

The Social Context of the Emergence of HIV in Thailand

*Nicholas Ford**

Introduction

The aim of this review papers is to explore the social context of the emergence of the Human Immunodeficiency Virus (HIV)/Acquired Immune Deficiency Syndrome (AIDS) in Thailand. At a global level there are considerable differences between regions in the prevalence of HIV/AIDS, and the rate of transmission of HIV. Furthermore there are differences between regions in the social and demographic characteristics of HIV carriers/AIDS sufferers (e.g. the relative proportions of heterosexual/homosexual, injecting drug users, male/female, infant, HIV carriers). It is notable that Asia has generally lagged behind other regions in the levels of HIV infection (Karel and Robey, 1988; Wood, 1988). However, over the past two years Thailand has acknowledged rapidly increasing levels of HIV infection. This paper reviews the developing pattern of HIV infection in Thailand in terms of the following sections; firstly a brief outline of some basic epidemiological principles concerning the transmission of HIV which help to account for the international variations in prevalence; secondly, a description of the emerging awareness of HIV as a public health threat in Thailand; thirdly a review of the social characteristics of HIV carriers in Thailand, interpreted by reference to the wider social context, chiefly in terms of - the commercial sex industry/sexual culture, international tourism and injecting drug dependency. This paper highlights some of dilemmas faced by a developing country in dealing with the HIV epidemic. It is emphasised that in order to develop effective HIV/AIDS risk reduction programmes it is beneficial to consider the broad social context of HIV transmission. An understanding of the social context entails the drawing together of general principles and the specific social conditions of unique national and regional situations. It is tentatively suggested that the next phase of socio-behavioural research into HIV/AIDS will be increasingly concerned with local social and cultural conditions.

The basic epidemiological principles underlying the transmission of HIV are well documented. Key insights have been derived from prior research into the transmission of other persistent (infections for which no effective therapy is available) infections notably herpes simplex (HSV2) (Nahmias, Lee and Danielsson, 1988:154).

* Institute of Population Studies, University of Exeter, Hooper House, 101 Pennsylvania Avenue, Exeter EX4 6DT, United Kingdom.

Two major factors, "the pool" and "polypartnerism", are seen to influence the level and pace of transmission. The pool comprises the total availability, during a certain period of a transmissible and infectious agent within a particular population - in short the proportion of the population already infected. "Polypartnerism" is the number of different contacts with whom an individual engages in unprotected coitus (in the case of HIV, needle/syringe sharing as well as sexual contacts need to be considered). Epidemiologically the prevalence of a sexually transmissible infection is primarily a result of the interaction of these two factors. The "fullness" of the pool will effect the likelihood of infection, whilst the degree of polypartnerism will determine how rapidly the number of infections will increase. Projections of the transmission of HIV under different patterns and levels of polypartnerism have strongly indicated that transmission will be slower in societies where large numbers of people have a few partners, than societies where a few people have very many partners (Nahmias, Lee and Danielsson, 1988:154; Anderson, 1988:66-93). The former case includes societies such as the UK where the general sexual culture is one of almost universal premarital (penetrative) sexual intercourse and social monogamy. The latter case would comprise sexual cultures in which prostitution is a major component. Both the scale of the commercial sex industry and needle/syringe sharing among injecting drug users in Thailand have for some time been recognised as providing a fertile context for the rapid transmission of HIV (Viravaidya, 1989).

HIV/AIDS as a Public Health Concern

In terms of the global HIV epidemic Asia as a whole lagged behind other regions, a situation which even gave rise to some early speculation that East Asian people may have some special immunity against AIDS - a myth now thoroughly discounted (Karel and Robey, 1988). The initial low level of HIV prevalence in Thailand merely reflected the relatively small size of infection within the "pool". In response to the diagnosis of early AIDS cases in Thailand (from 1984) the public's reaction was one of complacency, considering AIDS to be a homosexual/"farang" (foreign westerner) disease. The government was accused by the press of not providing sufficient information about HIV/AIDS to the public, partly in order to protect Thailand's burgeoning tourist industry. By 1987 under growing pressure from the press and other groups the Ministry of Public Health began to release more figures and information concerning the level of HIV/AIDS in Thailand (Cohen, 1988). From 1987 onwards the number of reported cases of infection rapidly increased, partly reflecting more widespread blood testing for HIV. As with any other country in the absence of

systematic screening for HIV, the actual number of cases of HIV infection in Thailand is thought to be considerably higher than the number of officially reported cases.

