The Era of ARV in the Generalised HIV Epidemic in Thailand: Research Approaches

Kritaya Archavanitkul • Anne Bergenstrom • Timothy Brown • Aphichat Chamratrithirong • Philip Guest • Wassana Im-em • Pimonpan Isarabhakdi • Churnrurtai Kanchanachitra • Sirinan Kittisuksathit • Wiwat Peerapatanapokin • Chai Podhsita • Pramote Prasartkul • Orratai Rhujareonpornpanich • Malee Sabaiying • Varachai Thongthai • Youngyud Wongpiromsan • Peter Xenos

Editors **Aphichat** Chamratrithirong
Dusita Phuengsamran

Preface by **Philip** Guest

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Aphichat Chamratrithirong

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THE COUNTRY PROGRAM AND THE COMMUNITY RESPONSES

PREFACE

Philip Guest

This book provides a comprehensive analysis of the sexual behavior of Thais. It draws primarily upon the 2006 National Sexual Behavioral Survey, which is a nationally representative survey of Thai adults. The emphasis of individual chapters is on risk behaviors, with the chapters analyzing risk behaviors in relation to HIV policy and programs.

The book provides a welcome addition to the literature on HIV policy and programs at an opportune time. While the HIV program in Thailand has increasingly devoted most of its resources to caring for those people who have HIV, several chapters point to the need to focus more attention on the prevention of the disease. Policy options for prevention-based approaches are provided.

The first article illustrates this approach. It involves using the data from the National Sexual Behavioral Survey to revise the estimates of the number of people affected by HIV. The revision does not result in major changes in number of people infected since the previous estimate and the authors conclude that the epidemic in Thailand will continue to be driven by heterosexual behavior. They caution, however, that there continues to be a substantial impact on the numbers of men having sex with men. The results suggest the need for a revitalized national prevention program.

Data on UNGASS and Millennium Development Goals (MDGs) are compared from a number of Asian countries in the second chapter. The analysis shows marked differentials among countries on a number of indicators. These include knowledge of HIV, level of sexual behavior, condom use, and sexual behavior with a non-regular partner. The chapter calls for a renewal of HIV prevention programs, particularly those that focus on condom use. This focus should include all groups of young persons.

Article by Dr. Chai Podhisita and Dr. Peter Xenos also compares sexual behavior among young adults in Asian countries. However, it limits the comparison to the Philippines, Thailand and Vietnam, and for Thailand, utilizes the National Sexual Behavioral Survey. The authors utilize simple

measures in modeling sexual risk behavior and conclude that the impacts of country of residence are strong on almost all indicators. The sexual behavior of young males is most notably different in Thailand and the Philippines compared to Vietnam.

The first article under the section of sexual behavior in Thai soceity directly addresses some of the beliefs about sexual behavior among young people that persist in society. The author finds that a number of these myths are not supported by the data. These include that youth in school are not sexually active, youth who stay with their parents or who are watched by their parents have limited opportunity to have sex, youth are not liberal in their views on sex, youth who are single do not have sex, male youth usually have their first sex with sex workers, and youth have sex because of pornography. The analysis recommends that it is necessary to empower youth to take action against negative influences.

The source of data for analysis is very different for the following article. While relying on the National Sexual Behavioral Survey for data, the information used comes from the qualitative component of the survey. The complexity of sexual behavior is clearly seen in the analysis. The focus group participants had clear views about what types of sexual relationships are more likely to lead to contracting HIV. However, there were clear age and sex differences in these views. There was a concern about the impact of Anti-Retrovirals on the behavior of those persons with HIV.

The relative influence of parenting behavior and peer influence on the sexual risk behavior of young adults in Thailand is addressed in Dr Chai's article. The analysis finds that very few parental characteristics influence the sexual behavior of their children. This contrasts with the characteristics of the peers, although even with peers the influence is not as strong as expected and not always in the direction hypothesized. The impacts of family and peers are argued to only have an effect when they outweigh the effects of competing environmental factors at the community and society levels.

The experience surrounding first sex has been shown to vary considerably. In the National Sexual Behavior Survey the authors of artical on forced sex and HIV infection report that the majority of first sex experienced among unmarried women was not wanted. It was either unintended, unprepared, or

forced. A total of 80 of women reported that their first sex was forced while only eight men reported a similar experience.

The utility of the abstinence, being faithful and condom use (ABC) campaign for changing sexual behavior among young and single Thais is taken up in the first article of the last section of this book. The chapter concludes that the emphasis on abstinence has not led to significant changes in behavior. In fact it could lead to increased stigmatization and bias against women. The existing approach needs to be changed to a CAB approach, where condom promotion is given precedence over the other two strategies. The way that condom promotion should be addressed among young and single Thais is to focus on the behavior that needs to change rather than hoping that the young people will be abstinent.

The success of the National Media Campaign in reducing the prevalence of HIV infection is reviewed in Dr. Varachai and Assist. Prof. Malee's paper. Very few people do not watch television or listen to the radio. The opportunity exists for them to obtain information that can be used to control the spread of the disease. However, while knowledge of the disease is high among most people knowledge of how the disease is spread is much lower. They find that knowledge is not related to risk behavior. They recommend that in order to increase coverage of the National Media Campaign there should be more focus given to women.

The final article addresses the types of action that can be taken in the media to develop strategies that help empower young people to engage in responsible sexual behavior. They argue that urgent action is required to expand the positive media while minimizing the effect of negative media. The three actions that are promoted are to increase the financial resources available; develop the human resources in the media outlets; and, promoting youth involvement in the media.

The analyses taken separately provide a description of various aspects of the sexual behavior of Thais, particularly as it relates to sexual risk behavior. Taken as a whole, the book argues for new policy approaches to sexual behavior among young Thais. Young, single Thais are increasingly sexually active and it is the responsibility of all in the society to ensure that such activity is safe.

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Most importantly, we would like acknowledge Dr. Philip Guest for the preface of this book. His significant untiring contributions throughout the production of this book are greatly appreciated.

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Emeritus Professor Aphichat Chamratrithirong
Dusita Phuengsamran
Editors

Acronyms and Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral treatment
BCC	Behaviour Change Communication
BSS	Behavioural Surveillance Survey
ABC	Abstinence, Be Faithful, Condom Use
CBO	Community - based Organization
GFATM	Global Fund for HIV/AIDS, TB and Malaria
HIV	Human Immunodeficiency Virus
IDU	Injecting Drug Uses
IPSR	Institute for Population and Social Rescarch
MICS	Multiple Indicators Cluster Survey
MOPH	Ministry of Public Health
MSM	Men who have sex with men
MDG	Millenium Development Goal
NGO	Non-Govermental Organizations
PMTCT	Prevention of Mother–to–Child Transmission
STIs	Sexually Transmitted Infections
UN	United Nations
UNAIDS	United Nations Programme on HIV/AIDS
UNFPA	United Nations Populations Fund
UNICEF	United Nations Children's Fund
VCT	Voluntary Counseling and Testing

REVISING HIV ESTIMATES AND PROJECTION: IMPLICATIONS OF THE NATIONAL SEXUAL BEHAVIOR SURVEY

Timothy Brown
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Introduction

In 2008, unprotected sex between heterosexuals remains the most important contributor to new and prevalent HIV infections in Thailand. The Thai Working Group on HIV/AIDS Projection updated their HIV projections for Thailand in 2005, and estimated a total of 1,070,000 adults had been infected with HIV since the start of the epidemic. Of these, 510,000 had died from AIDS, and 560,000 were currently living with HIV. An estimated 17,000 new infections occurred in 2005, declining slowly to 14,000 new infections in 2007.

Of all new infections in the 2005 projection, roughly one-third are women contracting HIV from their spouses who are either past or present clients of female sex workers. Many of the men currently passing HIV on to their wives were infected years in the past before condom use in sex work became the norm in Thailand. Given the significant increases in condom use and reductions in client numbers since the mid-1990s, however, at present less than 15% of all new infections are occurring among sex workers and their clients. Instead, for the next several years, the vast majority of new infections in Thailand will occur through husband-and-wife sex and male-male sex. Thus, further reductions of HIV risk in sex work, while possible, are not likely to make major changes in the shape of the epidemic in the near future. With the significant declines seen in young men visiting sex workers, many are concerned that a compensatory

increase in non-commercial casual sex in the younger generation will result in a second major wave of HIV infection in Thailand.

This paper will explore that proposition and discuss the future of the Thai epidemic by presenting revised HIV projections that incorporate new data on changes in sexual behaviors among heterosexual men and women in Thailand collected from The National Sexual Behavior Survey of Thailand 2006 (NSBS 2006). This new projection will also take into account expected changes in risk behaviors in both commercial and casual sex from 2007 until 2020. This revised scenario will then be compared to the current national HIV projection to illustrate the impact that heterosexual behavior changes are likely to have on the epidemic.

Background on the HIV Situation in Thailand

Thailand has been globally recognized as a success story in tackling the HIV epidemic, with a remarkable reduction in new HIV infections from 150,000 in the early 1990's to only 26,000 in 2000 (The Thai Working Group on HIV/AIDS Projection, 2001). But while incredible success was achieved in addressing sex work during the first decade of the epidemic, complacency and weakened prevention efforts have resulted in a slower decline in new infections in the second decade of the epidemic. Whereas new infections fell by 83% between 1990 and 2000, they will only fall by about 50% in the next decade, leaving almost 11,000 people a year contracting HIV in 2010 (Brown and Peerapatanapokin, 2005). The two major contributors to HIV infections during this second decade will be husband-to-wife transmission and sex between men, with sex work playing much less of a role than it did in the first decade. Promotion of condom use and STI treatment among sex workers and clients has changed the course of the Thai epidemic - but other prevention efforts will be needed in the future to make significant additional progress against the epidemic.

The other factor changing the course of the Thai epidemic is antiretroviral therapy, which is now universally available to people living with HIV through the Royal Thai Government. While this has little impact on new infections, it does keep many people with HIV alive who would otherwise

have died of various opportunistic infections. The net result is that the number of people currently living with HIV will decline only slowly instead of dropping very rapidly in response to the 10-fold reduction in incidence between 1990 and 2005. The impact of this will be highlighted later in the chapter.

Structure and Methodology of the HIV Projection Model Used

The Asian Epidemic Model (Brown and Peerapatanapokin, 2004) has been applied here to examine the future course of the Thai epidemic and take into account the changes in both commercial and casual sexual behaviors in Thailand since the last national data became available in 1993.]The Asian Epidemic Model (AEM) has previously been used in two rounds of Thai national modeling in 2000 and 2005. It provides HIV prevalence results for each key population modeled (direct and indirect female sex workers [FSW], clients, injecting drug users [IDU], men who have sex with men [MSM], and general population men and women) that are quite close to the actual observed HIV surveillance values in the country. The model's inputs include both biological data from the HIV and STI surveillance system and behavioral data from national behavioral surveys and sub-population specific studies among MSM, IDU and FSW. Using behavioral values measured over the years in Thailand, the model accurately reproduces over 15 years of past seroprevalence trends in each of the key populations. The required input parameters for each of those key populations are preliminarily behavioral in nature and include:

- Sizes of key populations-direct and indirect FSW and their clients, IDU, MSM
- Total male and female populations age 15 and over 15 years,
- Sexual risk behaviors-frequency of sexual contact and condom use, including marital, casual and commercial sex risk
- Injecting risk behaviors-frequency of injections, level of sharing, percent of injections shared
- Average duration one remains in the different at-risk populations, e.g., average time that a women remains a female sex worker

The next section will discuss the specific data inputs used for the behavior change scenario constructed for this paper.

Number of Male Clients and Female Sex Workers

To determine the size of the client population for AEM over time, the proportion of male visiting sex workers in the general population has been determined in the NSBS 2006 and from two previous national surveys: 1) the Survey of Partner Relations and Risk of HIV Infection (PR) conducted by the Thai Red Cross Society and Chulalongkorn University in 1991 (Sittitrai et al. 1992), and 2) the Survey on Effectiveness of AIDS Media on Behavior and Attitudes (MAIDS) conducted by the Institute for Population and Social Research, Mahidol University in 1993 (Thongthai et al, 1994).

Table 1 shows the age-specific percent of men visiting sex workers in the last year from each of those surveys. When adjusted for the age structure of the population, the percentage of men aged 15 and above visiting sex workers decreased substantially from 18.9% in 1990 to 9.2% in 1993, and then to 6.3% in 2006. This represents a major change in commercial sex behavior among heterosexual Thai males and has contributed to the observed declines in HIV prevalence around the country.

This massive reduction in men visiting female sex workers was a truly national phenomenon, occurring around the country in the early 1990s (see regional changes reported in Table 2). Men in most regions reduced their risk of exposure as clients by 50% or more. However, there has been more limited change since 1993. Only in the North and Northeast has there continued to be a substantial decline in men visiting sex workers after 1993 - in the other regions it stabilized at 10-13% levels. The North, of course, felt the strongest impacts of the epidemic, so the massive risk reduction is not unexpected. The Northeast has the lowest HIV prevalence among the regions, but has also been traditionally a more conservative part of country - note that the proportion of men visiting sex workers in the Northeast in 1990 was already roughly half the value seen in other parts of the country.

Table 1 Percentage of males aged 15 and above reporting visiting sex workers in the last year, by age groups

Age group	Percent visiting female sex workers in last year		
	PR 1990	MAIDS 1993	NSBS 2006
15-19	21.9	12.4	7.4 *
20-24	37.2	24.1	8.2
25-29	30.5	15.9	8.6
30-34	17.9	6.0	6.4
35-39	12.3	5.1	8.4
40-44	13.6	2.0	4.3
45-49	9.8	2.1	5.6
50+	5.0 **	1.5 **	2.2
Total	**18.9**	**9.2**	**6.3**

Source : Integrated Analysis and Advocacy Team (A2),2006, and Chamratrithirong et al.,2006.

Note: PR 1990: Survey of Partner Relations and Risk of HIV Infection 1990.
MAIDS 1993: Survey on Effectiveness of AIDS Media on Behaviors and Attitudes 1993
NSBS 2006 : National Sexual Behavior Survey of Thailand 2006
* This percentage obtained from respondents aged 18-19 years.
** These are assumed numbers since the surveys did not include age 50+

Table 2 Percentage of general males visiting female sex workers in the last year, by regions

Region	Percent visiting female sex workers in last years		
	PR 1990	MAIDS 1993	NSBS 2006*
Bangkok	30.4	13.4	10.4
Central	25.2	10.6	9.5
North	26.3	10.1	1.9
North-East	14.1	8.7	4.3
South	23.7	12.3	13.2

Source : Integrated Analysis and Advocacy Team (A2), 2006 and Chamratrithirong et al., 2006.

Note : This percentage obtained from respondents aged 18-49 yearold

In the 2005 national projection, the percentage of clients was adjusted according to results from: 1) the review of the 100% condom survey conducted by the Institute for Population Research, Mahidol University in 1997 (Chamratrithirong et al.,1999) and 2) behavioral surveillance surveys among three high risk groups conducted by the Ministry of Public Health between 1995 and 2002 (Integrated Analysis and Advocacy Team or A2,2006). These showed little change from the 9% level of clients seen in 1993, so this was kept fixed from 1993 through the end of the projection period.

For the revised projections presented below, the proportion of adult males visiting sex workers was reduced from 9.2% in 1997 to 6.3% in 2007 according to the results of the NSBS (Chamrachithirong 2006). The percentage of clients was kept fixed at this level until the end of the projection period. This represents a reduction of 30% in the number of clients used in the 2005 national projection.

The size of the female sex worker population in the revised projection was kept the same as in the 2005 national projection. However, the proportion between direct and indirect sex workers was adjusted based on the change in number of clients. findings. The number of direct sex workers in 2007 was reduced by 70% (from 24,890 in the original projection to 6,808 in the revised one), and kept stable at this level until the end of the projection. The number of indirect sex workers was increased correspondingly to produce a stable number overall number of female sex workers. The number of indirect sex workers thus increased from 113,387 in the national projection to 131,470 in the projection here (16% increase).

Casual Sex among General Males and Females

Casual sex for men and women is defined here as either premarital or extramarital sexual contact with a partner of the opposite sex who is not a sex worker outside of a primary relationship. Values prior to 1996 used in the 2005 national projection came from the Behavioral Surveillance Surveys in Bangkok conducted between 1993 and 1996 by OPTA (1996). Those surveys found that approximately 6% of male factory workers reported sex an with outside partner other than a sex

worker in the preceding year (Mills et al, 1997). However, the value used in the original projection for men was adjusted downward to 5% to reflect the fact that the male general population was somewhat older than the factory worker samples and probably had somewhat less casual sex. Based on a Behavioral Surveillance Survey in 2004 (Bureau of Epidemiology 2004), this percentage was assumed to rise from 5% in 1996 to 20% by 2004 and kept at that value from 2005 forward in the original national projection.

Among the female general population, a Bangkok survey in 1994 found that 4.1% of women between 1-5 and 30 years of age reported sex with more than one partner in the last year (Peerapatanapokin 1994). This was adjusted downward to reflect the older age and somewhat lower risk of the general female population, including a large rural female population. Thus, a value of 2%, half of the measured value, was used, which agreed fairly well with the 1.7% of women reporting sex outside of a monogamous relationship in the Survey of Partner Relations in 1990. Based on risk reported by women in the 2004 Behavioral Surveillance Survey, this percentage was assumed to rise from 2% in 1996 to 10% by 2004. In the 2005 projections it was kept constant at that value through the remainder of the projection.

The NSBS in 2006, however, found somewhat lower casual sex risk: 12% for males and 0.5% for females in the last year (Chamratrithirong et al. 2006). Thus, in the revised projection the proportion having casual sex was brought down to 12% for men between 2005 and 2007, and from 10% to 0.5% for women.

Condom Use Rate

Condom use rose rapidly in Thailand in response to intensive and extensive intervention efforts through the mid-1990s, rising from 30% levels at the time of the Partner Relations Survey to 60% levels at the time of the MAIDS and 80% levels by the 100% condom evaluation in 1997. The level of condom use has remained high since 1999, and the value used in the national projection was 82% between clients and direct

sex workers, and 70% between clients and indirect sex workers. These levels agreed reasonably well with what was measured in the NSBS, so they were left unchanged in the revised projection.

Condom use has always been much lower in Thailand in casual sex than in commercial sex, to a great extent because condoms are seen as inappropriate for relationships by many. In the original 2005 projection, condom use in casual sex was kept stable at 36% over the projection period. However, again NSBS has reported an increase in condom use in casual sex, so in the revised projection condom use increases from 36% in 2005 to 48% in 2007 and then remains there through the end of the projection.

Assumptions

In order to explore the potential impact of behavior changes in commercial and casual sex and condom use occurring since the last national projection was prepared in 2005, we compared the projection results of the original national projection with a revised scenario incorporating new data from the NSBS as described above. To summarize:

The original national projection used the following assumptions on heterosexual behaviors:

- The percentage of males visiting sex workers would be around 9% in 2005 and remains unchanged until 2020.
- Condom use in commercial sex remains stable at 82% from 2005 through the end of the projection period.
- The percentage of casual sex in the last year post-2005 remained stable at 20% for males and 10% for females.
- Condom use in casual sex between men and women remains stable at 36% over the projection period.

The revised projection reflects the decreased commercial and casual sex behaviors reported in the NSBS through 2007. In summary:

- The percentage of males visiting sex workers drops from 9% between 1993 and 2005 to 6.3% in 2007 and remains at that level in subsequent years.
- Condom use in commercial sex remains the same as in the 2005 national projection (82%).
- The percentage of casual sex drops from 20% during 2004-2005 to 12 % in 2007 for males and from 10% to 0.5% for females over the same period. It is kept constant at this level subsequently.
- Condom use rate in casual sex increases from 36% in 2005 to to 48% in 2007 and stablilizes there .
- Results of the HIV Projection

The result of HIV Projection

The revised HIV projection based on the behavioural assumptions presented above is presented in Figure 1. This shows the expected trends in the HIV epidemic from 2007 to 2020 including the effect of antiretrovirals. The estimated numbers of new, current and cumulative HIV infections over the course of the epidemic are displayed. Table 2 presents a direct comparison of the numbers from the revised projection between 2000 and 2020 in comparison with the original 2005 national projection.

Figure 1 Estimated number of new HIV infections, people living with HIV and cumulative HIV, revised projection using NSBS data, 1985-2020

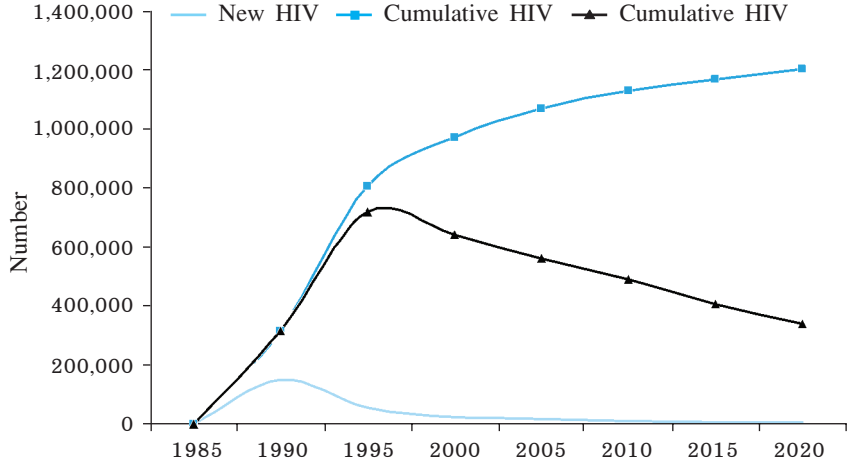
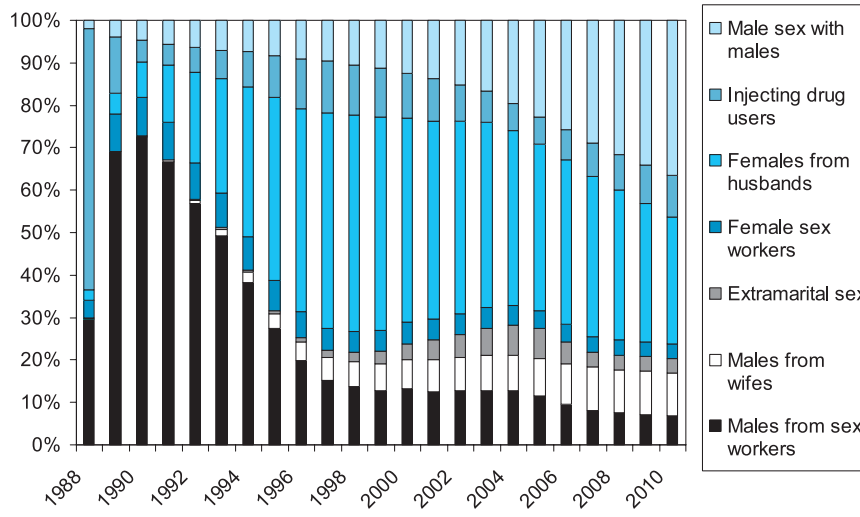


Figure 2 Percent distribution of new HIV infections by mode of transmission, 1988-2010



Source : Brown and Peerapatanapokin, 2005

Figure 2 shows the percent distribution of new infections by different modes of transmission from 1988 to 2010. The majority of new infections in 2007 continue to be heterosexual in nature with contributions coming from all possible heterosexual modes: husband-to-wife (38%), wife-to-husband (10%, largely former sex workers to their husbands), client to sex worker (4%), sex worker to client (8%), and through casual sex (3%). Altogether, these account for 63% of new infections in 2007. The next largest, and still growing, contribution comes from men who have sex with men, with male-male sex accounting for 29% of new infections in 2007, growing steadily to 37% by 2010. New infections among injecting drug users account for the remaining 8%, and will remain roughly stable through 2010.

The reason for the strong dominance of husband-to-wife infections (38% of all new infections) is that large numbers of clients contracted HIV in the late 1980s and early 1990s, before condom use between sex workers and

clients rose to high levels. Figure 1 shows this clearly for the period from 1989 to 1995. However, husband-to-wife transmission occurs much more gradually than transmission between sex workers and clients because in marriage there is less impact from HIV-transmission enhancing sexually transmitted infections, which are extremely common among sex workers. One study of male blood donors in the North found that only 20% of them had transmitted to their wives after 2 years. The large discordance in husband-wife HIV infection creates great urgency in developing ways of reducing husband-to-wife and wife-to-husband transmission in discordant couples, a component of the national response which has been seriously lacking through the present. The contribution of casual sex to HIV transmission will also be gradually increasing as these behaviours continue with less than 50% condom use.

The other major concern apparent in the figure is the rapidly rising contribution of men who have sex with men. This is also quite apparent in epidemiological data coming in from around the country. Among men having sex with men in Bangkok, HIV prevalence increased from 17% in 2003 to 28% in 2005 and to 31% in 2007 (van Griensven et al.2005). By comparison, the HIV prevalence among the other at-risk populations in 2006 (MOPH, 2006) was: female direct sex workers (4.6%), male sex workers (12.9%), seafarers (2.75%), and IDUs (40-50%).

Table 3 Comparison of new infections, cumulative HIV and people living with HIV between the 2005 national projection and the revised projection based on NSBS, 2000-2020

Year	New HIV infections		Cumulative HIV		People living with HIV/AIDS	
	2005 Projection	Revised Projection	2005 Projection	Revised Projection	2005 Projection	Revised Projection
2000	26,158	26,158	976,107	976,107	642,121	642,121
2001	23,268	23,268	999,375	999,375	614,710	614,710
2002	20,955	20,955	1,020,330	1,020,330	590,630	590,630
2003	19,002	19,002	1,039,332	1,039,332	572,474	572,474
2004	17,673	17,673	1,057,005	1,057,005	565,067	565,067
2005	16,513	16,323	1,073,518	1,073,328	562,243	562,062
2006	15,174	14,310	1,088,692	1,087,638	556,848	555,826
2007	13,936	12,659	1,102,628	1,100,297	546,578	544,275
2008	12,787	11,535	1,115,415	1,111,832	532,522	528,946
2009	11,753	10,574	1,127,168	1,122,406	516,632	511,862
2010	10,853	9,757	1,138,020	1,132,163	499,324	493,467
2011	10,097	9,084	1,148,117	1,141,247	481,770	474,944
2012	9,473	8,537	1,157,589	1,149,784	464,414	456,740
2013	8,959	8,094	1,166,549	1,157,878	447,640	439,240
2014	8,535	7,734	1,175,084	1,165,613	431,475	422,464
2015	8,184	7,441	1,183,268	1,173,053	416,099	406,589
2016	7,890	7,199	1,191,157	1,180,253	401,700	391,788
2017	7,640	6,996	1,198,797	1,187,249	387,877	377,652
2018	7,426	6,825	1,206,223	1,194,074	374,966	364,501
2019	7,241	6,679	1,213,464	1,200,753	362,737	352,098
2020	7,082	6,554	1,220,546	1,207,306	351,132	340,380

Note : The 2005 national projection was prepared by Brown and Peerapatanapokin in 2005

Figure 3 Comparisons of estimated number of new HIV infections between the 2005 national projection and the revised projection, 2000-2020

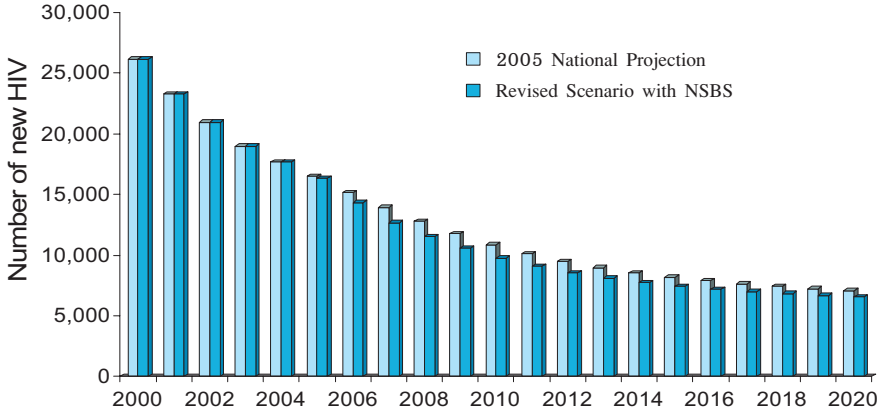


Figure 3 shows that the revised projection estimates a slightly lower number of new HIV infections, as compared to the original 2005 projection from 2005 to 2020. This results almost entirely from the reduction in casual sex risk measured by NSBS. This reduction is due to smaller percentages having casual sex and higher levels of condom use in casual sex than assumed in the 2005 projection. All told, these changes in behaviour have the effect of reducing new infections by 800 per year, with the total result that 13,239 infections are averted between 2005-2020. With the introduction of program to address HIV risk in discordant couples, stronger programs for MSM, more efforts to reduce the percentage of youth engaging in casual risk, and a renewed effort to reduce risk in sex work, the infections averted might be much higher.

Figure 4 Comparisons of number of people living with HIV between the baseline and the behavior change scenarios, 2000-2020

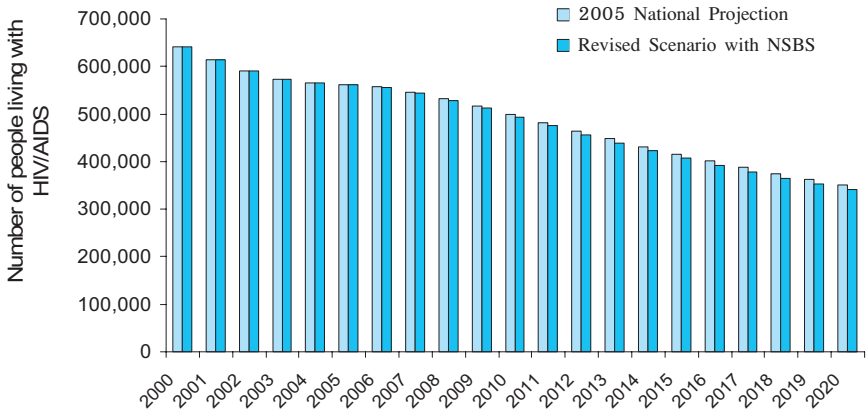


Figure 4 shows that the relatively limited additional behaviour changes reported in the NSBS only result in a small decline in the total number of people living with HIV. This highlights the need for a revitalized national prevention program in Thailand to bring these numbers down much more rapidly.

Discussion

The revised projection has not substantially changed the basic picture painted by the national projection in 2005. The future course of the Thai HIV epidemic will continue to be driven by heterosexual HIV transmission for the next several years. However, in parallel, a rapidly rising epidemic among MSM in spreading through the country, also requiring urgent attention and prevention focus.

The projections here highlight that all modes of heterosexual transmission are currently in play: spousal transmission, casual sex transmission, and ongoing sex work transmission. Thus, effective programs will need to address all of these. **While Thailand does have effective models for prevention in sex work, by far the most challenging issue is addressing spousal transmission, where few effective program models exist in any**

country - and are badly needed, especially since it is contributing almost half of new infections today. The contribution of young people infected through casual sex will also grow gradually unless condom use between them is promoted more effectively than it has been in the past. However, because of the nature of the relationships involved, attempts to promote condom use in casual sex remain an intervention challenge.

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COMPARATIVE ANALYSIS OF SEXUAL AND DRUG USE BEHAVIOUR AND HIV KNOWLEDGE OF YOUNG PEOPLE IN ASIA AND THE PACIFIC

Anne Bergenstrom
Pimonpan Isarabhakdi

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COMPARATIVE ANALYSIS OF SEXUAL AND DRUG USE BEHAVIOUR AND HIV KNOWLEDGE OF YOUNG PEOPLE IN ASIA AND THE PACIFIC

Anne Bergenstrom
Pimonpan Isarabhakdi

Background

With close to half of new HIV infections occurring among 15-24 year olds, young people are at the centre of the global HIV epidemic. Young people in Asia Pacific are at risk of, or vulnerable to, HIV, due to unprotected sex or unsafe injecting drug use on one hand, and limited knowledge of HIV, and low level of condom use on the other hand. Adolescents and young people frequently lack access to means to protect themselves, namely condoms, clean injecting equipment and access to youth-friendly sexually transmitted infection (STI), reproductive health (RH) and HIV testing and counseling services. Yet, when provided the information, skills and services, young people can make responsible decisions about their sexual and drug use behaviors, and protect themselves from HIV.

An estimated 5.4 million people were living with HIV in Asia Pacific as of June 2007. Of the total population of 3.8 billion people in Asia Pacific, 673 million (17.9 percent) are young people aged 15-24. This includes some 355 million young people in East Asia and the Pacific. National data on HIV prevalence among 15-24 year olds are not available in countries in Asia Pacific, but it is estimated that some 235 million new infections occur among young people every year and that some 1.8 million young people are already living with HIV (UNAIDS, 2007).

