathering procedures appropriate to the research question? Are they feasible? How soon the results can be generated?

The following issues are ones which deserve urgent attention:

- Costs of alternative treatment/caring settings (out-patient care, home management, residential/hospices settings for AIDS patients etc.);
- Costs of treating HIV/-related diseases, the costs of managing opportunistic infections;
- Out of pocket expenditure on treatment, and care of AIDS patients, other non-monetary costs;
- Costs effectiveness studies of different types of preventive and of caring interventions; and
- Costs of social and supportive services to the extent to which informal services do and can substitute for formal services.