Table 1. Reported cases of AIDS, ARC and HIV+ from September 1984 to 31st November 1989

Year	AIDS	ARC	HIV+
1984*	1	-	-
1985	1	6	5
1986	-	8	10
1987	6	14	173
1988	4	21	5,058
1989**	20	44	7,089
Total	32	93	12,335

* September - December 1984

** January - November 1989

Source: Poschyachinda, 1989.

An approximate breakdown of the characteristics of HIV carriers has been derived by comparing the findings on HIV prevalence in serological surveys undertaken among different groups (Koetsawang, 1989). HIV infection has now been detected in Thailand among injecting drug users (overwhelmingly males), prostitutes (both male and female), clients of prostitutes (males), recipients of contaminated blood products, wives of prostitutes' clients and in 1989 babies born to wives of injecting drug users/clients of prostitutes. The commercial sex industry, injecting drug dependency culture, international tourism and prisons have all been implicated as sources of accelerated HIV transmission. Within this complex of sources of HIV infection the greatest societal concern has focussed upon infection from female prostitutes to male, heterosexual clients, which given the scale of the commercial/sex industry is generally viewed as having the potential for the most widespread transmission to all strata of society. The following section explores the nature of the commercial sex industry and its context within Thailand's sexual culture.

Table 2. Results of HIV surveys, Thailand - May 1988

Categories	No. Tested	Percent of HIV+
Injecting drug users	7,615	4.48
Male commercial sex workers	2,891	1.28
Male prisoners	30,335	0.67
Female commercial sex workers	19,873	0.09
Migrant workers (before leaving)	146,058	0.01
Homosexuals	659	0.00
Blood donors	147,830	0.00

Source : Koetsawang, 1989.

Thailand's Commercial Sex Industry

Before discussing the socio-cultural context of Thailand's commercial sex industry a brief mention will be made of its scale and diversity. It is impossible to state with any certainty the precise numbers of individuals working within the commercial sex industry for a number of reasons. Assessment of the numbers involved is partly hampered by the fact that officially, prostitution is illegal in Thailand. Although legal proscription of prostitution in Thailand, as throughout much of the rest of the world, is largely aimed at restricting, rather than eliminating the phenomenon. In practice it flourishes, even as has been suggested, with the informal collusion of the police (Handley, 1989). It is furthermore very difficult to assess the numbers involved given that many individuals engage in commercial sex activities for intermittent periods according to changing circumstances, whilst others are involved on a part-time basis to supplement their usual (often meagre) income. Indeed, the continual recruitment of large numbers of younger girls is one feature that makes HIV/AIDS education among these groups so difficult. Probably the most commonly accepted estimate is approximately half a million mainly in the 16-24 age group working in the industry throughout the whole of Thailand (Phongpaichit, 1982).

Although the bulk of commercial sex workers (CSWs) in Thailand are females, there is also a significant male sector catering for homosexuals. Thailand's culture is renowned for its general sense of toleration, although concern has been recently expressed that the growing fear of HIV/AIDS is giving rise to a measure of

stigmatization of "gays" (Cohen, 1988). "Gay" groups in Bangkok have been at the forefront of efforts to promote "safe sex" (Timm, 1989:20-21). The following review focuses upon the more widespread phenomenon of female prostitution.