Not all young people have the same level of HIV risk. Those engaging in unsafe injecting drug use or unprotected sex in the context of sex work, or

same sex behavior among young men, are at highest risk of HIV. Some children, including children living on the streets, living in custodial settings, and children of injecting drug users (IDU), sex workers (SW)and men who have sex with men (MSM) are especially vulnerable to HIV. The majority of adolescents and young people, who are not injecting drugs, or engaging in sex, or who have sexual relations with other low risk young people, may be considered at low risk of HIV (UNICEF, UNFPA, UNESCO, 2007).

After years of tracking of the epidemic and research into the effectiveness of HIV prevention interventions, the coverage of evidence-informed prevention interventions remains low. In 2005, only 8 percent of primary school students received HIV education in schools and 26 percent of children living on the streets were reached with prevention programs (Stover & Fahnestock, 2005). Among the most-at-risk populations, 3 percent of IDU, 20 percent SW, and 2 percent of MSM were reached with prevention services. Many countries do not have data on estimated size of the sub-populations at risk and without the size estimates, it is challenging to monitor program coverage and estimate resource requirements for prevention.

In adopting the Millennium Development Goals (MDGs) in 2000, the international community set targets for combating HIV/AIDS, malaria and other diseases, including a target 6:"halt and begin to reverse the spread of HIV/AIDS" by 2015. Further, at the United Nations General Assembly Special Session on HIV/AIDS, June 2001, the governments adopted the Declaration of Commitment on HIV/AIDS (UNGASS, 2001). The agreed MDG indicators relevant to young people and HIV to be measured over time to track progress are "HIV prevalence among 15-24 year-old pregnant women" and "condom use rate of the contraceptive prevalence rate and population aged 15-24 years with comprehensive correct knowledge of HIV". The UNGASS targets, relevant to young people, include "percentage of young people aged 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission", "percentage of young people aged 15-24 reporting the use of a condom during sexual intercourse with

a non-regular sexual partner" and "percentage of young people aged 15-24 who are HIV-infected". The targets by 2010 are 95 percent young people with comprehensive knowledge and 25 percent reduction among young people aged 15-24 who are HIV-infected.

As governments strive to meet the HIV-related targets they committed to at the Millennium Development Summit and United Nations General Assembly Special Session on HIV/AIDS, there have been significant developments in the collection, analysis and use of data on HIV and young people (WHO, 2004). By 2006, 16 countries in Asia and Pacific have reported back to the UN on progress towards achieving the MDG and UNGASS HIV-targets.

Objective of the comparative analysis

The objective of the study is to compare how Thailand measures up in the progress of achieving the MDG and UNGASS targets related to HIV and young people's behaviors, knowledge and stigma, with other countries in the region. Specifically, data from the Thailand National Sexual Behavior Survey (NSBS) and Multiple Cluster Indicator Survey (MICS) will be compared with available data from other countries in Asia and the Pacific on the number of relevant MDG and UNGASS indicators (see Annex for detailed list of indicators).

Methodology

The methodology adopted in the comparative analysis involved a collection and review of secondary data from key documents, namely Demographic Health Surveys (DHS), Multiple-Cluster Indicator Surveys (MICS), Behavioral Surveillance Surveys (BSS) and UNGASS Progress Reports for data on young people. The most recent data points from the DHS, MICS and UNGASS reports were included in an excel spreadsheet. The data were summarized in graphs for ease of reference.

From the desk reviews of DHS, MICS, BSS and UNGASS reports, data on one or more of the indicators on young people and HIV were found for 14 out of 25 countries. For some countries no data on HIV and young people were available.

Findings

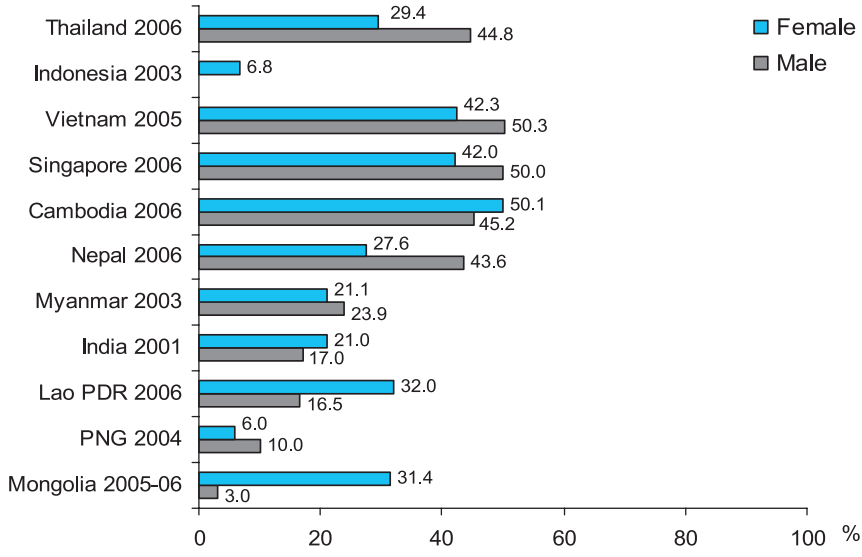
HIV knowledge

Comprehensive knowledge of HIV among young people aged 15-24

Knowledge of HIV is a necessary, though not sufficient pre-requisite for safe sexual and drug use behaviors. Of the 25 countries in Asia Pacific, data on comprehensive HIV knowledge, defined as "the correctly identifying ways of preventing the sexual transmission of HIV and rejecting major misconceptions about HIV, was found for 11 countries. With the exception of girls surveyed in Cambodia, and boys surveyed in Singapore and Vietnam, fewer than half of the young people aged 15-24 surveyed had comprehensive knowledge of HIV in the other eight countries.

In Thailand, 44.8 percent of boys, and 29.4 percent of girls in the age group 18-24 knew the main modes of HIV transmission, and correctly rejected major misconceptions about HIV (Chamratrithirong et al., 2007). Though a relatively larger proportion of the Thai girls surveyed had comprehensive HIV knowledge, compared with girls in Indonesia, India, Lao, Mongolia and Papua New Guinea, a higher percentage of girls in Cambodia were found to have comprehensive HIV knowledge (50.1 percent) in 2006 (CHDS, 2006).

Figure 1 Comprehensive knowledge among young people (15-24)

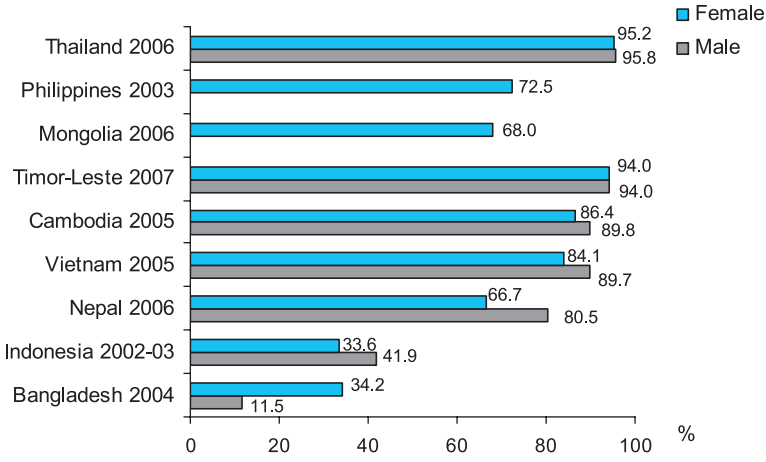


No country had met the MDG and UNGASS target of 80 percent of young people with comprehensive knowledge by 2005 and it appears unlikely, unless major progress takes place over the next two years, that any of the countries will meet the target of 95 percent young people with comprehensive knowledge by 2010.

Percentage of young people with knowledge on whether risk of HIV transmission can be reduced by having sex with only one faithful uninfected partner

Knowledge on the sub-indicators from which the comprehensive knowledge is constructed, is considerably higher than on the comprehensive knowledge in seven countries where data were available.

Figure 2 Percentage of young people (15-24) who know that the risk of HIV can be reduced by having sex with only one faithful uninfected partner

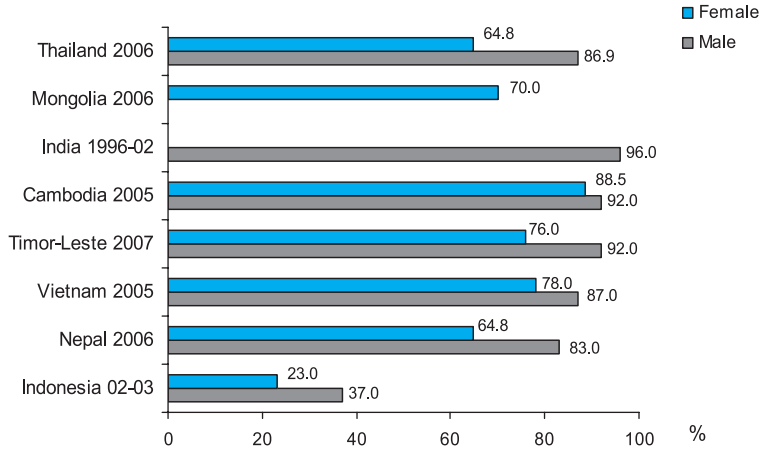


In Thailand, 95.8 percent of boys, and 95.2 percent of girls surveyed, a higher proportion of young people than that in other countries, knew that HIV transmission can be reduced by having sex with only one faithful uninfected partner. With the exception of Bangladesh, in all countries surveyed a larger percentage of boys, compared with girls, were found to know that they can reduce HIV risk by having sex with only one uninfected partner.

Percentage of young people who know whether risk of HIV transmission can be reduced by using condoms

Where data were available, a high percentage of young people surveyed, except in Indonesia and girls in Nepal, knew that the risk of HIV transmission can be reduced by condoms. In Thailand, 86.9 percent of boys and 64.8 percent of girls (Chamratrithiong et al., 2007) had knowledge on the protective effect of condom use. Compared with Thailand, higher knowledge of the protective effect of condom use was found among boys in Cambodia and India and among girls in Cambodia and Vietnam.

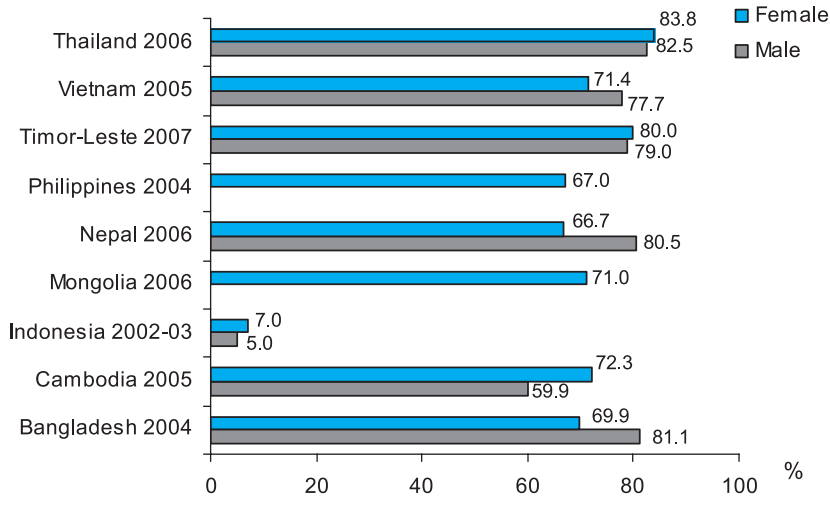
Figure 3 Percentage of young people (15-24) who know that risk of HIV transmission can be reduced by using condoms



Percentage of young people who know whether a healthy-looking person can have HIV infection

In Thailand, 83.8 percent of girls and 82.5 percent of boys knew that a healthy looking person can have HIV, compared with a lower percentage of young people in other countries where data on this indicator was available. Knowledge on this item was lowest among Indonesian boys (5.0 percent) and girls (7.0 percent). In Nepal, a much lower percentage of girls (42.0 percent) than boys (79.0 percent) knew whether a healthy looking person can transmit HIV. Several countries have either not collected, or reported on, data on this indicator.

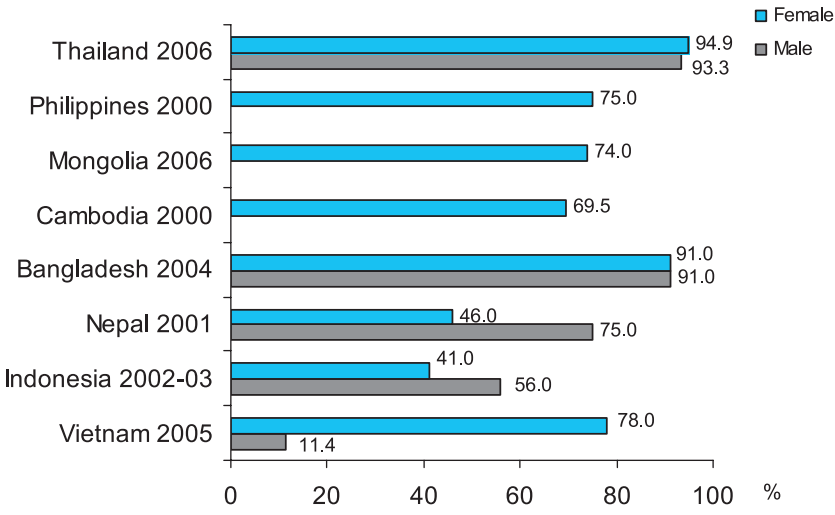
Figure 4 Percentage of young people (15-24) who know that a healthy looking person can have HIV infection



Percentage of young people (15-24) who know that HIV can be transmitted from mother to child

Knowledge on mother to child transmission of HIV was higher among Thai girls (94.9 percent) and boys (93.3 percent) than in any other country. In other countries where data were available, between 11.4 percent of young men in Vietnam and 91.0 percent of young men in Bangladesh knew about the possibility of HIV transmission from mother to child. Knowledge among young women ranged from 41.0 percent in Indonesia to 91.0 percent among young women in Bangladesh.

Figure 5 Percentage of young people (15-24) who know that HIV can be transmitted from mother to child

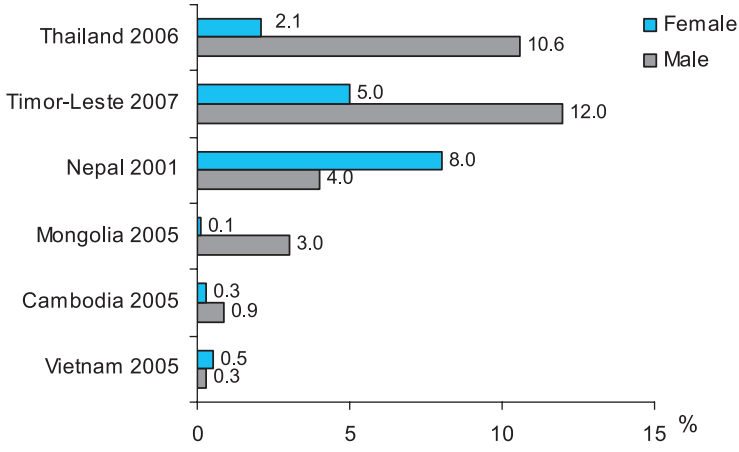


Sexual behaviors

Percentage of young people (aged 15-24) who have had sex before the age of 15

Few countries have collected, or reported, data on the percentage of young people aged 15-25 who had sex before the age of 15. In Thailand 10.6 percent of boys and 2.1 percent of girls aged 15-24 reported sex before age 15. Where data were available, the highest proportion of young people who had sex before age 15 was in Timor-Leste, with 12.0 percent of boys, and 5.0 percent of girls reporting sex before age of 15. In Cambodia and Vietnam, fewer than one in hundred of boys and girls in the age group 15-24 reported having had sex before age 15.

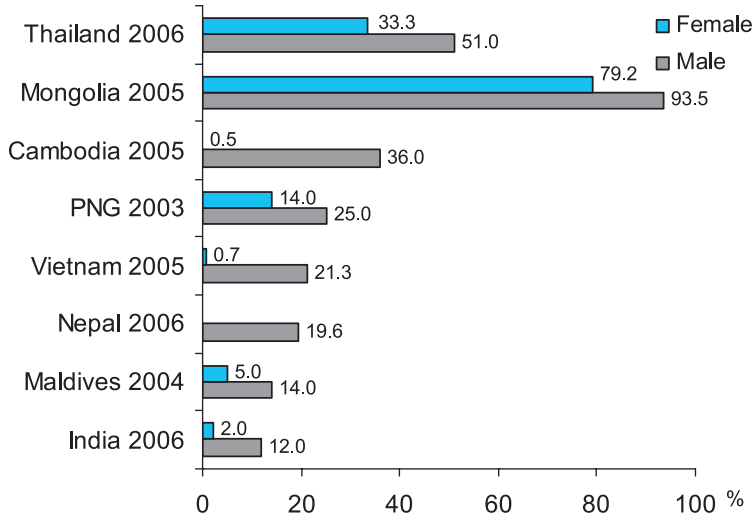
Figure 6 Percentage of young people (15-24) who had had sex before age 15



Percentage of young people (aged 15-24) who had sex with a non-marital, non-cohabiting sexual partner in the past year

In 2006, 51.0 percent of boys and 33.3 percent of girls in the age group 18-24 reported having had sex with a non-regular partner in the previous 12 months. In all countries where data on this indicator were available, a higher percentage of boys than girls reported sex with a non-regular partner, 93.5 percent of boys and 79.2 percent of girls in Mongolia, 36.0 percent of boys in Cambodia, compared with 0.5 percent of girls, 25.0 percent of boys in Papua New Guinea, compared with 14.0 percent of girls, 14.0 percent of boys in Maldives, compared with 5.0 percent of girls and 12.0 percent of boys in India, compared with 2.0 percent of girls, respectively.

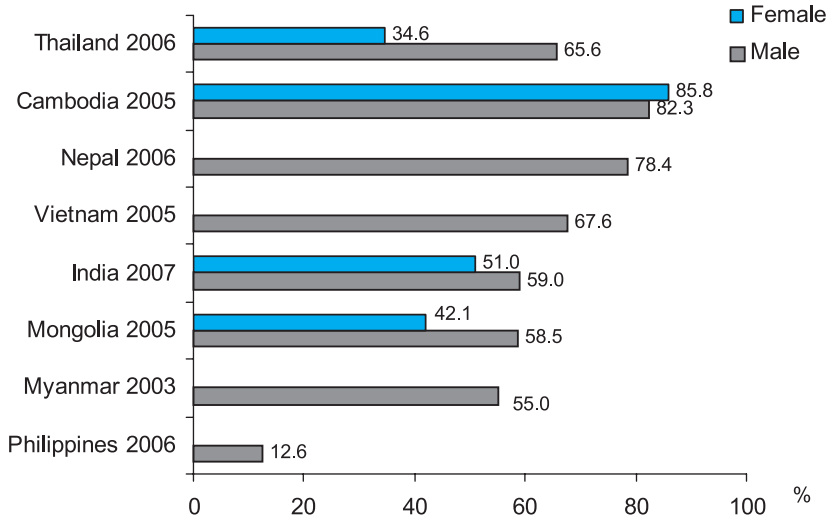
Figure 7 Percentage of young people (15-24) who had sex with a non-marital, non-cohabiting partner in the past year



Percentage of young people (aged 15-24) reporting the use of condom the last time they had sex with a non-marital, non-cohabiting sexual partner

Among those who reported sex with a non-regular partner in the previous year less than two thirds reported having used a condom. In Thailand, 65.6 percent of boys, and 34.6 percent of girls reported having used a condom in last sex with a non-regular partner. The highest level of condom use with non-regular partners was reported by Cambodian males (82.3 percent) and females (85.8 percent). Reported condom use by women was lower in Thailand (34.6 percent) compared with women in Myanmar (42.1 percent) and India (40.0 percent). Several countries have only collected, or reported, on condom use by men and limited data are available on reported condom use among women.

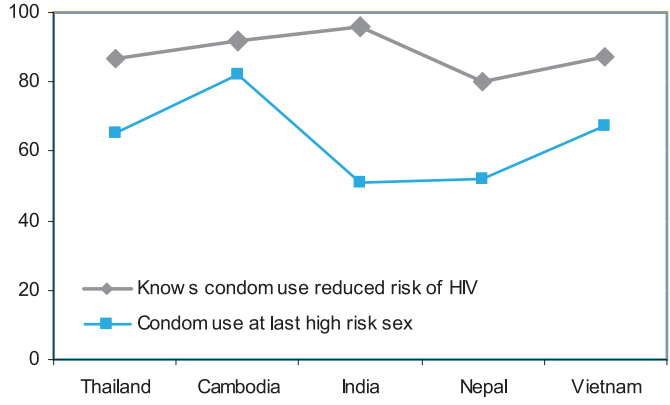
Figure 8 Percentage of young people (15-24) reporting use of a condom the last time they had sex with a non-marital, non-cohabiting partner



Knowledge and actual use of condoms

As seen in Figure 9 below, a consistently higher proportion of young men knew that risk of HIV can be reduced by use of condom, than actually used a condom in last sex with a non-regular partner.

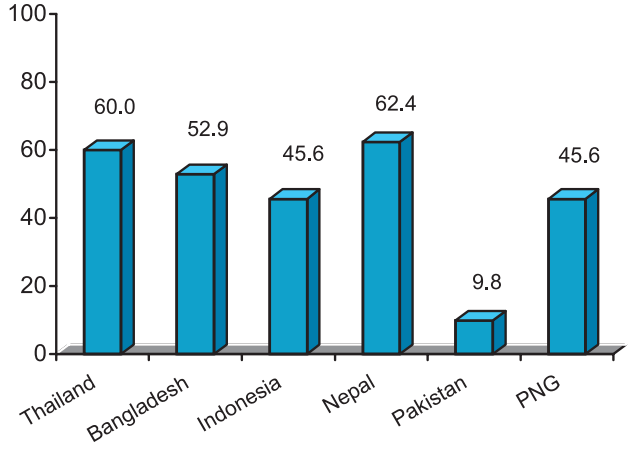
Figure 9 Percentage of young men (15-24) who knew that risk of HIV transmission can be reduced by using condoms and who reported having used a condom the last time they had sex with a non-marital, non-cohabiting partner



Percentage of men (< 25) who reported the use of a condom the last time they had anal sex with a male partner

Few countries have collected, or reported, on condom use at last anal sex with a male partner by young men. Reported condom use varied from 9.8 percent among young men in Pakistan to 62.4 percent among men in Nepal. In Thailand 60.0 percent of young men who reported sex with men reported that a condom was used in last anal sex with a male partner.

Figure 10 Percentage of men (< 25) reporting use of a condom the last time they had anal sex with a male partner



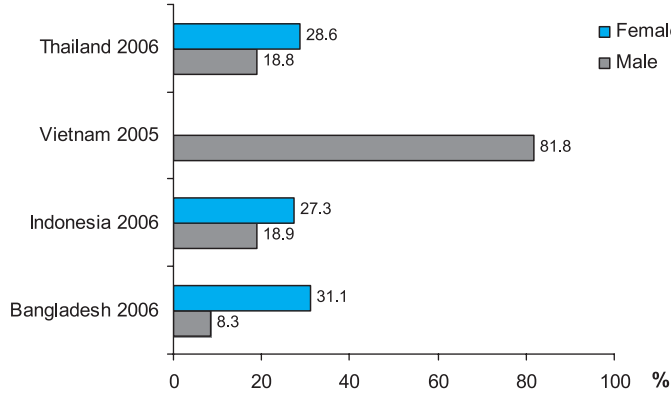
Safe injecting and sexual behaviors among injecting drug users

Percentage of IDU (< 25) who have adopted behaviours that reduce transmission of HIV, ie. who both avoid using non-sterile injecting equipment and use condoms, in the last 12 months

Data on safe injecting and sexual behaviors among injecting drug users was available in four countries, Thailand, Bangladesh, Indonesia and Vietnam. In Thailand 18.8 percent of young male IDU and 28.6 percent of young female IDU reported safe injecting and sexual behaviors in the

past 12 months, compared with 8.3 percent of men and 31.1 percent of women in Bangladesh, and 18.9 percent of men and 27.3 percent of women in Indonesia, respectively. In Vietnam, 81.8 percent of young male IDU reported safe injecting and sexual behaviors.

Figure 11 Percentage of IDU aged below 25 who reported avoiding use of non-sterile injecting equipment and used condoms in the previous 12 months

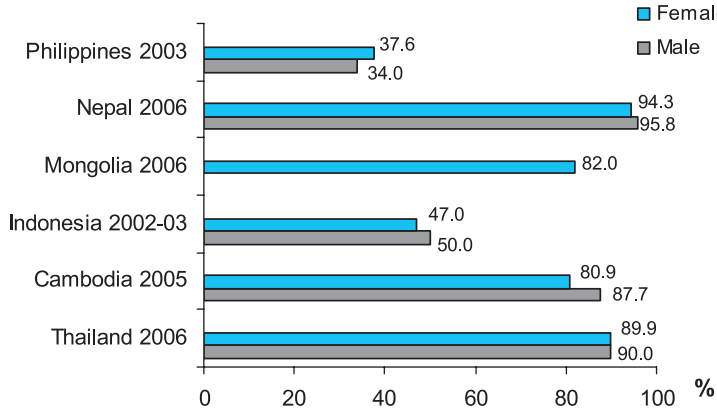


Stigma and discrimination

Willing to care for family member who is HIV positive

Though many countries have collected data on stigmatizing attitudes, few countries have made available age disaggregated data on these indicators. When asked about willingness to care for an HIV positive family member, 90.0 percent of young Thai men, and 89.9 percent of young Thai women reported that they would be willing to care for an HIV positive family member, compared with 87.7 percent of boys and 80.9 percent of girls in Cambodia, 50.0 percent boys and girls in Indonesia, and 34.0 percent of boys and 37.6 percent of girls in the Philippines, respectively.

Figure 12 Percentage of young men and women (15-24) who are willing to care for an HIV positive family member



Limitations of the comparative analysis

The above comparative analysis has several limitations. First, data on the core and additional UNGASS indicators relevant to knowledge, sexual and injecting drug use behaviors of young people is not collected, or reported, by several countries in the Asia Pacific region. No more than 10 countries in Asia Pacific had the data available even for core UNGASS indicator on young people. For sake of comparability, the data were derived mostly from population-based surveys, such as Demographic and Health Surveys (DHS), Behavioral Surveillance Surveys (BSS) and Multiple Cluster Indicator Surveys (MICS), which included standard items on HIV knowledge and related behaviors. However, population-based surveys are limited in Asia Pacific, resulting in a large number of gaps in data on even the core indicators. For example, only nine out of 25 countries in Asia Pacific have conducted a DHS or BSS, and 11 out of 25 countries have conducted a MICS.

Another reason for "absence" of data on core and additional indicators was that typically the wording of the same item varied from one country to another. This comparative analysis excluded data from indicators which had not relied on the same wording as the wording of the MDG or

UNGASS indicators. For example, data from eight countries were found on a core UNGASS indicator "percentage of young women and men (15-24) who had sex with non-marital, non-cohabiting sexual partner in the past year", while several other countries reported data on a similar indicator "percentage of young women and men (aged 15-24) who had multiple sex partners in the last year". Though the meaning of the indicator is similar, it is methodologically not correct to compare data from these two indicators, and hence data on the latter indicator were not included in this analysis.

To supplement data in the absence of population-based surveys, the comparative analysis drew from other surveys, such as the STI/HIV/AIDS Knowledge, Attitudes, Behaviors survey in Mongolia. The quality of the methodology of the country specific cross-sectional surveys is not known and the surveys typically have smaller sample sizes compared with the population-based surveys. There is also variation in terms of prompting. For example, in terms of capturing HIV knowledge of young people, some surveys would have prompted survey respondents to answer "yes", "no", or "don't know" when asked about possibility of transmission through different modes, while other surveys requested the participants to recall different modes of HIV transmission. It is well-known that prompting of research participants results in a higher rate of correct answers to knowledge questions, compared with a recall method, which requires the respondents to list different modes of transmission without any prompting by the interviewer. These factors limit the comparability of the data.

One of the main limitations of this comparative analysis is that it includes data from different surveys which had disaggregated data on different age groups. For example, while many surveys had sampled 15-24 years olds, some surveys only had data on 15-19 years old, while other surveys, such as the Thailand NSBS did not sample 15-17 years old. In some countries, data could only be found for female, rather than male, surveys respondents. This was often the case where data were drawn from MICS surveys, which exclude interviews of men.

Given the above limitations, the findings from this comparative analysis must be interpreted with caution. Their generalisability to the rest of the population of young people is not recommended.

Conclusions and recommendations

This paper compares data on UNGASS and MDG indicators relevant to HIV knowledge, sexual and injecting behaviors among young people aged 15-24 in Thailand and young people in other countries in Asia and the Pacific. Despite the limitations of the comparison, the findings have programmatic and research implications.

The data show that while comprehensive HIV knowledge is well below the UNGASS target of 95 percent by 2010 in most countries where data are available, knowledge on the sub-indicators of the comprehensive HIV knowledge is much higher is several countries. In several countries, young men had higher levels of knowledge on a number of HIV knowledge indicators. The overall low levels of comprehensive HIV knowledge calls for renewed programmatic efforts by countries to ensure that all young people have the necessary knowledge about modes of HIV transmission. The unavailability of data in several countries indicates a need for improved data collecting on these core UNGASS indicators.

Despite generally low levels of HIV knowledge, a considerable proportion of young people, as high as 93.5 percent of boys in Mongolia, reported sex with a non-marital partner in the previous year. Condom use in the last sex with non-regular partners was reported by approximately half of those who had sex with non-regular partners. Level of condom use by young men who reported sex with other men was similar to that of condom use in sex between young men and women.

The findings about sexual behavior with non-regular partners, coupled with moderate levels of condom use highlight the need to promote condom use among general population youth, who may not identify themselves at high risk of HIV. As documented elsewhere, knowledge of the protective

benefits of condom use in terms of reducing the risk of HIV transmission, does not necessarily result in consistent use of condoms. Therefore, it may be beneficial to promote use of condoms, not only for prevention of HIV, but also for pregnancy prevention. Where data on sexual and injecting drug use behaviors, of young IDU were available, suggests the need to step up HIV prevention among these young people at particularly high risk of HIV.

In conclusion, we found the data on core and additional UNGASS indicators relevant to young people absent or incomplete in many countries. Where data were available, sexual risk behaviors were reported, with moderate levels of HIV knowledge and condom use. The findings suggest a need for sustained HIV prevention response to reach a larger proportion of the population of young people, who may be vulnerable to HIV infection, that are currently being reached by prevention interventions.

The Asian epidemic has been characterized by an onset of the spread among injecting drug users (IDU) early on in the epidemic, followed by spread among sex workers (SW) and their clients, and men who have sex with me (MSM). The main determinant of the level and growth of the HIV epidemic is the proportion of clients of sex workers in the adult male population (UNAIDS, 2006). Even when the epidemic becomes generalized, with higher prevalence among the general population, concentrated sub-epidemics among the IDU, SW, their clients, and MSM, continue to account for the largest number of new infections. In majority of countries in Asia, both injecting drug users and female sex workers are young people aged below 25, and large numbers of men who buy sex, or have multiple male sexual partners, are also young (MAP, 2004).

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Annex 1

List of core and additional indicators

1. Comprehensive knowledge of HIV (aged 15-24)
   Sub-indicators on knowledge:
   - 1.1 Percentage of young people who know/do not know whether risk of HIV transmission can be reduced by having sex with only one faithful uninfected partner
   - 1.2 Percentage of young people who know/do not know whether risk of HIV transmission can be reduced by using condoms
   - 1.3 Percentage of young people who know/do not know whether a healthy-looking person can have HIV infection

2. Percentage of young people (aged 15-24) who have had sex before the age of 15

3. Percentage of young people (aged 15-24) who had sex with a non-marital, non-cohabiting sexual partner in the past year

4. Percentage of young people (aged 15-24) reporting the use of a condom the last time they had sex with a non-marital, non-cohabiting sexual partner

5. Percentage of injecting drug users (<25) who have adopted behaviours that reduce transmission of HIV, ie. Who both avoid using non-sterile injecting equipment and use condoms, in the last 12 months

6. Percentage of men (<25) who reported the use of a condom the last time they had anal sex with a male partner

7. Willing to care for family member who is HIV positive.

SURVEY COMPARISONS OF THE SEXUAL RISK BEHAVIOR OF YOUNG ADULTS IN THAILAND, VIETNAM AND THE PHILIPPINES

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Peter Xenos

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SURVEY COMPARISONS OF THE SEXUAL RISK BEHAVIOR OF YOUNG ADULTS IN THAILAND, VIETNAM AND THE PHILIPPINES

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Introduction

This analysis draws upon the data from national surveys conducted in three countries of Southeast Asia, the Philippines, Vietnam and Thailand. The three surveys are: The Young Adult Fertility and Sexuality Study 3 (YAFS III), conducted in the Philippines in 2002; The Survey and Assessment of Vietnamese Youth (SAVY), conducted in Vietnam in 2003; and The National Sexual Behavior Survey of Thailand (NSBS), conducted in 2006. The surveys in the Philippines and Vietnam focused on youth (ages 15-27 and 14-25, respectively. The Thailand survey interviewed a sample of the general population aged 18-59. Young adults aged 18-24 were over-sampled, resulting in 3,024 youth cases. All three are nationally representative, probability samples, obtained within multi-staged, clustered sampling designs[1]. For the purpose of comparison we have selected from each survey only young adult males and females aged 18-24 regardless of marital status or other characteristics. This results in 10,285 cases for analysis from the Philippines, 3,899 cases from Vietnam, and 3,024 cases from Thailand.