A key feature of the commercial sex industry in Thailand is the wide diversity of "outlets" which range through; high class "call girl" agencies, executive clubs, "Go-Go" bars, coffee shops/tea houses, "no hand" restaurants, massage parlours and brothels (catering for all social strata), "streetwalkers" and even mobile CSWs catering for rural market fairs. This diversity has important implications for the transmission of HIV given that small scale HIV serological surveys indicate rising levels of HIV infection in particular in those establishments which cater for the cheaper end of the market (The Economist, 1990). There are presumably a whole complex of factors which account for this variation in the pace of transmission, but it is probable that their key issues are levels of condom use and health (STD) conditions of both the prostitutes and clients. The clients of the higher social status establishments are likely to be better educated and more aware of the risks of HIV and other sexually transmissible infections, and as such more likely to comply with condom use. The clients of the lower social status brothels are presumably less likely to comply with the precaution of condom use. This tendency was possibly exacerbated by the early tendency of Thais (both CSWs and clients) to view HIV as a "farang" infection absent from establishments only frequented by locals. The girls working in low class brothels are also likely to have less control over their clients and indeed there have been reports of girls being physically abused for demanding the use of condoms. Some of the clients of the low class brothels are likely to be injecting drug users who have become infected with HIV from shared use of needles/syringes. Furthermore evidence has suggested that the presence of other STDs (especially those involving genital ulceration) is a significant co-factor in HIV transmission (Pepin et al., 1989). It has been estimated that as many as 70 percent of female CSWs in Thailand have some form of STD (Marchand, 1987). Thus the absence of regular medical check-ups for CSWs in the low class establishments may be further accelerating the transmission of HIV.

It now follows to review the socio-cultural and economic context of the commercial sex industry in Thailand. It is important to stress that although the industry has catered (during the Vietnam War), and continues to cater (via international tourism) for a foreign demand, the majority of CSWs' clients in Thailand are local Thais. Phongpaichit has traced the historical origins of prostitution to: "a culture of male dominance in which polygamy and concubinage played a significant role" (Phongpaichit, 1982). She elaborates that prostitution was first established on a large

scale in response to the predominance of young males in the migration streams attendant to Thailand's urban growth in the nineteenth century. It is also possible that prostitution is a by-product of the double standards for males and females pertaining to pre-/extra-marital sex inherent to traditional Asian sexual cultures. A line is clearly drawn between "respectable" females who are expected to preserve pre-marital virginity, and prostitutes to whom recourse is taken by males for both pre- and extra-marital sex. In the western "romantic" *ideal* the conjugal partner is expected to exclusively fulfil and combine the roles of lover, co-parent and personal companion. In sexual cultures which practiced polygamy and concubinage such diverse roles could be separated.

In the modern era in Thailand with increasing "modernisation" there are indications (increased unwanted pregnancies/abortions among adolescents) that significant proportions of young people are increasingly engaging in pre-marital intercourse reflecting some erosion in the traditional "double standard" (Porapakkham, Vorapongsathon and Pramanpol, 1986; Koetsawang, 1987; Prasartkul et al., 1989). However, there are not as yet clear signs that the scale of prostitution is declining. Although the recourse taken to CSWs by single and married Thai males is certainly not "socially acceptable", it nevertheless continues to be a significant component within the overall sexual culture. In a sense, the very scale of the phenomenon provides social reinforcement. However, although such socio-cultural factors facilitate female prostitution in Thailand, the fundamental motivating factors are of course, financial.

The involvement of large number of females in the commercial sex industry in Thailand can be considered from two levels, a macro level, concerning the social and regional pattern of inequalities in wealth, and a micro level, concerning economic livelihood opportunities and social responsibilities.

Despite Thailand's remarkable rates of economic growth from the 1960s onwards (Hewison, 1987), the country still remains predominantly rural dominated by the economic and political primacy of Bangkok Metropolitan Region (BMR). Thailand's rapid economic development is accompanied by (both permanent and temporary) migration flows from the poorer regions to BMR. Indeed during the 1975-80 period the net migrational inflow to BMR accounted for about 90 percent of the country's interregional migration (Sussangkarn et al., 1988). The majority of CSWs come from the poorest areas of the North and North-East regions (Phongpaichit, 1982). Both in social and regional terms Thailand is characterised by substantial inequalities in wealth (Hutaserani and Jitsuchan, 1988). Furthermore, these inequalities have been increasing over the past three decades. Analysis of indicators of social development

(health, education, nutrition) suggests that the basic standards have improved over this period. Nevertheless Thailand still contains a high proportion of the workforce in the agricultural sector and low levels of secondary school enrollment relative to other South-East Asian Newly Industrialising Countries (NICS). Thus, the rural poor, with incomes vulnerable to fluctuations in crop prices and often facing deepening indebtedness, may be easily tempted to take advantage of the additional income, which may be derived from links with the commercial sex industry. Despite broad socio-economic improvements at the macro level it is necessary to examine the social perception on needs and opportunities at the micro level in order to assess the link between prostitution and poverty.