[1] Sampling and other technical details on the Vietnam survey are provided in Ministry of Health (2005), chapter 2 on "Methodology." The methodology of the Philippines survey is described in Raymundo and Cruz (2004), Annex A. Sample design for the Thai survey is given in Chamratrithirong et al. (2007).

The three countries provide many different social and cultural settings and thus form an interesting set of cases for our comparative purpose. Thailand is predominantly a Buddhist society with a unique Islamic culture in the South. Since the end of World War II, the influence of the West has increased considerably due to more open social, political and economic systems. The Philippines has been under the influence of Catholicism for centuries, but it also has a substantial influence of Islamic culture among the population in the Southern region. Vietnam has long been influenced by the Chinese culture and, since the middle of the 19th century, the impacts of French colonialism and then international socialism. The socialist economic system began to "open" markedly under the *Doi Moi* policy promulgated in 1986 (Long et. al. 2000; Werner 2000).

The three countries share some important similarities in that the majority of their populations are predominantly rural and largely live by means of small-scale agriculture. Recent social and economic development in these countries has resulted in increasing rural-to-urban migration and the rapid growth of many urban centers. Today each of the three countries has a dominant 'metropolitan region': Bangkok in Thailand, Ho Chi Minh City in Vietnam, and Manila in the Philippines. Since the middle of the 20th century or even before, formal education has been a focus of policy and national expenditure for each of these countries. All three are educationally advanced, though with different emphases. The three countries have also been exposed increasingly to the broad influences of globalization on work and income options, on media exposure, and the like. The surveys examined here document strong influences on youth in particular. In the comparative analysis presented here we cannot examine all the relevant aspects of social change, but we do manage systematic measurement of two crucial dimensions--urbanization, and educational attainment--which we take as proxies for a whole gamut of changes.

Finally, the three countries have had rather different experiences with HIV and AIDS. Thailand has had the longest experience with the epidemic, which was first recognized there in 1984 (Phanuphak et al, 1985). According to the U.N.'s "2006 Report on the global AIDS epidemic" 580,000 Thais

were living with HIV with an adult prevalence (ages 15-49) of 1.4%. Vietnam initially experienced HIV much later but the infection rate seems to be high so that by 2005, according to UNAIDS estimates, some 260,000 people were living with HIV including those who had full-blown AIDS. The current HIV prevalence among adults aged 15-49 is 0.5%. The Philippines, according to UNAIDS 2006 Report, seems to be less affected; it had 12,000 people living with HIV . The HIV prevalence among Filipinos aged 15-49 was below 0.1% (UNAIDS, 2006). HIV/AIDS certainly continues to be among the high-profile national problems of these countries, but each country is responding to this problem in its own way. Thailand, due to the magnitude of the problem it has long faced, is said to have stronger and at times more aggressive programs in response to the spread of the epidemic.

This paper proceeds as follows. After a brief description of the measures used in our analysis we give a descriptive account of young adults from the three countries focusing on the distribution by two key social variables, Residence and Level of Education. We then look at patterns in their sexual risk-taking by Residence and Level of Education. Finally, we present results of analysis to determine whether or to what extent the observed differences in sexual risk-taking behavior can be accounted for in terms of differences in social composition and country specific patterns of sexual risk. For this we employ logistic regression analysis.

The Measures

In this preliminary analysis sexual risk behaviors of young adults from the three countries are compared on the basis of a set of measures considered to be associated with different levels of sexual risk. For our purpose here, each of these measures is taken as a dichotomous variable consisting of 'yes' or 'no' responses, unless stated otherwise. These measures include:

1. Proportion of the sample young adults (aged 18-24 years) who ever had sex (EVERSEX)
2. Among all who ever had sex, proportion whose sexual debut was under age 18 (SEXUN18)

3. Among all who ever had sex, whose sexual debut was under age 16 (AEXUN16)
4. Among all in the sample, proportion who reported having first sex before marriage (EVERPMS)
5. Among those who ever had sex, proportion whose first sex was pre-marital (IFSEXPMS)
6. Among all whose first sex was pre-marital, proportion whose pre-marital sex took place under age 18 (PMSUN18)
7. Among those who ever had sex, proportion who use a condom at first sex (CON1SEX)
8. Among the respondents who ever had sexual experience, proportion whose first sexual partners were 4 years younger or older than they were. (AGAPSEX) Regardless of whether the respondent was older or younger, it is considered "sexual risk" if the age difference between the two partners was 4 years or more. The rationale behind this is that the greater the age difference between the sexual partners is, the greater is the risk since such age difference often have a negative influence on sexual negotiation.
9. The proportion of respondents with sexual experience who ever paid someone for sex, or was ever paid by someone to have sex. Payment for sex here includes either or both in-cash or in-kind (EVPAID)
10. Among all young adults regardless of whether or not they ever had sex, the proportion with a high level of sexual risk (ALLHIRSK). These are young adults who had premarital sex under the age of 18 with partners who were four years or more, younger or older, and used no condom.
11. Among all young adults who ever had sex, the proportion with a high level of sexual risk as just defined. (SEXHIRSK)

Table 1 gives percent distributions of young adults from three countries, by these measures of sexual risk behavior.

Table 1 Distributions of Young Adults in Thailand, Vietnam, Philippines, by Measures of Sexual Risk

Measures of Sexual Risk		Thailand	Vietnam	Philippines
Proportion who ever had sex (EVERSEX)	Male	0.80	0.27	0.49
	Female	0.63	0.35	0.41
Proportions having first sex under age 18	Male	0.61	0.10	0.45
	Female	0.37	0.14	0.35
Proportions having first sex under age 16	Male	0.31	0.01	0.12
	Female	0.09	0.02	0.08
Proportion with pre-marital sex	Male	0.79	0.12	0.45
	Female	0.44	0.02	0.24
Of those with sexual experience, if first sex was pre-marital	Male	0.98	0.40	0.90
	Female	0.70	0.04	0.56
pre-marital sex under age 18	Male	0.61	0.10	0.44
	Female	0.39	0.18	0.34
Proportion using condom at first sex	Male	0.42		0.00
	Female	0.30		0.00
Level of risky pre-marital sex under age 18 (mean)	Male	3.15	1.40	2.15
	Female	2.38	1.37	1.81
Proportion with high level of sexual risk	Male	0.03	0.00	0.01
	Female	0.06	0.00	0.05
Among those who ever had sex, proportion with high risk	Male	0.04	0.00	0.02
	Female	0.10	0.01	0.12
Proportion whose first sexual partners were 4 year younger or older	Male	0.17	0.03	0.22
	Female	0.44	0.45	0.46
Proportions who ever paid for sex, or were ever paid by someone to have sex	Male	0.25	0.14	0.20
	Female	0.00	0.00	0.00

Social Background of Young Adults

For the present analysis we have utilized two basic socio-economic dimensions which other research has shown to be very important in distinguishing sub-groups of young people. These two dimensions, Residence and Level of Schooling, offer the advantage that they can be measured in essentially comparable fashion in each of the three national surveys. Our dimensions distinguish three residence categories: those living in the largest Metropolitan area (Bangkok, Manila, Ho Chi Minh City), those living in any other urban area, and those living in rural areas. Similarly, there are three education categories, dividing each national youth population into three groups. Low education includes those who completed primary/lower secondary school or less. Mid education includes those who went to high school or equivalent level, but did not enter college, while high education includes those who began college or completed college.

Figures 1 and 2 show, for males and females respectively, that the three national young adult populations are quite dissimilar on these dimensions. In these figures the countries are ordered from the lowest standing overall (Vietnam) to the highest (the Philippines). Within each chart the darkest shading is for the "lowest" social background (closest to rural and/or low education). It is evident that in Vietnam the rural and/or low education categories are much more prevalent, while in the Philippines the urban is somewhat more prevalent and the highly educated are much more prevalent than in the other countries. For example, male young adults who had low educational levels and lived in rural areas made up 44 percent of Vietnam young adults, nearly 20 percent of Thailand young adults, but only 8 per cent of Philippines young adults. At the other end of the continuum, those with high educational levels and metropolitan residence made up a negligible part of the male young adult population in Vietnam, while in Thailand this group made up 5 percent, and in the Philippines 9 percent. The same overall pattern of differences is evident for females (of Figure 2).

By examining Figures 1 and 2 for each country we can compare male and female young adults and recognize that within each country the joint distribution

of males and females by residence and education is broadly similar. The difference between males and females is very small but substantial differences between those in metropolitan (Bangkok, Ho Chi Minh City and Manila) versus rural areas are observed. These patterns reflect the relative equality of schooling levels by sex in these countries in recent years, and also the fact that in all three countries males and females share the same birth place distribution and that both are inclined to migrate to urban areas and especially the biggest cities.

These charts give us important background for an exercise in comparison among the young adults represented in these three national surveys. In the models reported subsequently we employ residence and education, as just defined, and Age, as predictors of a series of sexual risk-taking outcomes. Examination of the distributions on residence and education and age suggests that none of these will be important in distinguishing male from female risk-taking levels overall, but that both will be important in explaining differences among the countries. This expectation results in part from the important national differences in the distributions, and also from national differences in the pattern of levels across the social topography for each of a series of sexual risk-taking indicators. These patterns are examined next.

Figure 1 Distribution of the Male Population Aged 18-24, by Residence and Education: Vietnam, Thailand, and the Philippines

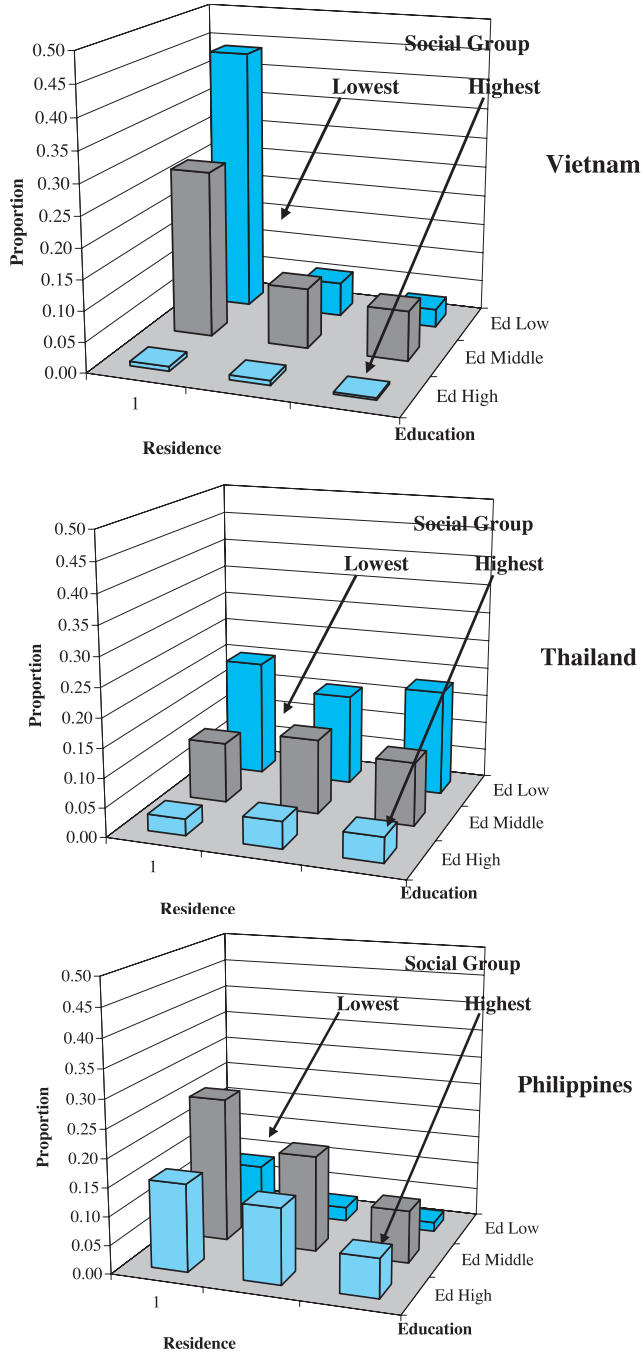
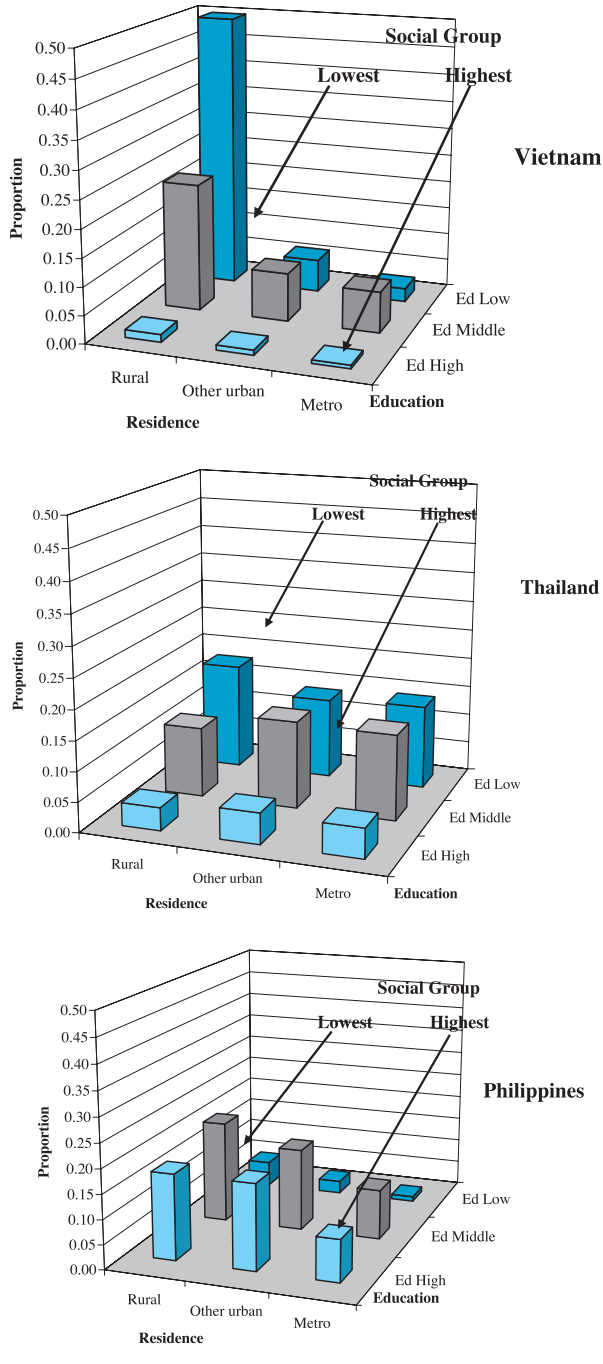


Figure 2 Distribution of the Female Population Ageñ 18-24, by Residence and Education: Vietnam, Thailand, and the Philippines



Patterns of Sexual Risk-taking

Young adults from Thailand, Vietnam and the Philippines are compared on three selected measures of sexual risk: (1) the proportion who ever had sexual experience, (2) the proportion whose first sexual experience was under age 18, and (3) the proportion of sexually active young adults who had first sex before marriage. These are examined here against social background as defined above in terms of Residence (metropolitan, other urban, and rural) and Levels of Education (low, middle, high).

Figures 3 and 4 show the prevalence of sexual experience among males and females from the three surveys. The data in Figure 3 reveal that Thai males are the most sexually active of all among the three countries. Regardless of social background, the proportions who ever had sex range from well above 70 to over 80 percent. Most active among Thai males are those in metropolitan and other urban areas with low education, and those in rural areas with high education. Filipino males are less active than Thais overall, and show a slightly different pattern across social background, with those from the metropolitan area who had middle and low education being most active. The highest proportion of Filipino males who ever had sexual experience is below 60 percent, much lower than among Thais among whom the level reaches 80 percent. Least active among young adult males are those from Vietnam. Here the highest proportion having sexual experience is below 50 percent with those having a high level of education being most active followed by the low and middle educational groups. Among females (Figure 4), somewhat similar distributions by education and residence are observed between Thailand and the Philippines. In all three countries it is females with low education in all residence categories who are most sexually active, with the highest proportion observed among those in metropolitan areas of Thailand and the Philippines (nearly 70 percent). Vietnamese females consistently report the lowest levels among youth in the three countries.

Some note must be taken when compare young adults on whether they ever had sexual experience that there are very different contexts for this experience. The indicator reflects any sexual experience regardless of when it occurs. Thus, for some it may be sex within marriage while for many others (especially males) it may be largely pre-marital. The differences observed in Figures 3 and 4 could be accounted for at least in part by the differences in timing of marriage among these countries.

Figure 3 Distribution of Young Adult Males Population Who Ever Had Sex, by Residence and Education: Vietnam, Thailand, and the Philippines

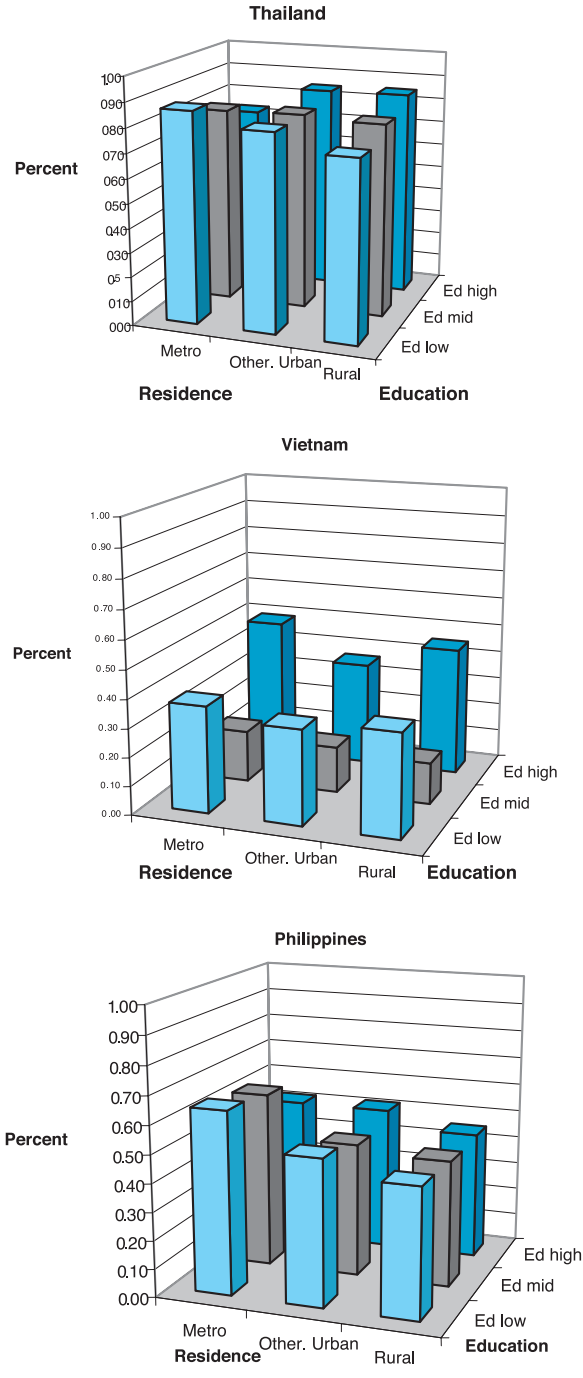
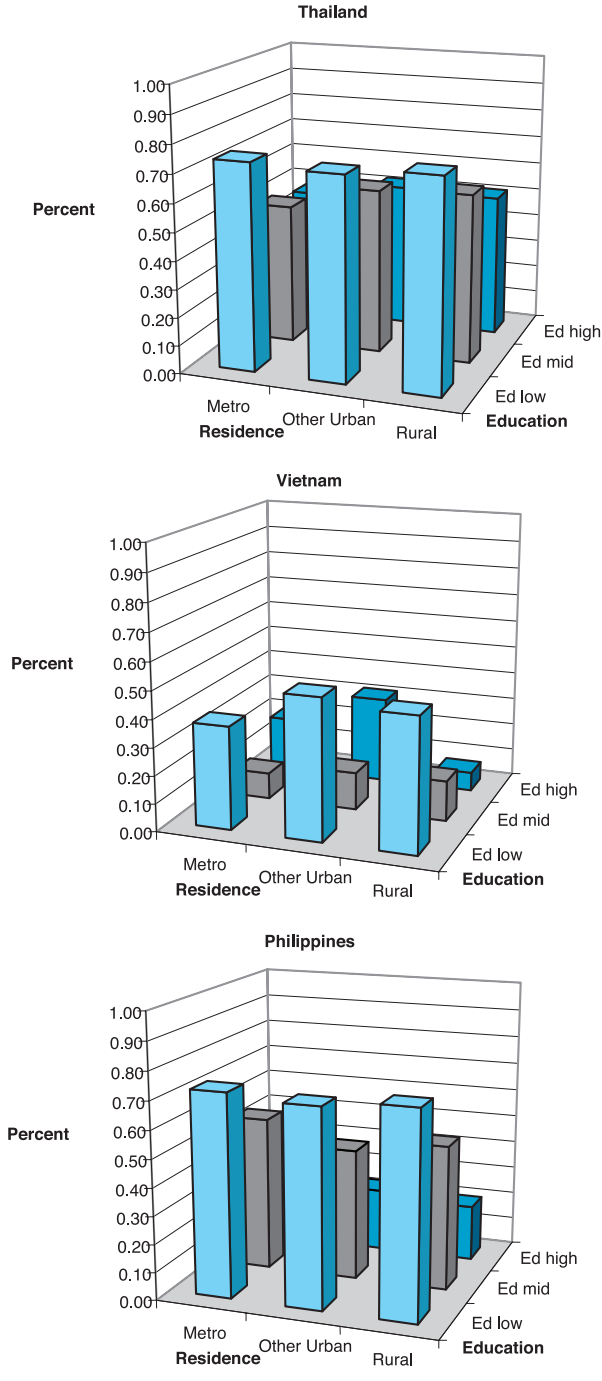


Figure 4 Distribution of Young Adult Females Population Who Ever Had Sex, by Residence and Education: Vietnam, Thailand, and the Philippines



In Figures 5 and 6 males and females are compared on whether their first sex was under the age of 18, which is a widely acknowledged risk category among youth. Here the country specific distributions are diverse. For Thai males, (Figure 5) the highest proportion is observed among those with low and middle education, respectively, regardless of where they live. For Filipino males, whose proportions are lower than for their Thai counterparts, a small difference is observed across the two social measures. In Vietnam, sexual experience before age 18 is relatively uncommon; the highest proportion of less than 20 percent is observed among those with the mid educational level living in the metropolitan area (Ho Chi Minh City). This is much a lower prevalence than that of the Thais (over 70 percent among those with low education living in metropolitan residence) and the Filipinos (nearly 50 percent among those with high education in metropolitan and other urban areas). For females, (Figure 6) sexual debut under age 18 is certainly less prevalent than among their male counterparts as seen in Figure 5. It is rather common among those who had low education, and this is observed across all residential areas of all the countries.

Figure 5 Distribution of Young Adult Males Population Who Had First Sex Before Age 18, by Residence and Education: Vietnam, Thailand, and the Philippines

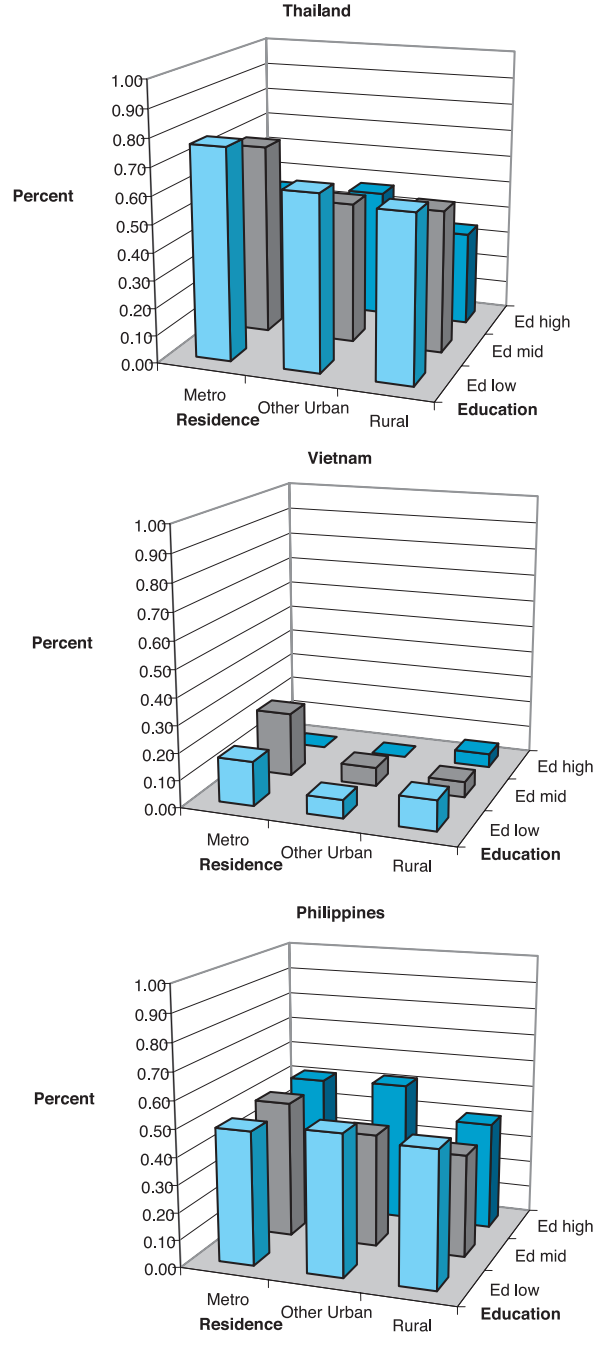
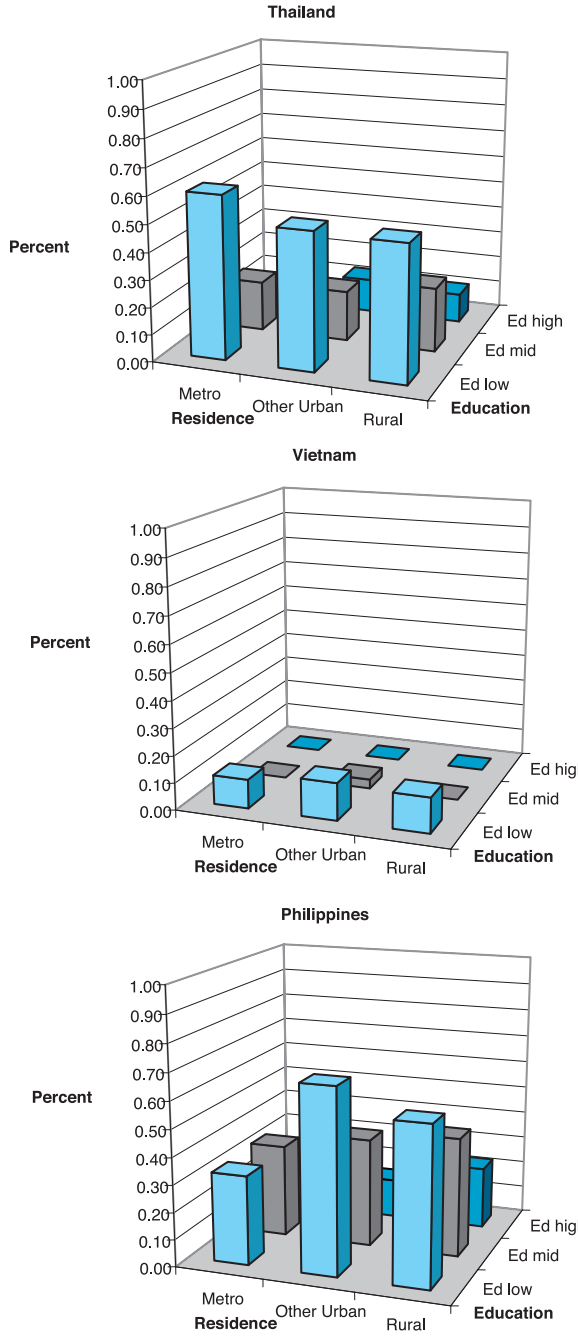


Figure 6 Distribution of Young Adult Females Population Who Had First Sex Before Age 18, by Residence and Education: Vietnam, Thailand, and the Philippines



In a similar fashion, Figures 7 and 8 compare young adult males and females on pre-marital sexual experience, among those who ever had sex. As will be noticed, regardless of Residence and Educational background, sexual experience for Thai males under age 25, where it existed, was almost always pre-marital (Figure 7). The same is more or less true among Filipino males. Among the Vietnamese, however, the proportion having pre-marital sex is less prevalent and, with a few exceptions, seems to increase with educational level. Among females (Figure 8), the highest prevalence, as far as pre-marital sex is concerned, is observed among the Thais. Much lower prevalence is observed among Filipino females. In both Thailand and the Philippines, the prevalence of pre-marital sex among females increases with level of education. In Vietnam, on the other hand, pre-marital sex is near absent, except among those with metropolitan residence who are of the mid and high educational levels.

From Figures 5 and 6 and Figures 7 and 8 above it is evident that among Thai and Filipino young adults sex not only occurs at relatively early (i.e. under age 18) but where it occurs, it is also largely pre-marital. This pattern is most common among the Thai and least common among the Vietnamese, with the Filipinos falling in between. This country-specific different pattern is of interest to us for the sake of comparison which follows in the next section.

Figure 7 Distribution of Young Adult Males Whose First First Sex Was Premarital, by Residence and Education: Vietnam, Thailand, and the Philippines

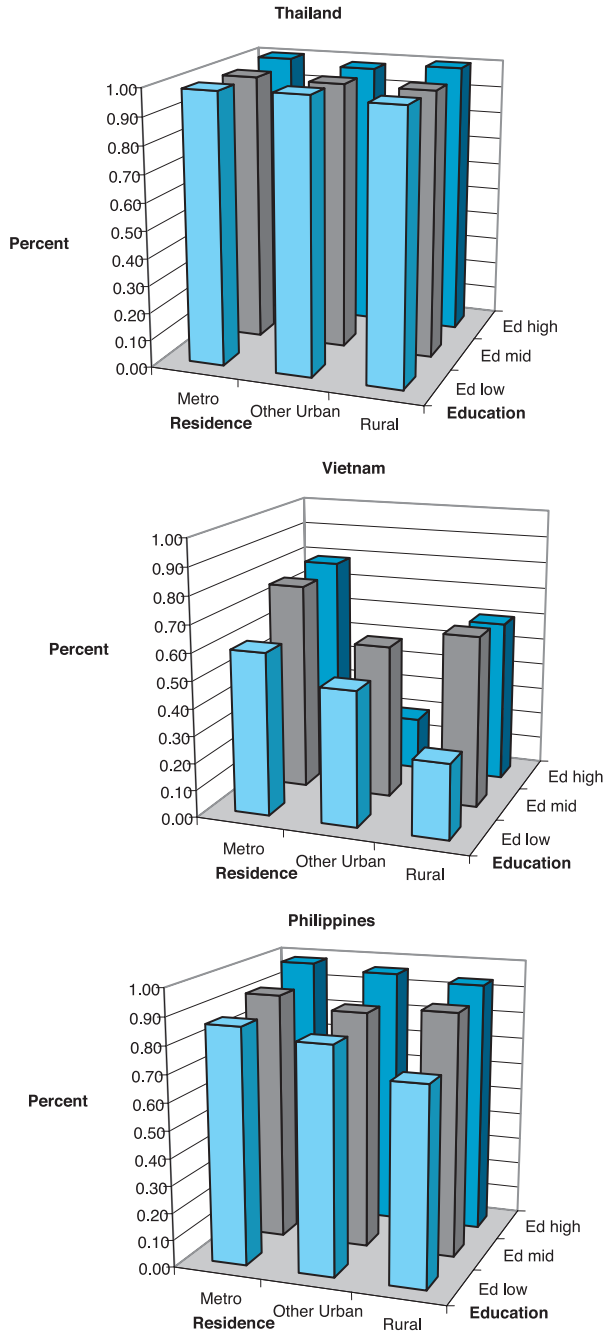
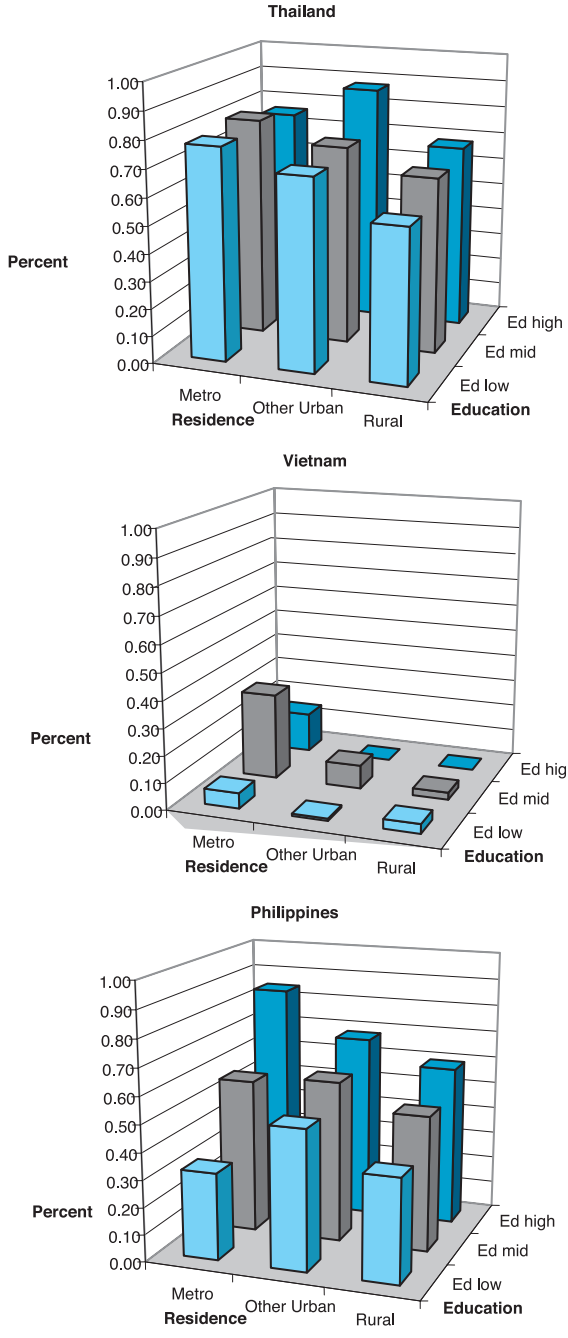


Figure 8 Distribution of Young Adult Females Whose First First Sex Was Premarital, by Residence and Education: Vietnam, Thailand, and the Philippines



Modeling Sexual Risk for Comparisioms Among Countries

Our objective is to compare the three countries on a few of the possible dependent variables (risk level indicators), in a modeling context in which we can control on our background variables in a similar manner for each country. Because our dependent variable is dichotomous we have employed logistic regression and maximum likelihood estimation. All of our independent variables are dichotomies as well, expressing classifications on Country, Residence, and Education, and logistic regression readily handles explanatory variables in this form. Because of the considerable differences between males and females on most or all outcome variables for each of the countries, it seemed appropriate to treat the two sexes as separate populations within each country. Models were run separately for each. The data on young adults aged 18-24 in the three surveys were pooled into one file. In that file cases are weighted within each country to adjust for unequal sampling fractions, and between the countries to produce an equal number of cases per country. For each country/sex group, we present only the coefficients for Country, and the overall model results for the full model and a model that excludes country. The country coefficients are presented in the more intuitive multiple classification analysis (MCA) format (Retherford and Choe 1993: chapter 5) that indicates the adjusted country levels on the dependent variable. In this analysis only two of the dependent variables are examined: first sex under the age of 18; and, among those who report having had sexual experience, the proportion whose first sex was pre-marital. The results are presented in Table 2.

Our main interest centers on the question whether or to what degree the differences in outcome levels among the three countries are accounted for or explained by the combination of (a) the social composition differences highlighted by our cross-tabulation of residence, schooling level and age, and (b) country-specific patterns on sexual risk-taking outcomes. In this initial analysis we look at two outcome variables: first sex under the age of 18, and the experience of pre-marital sex among those who have had first sex. The first of these measures of sexual risk-taking combines patterns of early union formation and early sexual onset outside of unions ("pre-marital sex"). The second measure focuses upon the pre-marital sex element of sexual risk-taking.

Table 2 Logistic Regression Results Comparing Countries, on Two Sexual Risk-Taking Indicators, by Sex

COUNTRY	Sexual Experience Under Age 18				Pre-Marital Sex, If Sexually Experienced			
	Male		Female		Male		Female	
	Observed	Adjusted	Observed	Adjusted	Observed	Adjusted	Observed	Adjusted
Results for Country								
Thailand	0.61		0.36		0.98		0.46	
Philippines	0.45	0.89	0.35	0.95	0.90	0.90	0.50	0.52
Vietnam	0.10	0.53	0.14	0.58	0.40	0.61	0.20	0.99
	(full equation includes Country, Age, Residence, Education Level: omitted categories are Thailand, Age 18, Rural and Low Education)							
Overall Model Results								
(A) Full Model								
-2x log likelihood =	2402.9040		1774.9130		2402.9040		2159.2970	
degrees of freedom =	12		12		12		12	
(B) Full Model - Country								
-2x log likelihood =	2727.1880		1952.9670		2639.2120		2626.6250	
degrees of freedom =	10		10		10		10	
(C) Comparison of (A) & (B)								
likelihood ratio =	324.2840		178.0540		236.3080		467.3280	
chi squared significance level =	>.001		>.001		>.001		>.001	

Note: Estimated with SPSS v. 15 Logistic Regression; pooled sample of youth ages 18-24 from Thailand, Philippines, and Vietnam surveys; cases weighted within countries to adjust for unequal sampling probabilities, and between countries to yield an equal number of cases per country.

First Sex Before Age 18

There are large observed differences among the countries for each of the sexes (Table 2, columns 1 and 3). Sex under the age of 18 is far more common among Thai males (0.61) than among Filipino males (0.45) or among Vietnamese males (0.10). Among females, we find that the level for Thais (0.36) is virtually matched by Filipino females (0.35), while Vietnamese females have a much lower level (0.14). But, a model predicting this sexual risk-taking level on the basis of Residence, Education Level, Age and Country indicates that both the male and female levels among Filipinos are higher than among Thais, once the much higher schooling distribution and higher level of urban/metropolitan residence among Filipinos are taken into account. The Vietnamese levels are also much higher when the background characteristics are adjusted for, rising to nearly the Thai level for among males, and to well above the Thai level among females though for each sex the Vietnamese level is still well below that for Filipinos (Table 2, columns 2 and 4). For the comparison with the Philippines, these results carry the implication that, were Filipinos less urban and/or less educated, they would have a level of sex under age 18 much closer to the initially distinct Thai levels. Alternatively, as Thais reach the urban and schooling levels of Filipinos they could be expected, assuming all relationships remained unchanged, to have a somewhat lower level of sexual experience by age 18. For the comparison with the Vietnamese, the results suggest that the much lower levels of this risk outcome among Vietnamese is largely a reflection of their being far less urban and far less educated. As young Vietnamese move in urban and educated directions in future years, this risk factor can be expected to become more prominent.

The lower part of Table 1 provides a comparison of two models: the full model as just described, and a model which excludes Country. The likelihood ratios all are significant at the 0.001 level or greater, which indicates that the contribution of Country is statistically significant, even in the presence of all the other variables in the model.

Pre-marital Sex, Among Those with Sexual Experience

This measure of risk-taking focuses on the pre-marital component of overall sexual experience. We examine pre-marital sex separately on the possibility that underlying country differences, and/or the influences of Residence and Level of Education might be notably different for pre-marital sex. The observed patterns for males (column 5) indicate that in Thailand and the Philippines nearly all sexual onset under age 18 is pre-marital, compared with only 40 per cent pre-marital in Vietnam. Among females (column 7) about half the sexual onset under age 18 is pre-marital in Thailand and the Philippines, but only 20 per cent in Vietnam. The adjusted levels (columns 6 and 8) indicate that at least with regard to the characteristics examined here, the difference between Thailand and the Philippines is unaffected, whereas the much lower observed levels for Vietnam rise to the Thailand level or even much higher when Age, Residence and Education are adjusted for. Again for this dependent variable, a comparison of the two models (one with Country excluded) indicates that the contribution of Country to the results is statistically significant.

Discussion

The aim in this analysis has been systematic comparison among three surveys to bring out important differences among countries. To accomplish this we have employed relatively simple measures expressing Residence and Education dimensions of social and economic change. We have developed straightforward logistic regression models for each sexual risk outcome variable and for a combination of Country, Residence, Age and Education. Initial examination of patterns (depicted in Table 1 and Figures 1 through 8) indicated that males and females have systematically different outcome levels. Rather than incorporate Sex into models of the total youth population ages 18-24, we elected to model each of the sexes separately.

The modeling results highlight the underlying strength of country differences, quite apart from country levels on Age, Residence and Education. All equations are improved in a statistically significant manner when the country

variable is included. At the same time, the results point to some interesting and statistically important patterns of sexual risk across the 3 x 3 social landscape we have identified. There are both statistically significant differences across the landscape, and important differences in pattern among the countries. The complete comparison of these countries will elaborate the framework further by, for example, exploring for the presence of interaction effects. Nevertheless, the results presented here point to difference level of needs for sexual risk reduction among young adults in the three countries.

It is appropriate, we feel, to conclude with the suggestion that three national surveys of recent vintage should provide a bigger array than they do of social and economic background variables to incorporate into these kinds of comparison.

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SOCIAL PERCEPTION AND EVOLVING SEXUAL BEHAVIOR AND PARTNER PREFERENCE OF YOUNG PEOPLE

Malee Sabaiying

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SOCIAL PERCEPTION AND EVOLVING SEXUAL BEHAVIOR AND PARTNER PREFERENCE OF YOUNG PEOPLE

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Introduction

Currently in Thai society, the sexual behavior of Thai youth is widely discussed and there have been attempts to identify potential solutions to problems that may result from the evolving behavior. Adolescence is a critical period of physiological change, especially sexual development, and psychological and emotional changes that lead to HIV risk behavior, including unprotected sexual intercourse. Moreover, external factors, such as the social and cultural context; peers, neighbors, adults and the media all may affect the sexual behavior of young people.

According to ABAC survey in 2004, it was found that 91.5 percent of the sample have been exposed to sexual information by watching pornography from various media sources, such as videos, VCD, websites and magazines. These media are easy to buy but difficult to control. The findings revealed that 42.4 percent of the sample had sexual experience, 16.1 percent had unwanted pregnancies and 13.9 percent indicated that they had sex with someone they had just met in a pub, discotheque or shopping mall. These survey findings generate the question of whether social factors affect sexual behavior of Thai youth, how and at what level.

This chapter presents information on the sexual behavior and preferences of Thai youth and compares this with social perceptions on youth sexual behavior and attitudes. Data from Thailand's National Survey on Risk Behavior and HIV/AIDS and ART Knowledge conducted by the Institute for Population and Social Research, Mahidol University in 2006 are used in the analysis. The study population are unmarried youth aged 18-19

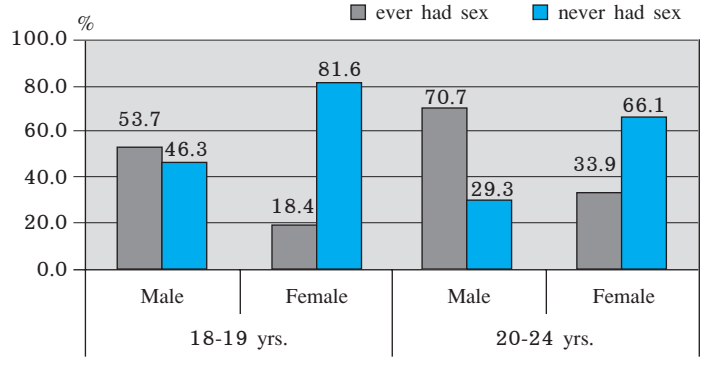
and 20-24 (in some cases, married youth are included). This age grouping is based on the fact that according to Thai law, a person who is over 20 years old is legally adult, and therefore the author assumes that the attitudes and behavior of the two age groups, one below 20 years old and the other 20 and above, are different. The sample includes youth in rural and urban areas, and Bangkok.

The following sections explore whether the social perceptions are consistent with the evidence from the survey on sexual behavior and attitudes of the youth

Sexual activity of students

In general, Thai society perceives that students have no sexual experience while out of school youth have sexual experience. Is this true in Thai society? The survey data reveals that this perception is not true among youth for both age groups. Among those aged 18-19 who are studying in school, 53.7 percent of males have had sexual experience, and 18.4 percent of females are sexually experienced. Among male students aged 20-24, 70.7 percent have had sexual intercourse, and 33.9 percent of female students aged 20-24 already have sexual experience This is consistent with the study of Siriyupa Nansunanon (2006) on knowledge, attitude, believe and sexual behavior of Thai youth, who found that one-third of youth who were studying have sexual experience.

Figure 1 Sexual experience of youth in schools



There are also questions raised about what youth think. Adult always say that "it is not the right time" for youth to be having sex. The data from the youth survey on attitudes toward premarital sex, expenditure for sexual activity, and having a "gig" (slang for lover) are as follows:

Premarital sex of students

Among male and female youth who are studying (not included married youth), about 67 percent have a positive attitude toward premarital sex. They perceive that it is a common and acceptable practice among young people. More male youth agree with this than do female youth. Older youth agree with this statement more than do younger youth. Among 18-19 years old youth, 71.4 percent of male and 56.8 percent of female youth and among 20-24 years old youth, 78.1 percent of male and 63.0 percent of female youth have a positive attitude.

Paying for sex

About one-third of youth in school have a positive attitude toward paying for sex. They view that there is nothing wrong with paying for sex. More male than female youth agree and older youth agree with this issue than do younger youth. Among 18-19 years old youth 37.0 percent of male and 14.5 percent of female youth and among 20-24 years old youth, 46.2 percent of male and 22.6 percent of female have a positive attitude.

Having a "gig" is fashionable

About a quarter of male and female youth in school perceive that having "gig" or lover is fashionable. More male than female youth accept having a lover and older youth accept more than younger youth. Among 18-19 years old youth, 29.7 percent of male and 16.0 percent of female youth accept having a lover, and among 20-24 years old youth, 24.2 percent of male and 10.7 percent of femaleyouth accept having a lover (gig).

In summary, the sexual behavior of students is in accordance with their attitudes toward premarital sex, which is generally seen as normal and acceptable among young people. In addition, it is consistent with the viewpoint of youth regarding their parents' acceptance of children's premarital sex.

Father's acceptance of premarital sex of sons and daughters

Most male and female youth view that their father accepts premarital sex of sons (71.7 percent). More male than female youth think that their father accept premarital sex, and older youth are more likely than younger youth to think that their father accept premarital sex of sons. Among 18-19 years old, 76.6 percent of male and 58.7 percent of female youth reported that fathers accept. Among 20-24 years old, 86.6 percent of male and 60.3 percent of female youth report that fathers accept premarital sex of sons.

The finding is opposite for premarital sex of daughters. A small proportion of male and female youth views that fathers accept a daughter's premarital sex. The view is similar among male and female youth and older and younger youth. Among 18-19 years old youth, 17.1 percent of male and 21.1 of female youth think that their father accepts premarital sex of a daughter, and among 20-24 years old, 21.3 percent of males and 21.8 percent of female youth think that their father accept it.

Mother's acceptance of premarital sex of sons and daughters

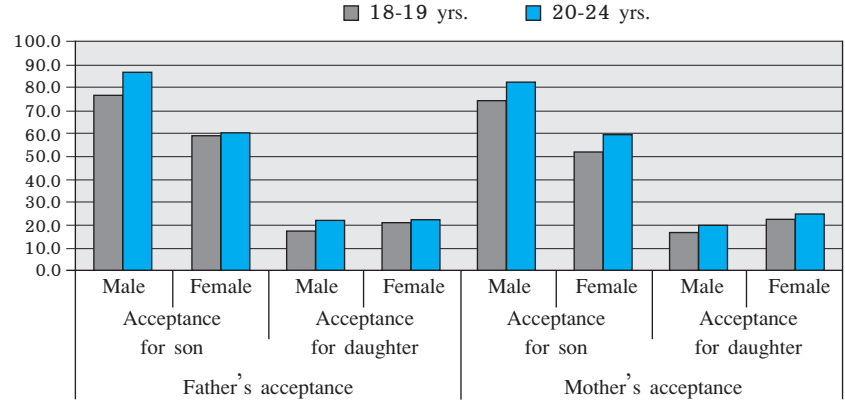
More than half of youth view that their mother can accept the premarital sex of sons (68.6 percent). More male than female and older youth more than younger youth think that their mother accepts premarital sex of sons. Among 18-19 years old, 74.0 percent of male and 51.7 percent of female youth felt that their mother could accept premarital sex of sons and among 20-24 years old, 82.4 percent of male and 59.4 percent of female youth felt that their mother could accept it.

The finding is opposite for premarital sex of daughters. Only a small proportion of male and female youth views that mothers accept a daughter's premarital sex. More female youth than male and older more than younger youth think that their mother accepts premarital sex of a daughter. Among 18-19 years old youth, 16.6 percent of male and 22.5 of female youth think that their mother accepts premarital sex of a daughter, and among 20-24 years old, 19.8 percent of males and 24.5 percent of female youth think that their mother accept it.

In summary, youth in school perceived that mothers and fathers accept premarital sex of sons more than they do for daughters. However, female youth are more likely than male youth to think that their mother accepts premarital sex of daughters.

In conclusion, we can agree that the social perception that youth in school have no sexual activity is not true. Evidence from the survey indicates that many students have had sexual experience, with more than half of male youth reporting that have had sex. Older youth are more likely to have had sexual intercourse than are younger youth. The results are consistent with the students' perception that premarital sex is common and acceptable for young people nowadays and that having a lover (gig) is normal and fashionable Moreover, youth view that their parents can accept premarital sex of sons more than they can for daughters.

Figure 2 Youth perceptions on parents' acceptance of premarital sex of sons and daughters.



Youth in general are not liberal in their view of sex: Is it true?

A general perception in Thai society is that youth are not liberal in their view of sex. However, the results of the survey suggest that youth, both in school and out-of-school, are rather liberal in their attitude toward premarital sex, paying for sex and having a "gig" (casual lover).

Premarital sex

Based on responses to the statement that "Nowadays premarital sex is common and acceptable among male and female youth," it is found that majority of male and female youth agree that premarital sex is common and acceptable. More male than female youth agree with this statement. There is almost no difference between older youth and younger youth. Among 18-19 years old youth, 76.3 percent of male and 59.6 percent of female youth agree, and among 20-24 years old, 77.3 percent of male and 60.9 percent of female youth agree with the statement.

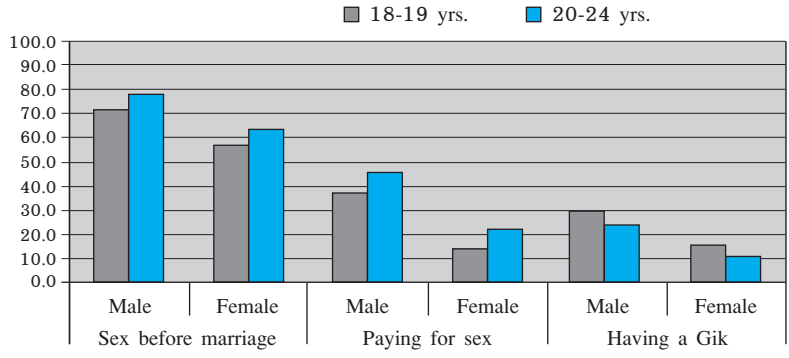
Paying for sex

About a half of male youth agree that there is nothing wrong with paying for sex. About one-fifth of female youth agree with this statement. Older youth express more agreement than do younger ones. Among 18-19 years old, 41.6 percent of male and 18.8 percent of female youth agree with the statement, while among 20-24 years old, 53.4 percent of male and 22.3 percent of female youth agree with the statement.

Having "gig" (casual lover)

Data reveal that about one-third of male and about one-fifth of female youth view that having a 'gig' is fashionable. In other words, more male than female youth agree with statement. Younger youth are more likely to agree than are older youth. (i.e. among 18-19 years old, 31.5 percent of male and 19.3 percent of female youth agree, and among 20-24 years old, 28.7 percent of male and 16.2 percent of female youth agree with the statement. This may indicate a trend among younger generation in favor of "having a casual lover".

Figure 3 Youth agree with premarital sex, paying for sex and having a 'gig' (casual lover)



Opinion on sexual experience of male close friends

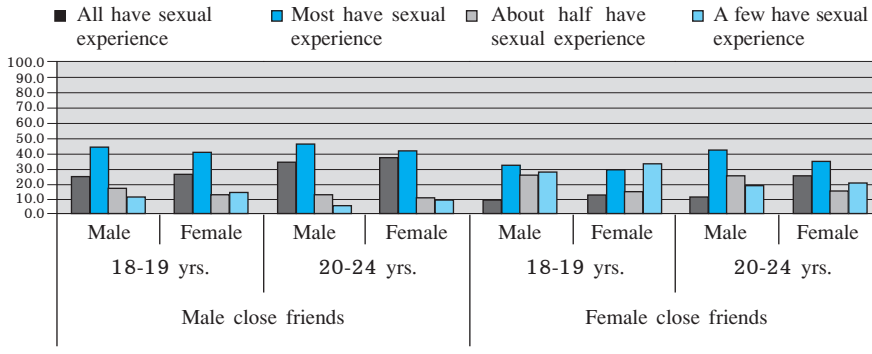
The results of the question "Have your male close friends ever had sex?" shows that most male and female answer that most already have had sex. That means youth perceive that most of their male close friends have already had sexual experience, and some answer that every male friend has had sex. Older youth are more likely to view that most of their male close friend have sexual experience, among 18-19 years old, 69.3 percent of male and 68.1 percent of female youth, and among 20-24 years old, 80.0 percent of male and 78.2 percent of female youth reporting that most of their male friends have had sex. It should be noted that the view that majority of male close friends have already had sex is shared by similar percentage of male and female youth.

Opinion on sexual experience of female close friends

One-third of 18-19 male youth say that most of their female close friends have had sex already (32.1 percent). The next most frequently cited answer is very few friends have ever had sex (26.2 percent). For 20-24 male youth, slightly over one-third answer that most of their female friends have had sex (41.6 percent), while one-quarter responded that about a half have ever had sexual experience (25.0 percent).

Among the 18-19 female group, one-third respond that very few of their friends ever had sex (32.8 percent) The next most frequently cited answer was that the majority have already had sex (28.9 percent) For the 20-24 female youth, about one-third of them say that most of their female friends have sex already (34.5 percent), and a quarter of female youth said everyone had sex already (25.0 percent). Age does not seem to make much difference in the opinion among female youth.

Figure 4 How youth describe the sexual experience of their male and female close friends



Opinion on sexual experience of unmarried adolescents.

The responses to the question on "How many unmarried male adolescents have sex?" found that most male and female youth say that most or all of unmarried male adolescents have had sex. Their opinion is nearly the same. Age and gender do not seem to make much difference in their opinion. (i.e. among 18-19 years old, 77.7 percent of male and 80.9 percent of female youth, among 20-24 years old, 79.0 percent of male and 77.2 percent of female youth).

Asking about how many unmarried female adolescents has sex already, most respondents reported that most or nearly all female adolescents have had sex. The results are similar for males and females and for the older and younger age groups. Among 18-19 years old, 67.0 percent of male and 65.1 percent of female youth and among 20-24 years old, 67.3 percent of male and 66.2 percent of female youth reported that most or nearly all of unmarried female adolescents have had sex.

In conclusion, based on the results of the survey we can argue that the perception by people in Thai society is not true. Actually youth are liberal in their view toward sex. Evidence from the survey indicates that youth perceive that premarital sex is common and acceptable among adolescents. Paying for sex is acceptable. They also reveal the perception that their close friends, both male and female, already have had sex, including unmarried male and female adolescents. Their point of view is not different by gender and age group.

Youth who stay with parents or are watched by parents do not have much opportunity to have sex: Is it true?

Youth who stay with parents do not have much opportunity to have sex

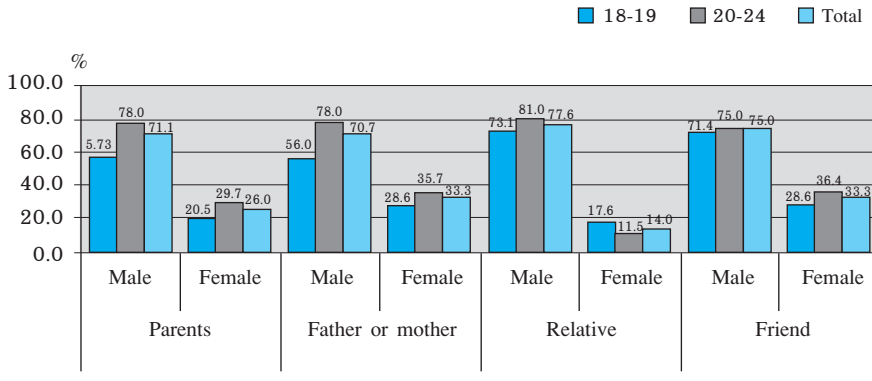
The general perception in Thai Society is that youth who stay with parents have limited opportunity to have sex. But the results of the survey show that for youth aged 18-24, almost three-quarters of male youth and one-quarter of female youth who stay with parents have had sex (71.1 percent of male youth and 26.0 percent of female youth). Older youth have more sexual activity than the younger youth. Male youth have more sexual activity than female youth. Among 18-19 years old, 57.3 percent of male youth and 20.5 percent of female youth have ever had sex. Among 20-24 years old, 78.0 percent of male and 29.7 percent of female youth have had sex.

Comparing youth who stay with other persons, it is found that male youth aged 18-24 who stay with other persons (relatives and friends) have a higher proportion with sexual experience as compared to those who stay with their parents. (77.6 percent of youth who stay with relatives and 75.0 percent of ones who stay with friends). Among female youth aged 18-24, those who are currently living relatives have a lower proportion with sexual experience; while those who stay with friends have a higher proportion with sexual experience than those who live with parents. (14.0

percent for female youth who live with relatives and 33.3 percent for those who live with friends).

For youth aged 20-24, it is found that 75 percent already have sexual experience regardless of whom they are living with. The proportion varies little, with 78.6 percent of those living with parents, 81.0 percent of those living with a relative and 75.0 percent staying with friends. Female youth who are living with either a father or mother, or with friends, have higher levels of sexual activity than those who stay with other persons (35.7 percent of female youth who stay with father or mother have had sex, and 36.4 percent of those who stay with friends).

Figure 5 Sexual behavior of youth by the relationship of who they are currently living with.



Youth who are watched by parents do not have much opportunity to have sex

The general perception in Thai society is that youth who are watched by parents have little opportunity to have sex. However, the results of the survey show that many youth who are watched by parents have had sex. The finding from the question "Generally, do your parents know that where you are, with whom and what you do each day?" it was found that male youth whose parents watch closely are more likely to have had sex than female youth. The proportion increases with the distance between them and their parents.

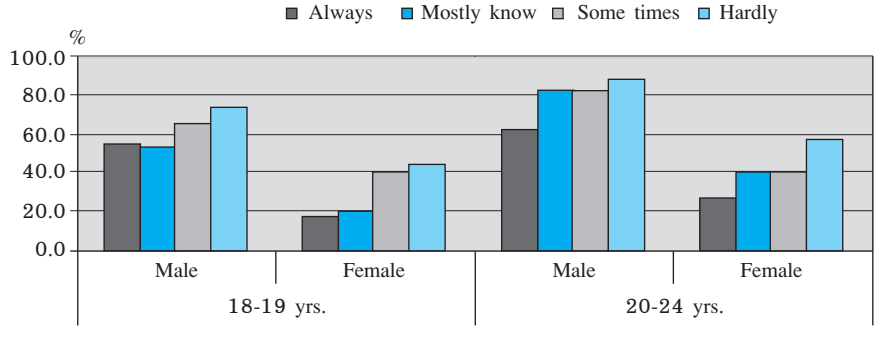
Among male youth aged 18-19 whose parents mostly know where they are, with whom and what they are doing, 54.0 percent already have had sex. Among male youth whose parents sometime know about their activities, 65.6 percent already have had sex. And among male youth whose parents rarely know about their daily activity, 73.5 percent already have had sex.

The percentage is higher for male youth aged 20-24. For the male youth whose parents mostly know where they are, with whom and what they are doing, 75.5 percent already have had sex. Among male youth whose parents sometime know about their activities, 82.7 percent already have had sex. And among male youth whose parents rarely know about their daily activity, 88.0 percent already have had sex.

Among female youth aged 18-19 whose parents mostly know where they go, and with whom, 18.0 percent already have had sex. Among female youth whose parents sometime know, 40.0 percent have had sex. And 44.4 percent of female youth whose parents rarely know about daily activity already have had sex.

The proportion is higher among female youth aged 20-24, where 30.5 percent of female youth whose parents always know their daily life have had sex, 39.7 percent whose parents sometime know about their activity, and 57.7 percent whose parent rarely know have had sex.

Figure 6 Sexual behavior of youth whose parents/guardians know about youth's daily activity.



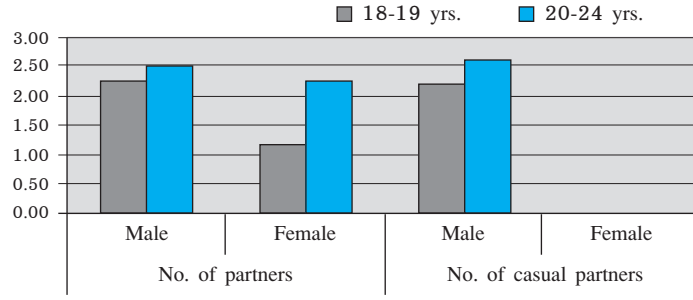
We can conclude that it is not true that youth who are living with parents or closely watched by parents have no chance to have sex. Findings indicate that male youth and older youth who are living with their parents and closely watched have a higher probability of experiencing sex than are female youth and younger youth. However, youth who are staying with other persons or not closely taken care by their parents are also likely to have had sex.

Male youth are more sexually active than female youth: Is it true?

The general perception in Thai society is that male youth are more sexually active than female youth. The findings from the survey confirm that in the 12 months before the survey, male youth had more sexual partners than did female youth. This was found for both age groups. Among the 18-19 age group, sexually active male youth had 2.25 sexual partners on average, with a minimum of 1 partner and a maximum of 21 partners. Among female youth, the average number of sexual partners was 1.18, ranging from 1 to 8 partners. Among the 20-24 age group, male youth have 2.5 sexual partners on average, with a range from 1 to 41. On average, female youth had 2.23 partners, with a minimum of 1 and a maximum of 5. This shows that older female youth have more partners than younger ones but possibly with more stable partners.

Older male youth had more casual sexual partners than younger youth, with male youth aged 18-19 having 2.2 casual sexual partners on average compared to 2.6 sexual partners for sexually active male youth aged 20-24. The female youth rarely have casual sexual partners.

Figure 7 Number of sexual partners in the last 12 months.



We can conclude that it is true that male youth one more sexually active than are female youth, with male youth having more sexual partners than female youth and older male youth have more sexual partners than younger ones.

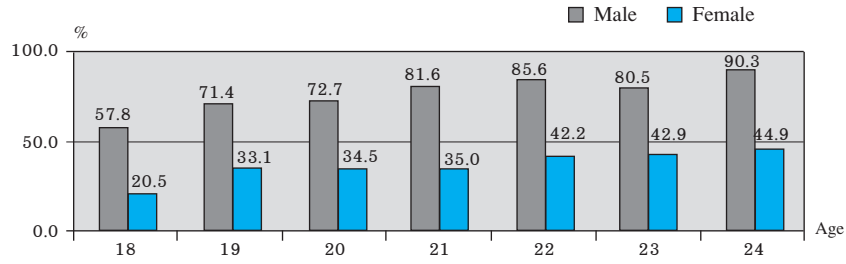
Most single youth do not have sex: Is it true?

The general perception in Thai society: is that most single youth do not have sex. However, the findings from the survey show that more than a half of male youth between age of 18 to 24 have had sex (ranging from 58-90 percent) and a significant proportion of female youth between age of 18 to 24 have had sex (ranging from 20-45 percent). Sexually active male youth started having sex at ages of 10-13, and for sexually active females, age at first sex was in the age range 11-14.