Although in absolute terms poverty has been reduced over the past three decades the increasing commodification/monetization of Thai society has served to increase the financial pressures on poor people and possibly also to make them more conscious of their relative poverty. The conspicuous opulence, advertising and lavish department stores of Bangkok may also be expected to foster increasingly consumerist desires (Ford, 1982). It is within this perceptual and aspirational context that it is necessary to evaluate the economic attractions of work in the commercial sex industry to young rural girls and also their families. It has been calculated that income as a CSW is likely to be as much as 25 times as high as the median level to be expected from other potential occupations (Phongpaichit, 1982). The long hours and poor conditions of certain other occupations may also run the risk of damage to health. The conditions and situations of CSWs vary widely according to type of establishment from virtual imprisonment and extreme exploitation in some low class brothels to considerable freedom and very high income in more affluent establishments. For those CSWs employed in the latter, the occupational attractions are not only financial, but also encompass opportunities to become more independent and to escape the long hours and poor conditions of alternative occupations. Indeed some CSWs see greater dignity in their work than earning a pittance for example, as a housemaid. Furthermore, once a young woman has become accustomed to the relatively high income and standard of living accruing from work in the commercial sex industry she often finds it very difficult to relinquish by returning to an alternative low paid occupation (McCleod, 1982).

It is important to recall that making a decision as to whether to work in the commercial sex industry is not solely based upon individual considerations, but is closely related to family and community issues. An oft-repeated reason for engaging in employment in the commercial sex establishments in Bangkok is to remit money back

to parents and siblings. As Phongpaichit has argued, the Thai female is conscious of the need not only to support herself economically, but also to make a contribution to the family's well being. This strong sense of responsibility for familial support is viewed as a major factor in shaping the personal and financial decision to work in the commercial sex industry (Phongpaichit, 1982).

Social stigmatisation and community social sanctions may be expected to discourage young women from involvement in the commercial sex industry. However, there is evidence that the very scale of the numbers involved and importance of remittances returned have combined to greatly reduce such sanctions in some communities, especially in the Northern region. Some "temporary" involvement in the commercial sex industry is perceived as a legitimate means of addressing the rural family's deepening indebtedness and where saving can actually occur, offers opportunities for economic advancement (Tangwisuttijit, 1989). Rather than being stigmatised, a young woman who has acquired some wealth from working as a CSW may become an attractive marriage prospect in her home area. The significance of these social and community factors should not be underestimated and may well partly account for the regional clustering in the origins of many CSWs. The low level/proportion of CSWs who actually come from Bangkok may reflect not only the relative affluence of the capital but also the higher level of familial and community sanctions militating against such involvement in the sex industry.

Although the major part of Thailand's commercial sex industry caters for the local clientele, some reference must be made to that substantial part which caters for international tourists (Wereld, 1979; Cohen, 1987). Population movement (including tourism) is recognised as a major contributing factor in the spread of STDs (De Schryver and Meheus, 1989). In 1988 Thailand received over four and a quarter million international tourists, showing an increase of 21 percent from the previous year (Tourism Authority of Thailand, 1989). The meteoric growth of the tourist industry in Thailand which earned US\$ 3,121,000,000 in 1988 (an increase of 66 percent upon 1987) (Tourism Authority of Thailand, 1989) has made it a vital source of revenue, crucial to Thailand's continuing economic development. The government is obviously concerned that adverse publicity concerning AIDS in Thailand may have a negative impact upon the tourist industry (Cohen, 1988). It is difficult to assess the precise significance of the commercial sex industry to tourism in Thailand today. Male tourists essentially took over the patronage of the sex establishments which were originally set up to cater form the visiting foreign military personnel during the 1960s/70s. The excess of male (65.8 percent male in 1988 (Tourism Authority of Thailand, 1989)) over