First sexual intercourse

Sexually experienced male youth aged 18-24 tended to have first sexual intercourse when they were 10-13 years old. For each age, 58-90 percent of male youth already have had sex. Sexually experienced female youth aged 18-24 generally had first sex at 11-14 years old. For each age group, 20-45 percent of female youth have already had sexual intercourses.

Figure 8 Percentage of unmarried youth who ever had sex.



Most male youth are single but have had sex (63.2 percent of 18-19 age group and 81.1 percent of 20-24 age group). Among female youth, the proportion of unmarried who have had sex is lower than that of male youth. Older youth are more sexually active than are younger youth (25.5 percent of 18-19 age group and 38.9 percent of 20-24 age group).

Last sexual intercourse

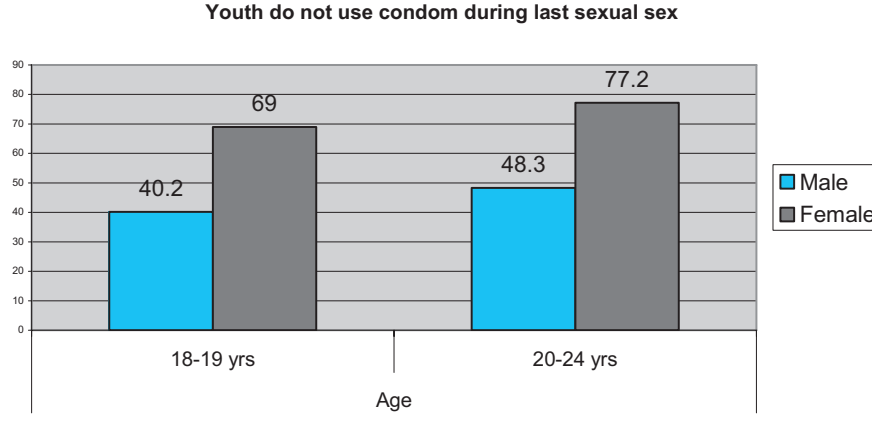
Respondents were asked "Who is the last sexual partner during the past 12 month?" The majority of male youth aged 18-19 reported that their last partner was their girlfriend (68.6 percent), next is someone they know (6.8 percent) and third most reported was "gig" or casual lover (6.1 percent) and only 3.4 percent had their last sex with sex worker. Among the 20-24 years old male youth, most replied that their last partner was their girlfriend (60.8 percent); followed by cohabiting partner (13.2 percent) and someone they know (5.6 percent), while 5.4 percent had their last sex with sex worker. Among female youth in both age groups, most mention their boyfriend as their last sexual partner followed by cohabiting partner.

More than one-third of male youth use condoms every time (i.e. among 18-19 years old, 39.2 percent, among 20-24 years old, 32.7 percent use condoms every time). However, one-half use sometime or never use condoms (i.e. 24.0 percent of males aged 18-19 use sometimes, and 22.0 percent never use, among 20-24 years old, 32.3 percent use occasionally and 24.5 percent never use).

Condom use for female youth is opposite to male behavior. About 70 percent of female youth never used condoms or used occasionally with their last partner. Among female youth aged 18-19, 43.0 percent never used condoms with their last sexual partner, 28.0 percent used occasionally and 16.0 percent used every time. For female youth aged 20-24, 42.7 percent used condom sometimes, 37.3 percent never used and 14.0 percent used every time.

It is found that more than 40 percent of male youth did not use condoms in their last sex with their last sexual partner, while 70 percent of female youth did not use condoms in their last sex with their last sexual partner. The proportion of older youth who did not use condom is higher than that of younger youth.

Figure 9 Youth who did not use condom during last sexual intercourse with last partner.

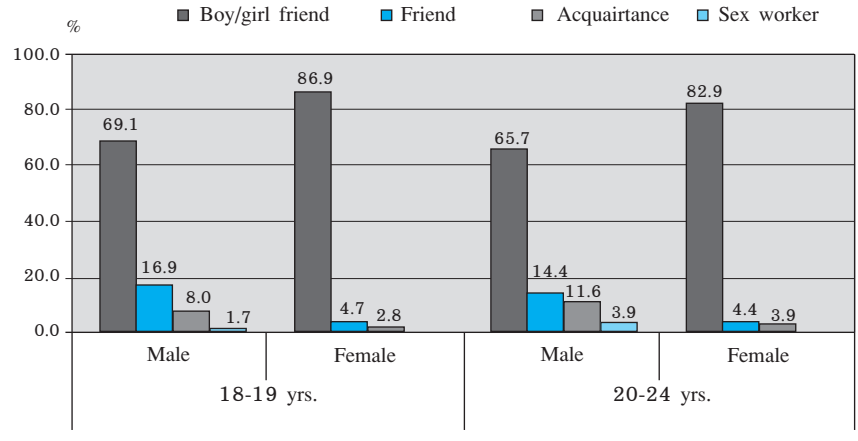


In conclusion, the perception of Thai society that most single youth do not have sex is not true. Data show that more than two-thirds of single male youth and one-fourth of single female youth have had sex. These youth have sexual risk behavior, with more than half (both male and female) not using a condom at first intercourse. Most, particularly females and older youth, also did not use condom every time with their last sexual partner.

Male youth had their first sex with sex worker: Is it true?

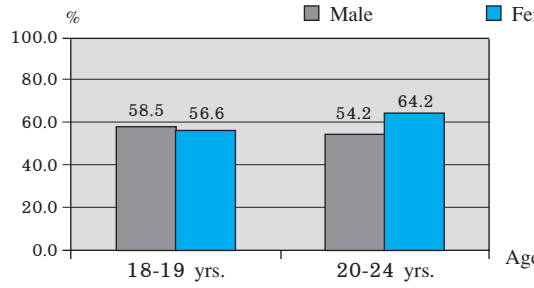
The perception in Thai society is that male youth have their first sex with a sex worker. However, the data from the survey does not support this perception. Most male and female youth have first sex with their girlfriend and boyfriend. Among youth 18-19 years old, 69.1 percent of male youth and 86.9 percent of female youth, among 20-24 years old, 65.7 percent of male, and 82.9 percent of female youth had first sex with a girlfriend or boyfriend. This is, followed by friend and someone they know. First sex with a sex worker is found only among male youth, for who 3.9 percent of those aged 20-24 and 1.7 percent for those aged 18-19 had first sex with a sex worker. This difference in the proportion of first sex with sex workers among older and younger youth may show a trend of change in Thai society on this matter.

Figure 10 Types of the first sexual partners



More than half of male and female youth in the two age groups did not use condom during first sexual intercourse. More female than male youth aged 20-24 did not use a condom. Older female youth more than younger female youth did not use condom.

Figure 11 Youth did not use condom during first sexual intercourse



In summary, in contrast to the general Thai perception that male youth had their first sex with a sex worker, most male and female youth had first sex with a girlfriend or boyfriend, followed by a friend and someone they know. Very few had their first sex with a sex worker. Older male youth, compared to younger youth, were more likely to have had first sex with sex worker.

Youth have sex because of pornography: Is it true?

It is usually felt in Thai society that youth have sex because of pornography. However, The results from the survey show no clear relationship between viewing pornography and sexual experience but watching VCD and VDO of pornography does appear to have a relationship with their sexual experience.

Youth's watching pornography

Watching pornography from media is often associated with the sexual behavior of youth. Pornography on VCD or DVD is easily associable. The spread of pornographic websites, sexy pictures in newspapers and magazines are seen to arouse youth's sexual behavior. How much do these pornographic images affect youth's sexual behavior?

Findings indicate that during the past 12 months most male and female youth have seen pornographic pictures from CD (54.3 percent), from

mobile phone (32.9 percent), book (32.3 percent) and magazines (29.7 percent). Male youth are more likely than female youth to have viewed pornography from every kind of media. It is noted that younger youth are more likely to have viewed pornography from mobile phones and the internet.

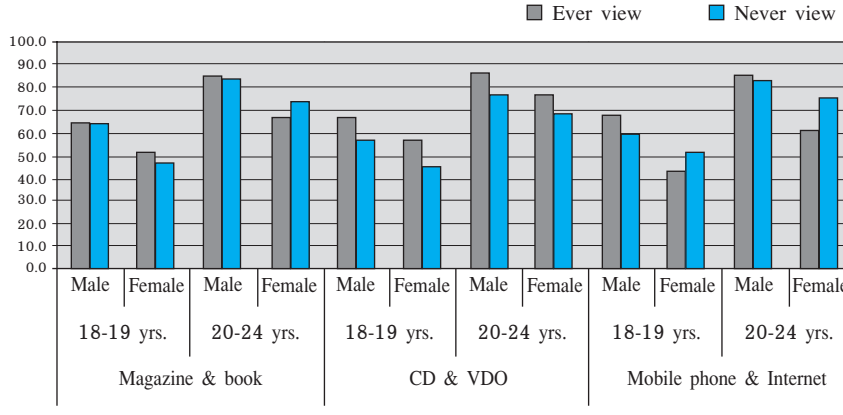
Pornography and sexual activity

The data suggests that viewing pornography from books or magazines does not affect sexual activity. In other words, male youth aged 18-19 and 20-24 who have or have not seen pornographic images in magazines and books have similar levels of sexual activity (i.e. 64.0 percent of male youth aged 18-19 who have and have not viewed pornography have had sex, and among male youth age 20-24, 85.0 percent who have seen pornography and 83.5 percent of them who have not seen pornography have had sex. The proportion who had sex among female youth who have seen pornography is slightly higher than among those who never seen (51.6 percent versus 46.4 percent). But among the 20-24 age group, the proportion of those who had sex is the opposite. Those who have never seen pornography are more likely to have had sexual activity than those who have viewed pornography (66.4 percent versus 73.7 percent).

Data shows an association between watching pornography from VCD or VDO and having sex. Male youth aged 18-19 and 20-24 who have seen pornography from VCD or VDO are more likely to have sexual activity than male youth who have not viewed pornography (66.7 percent versus 56.5 percent). Among male youth aged 20-24, 86.4 percent who have viewed pornography have had sex and 76.8 percent who have not viewed pornography have had sex. Female youth who have seen pornography from VCD or VDO have more sexual activity than those who have not viewed pornography (i.e. among the 18-19 age group, 56.4 percent have viewed pornography and have had sex, 44.5 percent have had sex but never seen pornography, while among the 20-24 age group, 76.9 percent have ever pornography and have had sex, and 68.4 percent who never seen pornography but have had sex.)

Findings on watching pornography from cell phones and the internet show that male youth aged 18-19 and 20-24 who have watched pornography from a cell phone or the internet are more likely to have had sex than male youth who have never viewed pornography from these sources. Among youth aged 18-19 age group, 68.1 percent versus 59.5 percent and among the 20-24 age group, 85.6 percent versus 82.5 percent. For female youth aged 18-19 and 20-24 who have viewed pornography from a cell phone or internet have the opposite levels of sexual behavior, i.e. female youth who have viewed pornography have less sexual activity than those who have never viewed pornography, with 42.9 percent versus 51.5 percent among the 18-19 age group and 61.4 percent versus 75.7 percent among the 20-24 age group.

Figure 12 Sexual experience and viewing pornography from various media.



We conclude that viewing pornography does not clearly affect the sexual behavior of youth, although viewing pornography from a VCD or VDO is correlated with having sex.

Youth and HIV prevention

There is a perception in Thai society that youth who know about AIDS are better able to prevent themselves from HIV. The results from the survey show no clear relationship between level of knowledge on AIDS and level of condom use.

Knowledge on AIDS and condom use

Thai youth have good knowledge on AIDS, but the number of HIV-positive youth continues to increase. Previous studies have reported high levels of sexual risk behavior, for example, a high proportion do not use a condom during intercourse or they thought that HIV was not of issue of concern for them. In this study, there are 11 questions on AIDS knowledge which is divided into three levels of knowledge. If the respondents could correctly answer every question, they are considered to have high knowledge, with 1-2 wrong answers, they are considered having moderate knowledge and 3 or more wrong answers means that they have low knowledge.

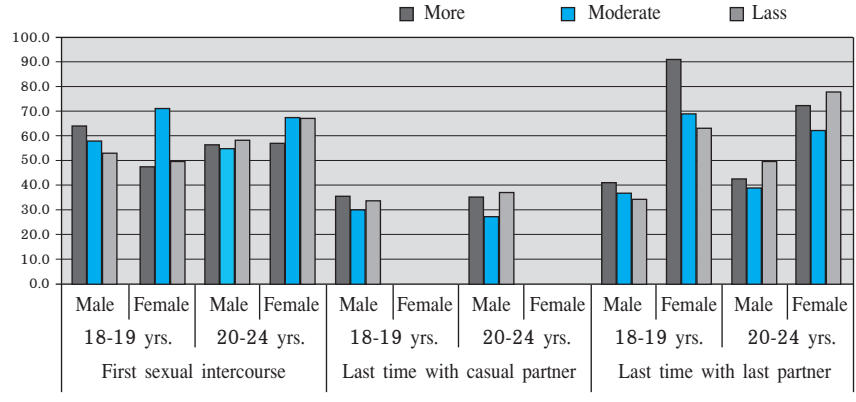
Findings from the survey on the association between knowledge and risk behavior of youth, such as condom use during first sex (excluding first sexual intercourse of married couples or cohabitants), show that male and female youth aged 18-19 generally did not use condom at first sex (about 58 percent). When comparing among youth with different knowledge on AIDS, we find that male youth who have high AIDS knowledge are less likely to have used condom than those with low knowledge. Female youth who have moderate knowledge used condom at a lower rate than those with high or low knowledge. Among youth aged 20-24, 56 percent of male youth and 65.2 percent of female youth did not use condom at first sex, with little variation by knowledge levels.

For condom use in the last sex with the last casual partner who is not sex worker, it is found that about one-half of male youth aged 18-24 use a condom every time, and about 40 percent use sometimes or never use. 32 percent of male youth aged 18-19 and 20-24 do not use condom. About 69 percent of female youth aged 20-24 stated they did not use condom. Male youth aged 18-19 who have high knowledge use less condom than other groups. Among male youth aged 20-24, those with low and high knowledge used condoms at a lower level than the moderate knowledge group. This suggests that levels of knowledge on AIDS do not appear to significantly affect condom use.

For condom use at last sex with the last partner (neither a spouse nor cohabitant nor fiancé), it is found that 37.1 percent of male youth aged 18-19, and 42 percent of male youth aged 20-24 did not use a condom, while 69 percent of females aged 18-19 and aged 20-24 did not use condom. For male and female youth aged 18-19, levels of knowledge on AIDS relate to levels of condom use. Male youth aged 20-24 who have low and high knowledge had lower level of condom use than the moderate knowledge group. Among female youth, those with low and high knowledge had lower level of condom use than did the moderate knowledge group.

It was found that 94 percent of male youth aged 18-19 and 20-24 use condom with their last paid partner. The different levels of knowledge among youth do not affect condom use at last sex with a casual paid partner.

Figure 13 Level of knowledge on AIDS in relation to condom use.



In summary, there is no evidence from the survey that youth who know more about AIDS are better in preventing themselves from HIV. There is no clear relationship between levels of AIDS knowledge and sexual risk behavior. This suggests that providing youth with AIDS knowledge alone will not lead to HIV prevention.

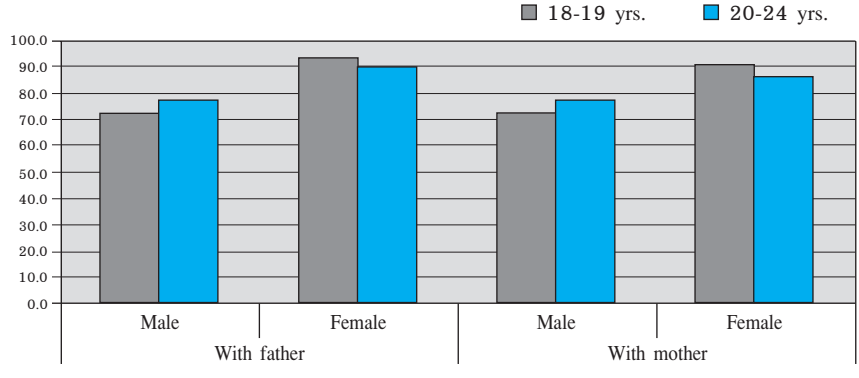
Communication on condoms between parents and youth

It is generally believed in Thai society that this is no discussion between parents and their adolescent children about condoms. The result of the survey supports this perception.

According to the survey data, most male and female youth have never talked about condoms with their parents. More female than male youth have not talked about condoms with parents. Most male and female youth say that they have never talked about condoms with their father. The proportion of differences between male and female is similar in both age groups. (i.e. 72.4 percent for male and 93.4 percent for female youth aged 18-19, and 77.2 percent for male and 90.1 percent for female youth aged 20-24). Most also do not talk about condoms with their mother (i.e. 72.9 percent of male and 90.9 percent of female youth aged 18-19 and 77.6 percent of male and 86.1 percent of female youth aged 20-24). It appears that more male youth have talked to fathers and mothers than female youth do.

Communication on sexuality and prevention of sexual risk is rare in Thai families. Youth prefer talking with their friends about sex.

Figure 14 Youth who never discussed condom use with father and mother.



In conclusion, the belief that parents and their adolescent children do not talk about condoms is true. Data confirm that majority of male and female youth have never talked about condom use with either their father or their mother. More female than male youth have not talked about condom use with parents. Younger male and female youth tend to talk with fathers and mothers more than older male and female youth about this issue. This may indicate a change between generations.

There is an increase in same sex behavior: Is it true?

Although the data from the survey show that the younger respondents are more likely to have had same-sex partners than older respondents - a finding that is consistent with the general perception in Thai society of an increase in same sex behavior, this trend may results from young people being more brave and more open about their sexual preference.

According to data shown in figure 14, the results suggest an increasing trend of homosexuality and bisexuality. For both male and females aged 18-19 years old there was a higher proportion who stated that they prefer same sex or both sex than the 20-24 years old group. More female than male youth in both age groups reported that they prefer same sex or both sex.

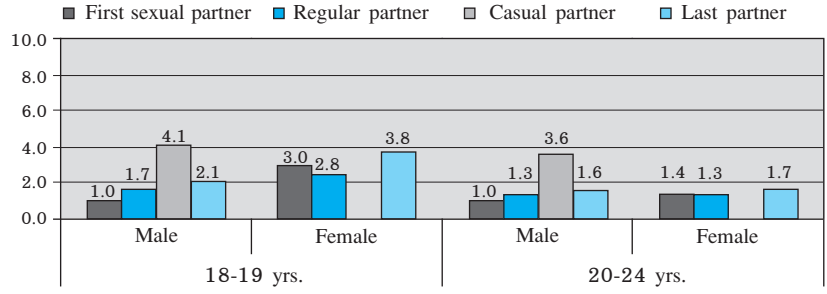
When considering first sexual partners, there is small proportion of same sex although the proportion appears to be increasing. When asked about the sex with their steady partners during the last 12 months, the proportion with a same sex steady partners is higher than for the first sexual partner. For male youth, the proportion of same sex partners who are casual partners during the last 12 months is higher than who are same sex partners who are first sexual partners.

The latest partners of younger male and female youth are more likely to be same sex. Among male youth aged 18-19, 2.1 percent have had sex with the same sex, which is higher than for male youth aged 20-24

(1.6 percent) Among female youth aged 18-19, 3.8 percent have had sex with the same sex which is higher than for female youth aged 20-24 (1.7 percent).

Very few youth agreed when asked having sex with the same sex is safer for HIV transmission. More female than male youth agreed with this statement.

Figur 15 Percentage of youth who have sex with same sex partners by age groups 18-19 and 20-24



In conclusion, in general people think that there is an increase in same sex behavior. This is true. There is an increase of same sex preference among younger youth. This may indicate a trend of behavior for the younger generation and partially it may due to the fact that the younger generation is more brave and more open about sexual preference.

Conclusion and recommendations

Based on the evidence from the survey, it was found that majority of the general perceptions in Thai society are not true. The results can be summarized as follows:

- **Youth in schools have no sexual activity - Not true**
- **Youth who stay with parents or are watched by parents do not have much opportunity to have sex Not true**

It was found that more than 50 percent of the male youth in school who live with their parents have sexual experiences while one fourth of the

female youth have had sex. This is consistent with their attitudes towards sex, including the saying that it is common and acceptable to have a premarital sex among male and female youth. Youth view that their parents can accept the premarital sex of sons more than of daughters.

- Youth are not liberal in their view of sex-Not true

The finding is also consistent with their attitude saying that most of their close friends have sex experiences.

- Male youth are more sexually active than female youth - True

A few sets of evidence support this statement. For example, in the last 12 months, male youth have had more sexual partners than female youth.

- Most single youth do not have sex- Not true

More than a half of male youth have had sex (ranging from 58-90%) and a significant proportion of female youth have had sex (ranging from 20-45%), sexually active male youth started sex at the age of 10-13, compare to females who started at the age of 11-14

- Male youth had their first sex with sex workers - Not true

Most have their first sexual experience with their girlfriends.

- Youth have sex because of pornography - Not really true

There is insufficient evidence to support this claim. Evidence shows slight relationship between sexual experience and watching pornography from DVD or VCD, but no relationship with pornography from other media.

- Youth who know about AIDS are better able to prevent themselves from HIV - Not true

The findings showed that youth with good knowledge of AIDS have HIV risk behavior. Most youth had their first sex with a girlfriend, boyfriend, friend and someone they know. More than 50 percent do not use condoms. Some condom use occurs when having sex with a casual or paid partner.

- **There is no discussion between parents and their adolescent children about condom - True**

Majority of male and female youth have never discussed condom use with their parents.

- **There is an increase in same sex behavior- There is a trend of in crease. Younger youth appear to have same sex more than older youth.**

How did this phenomenon reflect our society?

It is possible that risk behaviors are not acceptable but tolerated, In addition, what youth are exposed to such as, adult behaviors, media, and television dramas, show sexual experience as common and even popular while safer sex is rarely mentioned. Therefore, many youth might perceive that for them and for the adult, sex and risk behaviors are common, normal and acceptable in the society.

The awareness and sense of gender equality has been raised in Thai society. Often, the popular translation of gender equality is that "if a man can do it, then a woman can do it too" and vice versa. This may lead to an increase in sexual expression and risk behavior among both male and female youth.

It is recommended that:

1. Everyone including adults, teachers, families, media staff and policy makers as well as youth themselves acknowledges the facts about youth's sexual behavior and attitudes. If the adults close their eyes and ears from the facts, there will never be a chance to address the problem.
2. With the acknowledgement of the facts, youth should be empowered with capacity, knowledge, awareness, risk assessment skills, life skills and support so that they can make informed decisions on appropriate behavior and protect them from HIV and other sexually transmitted diseases, unwanted pregnancy, exploitation and abuse by peers and adults. They should lead and participate in sexual, reproductive health, AIDS and youth development projects for them and by them through strengthened youth networks in all areas of the country.

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SEXUAL RISK BEHAVIOR AND THE HIV EPIDEMIC IN THAILAND: RESULTS FROM FOCUS GROUP DISCUSSIONS

Sirinan Kittisuksathit
Philip Guest

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SEXUAL RISK BEHAVIOR AND THE HIV EPIDEMIC IN THAILAND : RESULTS FROM FOCUS GROUP DISCUSSIONS

Sirinan Kittisuksathit
Philip Guest

Introduction

This chapter presents information on sexual risk behaviours and the HIV epidemic in Thailand. The results are derived from 14 Focus Group Discussions (FGD) that were held during February and March 2006. FGD were stratified on the basis of area of residence (Bangkok, Songkla in the South, Lampang in the North and Ubonrachatani in the Northeast), gender (male and female), and age group (15-24 and 25-59 years old). The analysis is presented in five main sections. The first section explores issues related to sexual partners. The second section discusses perceptions about people drinking alcohol or taking drugs before having sex. The third section explores opinions about the HIV/AIDS campaign and condom use. The fourth analyzes the perceptions and attitudes towards Anti-retroviral (ARV) drugs. The final section summarizes the main points of the paper.

Sexual Partners

The analysis of sexual partners covers definition and types of sexual partners, venues and processes used to find the different types of sexual partners, and the ways to approach casual sex partners.

A) Casual partners (Temporary partners)

Most of the youth defined the word "casual partners" as "a one night stand", in that there were no commitments. This type of partner was

usually met in clubs, pubs and other areas where youth tend to spend their free time. Usually attraction is initially based on appearance and then those who are attracted will talk and may agree to have sex. Some mentioned the use of drugs and alcohol as being related to having sex. This can be understood in the context of where socializing takes place - mainly in pubs and clubs.

Many report that the people with who they have casual sex are friends or work colleagues. They are happy to have sex and not to make further relationships, since they may have a girlfriend/boyfriend or even husband or wife. No money in exchange for sex is involved in these relationships. One teenager said "Chics who like to go out at night-usually we will meet these chics[1] at the pubs and bars and you can take them to hotels or motels with curtained parking spaces." Chics in the meaning of the boys aged 15-24 years old include "chics who like to go out at night; chics in restaurant, chics who serves beer (beer promoter girls), chics in pubs who love to go to entertainment places just to have fun and might have casual sex with someone they are interested in.

Besides, the chics that can be met at night time, evidence from the focus group discussions indicated there are also "day time chics". Most male youths said that day time chic are students.

"Khong" is another slang word that the group called "any girl who flirts around with men and who has sexual activity with men who are not their boyfriend." The boy said "*This type of girl you will have a chance to sleep with and have sex with them if you are a sweet talking person and you can make them satisfied with you.*" (Out-of-school boy, Northeastern region). Trans-gendered persons are another group that the young men seek to have sex with.

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1 The term that young men call a flirtatious woman who is attractive and who easily make friends with men, mostly in night clubs, pubs or restaurants.

The word "Gig" a slang word which is defined as "*more than friend but not boyfriend/girlfriend*" and can also be applied to a married couple when a man/women has affairs and/or relationship with someone who are not their wife/husband and the intimacy leads them to have sexual activities but where there is no initial commitment involved. Sometimes these 'gig' relationships develop into more serious commitments

In Thai society, the word "Gig" has become widely adopted and is used often by both youth and adults. For example a girl aged between 15-24 year said " If you talk about casual partner, besides sex workers there is "*Gig*", *Gig is just a friend a special someone* (a person who knows you well). Another girl supported this meaning of "gig" by saying "*Gig*" *is more special than friend, but is not a boyfriend/girlfriend.*"

Casual partners can be described as partners with whom you are not in a committed sexual relationship with, and can include female/male sex workers, and female friends/male friends who have sex once or occasionally. Casual sex partners also include the "swinging partners" in which couples swap partners.

B) Permanent Partner (Committed partner)

A committed sexual partner can be defined as "more of less a permanent sexual partner (included husband and wife, mistress, lovers, regular sex worker partners) who can have sex on the basis of living together (husband and wife) or on the basis of a emotional commitment (mistress, lovers, regular sex workers). There are many young couples who are studying in schools, colleges or universities who agree to live together as lovers without marriage. Most of these live far from their hometowns.

Types of sexual partners in the perception of FGD participants who were married men aged 45-59 years old can be divided as follows:

Casual partners include massage parlor girls, female sex workers, cafe singers, and girls in Karaoke bars that they can have sexual relations,

waitresses from some restaurants, Gig (women that they met in the clubs, pubs or restaurant). They also mentioned Coyote girls (dancers in clubs). Additionally, they included students who provide sex services on a part time basis, executive males and female subordinates/secretaries. One FGD participant explained that "*sometimes a woman has high ambition but doesn't want to work hard and who wants to have a short cut to promotion will accept to have sex with her boss to achieve her goal.*"

The role of permanent partner in their opinion can be applied to husband and wife, those who have a long-term lover, and regular female sex worker partners.

The last group of permanent partners mentioned include same-sex relationships, such as man and man (homosexual), and woman and woman (lesbian). Currently the word "Gay" can be applied to both homosexuals and lesbians.

C) Perception of type of sexual partner and the risk of sexually transmitted infections (STI), including HIV

"*In your opinion, who do you think is at risk of HIV?*"

Based on the results of the FGD, we can categorize the perception of sexual partners related to the risk of STIs and, HIV/AIDS into four groups based on the characteristics of the FGD.

The first group is married men aged 45-59 years old who felt that: married couples and teenagers can be rated as having the highest risk as they don't use any protection. "*The husband might fool around and not use any type of protection.*" The reason that they have a high risk of HIV/AIDS is because they trust each other to be faithful or are not in a position where they can demand protection. The wives are afraid to ask their husbands to use condoms to protect them from STIs and HIV. "*The husband has sex with someone else and he might transmit the HIV*

virus to his wife without knowing."; "Sometimes, the husband is too drunk and has sex with a sex worker or any other woman without using a condom."

Teenagers are seen as having a high risk for a variety of reasons. One FGD participant noted that: *"Kids nowadays change sexual partners several times, and the ages they start to have sex have become younger and younger. Many kids have sexual partners from Grade 9 or 10. They often change sexual partners."* It was perceived that many young people were scared of only being pregnant so they might use injectable contraception to prevent pregnancy and they think of using condoms just to prevent pregnancy not for protecting them from HIV or other STI.

The second group of FGD participants, comprising married women, included all casual partners, such as waitress, female singers who have slept with many partners but who did not have regular health check-up, beer promotion girls, women at massage parlors, students who provide sex as a sideline career etc. as having high risk. This group considered many sex workers as having low risk of HIV because of their use of condoms. As one FGD participant noted: *"Nowadays, I think that all sex workers use condoms with their customers and the customers are forced to use the condoms with them."* But some others commented that: *"Though the sex workers will use condoms to prevent STI or HIV but they still have risk, as use is not a hundred percent effective. There might be a leak or break in the condom."*

This group of participants also felt that there was increasing risk among those students who like to go to entertainment places and those who provide sexual services as a sideline. *"Students in grade 8-9 get injections to prevent pregnancy. They aren't afraid of anything else. Sometimes they have many partners at the same time without any protection. That means those girls are afraid only of being pregnant but are not aware of infection from STI or HIV"*

Young married women also talked about what might be referred to a 'gang bang' (in Thai the word used was "Long Khaek"). By this they mean a situation where a woman willingly had sex with several men consecutively. When asked why they thought this activity entailed high risk, the group stated: "*Because there are many people. Sometimes before contracting HIV they might contract gonorrhea.*" They insisted that "*Men in a gang bang do not use protection, one man penetrates her and the others do the same thing without putting on condoms as they came in a group.*"

Another group that they felt was at high risk was a man who had two wives or a woman who had two husbands, and also boyfriends and girlfriends who have many partners.

This group believes a single wife and husband who never change their partners have no risk of HIV or other sexually transmitted infections.

Married Muslim women in the age group aged 15-24, pointed out that a man has a higher risk as being a HIV virus carrier, but that risk depends on the behavior of each person, whether they protect themselves by using condoms when having sex with different persons.

These women felt that casual sex partners were at risk and this included "Gig", sex workers, teenagers who provide sexual services, singers, and students, respectively. "*Many students are casual sex partners, you can find them outside everywhere at hotels, coffee shops, they have people come to contact with them. They usually sit in the restaurants and they behave in the certain way to attract their customers.*" *(Muslim, married women, South)*

The FGD with married women aged 35-49 concluded that: "The chics are at the highest risk". They assumed that chics never use condoms. They also felt that boyfriends and girlfriends are also at risk because they are not married yet and had no commitment to each other, so there are opportunities for them to have sex with other partners without using

condoms. This group believes that a "Gig" is not at risk as they would be prepared and use protection. And they even suggested that a "Gig" does not always having sexual activity.

This group come from Central Thailand - Bangkok, and they do not think the relationship of husband and wife involved risk:

> *"We do not mess around we've just stay at home, it's a guy who needs to use protection."*
> *Moderator :"Why do you think the husband uses protection? Did you tell them to?"*
> *"If they love us and love themselves, then they need to use protection."*

This group also considered sex workers as having low risk, as they know how to protect themselves from HIV.

The third category is constructed based on input from a variety of FGDs. Young men aged 15-24 in a FGD in Bangkok felt that risk could be classified as follows: (1) **"Waed Child"** - a one night stand relationship in which a young person does not like to stay at home and will hang around in many places and if they feel satisfied with someone he/she will ask that person to have sex with them. The group referred to situations where a girl may sleep with many young men at the same time; (2) **"Pub Child"**- refers to young people who go out to pubs or clubs and may get drunk and have sex; (3) **Sex workers**; (4) **"Line Child"** - young people who have phone sex and same-gender sex; (5) **"Street Child"** - young people who live on the street and agree to have sex; (6) **"Chat child"** - those who use computer chat to develop a relationship and who then make an appointment to meet in person and agree to have sex; (7) Relationship as **boyfriend and girlfriend.**

Group discussions suggest that many of the sexual relationships of young people are very superficial and they that don't need to know each other for a long time before making the decision to have sex. They can be attracted by appearance, or some of the girls like to flirt and do not seek commitment from sex partners. Some even suggested that some young women just want to keep statistics on the number of the guys they had sex with.

The quotes below help explain these young men's views of the current situation regarding sex.

> *"It's common to have many sexual partners at the same time."*
> *Moderator : "Why do you think like that?"*
> *"She's not your girlfriend. If your friend wants to sleep with her then you have to let your friend to have her because he is your friend..."*

> *"It's not just men. There are girls who will try to beat their friends to see how many guys she slept with?"*
> *Moderator : "How?"*
> *"Some girl would tell her friends if she had slept with some-one last night."*
> *"And most of them are junior high school students."*
> *"They would do when they are in junior high schools and when they get into senior high schools they will stop."*

> *"After the girls got their guys then they would go to talk about the guys among their group."*

> *"In the past girls would start to have sex at aged 18, but now when they are 12 years old, they start to have sex already."*

The FGD among young men not in school concluded that the highest risk of contracting HIV came from chics who like to go to the pubs, and other women who have many sexual partners or those called "Lamyong" (a character in a TV soap opera about a woman who is usually drunk and has affairs with many men). These women are followed by "Gig", and those in boyfriend/girlfriend relationships, and finally a minor wife. They felt that sex workers had low risk, and that a spouse had the lowest risk.

> *"I think that chicks in restaurants and chics in general are at risk of AIDS. I don't think that sex workers in brothels and bars are at risk because they protect themselves against AIDS."*
>
> *"Wives have low risk. Boyfriends/girlfriends have high risk."*
>
> *"Because we know, before they become husband and wife, they both need to go to have a blood test at the hospital."*
> *"Condoms are used during sex."*
>
> *"Why do you think that chics who like to go to pubs rank number 1?" (moderator) (Means the highest rank)*
> *"We don't know who they have had sex with. We don't know where they are from. We don't know their background."*
>
> *"Where do you find "Lamyong"? Are they easy to find?"*
> *"Yes, they're easy to find." "Usually, I meet them when I go out with my friends. They like to fool around."*

(Group of out-of-school boy, Northern region)

A fourth category based on FGD with both In and Out-of-schools girls aged 15-24 years old. These young women ranked "Gig" and those who have extra-marital relationships as having the highest risk of contracting HIV. Their logic was that these persons, when they are not with their partners, might sleep with many other persons. For the women in these FGD, risk was most associated with having many partners. Casual sex partners were felt to not regularly use condoms for protection from HIV and STD.

> *"If they have sex with someone they met at nightclubs, pubs or restaurants, they might use condoms, but when they have sex with friends or someone that they feel familiar with they use condoms less."*

These casual sex partners, in their view, could include waitress, sex workers, singers, karaoke girls and the women at massage parlor. Boys in the gay bars, and chat partners in pubs or bars could also be included.

The young women also perceived that sex workers have low risk, even though they have many partners, as they thought that sex workers usually use condoms with customers, so they need to be well prepared to protect themselves from HIV.

Permanent sexual partners are also at risk in situations where one partner has a sexual relationship outside of the permanent relationship and does not use any protection. Overall, it was concluded by these FGDs of young women that anyone having many partners was at high risk of contracting HIV.

D) Venues and processes used to find different types ofsexual partners

FGD participants Discussed many different ways in which young men and women could seek casual sex partners. These methods varied by gender and also the mechanisms through which contact is made. For example, contact can be made at entertainment establishments, where it is not unusual for women to ask men to buy them a drink. Chat rooms and websites, with web cameras in some cases, are increasingly being used to find casual partners. Hanging around at shopping complexes, restaurants, and fast food restaurants can also lead to meeting people who may be interested in sex.

For those who want to engage sex workers, there are both establishment-based sex workers and those that work from the parks or on the street. For

students who provide sex services as sideline work, there will usually be someone who contacts customers for them, although sometimes they will approach customers directly. FGD participants also mentioned that it is becoming more common for women to use the services of male sex workers. Below are some quotes of how to arrange casual sex.

Moderator: "In general where do people find the casual sex partners?"
"Everywhere, they are easy to find."

Moderator: "Why are they easily to find ?"

"Because the women are like that?"

Moderator: "What do you mean?"

"Women also like to hunt men, as well."

"You can even gang bang (having sex in group such as one girl with 6 boys)."

"You don't have to find them."

"You just drive to pick them up at home."
"Besides you can pick them up at home, where else you can find casual sex partners?"

"At schools.", *"By phone."*, *"At the bars, at the discotheque"*.

"At the restaurant."

"Everywhere."

Moderator: "What do you have to do in order to have sex with the casual partner?"

"You have to have a bit of money."

"You have to talk to them a bit; each person has their own way of convincing."

Moderator: "How do you get the boyfriend/girlfriend of your friends?"

"You have to wait until they break up then you take their place."

Moderator: "Is it common for men and women to have sex with casual partners?"

"It's common."

Drugs and Sex

An important topic of discussion of the FGD was the relationship between alcohol and drug consumption and sex. In general, people believe that if they have some alcohol and become a bit drunk it will make them much more likely to feel brave enough to ask someone to have sex with them. They even believe that alcohol and drugs have a stimulating effect on their desire to have sex.

"Teenagers drink alcohol before going to Karaoke places. After that when they are drunk they have sex." (Muslim, married man, south).

"Alcohol affects your thoughts. Alcohol can make people who never know each other to get to know each other and then have sex without being in love."

Whiskey, beer, wine and various types of spirits are used in places where social contact takes place and, according to participants, leads to sexual

activities. There was also a feeling that the quality of alcohol will make people loose control of their thoughts and actions.

FGD participants also spoke about many kinds of addictive drugs or substances that adults and teenagers take before having sex or while they are drinking alcohol in the clubs, pubs or restaurants where sex is available. For example, it was mentioned that some use Viagra to stimulate their sex drive in cases where they have a problem with their erection.

> *"Drugs enhance sexual ability. That's what the women say. They know that their husbands are bad, but they still love their husband anyway. It's stupid, but it happened at the beginning of marriage lives." (Married men, South)*

FGD participants reported that the drugs Ecstasy and IC stimulate the sex drive. They also mentioned that love drug–a type of drug can make a person who takes it unconscious and unable to remember if they had sex when they wake, may also be used. Amphetamines, tranquillizers, and barbiturates were mentioned as causing sexual arousal. It was discussed how the use of these drugs can distort perceptions and lead to a lack of condom use during sex.

> *"Youth who love to spend their times at the entertainment complexes in the night are the groups who often use drugs" (Commerce Girl students, Bangkok, Central region)*

> *"Casual sex partners, temporary sex partners, and sex workers are the groups that often use drugs to stimulate their sex drives before having sex."*

> *Moderator: "Are those drugs easy to find? Where we can buy those drugs?"*

> *"In drug stores, in pubs and bars, and sometimes there are persons who sell the drugs in schools or colleges." (College Girl students, Bangkok, Central region)*

Some drugs will be for a men such as Ketamine, "A drug that applies to a man's penis. It will make the penis desensitized, so his penis can be erected for a long time and can have sex with partner for a long time. It is sold at the doctor's clinic in front of the market." (Muslim, married women, Southern region)

Information from the FGD, particularly those conducted with young men and women aged 15-24 years old, indicate that many of the above mentioned drugs are easily purchased at drug stores. The drug stores usually have regular customers that come for the drugs. The FGD participants mentioned that the drugs are easy to buy and are not expensive.

Participants of the FGDs said that those involved with permanent sexual partners did not need to use drugs to enhance their sex drives. They felt that for these people, their closeness, love and their intimacy makes them have sex comfortably and naturally with the same partner.

Opinions about HIV and AIDS campaigns and condom use

There were a variety of opinions about HIV and AIDS campaigns and condom use that emerged from the FGDs.

> *"There are still AIDS campaigns, but less compared to the past. They campaigne for people to use condoms when having sex." (Muslim, Married male, South)*

Effective AIDS campaign can shape attitudes, as clearly seen from the quote of one man in a FGD.

> *"If you want to have sex, you should use condoms. People are forbidden to have sex out of wedlock, but they still want to have sex with others who are not their spouse so, then they should use condoms." (Muslim, Married male, South).*

Participants in all the FGDs agreed that the AIDS campaign should be implemented continuously as the population expands and because people constantly need to be informed about the appropriate behavior protecting HIV.

The campaign to promote condom seems to have an overall impact for all groups of people maybe beacuese it respond to both adults and teenagers who may have different purposes of useing condom

> *"People have continuously used condoms. Overall condom use in the country has increased."*

> *"People use condoms to prevent HIV. Students and teenagers use condoms to protect unwanted pregnancies." (Married male, Northern region).*

> *"We use condoms more because we are scared of HIV." (Married women, Bangkok)*

> *"Condoms are also used for contraception. Not only do they prevent you from HIV, they also prevent against other sexual transmitted diseases." (Married women, Central Bangkok)*

Information on HIV and AIDS and its to transmit this virus has been broadcasted through mass media, particularly TV and radio. Focusing on HIV Protcction, the campaign to install condom vending machines in schools, universities and educational institutions has been widely debated. There have been two different sides of the debates. One side supports the condom vending machine in universities and colleges but not in schools

because school children are too young for this type of exposure. The other side agrees with plans to install condom vending machine in schools, arguing that if sexually active kids are not buying condoms from outside school, it is best if they have access from the vending machine inside schools.

The information is viewed as being effective by many of the participants in the FGD. But some also felt that the information has not been effective because it has not reached the appropriate population.

> *"Publicity about AIDS is not effective. Most of the general public doesn't know how to prevent AIDS. Most HIV infected people are laborers. I'm not putting people in different classes. I'm just trying to make you see the picture clearly. These people don't understand about AIDS and don't know how to prevent against AIDS. This has caused AIDS to spread rapidly. In addition, people, especially youth, are influenced by western culture. This has caused AIDS to be easily transmitted. They are having sex while they are still in school."* (Married Male, ARV, Northeastern region)

> *"People now know more about AIDS. There are problems with business benefits and the medicine patents. It involves the drug manufacturing companies."*

In conclusion, people can access updated information and knowledge on HIV and AIDS easily from vastion media sources, such as the printed media from the AIDS centers or NGOs who working on issues related to HIV, AIDS campaigns from the Ministry of Public Health, and TV and radio. Thus people are increasingly more knowledgeable about HIVand AIDS, and this is seen by FGD participants to be increasing use of condoms.

However, it was still felt that expanded campaigns were necessary. In order to expand knowledge of HIV and AIDS in communities in remote

areas, workshops and seminars could be organized to raise awareness of community members. Such activities should involve HIV positive people in order that they can directly provide their experience of how to live positively with HIV. The participation of HIV positive persons in such activities can also increase the creditability of information about HIV and AIDS, by providing direct experience.

> *"I'd like the HIV positive people and others to undertake activities together. This way, HIV infected people can live in society without being discriminated against." (Out-of-school girl, Northern region)*

Perceptions and attitudes towards ARV

There was widespread knowledge of ARV. This knowledge included the effects of using ARV and the broad ways in which the drugs worked.

> *"There is treatment. In the past, people thought that if you had AIDS, you would certainly die. But it's not true. If you take medicine, you can live normally. Today, HIV positive people take medicine as if they have an allergy. People who take this medicine don't become sick. Other people might think that they just have an allergy, not a deadly disease like cancer."*

> *"If we take the medicine regularly and take good care of our health, we won't become sick."*

> *"The HIV positive person that I knew at the hospital had to take medicine regularly. Then he stopped taking the medicine .....he stopped taking medicine for two months and then he became sick and need to stay at the hospital for two weeks. After that he passed away." (Out-of-school girl, Northern region).*

Even though most people do not know the names of drugs used for the ARV treatment, they have all heard of these drugs, without being sure of the specific qualities of the drugs. Most people with special interest in ARV have someone in their family or close to them who is infected with HIV.

It was felt by some participants that widespread access for ARV would reduce concern about contracting the disease.

> *Moderator :"Now that the medicine against AIDS is available, do you think people still be afraid of AIDS?"*
> *"If the medicine can completely cure AIDS, I think that people won't be afraid of AIDS."*

Conclusion

In this paper we use qualitative data obtained from FGD to address a number of issues related to sexuality. It is clear that the participants of FGD felt that sexual relationships in Thai society were complex in scope. Sex is not confined to marriage or other committed relationships. Instead there are a wide variety of sexual relationships that differ in terms of commitment, terms of engagement, and type of partner. These relationships are perceived to be common and easily entered into. There was a common perception that there were an increasing variety of sexual relationships that did not require emotional or economic commitment and that some of these were initiated by women.

The participants in our FGD had common understandings about whether sexual relationships within the various types of identified relationships. These understandings underlie there views about which types of sexual relationships were most likely to lead to contracting HIV. However, it was very interesting that different gender/age/regional FGD varied in who they saw to be most at risk of HIV. For example, while some groups viewed sex workers to be at high risk, most felt that sex workers were at low risk because of high perceived use of condoms. Some groups expressed the

view that married couples, especially women, were at high risk, while other felt that married couples were not exposed to the risk of contracting HIV. The most important message to come from this component of the analysis is that HIV prevention messages need to be tailored to the understandings of different groups defined, at a minimum in terms of gender, sex and place of residence.

Many sexual relationships are initiated through interaction at entertainment places. It is therefore not surprising that participants of FGD noted the link between the use of alcohol and drugs in sexual relationships. Alcohol was seen as allowing people to more easily break traditional norms of sexual behavior. Illegal drugs, which were viewed as being widely available and easily accessed, were seen as being used to increase sexual pleasure. In so far as alcohol and use of other drugs is related to unsafe sex more needs to be done to make evident the link between drug use and unprotected sex.

Knowledge of ARV has rapidly spread through Thai society as a result of the efforts of the government to expand ARV use. Although knowledge is not necessarily deep, FGD participants expressed knowledge about the availability of the drugs and knew about the benefits of ARV in prolonging life. Some FGD participants also expressed the view that the expansion of ARV could result in PLHA increasing their levels of risk behaviors. Whether or not this occurs, there needs to be efforts to ensure that stigma and discrimination against PLHA does not increase as a result of access to ARV.

The FGD that were used in this analysis provide a wealth of information about the perceptions of sub-populations related to sexual behaviors and ARV use. It is very apparent that message related to HIV are processed differently by different groups and hence understandings of the epidemic also differ. It is important for HIV prevention efforts that these different understandings are researched and used to increase the efficiency of prevention efforts.

PARENTING PROCESS AND PEER INFLUENCE IN THE CONTEXT OF SEXUAL RISK BEHAVIOR AMONG YOUNG ADULTS

Chai Podhisita

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PARENTING PROCESS AND PEER INFLUENCE IN THE CONTEXT OF SEXUAL RISK BEHAVIOR AMONG YOUNG ADULTS

Chai Podhisita *

Introduction

Sexual risk behavior among adolescents and youth has occupied much of the public attention in Thailand during the recent decades. Public discussions and concerns have focused largely on early onset of sexual experience and lack of safe sexual practice among young people. At the same time, efforts toward reducing sexual risk and its related problems have also increased over the years. These include not only investment in information and education programs directed to various target group but also research to understand mechanisms that impinge upon sexual risk behavior. Despite some progress and success, however, much remains to be achieved. There is mounting evidences that premarital sex among adolescents and youth continues to increase, that age of sexual onset becomes younger, that adolescents' premarital sex is largely unprotected, that unwanted pregnancy together with unsafe abortion is increasing, and that the number of young people with sexually transmitted infection, including HIV is rising (See, for example, The Division of AIDS, Tuberculosis and STD Epidemiology, Bureau of Epidemiology, 2004, 2005; Punpanich, Ungchusak and Detels, 2004; Lertpiriyasuwat, Plipat and Jenkins, 2003; van Griensven et al, 2001; Thato et al, 2003).

* The author would like to acknowledge, with thanks and appreciation, assistance of Malee Sunpuwan and Nanchapat Ponchua for data preparation and literature search in the process of preparing this paper. Thanks are also due to anonymous reader for comments and suggestions.

Previous studies on sexual behavior of adolescents and youth have identified several key factors leading to safe and unsafe practices. Kotchick and her colleagues conducted an extensive review of studies available in the English literature over the period of 1990-1999 (largely in the U.S.) using a multisystemic perspective by which the factors related to adolescents' sexual risk are classified into those pertaining to the self, family, and extrafamilial systems (Kotchick et al, 2001). Of particular relevance to our interest here are the factors pertaining to the family and extrafamilial systems which will be discussed in some details below.

Factors in the family system can be divided into two primary categories: family structure variables and family process variables. In general, the variables pertaining to the family process have received more attention than the structural variables. Nevertheless, most studies have generally found that high level of sexual risk behavior is associated with such structural factors as living with single parent, low family socio-economic status, and low parental education (e. g., Jemmott and Jemmott, 1992; Metzler et al, 1994). However, some studies seem to raise caution on drawing a conclusion in favor of strong influence of the structural factors as these particular variables are often statistically controlled due to their covariance with other variables. For example, one study examined several aspects of adolescent sexual risk behaviors and failed to find any relationship between family structure variables and the risk outcomes (Miller, Kotchick and Forehand, 1999).

With regard to the family process, it is found that parenting behavior is an important source of influence on adolescent sexual behavior. Three dimensions of parenting behavior have been identified as important variables in reducing adolescent sexual risk-taking. These include parental monitoring of adolescent behavior, the quality of parent-adolescent relationship, and parent-adolescent communication. The influence of these variables is believed to work through socialization process whereby parents transmit, directly and indirectly, their own sexual standard and values to their children.

Many studies have found that higher level of parental monitoring was associated with less sexual activities among boys and girls of early adolescent age, whereas lower monitoring level was associated with greater number of sexual partners and inconsistent condom use (e.g., Romer et al, 1994; Luster and Small, 1994; Rodger, 1999; Howell, 2001). Similarly, perceived parental strictness was found to be related to safer sexual behavior, but the influence was different between mother and father. Jemmott and Jemmott (1992) found in a study among African American adolescents that having a strict mother was related to fewer sexual partners while having a strict father was related to more consistent condom use. However, findings of some studies seem to raise an important point that parental monitoring is effective only when it is applied up to a certain level beyond which its influence becomes weak. For example, Rodgers (1999) found that while parental monitoring in general sense was related to lower sexual risk, too much of it was associated with higher odds of taking higher sexual risk among female adolescents. The key argument from this is that either too much or too little parental control can increase harm rather than reducing it.

Good relationship with parents, including perceived parent-adolescent relationship is generally a protective mechanism that keeps adolescents from sexual risk-taking. Luster and Small (1994) found that female adolescents who had multiple partners or used contraception inconsistently (i.e. at higher sexual risk) were those who were less likely to perceive positive level of parental support. This is consistent with study based on the data from the longitudinal study of high school adolescents (in the U.S.) which revealed that parent connectedness was the key family factor in the development of general (nonsexual) risk behavior, even after controlling for demographic characteristics (Resnick et al, 1997).

Quality of the parent-adolescent relationship and support is reflected in parent-adolescent communication. Communication between adolescent and parents is a very important and effective means of transmitting information on sexual risk behavior. It is especially effective tool when combined with parental support. Rodgers (1999) found that although there was no direct

relationship between parental support and sexual risk behavior for either male or female adolescents, there was a significant interaction between parental support and parent-child communication about sexual risk, such that adolescents with less supportive parents were less likely to benefit from the protective effects of parent-child communication about risk reduction strategies. Another point of interest is that parent-child communication per se does not do much in protecting adolescents from sexual risk; it is the communication on sexual risk, and about negative health outcomes associated with it in particular, that is more effective (Henrich et al, 2001).

In addition to parental monitoring, parental relationship, and parent-adolescent communication, parents' attitude about adolescent sexual behavior is also found to be important factor contributing to understanding of adolescent sexual risk-taking. There is mounting evidence that perceived parental disapproval of risky sexual behavior is a predictor of more consistent contraceptive use and less sexual activities (Jaccard, Dittus, and Gordon, 1996). Another study found significantly less perceived parental disapproval of adolescent sexual behavior among sexually active girls, particularly those with male partners who were not regular condom users (Stanton et al, 1994).

Adolescence is the period when individuals develop their own identities and establish more complex social networks. During this period the point of reference shift from family to the wider world in which peers play very important role (Forehand and Wierson, 1993). Peers are important source of information, reinforcement, modeling, and support with regard to values, belief and formation of identity during adolescent years. Thus, it is not surprising that adolescents whose peers are sexually active are more likely to be sexually active themselves (e.g., Romer et al, 1994). Studies have also revealed that increased sexual risk of adolescents is related to having peers with high level of sexual risk-taking indicators (e.g., Gillmore et al, 1997). Moreover, adolescents' perceptions of their peer sexual behaviors (whether their peers have had sexual experience) have been found to relate to sexual risk-taking. Several studies reported that consis-

tent condom use is also associated with perception of condom use among friends (Brown et al, 1992; Romer et al, 1994; Stanton et al, 1994).

Findings from previous studies reviewed provide a basis for analysis in the Thai context. In Thailand studies along this line are of limited number. One study by Podhisita, Xenos and Varangrat (2004) based on the data from the family and youth survey 1994, found family control and peer influence to be related to youth premarital sex but in different ways. Family control is found to have different effect on male and female youth. When only age of the sample is controlled, increased family control significantly lowers the likelihood of premarital sex among male youth, but the same likelihood is much higher (although not statistically significant) among females under the same condition. However, when all other individual and family measures are taken into consideration, family control measure shows statistically non-significant effect for both males and females. Peer influence also works differently for male and female youth. While increase in the peer influence strongly and significantly increases likelihood of premarital sex among males, for females the effect is without statistical significance.

A recent study by Thayansin and Podhisita (2008) confirms the relationship between the family and peer connectedness and risk behavior. This study focuses on the influence of connectedness to parents and peers and drug use among young adults aged 15-24. It shows that strong connectedness to parents significantly lowers the likelihood of drug initiation whereas strong connectedness to friends increases the likelihood of using drugs.

Taking these limited studies together, we cannot draw a solid conclusion with confidence about the effect of the measures of parenting process and peers on sexual risk behavior among young adults in Thailand. This is the issue that drives the present analysis. In particular, this analysis is designed to identify the effect of parenting process and that of the peer influence on young adults' sexual risk behavior.

Data and Method

This analysis draws upon the data from the National Sexual Behavior Survey (NSBS) conducted in 2006 by the Institute for Population and Social Research (IPSR), Mahidol University. Details of the survey population and sampling procedures were already provided elsewhere (See Chamratrithirong et al, 2007). Described below is the information specifically relevant to this analysis.

Young adults in this analysis are males and females aged 18-24 regardless of marital and schooling statuses. They comprised a subset of the sample population in the NSBS and were drawn from three main residential strata of the country, Bangkok Metropolis, other urban centers, and rural areas. Study sites were stratified randomly selected from all four regions (except for the three southernmost provinces which were not included in the sampling frame). The NSBS completed 3,024 interviews of individuals aged 18-24, of which males and females each accounts for 50 percent. The data used in descriptive tables below are adjusted so that distribution by age and sex of the sample in this survey is similar to those in the Census 2000 (the most recent census nearest to the year when NSBS field research was undertaken).

This analysis aims at gaining an understanding of young adult sexual risk behavior defined in terms of early onset of first sex (under age 18) and using no condom at first sex. First sex under age 18 is considered 'early' and largely premarital in light of the current average age at marriage: 27 for men and 24 for women (Podhisita et al, 2007). Early onset of sex is considered with the risk of unwanted pregnancy and sexually transmitted diseases including HIV. It is risky mainly because it takes place while the individual is not mature enough physically and emotionally and hence may not be fully aware of the health outcomes associated with it. In terms of the policy, early onset of sexual union and absence of condom use have been important issues for campaign targeting young adults.

The variables employed for analysis are based on questions in Section 12 of the NSBS questionnaire which were designed specifically for interview of young adults in the sample. These are divided into three sets related to young adult personal characteristics, their family factors, and peer factors. The personal characteristics are limited to age, sex, areas of residence (Bangkok, other urban, and rural areas), education attainment, and living arrangement. In the logistic regression analysis these personal characteristics are treated as a set of control variables.

The family factors consist of a set of seven items representing two aspects of parenting process, namely, parental monitoring, parents' attitude about sex of young adults and communication. These are important part of the family environments within which young adults grow up. They include:

- parental knowledge of where-about of respondents
- parental knowledge of respondent's close friends
- parental permissiveness on son's premarital sex
- parental permissiveness on daughter's premarital sex
- parental knowledge of respondent's sexual experience
- discussing sex or sexual health with parents in the past year prior to the interview
- talking about condom with respondent

The first two measures fall in the area of parental monitoring of young adults, the next two are measures of parental attitude toward premarital sex, and the last three represent parent-child communication. Based on findings of numerous previous studies, an underlying hypothesis may be set for the analysis here: parenting process taken in terms of appropriate parental monitoring, parents' attitude toward sexual engagement of young adults, and effective parent-child communication have a protective value that keep young adults from sexual risk behavior.

The variables of peer factors are a set of items that fall generally in the area of peer pressure and influence on young adult sexual behavior. An underlying assumption here is that as peers are important source of

reference, reinforcement, support, and modeling, they are 'significant others' who have strong influence on young adults' behavior outside the family context (Forehand and Wierson, 1993). Thus, our hypothesis anticipates positive effects of peer pressure and influence on sexual risk behavior and condom use at first sex among young adults. These peer factors in this analysis include:

- discussing sex or sexual heath with friends in the year prior to the survey
- sexual experience of male friends
- sexual experience of female friends
- premarital sex among young adult males
- premarital sex among young adult females
- peer influence on male sexual behavior
- peer influence on female sexual behavior

A few points are worth noting here. First, measures of the parenting process and peer pressure listed above focus largely on one or more aspects of sex or sexual behavior. Limited availability of information in the dataset makes it difficult to include measures of other relevant aspects. Second, and importantly, all measures of parenting process and peer pressure are based on the interview of the sample young adults; they represent respondents' perception rather than direct reports of their parents and friends. As such, these measures may or may not accurately reflect what their parents or friends would say. Nevertheless, it is believed that these measures are of reasonable analytical value for understanding our research questions, as in many cases it is what people perceive as real that has significant impact on their decision and behavior.

Descriptive Findings

Selected Characteristics of the Sample Young Adults

In Table 1 distribution by age shows that sample young adults in the older age-group (21-24) are of larger proportion than those in the younger one

Table 1 Percent Distribution of Young Adults, by Personal Characteristics and Sex

Characteristics	Male	Female	Total
Age			
18-20	46.1	41.4	43.7
21-24	53.9	58.6	56.3
Area of residence			
Bangkok Metropolis	11.3	12.8	12.0
Other Urban	29.9	32.4	31.1
Rural	58.9	54.8	56.9
Level of education			
Lower secondary or less	55.8	47.9	51.8
Some or completed high school	33.6	38.9	36.2
Some or completed college	10.6	13.2	11.9
Exposure to HIV/AIDS education in past year			
No	60.5	53.4	56.9
Yes	39.5	46.6	43.1
Living arrangement			
With own family	77.8	79.7	78.8
With other's family	18.8	17.3	18.0
Alone	3.4	2.9	3.2

(18-20). Note that in normal cases one would expect young adults in the older age-group to be of a relatively smaller proportion, but this is not the case here. The larger proportion in the older age group (21-24) is due partly to its broader interval (i.e. 4-year age-group, comparing to only 3 years in the younger group). In part, this also reflects rapid fertility decline in Thailand over the past two decades or so before the survey.

Across the three residential strata, the largest proportion of young adults is from rural area (about 57 percent). This group is followed by those from

other urban areas and Bangkok Metropolis respectively. About half of young adults in the sample had lower level of secondary education or less, while slightly more than one-third completed high school or equivalent level; the rest (12 percent) had some or completed college education. It is worth noting that in the highest level of education females outnumber males by 2 percentage points. This is a small but perhaps significant difference that needs further investigation for those interested in gender difference in education.

Nearly 80 percent of male and female young adults lived in their own family. The majority of these had either a mother or father and sibling in the household. The rest had no parents or otherwise lived with their own spouses and children. A substantial minority (nearly one-fifth) lived with others who are non-family members. Young adults who lived alone accounted for a small proportion (about 3 percent) of the sample. Yet, this proportion is similar to that observed in the census 2000 (Podhisita et al, 2007). A substantial proportion of young adults (43 percent, overall) reported that they had exposure to HIV and AIDS education at least one time in the year prior to the survey. These include any form of formal and informal education ranging from those in school curriculum, community, or workplace to those provided through radio and television.

Parenting Process

Table 2 presents descriptive information on measures of the parenting process. In general, the sample young adults reported a moderate-weak level of parental monitoring. This varies by sex of respondents, with females being under stronger monitoring than males. Slightly less than half of the sample (about 44 percent) said that their parents always knew the whereabouts, while about the same proportion reported that their parents knew, but only sometime or at best mostly.

Table 2 Percent Distribution of Young Adults, by Measures of Parenting Process and Sex

Parenting Process	Male	Female	Total
Parents know where			
Always	23.8	62.6	44.4
Sometimes or mostly	64.0	32.8	47.4
Hardly or not at all	12.2	4.6	8.2
Parents know close friends			
All	34.5	47.8	41.3
Some or mostly	61.6	48.8	55.2
Hardly or not at all	3.8	3.4	3.6
Parental permissiveness on son's premarital sex			
No	11.8	33.6	22.8
Yes	88.2	66.4	77.2
Parental permissiveness on daughter's premarital sex			
No	77.5	72.0	74.6
Yes	22.5	28.0	25.4
Parents know sexual experience of respondent			
No	41.1	32.7	38.0
Yes	58.9	67.3	62.0
Discuss sex/ sexual health with family members			
No	59.0	50.5	54.7
Yes	41.0	49.5	45.3
Discuss condom with parents			
No	75.9	88.1	80.4
Yes	24.1	11.9	19.6

According to reports of the young adults parents, they seem to have better knowledge of their daughters' friends than that of their sons'. But overall, only about 2 out of 5 young adults said parents knew all of their close friends. With regard to parental permissiveness on premarital sex, parents were reported to be much more relaxed for sons than for daughters. Male and female reports on this issue are consistent. The finding reflects different parental sexual standards for son and daughter and that probably accounts for different parental monitoring as well.

Young adults in the sample reported that their parents had relatively 'good knowledge' of their sexual experience. Nearly two-thirds (62 percent) reported this, more so among females than among males. But this seems to be somewhat inconsistent with reports on discussing with parents about sex/ sexual health, as less than half of the sample reported that they had such a discussion with parents in the year before the interview. Again females tended to do so more than males. Condom discussion with parents is of even lower proportion; only 20 percent of the total sample did so (24 percent for males, 12 percent for females).

Parents' knowledge about sexual experience of respondents reported above needs some comments. The interview question from which this information is derived reads: "Do you think your father/mother knows whether you ever or never had sex?" There was no attempt to follow-up with interview of parents. Nor was there an attempt to ask further what respondents reported was the same as their actual (sex) behavior. Thus, there may be some cases where respondents who ever had sex perceived that their parents were ignorant about it, and hence, just reported their pure perception. In effect, then, when some respondents who ever had sex reported that their parents knew about their sexual experience, the meaning might be that parents actually knew what reality was, or knew nothing about it, depending on respondents' perception of parents knowledge at the time of interview. In addition to measuring respondents' perception of their parents' knowledge, this measure is intended to provide the level of communication between respondents and their parents with regard to sexual behavior.

Peer Influence

Table 3 presents a descriptive account of peer factors which are intended to identify dimensions of influence on young adults' sexual experience. Overall, half of respondents have ever discussed sex or sexual health with their friends; men are much more active than women in this regard (61 percent among men, 39 percent among women). However, young adults of both sexes are similar in their responses about sexual experience of their male and female friends. That is, the majority of them reported that half or more of their male and female friends already had sexual experience. As expected, male friends were thought much more active than female friends. Note that sexual experience in this question includes both marital and premarital sex, as some of their friends may have been married at the time of the survey.

When asked about premarital sexual experience of friends, responses of males and females show similar patterns. The largest majority of respondents who reported that everyone or nearly every one of their friends ever had premarital sex account for well over 85 percent for male friends and about 70 percent for female friends (two response categories combined). Those who reported that half or less of their friends had this experience are of much smaller proportions. Together, this finding suggests not only how prevalent sexual experience is, but also how prevalent premarital sex is among young adults today.

In general, nearly 60 percent of the sample thought that there was a moderate peer pressure to have sex among young people today. About one-fifth reported that the pressure was strong while another one-fifth said it was weak. Male and female responses are of similar patterns. If we combine those who reported moderate and strong pressure together, the proportion in favor of positive influence of peer pressure is significantly high, over three-fourths of the sample. This information suggests, among other things, that young adults' sexual behavior is influenced considerably by their peers.