female tourists may provide a very rough indication of that tourist flow which is particularly orientated towards the sex industry. This excess of male over female tourists is higher for the two main source countries, Japan and Malaysia (Tourism Authority of Thailand, 1989). For several years the Tourism Authority of Thailand has been striving to downplay the sex industry and to emphasise Thailand's other attractions. Especially given the growing international awareness of HIV/AIDS it is unlikely that the sex industry has much growth potential for the future. The incredible increase in the numbers of visitors to Thailand reflects the appeal of the variety of other touristic attractions. Indeed, the percentage of male visitors has declined from 71.7 percent in 1985 to 65.8 percent in 1988 reflecting this shift of emphasis (Tourism Authority of Thailand, 1989). Bangkok's well known Red Light district of Patpong probably has as much to do with sightseeing voyeurism as actual sexual contacts in the 1990s.

In summary the social context of the commercial sex industry has been delineated in terms of the historical and cultural background, the social and regional distribution of wealth and livelihood opportunities, and social and community attitudes to involvement in different shades of prostitution. Thailand is by no means unique in the scale of its commercial sex industry, but the reputation of the industry has been highlighted by international contacts generated by tourism. There are a number of government and non-government organisation-based initiatives being developed to help CSWs to protect both themselves and their clients from infection, although it is beyond the scope of this paper to review these HIV preventative intervention developments. It is hoped that Thailand can build upon its highly acclaimed information, education and communication (IEC) achievements in family planning to effectively promote appropriate behaviour change. In the same way that Thailand's family planning strategy was non-coercive and sensitively adapted to the cultural context, HIV prevention strategies will similarly need to take account of the wider social context (Knodel, Chamrathirong and Debavalya, 1987).

Injecting Drug Dependency

Although the greatest societal concern regarding HIV in Thailand has revolved around the potential transmission via female CSWs, the most spectacular rates of infection have been detected among a different "risk group" notably injecting drug users. Before outlining the current situation regarding HIV and injecting drug use in Thailand, reference is made to the historical background in order to understand the factors which have shaped and sustained the sub-culture of opiate dependency.

Opium consumption has long been an almost integral part of East Asian culture. The earliest documented reference to opium dependence in Thailand is found in the Criminal Code of Law of the fourteenth century, which described a widespread epidemic (Poschyachinda, 1981). Following Thailand's legalization of the opium trade in the mid-nineteenth century revenue from the trade comprised a substantial portion of the total national revenue, reaching a peak of 30 percent around 1916-1919 (Poschyachinda, 1982). During the same period the colonial powers were also exacting substantial revenue from the opium trade in other neighbouring South East Asian countries (McCoy, 1972). World War Two entailed a major (although temporary) dislocation of the international opiate trade. However with continued access to local production, unlike other parts of the globe numbers of opiate dependents did not decline in South-East Asia during this period (McCoy, 1972). The suppression of alternative sources of opiate production, such as Yunnan for instance following the communist takeover in China, led to an expansion and development of South East Asian opium cultivation in the so-called "Golden Triangle" which straddles northern Burma, Thailand and Laos (McCoy, 1972). The upland areas of this region have been settled by a range of diverse, semi-nomadic Hill Tribe people, including the Hmong, Karen, Akha, Lisu and Lahu (McKinnon and Bhruksari, 1986), many of whom have long cultivated opium for both medicinal and cultural-recreational reasons.

The Thai government had considered banning opium on many occasions due to its negative social impacts, but had deferred legislation due to the governments dependence on revenue from the trade. Finally having extricated itself from economic dependence on opium revenue in 1958, opium was banned amid the public fanfare of the "burning of the pipes". In 1959 Thailand's first heroin epidemic began as former opium users switched to heroin (Poschyachinda, 1982). By the early 1960's large quantities of this low grade heroin was being produced in Thailand, although it was not until the end of the decade with the arrival of skilled chemists from Hong Kong that the first No.4 heroin (90-99 percent pure) was being refined in Thailand (McCoy, 1972).