Table 3 Percent Distribution of Young Adults, by Measures of Peer Influence

Characteristics	Male	Female	Total
Discuss sex / sexual health with peers			
No	38.6	60.6	49.6
Yes	61.4	39.4	50.4
Sexual experience of male peers			
Half or more had sex	90.0	86.3	88.3
Less than half or none had sex	10.0	13.7	11.7
Sexual experience of female peers			
Half or more had sex	73.4	68.2	70.7
Less than half or none had sex	26.6	31.8	29.3
Pre-marital sex among young males			
Everyone had it	6.4	9.8	8.1
Nearly everyone had it	78.6	78.3	78.5
Half or less had it	15.0	11.9	13.4
Pre-marital sex among young females			
Everyone had it	3.8	4.9	4.3
Nearly everyone had it	67.2	65.8	66.5
Half or less had it	29.0	29.3	29.1
Peer pressure for sex among young males in general			
Strong	18.3	25.0	21.7
Moderate	59.6	55.8	57.7
Weak or none	22.1	19.1	20.6
Peer pressure for sex among young females in general			
Strong	15.7	18.3	17.0
Moderate	62.8	59.1	60.9
Weak or none	21.5	22.6	22.1

Sexual risk behavior

As mentioned above, the focus of this analysis is on understanding of sexual risk behavior of young adults. Table 4 gives the prevalence of a summary of sexual risk information in two measures. Overall, about half of the sample young adults reported that their first sexual intercourse took place when they were under 18 years of age, and this was largely premarital. Men are obviously more active than women (58 percent compare to 39 percent). Condom use at first sex was low, just slightly over one-third of all cases. Again, men are doing slightly better than women in using condom at first sex. Together, early onset of first sex and low condom use associated with it suggests relatively high level of sexual risk among young adults in this sample.

Table 4 Pre-marital Sex and Condom Use at First Sex

Sexual risk behavior	Male	Female	Total
Pre-marital sex under age 18			
No	41.9	61.5	48.9
Yes	58.1	38.5	51.1
Condom use at first sex			
No	56.4	71.8	63.3
Yes	43.6	28.2	36.7

Results of Bivariate Analysis

This section looks at associations of young adults' sexual risk behavior with their personal characteristics and the factors related to parenting process and peer influence. The results are given in Tables 5-7.

Table 5 shows that premarital sex is much more prevalent among the younger adults (aged 18-20), i.e., 75 percent among males and 59 percent among females compared to 46 percent and 27 percent among those of the older group (aged 21-24). Early premarital sex is more

prevalent among young adults in Bangkok Metropolis than in other two residential areas (other urban and rural areas). It is also negatively associated with level of education, i.e. higher among those with low level of education but lower among those with high education. Men who had at least an exposure to any form of HIV and AIDS education in the year before interview tend to engage in premarital sex more than those who did not; but for women this is the opposite.

Living with own and others' families makes no difference for women. In each of these two types of living arrangement nearly 2 out 5 young adult females engaged in premarital sex. The proportion is smallest among the females who lived alone (but note small number of valid cases). For men, those who lived in others' families seem to most actively engage in premarital sex. In the rest of the living arrangements there is only a small difference.

Results on condom use at first sex give fairly uniform patterns of distributions across characteristics and sexes of respondents. First, men and women differ in their levels of condom use. The use rate for men is higher across all measures, except for those who lived alone, whose proportion is lower than that of women. Second, a small difference in condom use exists among categories within each measure, suggesting that in fact personal characteristics included in this analysis hardly make a difference as far as condom use at first sex of young adults is concerned.

Table 5 Percent Distribution of Young Adult Males and Females Who Reported Early of Pre-marital Sex and Condom Use at First Sex, by Selected Personal Characteristics

Characteristics	Pre-marital sex under age 18		Condom use at first sex	
	Male	Female	Male	Female
Age				
18-20	75.4	58.9	44.5	35.9
21-24	46.3	26.8	43.1	24.5
Area of residence				
Bangkok Metropolis	71.4	43.2	36.8	30.4
Other Urban	56.8	32.6	44.6	35.2
Rural	55.9	41.0	44.5	23.9
Level of education				
Lower secondary or less	63.6	55.2	42.5	22.8
Some or completed high school	55.0	24.0	46.0	34.1
Some or completed college	40.7	12.5	42.6	39.0
Exposure to HIV/AIDS education in past 12 months				
No	56.1	40.7	42.2	24.4
Yes	61.1	35.0	45.9	33.5
Living arrangement				
With own family	56.4	39.4	44.0	27.8
With other's family	64.9	38.3	43.3	26.5
Alone	52.9	12.5	38.9	55.6

Table 6 looks at association between measures of parenting process and sexual risk behavior. Recall that the rate of engaging in premarital sex is higher among young adult males (Table 4). This male-female difference remains when measures of parenting process are applied. A general pattern that emerges gives us an idea that premarital sex under age 18 is more prevalent among young adults (males as well as females) who reported that their parents knew about their sexual experience, ever talked about sex/ sexual health with family members, ever discussed about condom use with parents, perceived parents' permissive attitude toward sex for son and daughter, whose parents knew their whereabouts, and whose parents hardly or did not know their close friends.

Unlike premarital sex, association of condom use with parenting process is less uniform across characteristics and sex of young adults. In general, in

six of the seven measures the pattern of condom use among males is opposite to the pattern observed in early premarital sex described above. Lower level of condom use is found among those who reported that their parents knew about their sexual experience, who ever talked about sex or sexual health with family members, who ever discussed about condom use with parents, who perceived parents' permissive attitude toward sex for son and daughter, and whose parents hardly or did not know their whereabouts. But for those whose parents hardly or did not know their close friends, condom use among males is slightly higher than those in other categories.

Table 6 Percent Distribution of Young Adult Males and Females Who Reported Early Pre-marital Sex and Condom Use at First Sex, by Measures of Parental Process

Characteristics	Pre-marital sex under age 18		Condom use at first sex	
	Male	Female	Male	Female
Parents know sexual experience of respondent				
No	47.9	26.1	52.9	36.4
Yes	63.8	35.0	43.4	41.5
Discuss sex/ sexual health with family members				
No	53.0	38.5	47.2	24.3
Yes	63.7	39.4	39.6	31.0
Discuss condom with parents				
No	54.3	29.4	48.0	36.0
Yes	69.5	40.0	43.2	54.5
Parental permissiveness for son's sex				
No	55.9	35.5	48.6	22.6
Yes	57.6	39.2	43.7	30.5
Parental permissiveness for daughter's sex				
No	56.8	36.6	44.9	26.1
Yes	61.8	38.9	42.2	31.4
Parents know whereabouts				
Always	55.8	33.1	42.9	26.4
Sometimes or mostly	53.7	42.9	44.6	33.9
Hardly or not at all	62.0	47.1	38.0	21.7
Parents know close friends				
All	63.2	34.0	43.8	27.2
Some or mostly	56.3	38.3	43.1	30.4
Hardly or not at all	66.7	53.8	44.4	26.7

Associations between sexual risk behavior and peer factors are presented in Table 7. Here, the male-female difference noted above still remain. Among males, the proportions who ever had premarital sex under age 18 are higher among those who ever talked about sex or sexual health with friends in the past year prior to interview. Higher proportion is also observed among those who perceived that half or more of their male and female friends had already engaged in sexual activities, that premarital sex is common among most young adult males and females, and that peer influence on sexual behavior of young adults was strong.

Among females, the pattern of association of early premarital sex with peer factors is more or less similar to that observed among their male counterparts. A minor difference is observed in the factors related to the perception about the level of premarital sex and of strong peer influence on sexual behavior of young adults.

Condom use at first sex among males is at a low level as already noted. In nearly every peer factor the rate of condom use does not exceed 50 percent for males, and even is much lower for females. Within this low level, the highest rate is found among those who ever talked about sex or sexual health with peers in the past year before interview, who believed that none of their male and female friends ever had sexual intercourse (note small number of valid cases), that premarital sex is widespread among young adults, and that peer influence on sexual behavior of young adults is weak. Among females, the proportions who used condom at first sex distributes fairly evenly at a low level across categories of all factors. Overall, there is no clear pattern of association between peer factors and condom use among females, but among males the pattern is a little bit clearer.

Table 7 Percent Distribution of Young Adult Males and Females Who Reported Early Pre-marital Sex and Condom Use at First Sex, by Measures of Peer Influence

Characteristics	Pre-marital sex under age 18		Condom use at first sex	
	Male	Female	Male	Female
Discuss sex / sexual health with peers				
No	50.6	37.5	50.0	27.5
Yes	62.3	39.4	39.9	29.7
Sexual experience of male peers				
Half or more had sex	59.8	38.2	43.1	28.0
Less than half or none had sex	41.4	31.8	48.3	30.6
Sexual experience of female peers				
Half or more had sex	58.9	39.5	42.5	29.0
Less than half or none had sex	57.6	30.4	46.8	28.2
Pre-marital sex among young males				
Everyone had it	74.5	40.8	32.7	33.3
Nearly everyone had it	66.3	43.9	43.0	30.4
Half or less had it	49.1	34.8	42.0	27.4
Pre-marital sex among young females				
Everyone had it	72.0	41.7	34.0	35.6
Nearly everyone had it	67.2	42.3	41.5	30.5
Half or less had it	59.8	45.2	44.4	28.6
Peer pressure for sex among young males in general				
Strong	70.6	42.4	33.3	27.3
Moderate	54.5	34.5	45.6	28.5
Weak or none	57.8	44.2	46.4	28.8
Peer pressure for sex among young females in general				
Strong	70.3	46.8	36.5	28.8
Moderate	55.5	33.1	43.6	28.6
Weak or none	56.6	46.6	48.6	26.9

Effect of Parenting Process and Peer Influence on Sexual Risk Behavior

The results presented so far have focused on outcome variables (premarital sex under age 18 and condom use at first sex) with personal characteristics, parenting process and peer influence without taking into account the effects of other factors that may be at work simultaneously. The following analysis examines the effect of each factor, net of the effects of all other factors. This is done by applying logistic regression analysis. As our outcome variables are categorical consisting of a "yes or no" response, a binary logistic regression analysis is employed. Before entering into the models, correlations among all independent variables are examined, and no high or unacceptable correlations among them are detected. Therefore, no measures are excluded. Models predicting effects of personal characteristics, parenting process and peer influence on the outcome variables are prepared separately. Results of both models are presented in Table 8.

It is important to note that the present analysis does not separate the male from the female models. Instead, sex is treated as one among the independent variables. The reason for not treating male and female models separately has to do with limited number valid female cases in our data set.

Table 8 Logistic Regression Analysis of the Effects of the Parental Process and Peer Influence on the Likelihood of Having Pre-marital Sex under Age 18 and Use of Condom at First Sex among Young Adults.

Characteristics	Model 1 Pre-marital sex under age 18			Model 2 Condom at first sex		
	B	S.E.	Exp (B)	B	S.E.	Exp (B)
Personal Characteristics						
Sex						
Female ®						
Male	1.753**	0.326	5.772	0.10	0.26	1.10
Age	-0.523**	0.071	0.593	-0.09	0.05	0.91
Area of residence						
Rural ®						
Bangkok Metropolis	0.698*	0.309	2.010	-0.28	0.25	0.76
Other Urban	-0.109	0.299	0.897	-0.06	0.24	0.95
Level of education						
Some or completed college ®						
Lower secondary or less	0.914*	0.395	2.493	-0.87*	0.33	0.42
Some or completed high school	0.124	0.378	1.132	-0.61*	0.31	0.54
Exposure to HIV/AIDS education in past 12 months						
No ®						
Yes	0.137	0.248	1.147	-0.10	0.20	0.90
Living arrangement						
Alone ®						
With own family	0.507	0.516	1.660	0.31	0.39	1.36
With other's family	0.439	0.548	1.551	0.55	0.41	1.74

Table 8 (Continued)

Characteristics	Model 1 Pre-marital sex under age 18			Model 2 Condom at first sex		
	B	**S.E.**	**Exp (B)**	**B**	**S.E.**	**Exp (B)**
Parental process						
Parents know sexual experience of respondent						
No ®						
Yes	1.039**	0.276	2.825	-0.42	0.22	0.66
Discuss sex/ sexual health with family members						
No ®						
Yes	0.040	0.273	1.041	-0.31	0.22	0.73
Discuss condom with parents						
No ®						
Yes	0.444	0.266	1.559	-0.05	0.22	0.95
Parental permissiveness for son's sex						
No ®						
Yes	-0.130	0.376	0.878	-0.18	0.30	0.83
Parental permissiveness for daughter's sex						
No ®						
Yes	-0.085	0.276	0.918	-0.29	0.22	0.75
Parents know whereabouts						
Always ®						
Sometimes or mostly	0.690*	0.296	1.993	-0.02	0.23	0.98
Hardly or not at all	1.107*	0.491	3.027	-0.75*	0.38	0.47
Parents know close friends						
All ®						
Some or mostly	-0.431	0.280	0.650	0.07	0.22	1.07
Hardly or not at all	0.571	0.653	1.770	0.55	0.48	1.74

Table 8 (Continued)

Characteristics	Model 1 Pre-marital sex under age 18			Model 2 Condom at first sex		
	B	S.E.	Exp (B)	B	S.E.	Exp (B)
Peer Influence						
Discuss sex / sexual health with peers						
No ®						
Yes	0.612*	0.268	1.843	-0.18	0.21	0.84
Sexual experience of male peers						
Less than half had sex or none ever had sex ®						
Half or more had sex	0.033	0.552	1.034	-0.88	0.47	0.41
Sexual experience of female peers						
Less than half had sex or none ever had sex ®						
Half or more had sex	-0.321	0.321	0.725	0.26	0.25	1.30
Peer pressure for sex among young males in general						
Strong ®						
Moderate	-0.727	0.541	0.483	0.20	0.40	1.22
Weak or none	-0.496	0.590	0.609	0.42	0.47	1.53
Peer pressure for sex among young females in general						
Strong ®						
Moderate	-0.539	0.570	0.583	0.18	0.41	1.20
Weak or none	-0.685	0.625	0.504	0.01	0.48	1.01
Premarital sex among young males						
Everyone ®						
Nearly everyone	-0.352	0.545	0.703	1.02*	0.44	2.78
Half or less	-1.156	0.722	0.315	1.12	0.58	3.06
Premarital sex among young females						
Everyone ®						
Nearly everyone	1.066	0.813	2.904	-1.69*	0.62	0.18
Half or less	0.951	0.848	2.589	-1.66*	0.66	0.19
Constant	7.794			3.84		
-2 Log likelihood	477.518			679.32		
Chi-square	247.148**			45.92*	29.00	

Early Premarital Sex

Model 1 reveals that only a small number of variables show significant effects on early premarital sex of young adults. Among the measures of personal characteristics, males are almost six times more likely to engage in premarital sex than females. Older young adults are about 40 percent less likely to engage in early premarital sex when compared the younger ones. The odds of engaging in premarital sex for those under age 18 for young adults who live in the Bangkok Metropolis are two times significantly greater than that for those who lived in the rural area. And finally, having low education (lower secondary education or below) increases the odds of engaging in premarital sex under age 18 compared to those with high education (some or completed college level). The odds for early premarital sex are also greater among those with some or completed high school education but the effect is not statistically significant. The other two measures of personal characteristics (exposure to HIV/AIDS education in the past year before interview and living arrangement) do not show statistically significant effects on premarital sex under age 18.

Early premarital sex among young adults seems to have not much to do with measures of the parenting process included in the present analysis. Of all seven measures of the parenting process, only two show statistically significant effects. One of these is parental knowledge of young adults' sexual experience. Young adults who perceive that their parents know whether they ever had sex are more likely to engage in early premarital sex; the odds for this group is nearly three times greater comparing to those who reported the opposite.

Another measure with significant effect on premarital sex is parental knowledge of whereabouts of their young adult children. Perceiving that parents know their whereabouts, but only sometime, mostly significantly increases the odds of early onset of sexual union by about two times compared to perceiving that parents always know their whereabouts. The odds are even greater (about three times greater) among those who perceived that parents hardly or do not know their whereabouts. Put

simply, results for this measure reveal that when parents have good knowledge of where their children are and what they do in each day, the odds of their children's engaging in early premarital sex is reduced. This confirms a significant effect of parental monitoring on sexual risk-taking among young adults.

This analysis does not reveal significant effects of other parenting process measures included in the model.

All, except only one, measures of peer influence do not show significant effects on early onset of premarital sex. The only one measure that shows a significant effect in this case is 'talking with friends about sex or sexual health'. Young adults who ever discussed sex or sexual health with friends in the year before interview are nearly two times more likely to engage in premarital sex under age 18 comparing to those who never talked with friends about this.

Note that although the measures presented above have effects on early premarital sex of young adults, the effects are found to be either weakly or moderately significant statistically. It is also worth noting that although affects of all other peer factors are not statistically significant, their influence exist more or less in an expected direction. For example, perceiving that half or more of male friends already had sexual experience increases the odds of engaging in early premarital sex. Similarly, perceiving moderate or weak peer pressure for having sex among both males and females lowers the likelihood of engaging in early sexual experience comparing to those who perceived strong peer pressure. Effects such as these, although not statistically significant, are of policy and program value.

Condom Use at First Sex

As in the case of model 1, few measures in model 2 are found to show significant effects on condom use at first sex. These include only one measure of personal characteristics (level of education), one measure of the

parenting process (parental knowledge of where-about), and two measures of the peer influence (perception of premarital sex among males and the same perception among females). Statistically, effects of these measures are only weakly significant.

Compared to those who have high education (i.e., some or completed college level), young adults with any lower levels of education are less likely to use a condom at their first sex. Similarly, young adults who reported that their parents hardly, or do not, know whereabouts are less likely to use a condom at first sex. The key message from this finding supports the notion that low levels of parental monitoring is associated with higher risk behavior of young adults.

As for the peer influence, young adults who perceived that premarital sex was prevalent among nearly all men are more likely to use a condom at first sex compared to those who perceived the prevalence was lower. Perceiving the same prevalence among half or less of the men also increases the odds, but not with any statistical significance. On the other hand, the odds of using condom is lowered among young adults who perceived premarital sex among nearly every woman or among only half or less compared to those who perceived the same prevalence among all. Apparently, the perception of peer influence on condom use at first sex is inconsistent; for men it tends to increase the odds of using, for women the trend is toward decreasing it.

Discussion and Conclusion

This analysis aims at understanding effects of factors related to parenting process and peer influence on sexual risk behavior of young adults. Sexual risk behavior here is defined in terms of early onset of sexual union and lack of condom use at first sex. The analysis is driven by two hypotheses: (1) appropriate parenting process, measured in terms of parental monitoring, parental attitude toward sex of young adults, and parent-child communication, has a protective value in keeping young adults from sexual risk-taking; and (2) peer influence have significant effect on sexual risk behavior of young adults.

Altogether, not including young adults' personal characteristics, only two measures of parenting process and three measures of peer influence are found to have any significant effects on the outcome variables. These results are summarized in Table 9.

Table 9 Summary of the effects of the family and peer factors on outcome variable

Factors	Premarital sex	Condom use at first sex
Parental Process		
Parents' knowledge sexual experience		
No ®		
Yes	+/**	
Parents know where-about		
Always ®		
Sometimes/ mostly	+/*	
Hardly/ not at all	+/*	+/*
Peer Influence		
Ever talked with friends about sex		
No ®		
Yes	+/*	
Premarital sex among males		
Everyone ®		
Nearly everyone had PMS		+/*
Premarital sex among females		
Everyone ®		
Nearly everyone had PMS		-/*
Half or less had PMS		-/*

Note: + = positive effect; - = negative effect; * $p<.05$; ** $p<.001$

The finding that parental knowledge of the sexual experience of young adults increases the odds of involvement in early premarital sex among the latter needs to be interpreted with caution. It will be erroneous, for instance, to assume in this case that there exists a causal link between parental knowledge and children's involvement in early premarital sex. The complication here has to do with the fact that this measure is based on perception of the sample young adults which may or may not reflect reality (i.e., what parents really know). Therefore, parental knowledge should not be mistaken as causing early premarital sex of children as it may just reflects children' behavior, not something that causes it. The best case that can be taken from this finding is where young adults actually ever had sex and perceived that parents knew about it, hence reported it in the interview accordingly. Another possible way of interpreting this is that there must be a good parent-child communication in the case like this otherwise parents would not be reported as knowing about it. Hopefully, through such a good parent-child communication young adults benefit from parents supervision such that the outcome is safe sexual practice of children.

Parental monitoring, measured in terms of parents' knowledge of whereabouts of children, is the only variable that shows a significant effect on both aspects of sexual risk behavior (early premarital sex and condom use at first sex). This seems to suggest that parental monitoring is the most important of all in the parenting process. However, it is not possible to explain why other aspects of parenting process fail to show significant effects. In absence of relevant data, we can only guess that this may be due to measurement problem; our measurement of parents' attitude and parent-child communication may not be well suited given their purposes. The finding that talking about sex or sexual health with friends increases the odds of early premarital sex must also be carefully interpreted. On the one hand, discussing with friends about sex may reflect curiosity and eventually lead to some effort to have sex. On the other, discussing this topic with friends may be an 'after-effect' of having had sexual experience. For example, it may reflect concern about the outcome of that sexual behavior. Both of these interpretations can be possible.

Perceptions of premarital sex among young adult males and females in general do not show significant effects on early premarital sex, but they do have significant effects on condom use at first sex. This finding is not consistent with results of previous studies; it is also inconsistent with popular views expressed through different media that sexual behavior of young people nowadays is much influenced by that of their peers. Results of this analysis fail to confirm it.

In conclusion, results of this analysis are not strongly in favor of what has been stated in both the hypotheses. Each hypothesis is at best partially supported. We can see some effect of an aspect of parenting process, especially parental monitoring and parent-child communication, on sexual risk behavior, but effects of peer factors are somewhat mixed and weak. This being the case, some points of concluding remark are made here.

First, it may be that family and peers today are of minor influence as far as sexual behavior is concerned. This may be due partly to their relative weakness on the one hand, and to relative strength of other competing factors on the other. In such a situation it is almost readily possible for young adults to act based on their own decision without referring significantly to what their families and peers expect. The competing factors may be seen in a wider social and community contexts that may facilitate risk behavior among young adults. For example, where there is lack of appropriate control over entertainment places and where easy access to pornographic media is possible, young adults may feel encouraged trying risky behavior such as involving in sex at an early age. If such community factors are coupled with inadequate program activities aiming at guiding young adults toward safe behavior, it can be even more possible for them to go the risky way.

Needless to say, there has been trust and confidence in the role of family and peer as effective mechanisms that can protect young people from risk behaviors. It is argued, however, that family and peers can work well only when they have adequate strength to outweigh the influences of the competing environmental factors in the community and society at large.

Second, it may the case that the family and peers are indeed not of a minor influence, but the measures used in our models do not adequately represent what they are supposed to. To that extent, this is a limitation of the present analysis. Further, to be more appropriate, analysis such as this should be able distinguish male from female models as the effect of family and peers may not be the same for both sexes. Thus, future research that aims at testing the role of parenting process and peers in protecting young adults from harm should develop more accurate measures while taking into consideration variables at the context and program levels.

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FORCED SEX AND HIV INFECTION: RESULTS OF THE 2007 NATIONAL SEXUAL BEHAVIORAL SURVEY

Churnrurtai Kanchanachitra
Wassana Im-em
Kritaya Archavanitkul

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Background

Sexual abuse may affect many aspect of an abused person's life, both physical and mental health, their ability to work and their relationship with others. Forced sex or other forms of sexual abuse was found to be related to risk of HIV/AIDS and other sexually transmitted diseases. A study in Uganda reported that women who perceived their partner very likely to be at risk of HIV were almost three times more likely to report forced sex than the reference group of women with no perceived risk (Koenig et al, 2004). Forced sex also leads to physical injuries, psychological trauma and unwanted pregnancy. Rape survivors are more likely to attempt suicide. UNFPA reported that girls and women who experienced rape were nine times likelier than non-experienced women to attempt suicide and to suffer major depression (UNFPA, 1999). A study in the U.S found that the feeling of sadness and hopelessness and also consider suicide are about two times higher for rape victims than non-rape victims (Howard and Wang, 2005). Rape-experienced girls and women's another major consequence is unwanted pregnancy. A study in Peru as cited in a UNFPA report, revealed that 90 percent of young mothers aged 12-16 had become pregnant because they had been raped (UNFPA, 1999). A study in Haiti found that women who have forced sex were 1.7 times more likely to have an unplanned pregnancy (Fawzi et al, 2005). Sexual violence increases the risk factors for girl and women. Studies in the U.S found that girls and women who reported having forced sex were more likely to have heavy smoking, use of alcohol or drugs, had multiple sex partners and low condom use (Howard and Wang, 2005). Similar findings were found in

the National Longitudinal Study of Adolescent Health (Add Health) which found that girls who experienced forced sex are more likely to have more lifetime sexual partners, age at first sex younger than 14 and used alcohol or drugs at last sex, they also had 2 times more likely to have history of STD (Upchurch and Kusunoki, 2004).

The economic implications are also large. A study in Canada to estimate the costs of different forms of violence against women found that the economic implications is $4.2 billion per year to cover the cost of social services, education, criminal justice, labor, employment, health and medical costs (Department of Justice, Canada, 2001). Forced sex is, thus, not a private problem encountered by only the girls or women but it has many consequences and implications that require policies and programs to prevent and solve the problems. This study's main purpose is to find the magnitude of forced sex and their risk of HIV/AIDS. Furthermore, the study will review the program and policy in Thailand and provide recommendations in order to minimize the problems.

Definition of forced sex

Forced sex or sexual abuse and exploitation refer to all forms of sexual assaults, sexual harassment or sexual exploitation. It was defined as forcing someone to participate in unwanted, unsafe or degrading sexual activity, or using ridicule or other tactics to try to denigrate, control or limit their sexuality or reproductive choices (Department of Justice Canada, 2001).

WHO's definition of sexual violence

Sexual violence was defined by the following three behaviors:

- being physically forced to have sexual intercourse against her will;
- having sexual intercourse because she was afraid of what her partner might do;
- being forced to do something sexual she found degrading or humiliating

http://www.who.int/gender/violence/who_multicountry_study/summary_report/chapter2/en/index1.html

Methodology

This study uses National Sexual Behavior Survey conducted by the Institute for Population and Social Research (IPSR), Mahidol University in 2007 for analysis.

Questions asked

To explore information about experience with forced sex, in Section 7 of the questionnaire, male and female respondents with sexual experience, regardless of their age and martial status, were asked to describe their experience at first sex. Answers were coded into five categories: 1) wanted or ready; 2) unwanted; 3) unprepared or ambiguous; 4) forced; and 5) cannot remember. Other related variables to this question include: age at first sex, age and sex of first sex partner, relationship with partner at time of first sex, relationship after first continued sex or not, condom use at first sex.

Another question in Section 7 of the questionnaire asked whether or not the respondents ever experienced any forced sex in a life time. However, no follow up questions were asked to explore specific information related to this question.

Sample size [1]

The sample includes a total of 6,048 men and women in the reproductive ages (18-59 years). Overall 90.5 percent of the respondents (n=5,044), 92.7 percent men and 88.4 percent women, ever had sexual experience.

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1 Adjustment of sample was applied to adjust the distributions by the categories of location (3 strata), gender (2 strata) and age group (9 groups) to be the same as that of the 2000 Population and Housing Census. The weight takes into account the different probabilities of selection by location, sex and age. If the weight is applied and the percentage distribution of the sample is calculated for each of the nine age groups, by sex and by the three broad geographical strata, the distribution across the 54 categories should equal that of the 2000 population census. The individual values of this weight vary considerably because of over sampling of young persons, and of Bangkok residents.

Only three women in their 40s refused to answer whether or not they ever had sexual experience. Out of 5,044 respondents with sexual experience, only two women and seven men could not recall their experience at first sex, whether it was wanted or not.

Strengths and limitations

The major strength of this analysis is the ability to explore sexual violence in the form of forced sex in association to HIV infection using population-based survey data. Hence, many variables on socio-economic background could be used to obtain information to explain the association. However, this National Sexual Behavior Survey was not designed to explore sexual violence in particular, thus there are several limitations to bear in mind when exploring the linkage of sexual violence and HIV infection. Analysis of sexual violence could be obtained from two time periods: forced sex at first sexual intercourse and forced sex in a life time. Limited linkage between forced sex at first intercourse and HIV infection could be made due to different time periods as most HIV related questions are related to the present time or to recent years. Beside, only 80 women and 7 men reported that they were forced to have first sex, thus the analysis was based on only small samples. For lifetime sexual violence, no follow up questions were asked to explain the content of the experience (lack of information about perpetrators, time frame, cause, consequences etc.). Hence, sexual violence was analyzed based on the respondents' experience with first sex of those who have sexual experiences (N= 5,474).

Consistency of Reports on Sexual Violence

As mentioned earlier, only two specific questions were asked about the respondents' experience with forced sex - whether they had experience it at first sex and in a life time. A consistency check of data between these two variables suggests that there is some inconsistency in reporting sexual violence in both men and women. Those who reported first sex was forced should also reported their life time experience of forced sex as well. However, among women reported having first sex by force, 91% of 80 women also reported that they ever had experienced a forced sex in a life time. Likewise, 37% of men, or 3 out of 8 men, reported that first sex

was forced also reported that they ever had experienced forced sex in their life time (Table 1). Thus, data for forced sex for women is more consistent than men. Thus, this report will focus analysis on women experiences.

Table 1 Consistency in reporting first sex by forced and life time experience of forces sex

First sex was forced	Life time experience of forced sex					
	Men			Women		
	Yes	No	Total (N)	Yes	No	Total (N)
Wanted	2.0%	97.8%	2,492	3.4%	96.5%	1,873
Unwanted	4.0%	96.0%	25	9.5%	90.5%	179
Unprepared	4.7%	94.6%	149	13.2%	86.8%	220
Forced	50.0%	50.0%	8	93.3%	6.7%	90
Total	2.4%	97.4%	2,676	8.2%	91.6%	2,362

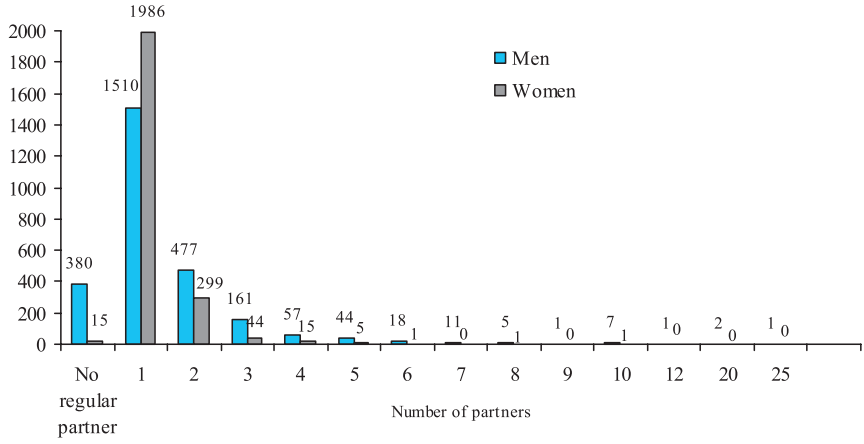
** 2 men and 7 women cannot remember, 3 women refused to answer.*

Results

Sexual Experience of Respondents

Among 5,044 men and women with sexual experience, 11 men and 16 women identified themselves as homosexual and 15 men and 29 women were bi-sexual or in other words 99.4 percent of women and 99.5 percent of men described themselves as heterosexual. Median age at first sex is 17 years old for men and 19 years old for women. In terms of number of stable sexual partner in a life time, 56.4 percent of men and 83.9 percent of women reported that they have had only one partner, while 477 men and 299 women (17.8 percent and 12.6 percent) reported as having two partners in their life time and 14.2 percent of men and 0.6 percent of women reported as having no stable partner (see Figure 1 for distribution).

Figure 1 Men and women with number of stable sex partners in a life time.



While 4.1 percent of women reported as ever had a casual partner, about half (55.7 percent) of men reported that they ever had casual partners (those who are not sex workers) in a life time and 552 men (37 percent) had sex with casual partners in the past 12 months. Although they identified themselves as heterosexual men, three of them had sex with men in the past 12 months. In terms of their experience with sex workers, 37.2 percent of men ever paid for sex (or had sex with sex workers) in a life time. Only 9 percent of men (241 out of 2,676 men with sexual experience) or 24.2 percent of men who ever paid sex (232 of 996) did pay for sex in the last 12 months. The frequency of those who paid for sex in the last 12 months was 3.5 times in a year. Among men ever paid for sex, the median age of those paying for sex in the last year was younger than those ever paid for sex in a life time (24 and 35 years old).