Initially the main market for this high grade opium was the U.S. military personnel serving in South Vietnam (Robins, Helzer and Davis, 1975). The U.S. Central Intelligence Agency's involvement in opium/heroin marketing and transport (via "Air America") as a means of financing counter-insurgency operations and supporting the corrupt South Vietnamese regimes has been well documented (McCoy, 1972; Belanger, 1989). Even before the withdrawal of U.S. servicemen from the region large quantities of heroin were being exported, principally to the U.S.A. (McCoy, 1972). As Bangkok became an increasingly important node in international heroin

trafficking, international pressure demanded that efforts be devoted to eradicating opium production at its source in the "Golden Triangle". There is not the space in this paper to review the full complexity of the social ecology of opium cultivation in South East Asia, suffice it to state that it is inextricably linked to the struggle for survival of marginal Hill Tribe people's in a politically turbulent region. Opium cultivation within Thailand itself has been significantly reduced in response to the twin operation of police enforcement and development initiatives which seek to develop alternative means of livelihood for the Hill Tribe peoples. Meanwhile opium cultivation has continued to expand in neighbouring Burma and Laos. Khun Sar ("drug baron/warlord") and the Shan rebel forces have interlinked narcotics production with the politico-military conflict as the peoples of Northern Burma seek autonomy from the central government (McCoy, 1972). Thus the eradication of opium production in "Burma" presupposes a resolution of the political conflict.

The main social impact of the heroin trade upon Thailand has been that the very availability and accessibility of heroin has resulted in deepening problems of drug dependency. The exact number of injecting drug users in Thailand is obviously unknown, although the numbers attending drug dependence treatment centres totalled over 61,000 in 1988 (Poschyachinda, 1989). The overwhelming majority of injecting drug users in Thailand are males, with many residing in the slum areas of Bangkok. Drug use in such areas is probably fostered by peer usage and influence and also reinforced by the so-called "career" aspect of drug dependency. It has been argued that heroin addiction can be viewed as a "form of work" providing otherwise aimless lives with a goal-orientation, social networks and meaning (Sackman, Sackman and De Angelis, 1978). It is this social aspect of injecting drug use involving the sharing of needles and syringes that has given rise to the most rapid rates of HIV transmission in Thailand (Table 3). The speed of transmission among injecting drug users has been staggering, as health workers in drug treatment in Bangkok have seen a tragedy unfold before their eyes. The problem is becoming further exacerbated as opium dependents in Northern Thailand are currently switching from smoking to injecting their drugs (Poschyachinda, 1989) creating the potential for a new HIV epidemic in that region.

Table 3. HIV seropositivity among injecting drug users in Bangkok

Percentage	December 1987	March 1988	September 1988*
Percent injecting drug users with HIV+	1 %	16 %	43 %

* Recently chosen sample of 1800 injecting drug users attending drug dependence treatment centres.

Source : Viravaidya, 1989.

Despite the higher prevalence of HIV seropositivity among injecting drug users than female CSWs, there has been much greater social concern about the HIV/AIDS with respect to the latter, than the former group. It is possible that this arises from the thinking that whilst female CSWs have the potential, via the prevailing sexual culture, to transmit the virus to large sections of society, injecting drug users consist of a deviant sub-culture which is largely separate from the rest of society. It is more likely however that the lives of injecting drug users are composed of periods of relatively normal living, with attendant social interaction, punctuated by shorter periods of chaotic, non-functional behaviour. Thus, it should be recognised that injecting drug users are not separate from the rest of society and it is imprudent to ignore their social and health needs. There is a pressing need for the development and expansion of social and health programmes which can *interact* with drug users in order to help alleviate drug dependency and pursue harm-reduction with respect of HIV transmission.

Conclusion

This short review has not sought to provide an exhaustive and detailed description of Thailand's social response to the emerging HIV threat, but has attempted to draw out some of the key social dimensions which underline the specific nature of the pattern of HIV infection in Thailand. The paper has sought to emphasise that although HIV is a global pandemic the particular form it takes at a local and national level is related to particular historical and social factors. The Thai case illustrates the way in which HIV can be rapidly transmitted within a specific sub-group (namely injecting drug users) which has been largely neglected within the societal debates and discussions concerning HIV/AIDS.

Pertinent HIV preventative strategies can be gainfully considered in the short and long-term. In the short-term interactive IEC strategies tailored to meeting the needs

of specific groups (for instance injecting drug users, CSWs, the clients of CSWs, etc.) may go some way towards HIV risk-reduction. Sensitive social research is needed to help develop and refine such interventions. It is also important to recognise that the transmission of HIV in any given society is inextricably related to a host of complex and far-reaching social and political factors. There is much potential for further consideration of the implications for HIV prevention in various areas of social and economic policy. For instance legalisation of the commercial sex industry may facilitate an improvement in health care of the workers and provision of regular and appropriate IEC. Dealing with HIV transmission among injecting drug users raises issues such as providing needle/syringe exchange schemes and social and health care support for users, as well as reducing the availability of drugs. Reducing the flow of heroin through Thailand is related to fostering social and economic development among the Hill Tribe peoples as well as the almost insuperable difficulties of reaching a political solution to the conflict in areas of neighbouring Burma. The scope for social and health policies necessarily depends upon the allocation of scarce resources which a developing country such as Thailand can ill afford. This in turn raises issues concerning the continuing channeling of appropriate aid from donor countries. A consideration of the social context of HIV transmission within specific settings may help to contribute towards comprehensive inter-sectoral HIV prevention strategies in the long term.

Acknowledgement

This is a revision of paper presented at the Fourth International Symposium in Medical Geography, University of East Anglia, Norwich, 16-19 July 1990. I would like to express my thanks to Suporn Koetsawang, Vichai Poschyachinda, Apichat Chamrathirong and Boonlert Leoprapi for their helpful advice behind the development of this paper. Any errors are of course the author's own. Thanks also to Elaine Davies for comments on the text and Nikki Lamb for typing the paper. Funding the study visits (1986, 1988, 1989) upon which this review is based, was gratefully received from the British Council.

References

- Anderson, R.M. 1988. The Epidemiology of HIV Infection: Variable Incubation plus Infectious Periods and Heterogeneity in Sexual Activity. *J R Stat Soc* 151 (1) : 66-93.
- Belanger, F.W. 1989. *Drugs, the US and Khum Sa*. Bangkok : Duang Kamol.
- Cohen, E. 1987. Sensuality and Venality in Bangkok: The Dynamics of Cross- Cultural Mapping of Prostitution. *DEBEDF* 8 : 223-234.

- _____. 1988. Tourism and AIDS in Thailand. *Annals of Tourism Research* 15 : 467-488.
- De Schryver, A., and A. Meheus. 1989. International Travel and Sexually Transmitted Diseases. *World Health Stat Q.* 42 : 90-99.
- Ford, N.J. 1982. The Nature and Range of Human Needing. In *Industrial Decline and Regeneration*. L. Collin (ed.). Edinburgh : University of Edinburgh : 279-290.
- Handley, P. 1989. The Lust Frontier. *Far East Economic Review* , Nov. 2nd : 44-45.
- Hewison, K. 1987. National Interests and Economic Downturn: Thailand. In *South- East Asia in the 1980s: The Politics of Economic Crisis*. P. Robinson et al. (eds.). Sydney : Allen and Unwin : 52.
- Hutaserani, S., and S. Jitsuchan. 1988. *Thailand's Income Distribution and Poverty Profile and Their Current Situations*. Bangkok : Thailand Development Research Institute.
- Karel, S.G., and B. Robey. 1988. AIDS in Asia and the Pacific. *Asian and Pacific Population Forum* 2 : 1-4, 18-29.
- Knodel, J., A. Chamrathirong, and N. Debavalya. 1987. *Thailand's Reproductive Revolution*. London : University of Wisconsin Press.
- Koetsawang, S. 1987. *Siriraj Adolescent Counselling Programme 1983-85 Report*. Bangkok : Theera Press.
- _____. (ed). 1989. *Workshop: AIDS Prevention and Family Health*. Bangkok : Siriraj Family Planning Research Centre.
- Marchand, D. 1987. Paying the Price of Prostitution. *IDRC Report*, April : 20-21.
- McCleod, E. 1982. *Women Working: Prostitution Now*. London : Croom Helm.
- McCoy, A.W. 1972. *The Politics of Heroin in South-East Asia*. Singapore : Harper and Row.
- McKinnon, J., and W. Bhruksari. (eds). 1986. *Highlanders of Thailand*. Oxford : Oxford University Press.
- Nahmias, A.J., F. Lee, and D. Danielsson. 1988. Epidemiological Principles for Understanding the Prevalence of HIV Infections and their Possible Control. In *AIDS in Children, Adolescents and Heterosexual Adults*. R.F. Schinazi and A.J. Nahmias (eds.). New York : Elsevier Science Publishing : 154.
- Pepin, J., F.A. Plummer, R.C. Brunham , P. Piot , D.W. Cameron, and A.R. Ronald. 1989. The Interaction of HIV Infection and Other Sexually Transmitted Diseases: An Opportunity for Intervention. *AIDS* 3 : 3-9.
- Phongpaichit, P. 1982. *From Peasant Girls to Bangkok Masseuses*. Geneva : International Labour Organization.
- Porapakkham, Y., T. Vorapongsathon, and S. Pramanpol. 1986. *Review of Population/ Family Planning Needs of Adolescents in Thailand*. IPSR Publication No.93. Bangkok : Institute for Population and Social Research, Mahidol University.

- Poschyachinda, V. 1981. *Illegal Opiate Consumption in Thailand: Population and Pattern of Use*. Bangkok : Drug Dependence Research Center, Institute of Health Research, Chulalongkorn University.
- . 1982. *Heroin in Thailand*. Bangkok : Drug Dependence Research Center, Institute of Health Research, Chulalongkorn University.
- . 1989. *Recent Changes in Needle Sharing Among Intravenous Injecting Heroin Abusers in Thailand*. Bangkok : Drug Dependence Research Center, Institute of Health Research, Chulalongkorn University.
- Prasartkul, P., A. Chamratrithirong, A. Bennett, L. Jitwatanapataya, and P. Isarabhakdi. 1989. *Rural Adolescent Sexuality and Determinants of Provincial Urban Premarital Adolescent Sex*. IPSR Publication No. 113. Bangkok : Institute for Population and Social Research, Mahidol University.
- Robins, L.N., J.E. Helzer, and D.H. Davis. 1975. Narcotic Use in South-East Asia and Afterward. *Arch Gen Psychiatr* 32 : 955-961.
- Sackman, B.S., M.M. Sackman, and G.G. De Angelis. 1978. Heroin Addiction as an Occupation: Traditional Addicts and Heroin-Addicted Polydrug Users. *International Journal of the Addictions* 13 : 427-441.
- Sussangkarn, C., D. Patamisiriwat, T. Ashakul, and K. Chimkul. 1988. *The Long-Term View on Growth and Income Distribution*. Bangkok : Thailand Development Research Institute.
- Tangwisuttijit, N. 1989. Living off the Wages of Sin. *The Nation*, November 26.
- The Economist. 1990. AIDS? What AIDS? *ECSTA* 74, March 24.
- Timm, M. 1989. Condom Cabaret in Bangkok. *New Int.*, November : 20-21.
- Tourism Authority of Thailand. 1989. *Annual Statistical Report on Tourism in Thailand 1988*. Bangkok : Tourism Authority of Thailand.
- Viravaidya, M. 1989. *A Thai Perspective on the Role of the Private Sector in Controlling AIDS*. Paper presented to the V International Conference on AIDS, Montreal, Canada.
- Wereld, O. 1979. Sex Tourism in Thailand. *ISIS International Bulletin* 13 : 9-12.
- Wood, W.B. 1988. AIDS North and South: Diffusion Patterns of a Global Epidemic and a Research Agenda for Geographers. *Prof Geogr* 40 : 266-279.