Among men and women aged between 18 to 24 years old, 63.2 percent women (956 out of 1,512) and 80.1 percent of men (1,210 out of 1,511) reported as ever had sexual experience. As shown in Table 2, a great proportion of young men and women have had sexual experience even among female students in secondary school in which more than one-fourth of them reported as having sexual experience.

Table 2 Percentage of men and women aged 18-24 years old with sexual experience

	Men		Women	
	%	N	%	N
All (aged 18-24)	80.1	1210	63.2	956
• Students	63.4	223	31.0	148
• Unemployed/looking for job	79.8	154	58.9	63
Currently Students				
• Maw 1-3	51.1	48	23.1	24
• Maw 4-6/Vocational	67.0	142	32.4	97
• Higher	74.4	32	31.3	21

* Denominators are all men and women aged 18-24 years old.

Among young men and women in this age group, it was found that while about half of men reported as ever had a casual partner in a lifetime, fewer than five percent of women reported that they ever had a casual partner. Only about one-tenth of male students reported as ever had paid for sex in which students in high secondary school or vocational college and over one-fourth of unemployed or workign men reported ever had paid sex.

Table 3 Percentage of lifetime sexual experience by type of partner of men and women below aged 24 years*

	Men				Women			
	Stable partner	Casual partner	Transac-tional partner	Paid partner	Stable partner	Casual partner	Transac-tional partner	Paid partner
All (18-24)	60.9	51.2	0.9	19.6	62.4	4.4	0.1	0.2
Students	45.7	38.8	1.1	12.2	29.1	4.2	0	0
Maw. 1-3	37.2	33.0	1.1	5.3	22.1	4.8	0	0
Maw. 4-6 /vocational	50.0	42.9	1.4	16.0	33.3	4.7	0	0
Higher	60.5	39.5	0	4.7	30.3	1.5	0	0
Unemployed	54.9	57.5	0.5	20.2	57.9	4.7	0	0
Working	67.1	54.2	0.9	22.2	72.0	3.8	0.2	0.5

* Denominators were all respondents of each catgory regardless of their sexual experience.

Forced Sex of Men and Women in their First Sexual Experience

Overall, 79.3% of women and 93.2% of men reported that their first sex experience was wanted. Women who had their first sexual experience at young ages are more likely to experience forced sex than those who had their first sex later on. While 3.8 percent of women reported as having their first sex by force, 15.2 percent of 33 women who had first sex when they were only 10-14 years old reported that they were forced to have sex and 30.3 percent reported either unwanted or unintended to have their first sex (Table 4). When first sex happened at older age, the report of forced sex reduced substantially

For men, they also reported having forced sex when it happened at younger age but the percentage was lower than women in every age group.

Table 4 Men and women and their experience at first sex

	Women (%)				Men (%)			
	Wanted (n=1,873)	Unwanted (n=179)	Unintended (n=219)	Forced (n=90)	Wanted (n=2,492)	Unwanted (n=25)	Unintended (n=149)	Forced (n=7)
Current age								
18-24	71.4%	8.1%	14.7%	5.9%	91.7%	0.8%	7.2%	.2%
25-34	80.2%	7.8%	9.1%	3.0%	93.4%	1.3%	5.1%	.2%
35-44	87.9%	5.0%	4.8%	2.3%	94.7%	.8%	4.1%	.4%
45-59	86.6%	9.2%	2.2%	2.0%	95.8%	.9%	3.1%	.2%
ALL	79.3%	7.6%	9.3%	3.8%	93.2%	.9%	5.6%	.3%
Age at first sex								
10-14	54.5%	12.1%	18.2%	15.2%	89.6%	.8%	9.3%	.4%
15-19	76.7%	7.5%	11.2%	4.6%	93.3%	.8%	5.5%	.4%
20-24	81.7%	6.9%	8.4%	3.0%	93.3%	2.0%	4.7%	.0%
25-43	88.5%	9.6%	1.5%	.4%	98.2%	.0%	1.8%	.0%
ALL	79.4%	7.6%	9.3%	3.7%	93.2%	1.0%	5.5%	.3%
Education attainment								
never attending	92.1%	*	*	*	85.7%	*	*	*
primary school	86.4%	6.2%	4.9%	2.5%	94.1%	.9%	4.2%	.8%
secondary school	73.0%	8.8%	13.1%	5.1%	92.7%	1.3%	6.0%	*
High school/diploma	74.0%	8.2%	13.1%	4.7%	92.3%	.7%	7.0%	*
Bachelor/higher	73.4%	10.0%	12.0%	4.6%	93.4%	*	5.2%	*
ALL	79.3%	7.5%	9.3%	3.8%	93.2%	1.0%	5.6%	.3%

* 2 men and 7 women cannot remember, 3 women refused to answer.
**n < 5 cases

While most women had their first sex with boyfriend or spouse (married, no registration), spouse (registered marriage), fewer than 10 percent of men reported to have first sex with spouse. Among 90 women who were forced agt first sex, about two-third of them were forced by their boyfriend followed by acquaintance, friend and unregistered spouse (see Table 5).

Table 5 Women's experience at first sex and type of first sex partner

Type of partner	First sexual experiences of men (%)					
	Wanted	Unwanted	Unintended	Forced	Total	
					%	N
Girlfriend	55.6%	32.0%	37.2%	28.6%	54.3%	1451
Friend	14.0%	36.0%	20.9%	14.3%	14.6%	390
Kik	1.2%	.0%	1.4%	*	1.2%	33
Acquaintance	9.6%	4.0%	20.3%	*	10.1%	269
Spouse-registered	4.1%	4.0%	1.4%	*	3.9%	104
Spouse- had marriage ceremony but not registered	2.6%	8.0%	.0%	*	2.5%	68
Sex workers	12.4%	16.0%	12.2%	57.1%	12.5%	335
Stranger	.4%	.0%	5.4%	*	.6%	17
Type of partner	**First sexual experiences of women (%)**					
	Wanted	**Unwanted**	**Unintended**	**Forced**	**Total**	
					%	N
Boyfriend	35.2%	37.4%	77.2%	65.2%	40.4%	954
Friend	1.8%	*	6.8%	7.9%	2.5%	59
Kik	*	*	*	*	.1%	2
Acquaintance	1.2%	*	2.7%	12.4%	1.7%	40
Finance	.5%	*	2.3%	*	.8%	18
Spouse-registered	24.0%	22.9%	4.6%	*	21.3%	502
Spouse- had marriage ceremony but not registered	36.9%	34.1%	6.4%	6.7%	32.8%	773
Stranger	*	*	*	*	.1%	2
Relative	*	*	*	*	.2%	4

* n < 5 cases

Note that two women reported as having first sex with paid partner.

Seven men reported they were forced to have their first sex and fourof them presumably were forced by friends to it with sex workers. When exploring first sex partner for men, 12.5 percent of men (n=335) reported as having sex worker as their first sex partner. However, proportion of men having a sex worker as their first sex partner had a declining trend where the majority of first sex partner as sex worker (62.7 percent) happened in longer period (more than 21 years) as compared to only 5.9 percent if it happened in less than 5 years (Table 6). This indicates that sexual behavior of men has changed quite substantially after AIDS epidemic started in Thailand.

Table 6 Men who had a sex worker as their first sex partner by age and duration of time from first sex to present

Age group	Percent	N
18-24	9.8	33
25-34	15.5	52
35-44	39.3	132
45-59	35.4	119
All	100	335
Duration from time at first sex to present time (years)		
0-4	5.9	20
5-9	6.1	20
10-14	7.0	23
15-19	18.3	60
20+	62.7	207
All	100	330*

* missing cases=5.

Condom Use and Experience at First Sex

Women who experienced forced sex may have a higher chance for risk of HIV/AIDS infection than those who have sex voluntarily. However, data suggests that condom use at first sex did not show much variation among various type of experience at first sex, either want or unwanted sex. Only about one-tenth of women and one-fourth of men reported that a condom was used in the first sexual experience in all type of sexual experiences

(Table 7). When compared between types of sexual partner at first sex for men, it was found that percentage of condom use were higher when having sex with a sex worker than non-sex workers and the longer ago the first sex happened, the lower rate of condom use for both type of sex partners. Among men who had their first sex with sex workers , 92 percent of them wanted to have first sex. When looking at duration of time from their first sex to the present, it was evident that condom use were higher if it happened recently among men who want to have first sex. About 89 percent of them use a condom with sex workers if it happened in the last 5 years and 100 percent in the last 10 years. Rates of condom use with sex workers in the last 20 years were 44 percent and it reduced to only 20 percent if it happened more than 20 years ago. For men who reported first sex with sex workers was unwanted, the pattern of condom uses was similar when compared with wanted group (Table 7).

Condom use among men whose first sexual partner was a non-sex worker, was lower than with sex worker. The more recent experiences had the highest rate of condom use for wanted sexes at 46.6 percent and it was reduced overtime respectively. When first sex was unwanted, rate of condom use showed a similar pattern to wanted sexes (Table9).

Table 7 Condom use at first sex by men and women and their first sexual experience*

First sexual experience	Condom use at first sex (%)					
	Women			Men		
	Yes	No	Total (N)	Yes	No	Total (N)
Wanted	16.6%	83.4%	1862	29.1%	70.9%	2477
Unwanted	14.7%	85.3%	177	32.0%	68.0%	25
Unintended	24.8%	75.2%	214	33.3%	66.7%	147
Forced	19.8%	80.2%	90	14.3%	85.7%	7
Total	17.4%	82.6%	2343	29.3%	70.7%	2656

* 14 men and 13 women could not remember and 2 men and 2 women refused to answer whether condom was used at first sex or not.

* n < 5 cases

Table 8 Condom use in first sex with sex worker by duration of time from the first sex and present (men)

Duration of time from first sex to present	Condom use (%)					
	First sex wanted			First sex unwanted/ unintended/forced		
	Yes	No	Total (N)	Yes	No	Total (N)
0-4	80.0%	*	15	*	*	5
5-9	100.0%	*	20	*	*	0
10-14	90.9%	*	22	*	*	1
15-19	48.0%	52.0%	50	54.5%	45.5%	11
20+	18.8%	81.2%	197*	60.0%	10	
Total	37.2%	62.8%	304**	55.6%	44.4%	27

* n < 5 cases

** missing cases= 26 (cannot remember)

Table 9 Condom use in first sex with non-sex worker by duration of time from the first sex and present (men)

Duration of time from first sex to present	Condom use (%)					
	First sex wanted			First sex unwanted/ unintended/forced		
	Yes	No	Total (N)	Yes	No	Total (N)
0-4	46.6%	53.4%	638	41.7%	58.3%	60
5-9	33.5%	66.5%	556	36.1%	63.9%	36
10-14	19.6%	80.4%	285	*	76.5%	17
15-19	11.6%	88.4%	109	*	96.2%	16
20+	8.8%	91.2%	488	*	96.2%	26
Total	28.0%	72.0%	2157**	29.0%	71.0%	155

* n < 5 cases

** 11 cases could not remember, 1 refused to answer

Perceived Risk of HIV Infection

The respondents were asked about their perceived risk of HIV infection in the next 12 months, which was used to assess risk of HIV infection in association with sexual experience at first sex. Table 9 shows that both men and women who reported first sex was unwanted had a higher rate of perceived risk of HIV than those who reported that first sex was wanted. The group of wanted sexes, around 11 percent of men and 13 percent of women reported that they perceived that they have risk of HIV while 20 percent of men and 25 percent of women who have first sex by forced reported perceived risk of HIV

Table 10 Perceived risk of HIV infection by age group

Age group	Men					
	Wanted			Unwanted		
	No Risk	Risk	Total (N)	No Risk	Risk	Total (N)
18-24	78.9%	21.1%	403	83.3%	16.7%	36
25-34	84.6%	15.4%	687	77.8%	22.2%	72
35-44	93.8%	6.2%	674	81.4%	18.6%	43
45-49	93.9%	6.1%	627	81.5%	18.5%	27
Total	88.7%	11.3%	2391	80.3%	19.7%	178
Age group	**Women**					
	Wanted			**Unwanted**		
	No Risk	**Risk**	**Total (N)**	**No Risk**	**Risk**	**Total (N)**
18-24	85.8%	14.2%	254	76.5%	23.5%	98
25-34	85.0%	15.0%	626	71.2%	28.8%	139
35-44	85.7%	14.3%	628	74.4%	25.6%	78
45-49	90.8%	9.2%	566	82.9%	17.1%	70
Total	86.9%	13.1%	2074	75.3%	24.7%	385

Among men and women with sexual expereince who perceived that they are at risk of HIV infection in the next 12 months, they were asked to explain the reasons why they perceived they were at risk. As given in Table 11, main reasons for men were having visited sex workers, followed by having unprotected sex and having multiple sex partners. For women, the main reasons are their partners visited sex workers (35.4%) followed

by had accident, had unprotected sex, and had HIV infected partners. Note that 23 women and 1 man reported that they were at risk because their partners were infected with HIV.

Table 11 Reasons why you think you are at risk of HIV/AIDS

Risk behavior	Men		Women	
	%	N	%	N
Had multiple partners	18.7	76	1.5	5
Visited sex workers	29.5	120	.8	3
Partner visited sex worker/ Unfaithful partner	2.3	9	35.4	114
Partner is HIV infected	*	1	7.2	23
Exposed to HIV infected persons	3.9	16	7.0	23
Had unprotected sex	26.6	108	7.8	25
Had accident	2.4	10	7.7	25
Touched while playing sport	1.2	5	*	2
Others	14.4	59	31.8	103
Total	100	403	100	323

Further analysis was done on condom use among 23 women who knew their partners' sero status. Table 12 shows that knowing their partner sero-status of HIV infection did not increase the chance for having protected sex among partners since only 5 percent reported using condom every time when having sex while 65 percent reported never use condom. If sexual violence is defined as forcing someone to participate in unsafe sexual activity, having sex with partner who they know as HIV positive may also classified as a form of sexual violence.

Majority of this group of women also reported that their partner has partners other then themselves (Table 13). This will increase risk of further spreading the disease to other persons.

Table 12 When you have sex with this partner, how often did you use condom?

How often did you use condom?	Percent N= 20
Every time	4.7
Equal between use and not use	8.8
Sometimes	21.8
Never	64.7
Total	100.0
Had no sexual partner in the last 12 months	3

Table 13 Does your partner have sexual partners other than you?

Does your partner have sexual partners other than you?	Percent N= 20
Yes	49.2
No	37.0
Not sure	7.8
Don't know	5.9
Total	100.0
Had no sexual partner in the last 12 months	3

Discussion

This study found that 3.8 percent of women reported as having their first sex by force which is close to the figure of 4 percent reported in a population survey of respondents aged 15-49 years old in Nakornsawan and Bangkok which is part of the WHO Multicountry study on domestic vioelnce against women (Archavanitkul at al., 2001). Men and women who had sex at young ages are more likely to have their first sex by force. Women with forced sex experience were likely to be forced by their boyfriend for first sex experience. For men's sexual experience, there was a declining trend of men in having their first sex with sex workers. Condom use at first sex was low particularly among men who had sex with sex workers over 15 years ago. Both men and women who experienced

their first sex as unwanted, they were likely to perceive that they were at risk of HIV infection more than those who wanted their first sex. Having sex with sex workers was perceived by both men and women to be the main reason to put them at risk of HIV infection. It was found that condom use was low among women with HIV infected partners.

Policy Implication

- Socio-demographic background - Attention should be given to protect young women from being forced to have their first sex and their boyfriends are most likley to be the perpretrators. Public awareness and proper interventions should be given to prevent female students from experiencing unwanted sexual experience at first sex.
- Sexual behavior among students - 46 percent of male and 29 percent of female students reported that they had already had a stable partner and 39 percent of male and 4 percent of female students reported as casual partners. Hence, male and female students should have access to friendly reproductive health information, counselling and services.
- Condom use - This study suggested that condom use rate is low despite the fact that about 10 percent of men younger than 25 years old still had their first sex with sex workers. Moreover, condom use rate with non-paid partners was low. Hence, condom promotion targeting youth is needed. Female control method is needed to allow women to protect themselves from having unwanted pregnancy as well as from being exposed to HIV infection.

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ABC PROGRAM FOR HIV PREVENTION IN THAILAND: EMPIRICAL EVIDENCES AND POLICY IMPLICATIONS

Aphichat Chamratrithirong

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ABC PROGRAM FOR HIV PREVENTION IN THAILAND: EMPIRICAL EVIDENCES AND POLICY IMPLICATIONS

Aphichat Chamratrithirong

Introduction

Although Thai society is tolerant to a variety of individual sexual practices, publicly people still express traditional values related to the value of female virginity and the need for women to maintain their reputation and family honor by not having sex before marriage. The policy environment in Thailand may not be considered the same as that in the US and many countries receiving US funding where sex education based on abstinence has been the focus. Programs in Thailand to encourage and concentrate on sexual abstinence as the only or best preventive choice against HIV infection are not at all explicit. In practice these programs are implicit in Thailand, which as a conservative society maintains a number of barriers to providing sexual health services for the young people.

Barriers to the condom promotion programs in Thailand, especially when targeted to adolescents, can be observed everywhere in the community and especially in school settings. In these environments condom campaigns become problematic and cannot be carried out on a full scale. Abstinence-only initiatives are more popular and much easier to launch in the majority of schools or even universities. A gender-based sexual double standard and complacency in implementing sex education programs in the country frequently obstruct rigorous condom promotion efforts, or at least a serious integration of the ABC prevention strategies cannot be completely realized. Moreover, the Catch 22 problem is that the abstinence-only initiative, by design, straightforwardly obstructs and dissociates itself from condom promotion programs.

The above problem is partly due to the lack of evidence based on comprehensive sexual behavior studies to show the current level of sexual risk of young people in Thailand in order to convince policy makers that action is required. The lack of data becomes especially crucial when we need to investigate issues of sexual health across all the segments of the population.

It is therefore logical to ask the question of whether it is possible to have a truly integrated ABC programs in Thailand, with sufficient emphasis on the condom campaign, and how this agenda should be pursued. If abstinence and being faithful strategies work, and we can measure the extent to which they work, then there may be no need to rigorously promote condom use. But if the measures of abstinence and being faithful are not working and may contradict with the current sexual situation among the new generation, then condom promotion among young people has to be strengthened either as a stand alone measure, or in a well integrated process with other programs. There is a general belief that the failures of abstinence and being faithful strategies may not be that crucial since they have the back-up of condom use. However, too much reliance on these traditional measures, in isolation of and in contradiction to safe sex measures, may run the risk of creating and environment conducive to unsafe sex where young people fail to be prepared to protect themselves, for whatever reasons under conditions they had not anticipated. The potential failure of an abstinence-only approach may lead to an even more serious problem of vulnerability to unprotected sex. Condoms should be viewed not only as a back-up, but also as a leading and instrumental element in any HIV prevention programs.

The empirical evidence in this study is used to support these important policy implications mentioned above. The study shows that based on the evidence an abstinence-only policy may not fit Thai people fully, especially not across all demographic groups. Being faithful cannot guarantee sexual health for all demographic groups of the Thai people. The data suggest that condom use should be encouraged at the onset of any prevention efforts, not only as backups of abstinence and being-faithful programs. This is not only for the older adults but also for young people and across all the different partners and marital status. The chapter will conclude by discussing whether how integrated CAB (and not ABC) programs should be promoted.

ABC and HIV Prevention

ABC as measures of HIV prevention has been advocated in a number of countries since the beginning of the World HIV pandemics. However, the first ABC slogan was used by the Botswana government only in the late 1990s (Kanabus and Noble, 2007). The strategy was probably "invented" to integrate the three fundamental measures of HIV prevention generally known at that time, namely, abstinence, being faithful, and condom use, into one intervention program. ABC has been further elaborated in more detail to include abstinence or delay of sexual debut and with intention to abstain from sexual relation until marriage, as well as abstinence from other subsequent sex, being faithful to the marital sexual partner or reducing number of sexual partners in general, and lastly, consistent and correct use of condoms.

Although these measures are fundamental and have been elaborated in detail in prevention programs, they still do not include many other important means and strategies for HIV prevention. In analogy to the acronym for one news network (ABC), the acronym for another news network (CNN) CNN has been proposed as the basis for prevention activities (Sinding, 2005). CNN in this case stands for: condoms, needles and negotiation. With CNN, condom promotion should come first. Clean needles are also very important in many country settings. Skills to negotiate condom use, especially by women, are also significant, since gender issues are still crucial in the HIV/AIDS pandemics. Sinding (2005) also advocates further that ABC measures could be misleading and abused since it places more emphasis on abstinence, and sometimes abstinence-only until marriage, has been implemented (under the leadership of President G. Bush) but under the name of ABC. Following this line of observation, other researchers also found greater importance of needles over ABC measures. In Uganda, it is has been claimed that the decline in HIV rates is due to the availability of clean needles rather than abstinence or even condoms (Brody, 2004).

Apart from ABC and CNN, other measures indirectly related to ABC in this study, can perhaps be called the RPG. These would include Rights, Poverty and Gender. Cohen and colleagues (2006) argue strongly that

access to public health services and information are the basic rights of individuals and should not be abused. This includes the right to know about, and to access, condoms. Poverty and gender issues are also important aspects of HIV prevention program. Interventions with major consideration of poverty and gender empowerment to fight against HIV/AIDS are indirectly if not directly related to the successful achievement of goals of safe sex promotion efforts.

Apart from RPG, other measures including VCT, STI treatment and campaigns against stigma and discrimination that are equally important for the HIV prevention. However, policy makers seem to focus first on ABC, and the remaining strategies are often considered as additional measures related to the unique social and economic setting for the promotion of each element of ABC. Particularly important is the need to address how condom use barriers are associated with social and cultural factors related to poor enabling environments.

Elaborated definitions of ABC also vary according to the political context and the evidence that is available to support the definitions. There appears to be a major difference between PEPFAR and UNAIDS on the definition of ABC (Kanabus and Noble, 2007). PEPFAR stresses population specific intervention where abstinence is designed to be almost the only program for youth and where condom promotion is only provided for the high risk behavior groups such as sex workers, sexually discordant couples, and injecting drug users. It is important to note that for ABC under PEPFAR, condom promotion is not included in programs for young people who are not in high risk behavior groups (Office of the US Global AIDS Coordinator, 2004; and Office of the US Global AIDS Coordinator, 2005). In contrast, UNAIDS promotes condom use among young people as a priority strategy.

Because of the above reasons, the abstinence-only programs for youth can be hidden under ABC interventions. Under the ABC slogan, youth can be deprived of access to condoms, which are only provided to the high risk behavior populations. Under the ABC campaign banner, the "abstinence-only" intervention can be easily implemented nationwide. As pointed out by Bwesigye (2006), there was an "alteration" of ABC in Uganda from all ABC strategies employed into a program where an

'abstinence takes priority' approach was used at the expense of condom use promotion. Conflicts between an "abstinence-plus" (Halperin et. al., 2004) approach versus a comprehensive sex health program are inevitable. The belief that abstinence-only and comprehensive sex education can be combined is still, to a large extent, overly optimistic (Forest, 2007).

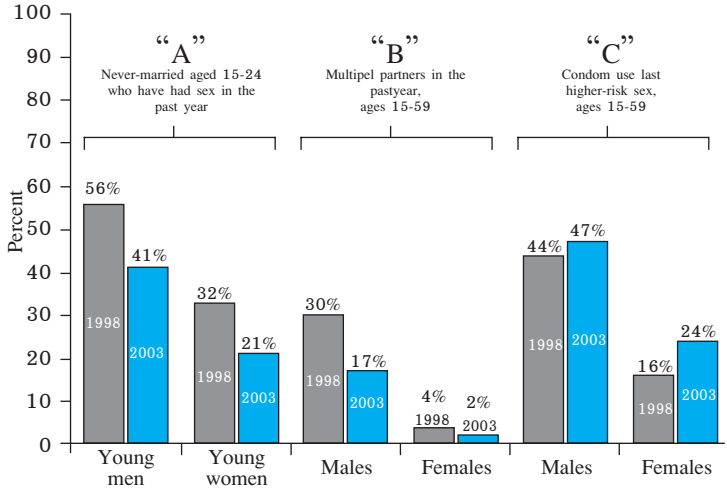
Those who are pro-condom are generally against AB and ABC. Their claim is that all have the human right to health information and services (Cohen et. al. 2006). Their arguments also center on the claim that youth sexuality has changed a great deal and that abstinence-only until marriage programs have been proved to fail even in the US (Smith, 2006). Recent evidence showing that abstinence-only education in the US nationwide has failed has been presented by Bach (2006) whose research found that counties in North Carolina where there were abstinence-plus programs were better at promoting HIV prevention than counties that only had abstinence programs. A number of studies on the effectiveness of ABC also show negative results (See for examples, Bwesigye, 2006 in Uganda; and Mwesigye, 2006). A review of nine studies in developing countries during 1990-2005, also reveal little evidence of effectiveness of abstinence-only program (O.'Reilly et. al., 2006). A more recent systematic review of all relevant studies published in 2007 also concluded that abstinence-only programs are not effective (Underhill, et. al., 2007).

An important ground for rejecting abstinence-only programs is linked to gender considerations. Abstinence approaches tend to focus more on women than men. This becomes a barrier for women seeking services and disclosure of sexual activities (Tangmunkongvorakul, et. al., 2005). Abstinence-only campaigns tend to increase stigma and discrimination against people living with HIV/AIDS (Gerald, 2006). As abstinence-only programs do not provide enough information on safe sex, those persons who engaged in unanticipated sexual activities become more vulnerable (Bronner and Brocato, 2006).

Those who stress abstinence-only programs often make the claim that the promotion of condoms will increase levels of sexual activity. However, a review of 174 published studies found no evidence of an increase in sexual relations resulting from condom-related interventions (Smoak et. al., 2006)

The counter arguments from those who stress A and B, and reject C, generally are not supported by the evidence. USAID advocates effective ABC in Uganda, Kenya, Thailand, Cambodia and Dominican Republic (USAID, 2006). According to USAID (USAID, 2006), Kenya is shown to have ABC behavior changes according to the DHS data in 1998 and 2003 (See table below).

Figure 1 Kenya– Changes in "ABC" indicators between the 1998 and 2003 Demographic and Health Surveys (DHS)



Source: USAID, 2006 The ABCs of HIV Prevention in http://www.usaid.gov/our_work/global_health/aids/News/abcfactsheet.html

The pro abstinence-only supporters provide evidence that there is an increasing trend in primary and secondary abstinence (Chiao, et. al., 2006) and that young people can be trained on skill-based abstinence (Aderayo, 2006) and have the potential to reduce sexual activity and delay sexual debut, without an adverse effect on condom use when sexual activity is to be initiated (JemmottIII, et. al., 2006). Research on abstinence-only suggests that there are certain students who want to undergo abstinence-only and want to be trained in family life education and to maintain abstinence (Asuzu, 2006). In Nigeria, effective abstinence campaign was found to work in delaying first sex (Akinyemi, et. al., 2006).

Many of the abstinence advocates take advantage of the conservative features of the program principle, in involving the family in the intervention design. These include a family program where mothers are utilized for daughter's protection (Dancy, 2006; and Adeleke, et.al., 2006). This group understands that condom programs usually encounter strong social resistance. They prefer to seek proper incorporation of useful local beliefs into abstinence intervention which costs little and has shown to produce positive results (Ezegwu, 2006).

Regarding the intervention to promote "Being Faithful" measure or "B", Ojidon found that by promoting sexual pleasure among couple, in addition to A and C, being faithful as an HIV preventive measure, has also proven to be effective in Lagos and Nigeria, (Ojidon, et. al., 2006).

Some researchers are still optimistic about integrating AB and C together. Green (2003) points out that A and B (considered to be primary behavior change or PBC) are more "options" to provide beyond C. A and B can be viewed as new challenges to the AIDS prevention paradigm (Green, 2003). According to his argument, these options are suitable in certain areas and may not be appropriate for other areas. For example, he states that condom promotion may be good for San Francisco or Bangkok, but not necessary for other places where the nature of the pandemic is different.

Other program people who try to combine AB and C also mention the situational dynamics and differences. For example, an abstinence-based approach under the HOPE Worldwide Model stresses A then AB then ABC according to age and setting (Ottenweller et. al., 2006). Promoting A in the context of ABC, "not A in isolation" is advocated by researchers including IriogbeI (2005).

In summary, evidence of success of abstinence-only and the integration of AB and C remains debatable (see for examples, Green et. al., 2006; and Underhill, et. al., 2006). Even now, researchers are debating how HIV levels were reduced in Uganda, and argue that the conclusion of this debate is crucial for consideration of the re-launch of the HIV prevention program with all ABC components and without undermining any one component (Kindyomunda, et. al., 2006).

Data

The data used in this chapter is derived from the National Sexual Behavior Survey of Thailand 2006 (Chamratrithirong et. al., 2007). The data is used to explore the extent of abstinence, being faithful and condom use among young and older male and female adults in Thailand. The operational definition of abstinence, being faithful and condom use as backups will take into account marital status of respondents and include all types of regular partners and reported sexual behavior in the past year with all types of partners. Data on safe or unsafe sex within the context of different types of relationships will be the central information for used in the analysis.

Methodological Issues in Defining Abstinence

Since age at sexual debut appears have declined rapidly in recent years, while age at marriage has increased, the potential period of abstinence before marriage has lengthened. This increase has heighten the interest of researchers and program managers about the viability of approaches that stress primary abstinence (abstaining from first sexual intercourse) and secondary abstinence (abstaining from further sex before marriage for those who already have sexual experience).

The secondary abstinence or "periodic" abstinence concept (McCauley et. al., 2004) is measured in the time frame of one year, i.e., abstaining from sex in the last year among those with previous sexual experience. The extent to which secondary abstinence is feasible and can be included in the existing abstinence programs requires more research. The central question that needs to be addressed, for both primary and secondary abstinence, is whether abstinence is by choice or by design of the individuals, as opposed to the lack of opportunity to access partners or desired partners (McCauley et. al., 2004; and SebyayiMuwanga, et. al., 2006).

In Thailand, abstinence is usually regarded as preserving virginity and virtue. This is seen in the Thai phrase of "Rak Nuan Sa-gnuan Tua" (love and preserve your young and feminine body and self). As seen from the phrase, the focus of abstinence is placed on women. For men, abstinence is not regarded so much as virginity or virtue rather is typically promoted

in terms of a way of showing respect for women or as a means of STI and HIV prevention. In this regard, ideally abstinence should be defined as an intentionally abstaining from first sex, or spacing current sexual activities (for those who already have sexual experience before) for a period of time, abstaining from sex before marriage or living together, on purpose of preserving virginity, virtue, traditions, personal values and/or avoiding infectious diseases and HIV transmission. Both primary and secondary abstinence (abstaining first sex and subsequent sex respectively) will be discussed below.

Two Indicators of Primary Abstinence

Primary abstinence, or abstinence from first sexual intercourse, is measured by two indicators. These indicators, defined below, are gross primary abstinence and net (or real) primary abstinence,

Gross Primary Abstinence
Gross primary abstinence is defined as the percent of respondents who never had sex before marriage regardless of whether the abstinence is intentional or due to lack of sexual opportunities or inability to find sexual partners.

Net Primary Abstinence
Net primary abstinence is defined as the percent who never have sex before marriage among those who intended to remain abstinence for HIV prevention and intended not to choose to have safe sex as a means of HIV prevention. This indicator takes into account the intention of employing abstinence to avoid HIV infection, implying that current celibacy is intentional and not because of the lack of opportunities to have sex. Those who express an intention to rely on condoms to avoid HIV prevention are excluded from this primary abstinence measure since they are regarded as willing to have sex and that the reason of being celibate may be due to the lack of opportunity or lack of sexual partners.

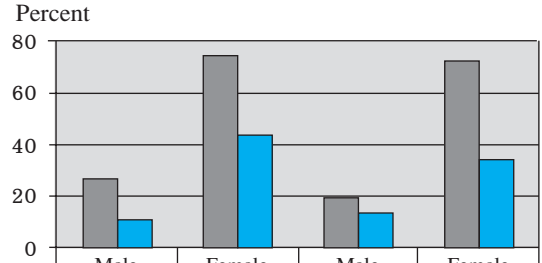
Practice of Primary Abstinence

The level of gross primary abstinence (percent never having sex among single people, either intentionally or not intentionally), it is shown in

Figure 1. The majority of women (70 percent) who are single and not living with someone, have not had sexual experience. The levels are much lower among men, with 27 percent of males aged 18-24 and 20 percent among males aged 25-59. It is assumed in this study that mean and women who have not had sex may practice abstinence intentionally or not intentionally. Some may not want to abstain from sex, but do not have opportunities for sexual experience. The high percentages, especially among single women, engaging in abstinence does not mean that all prefer to abstain. The net primary abstinence indicator is presented in the next section and this will provide information on the level of preferred abstinence.

Figure 2 Gross and Net Primary Abstinence: Percent of Single Persons Who Never Had Sex, and Percent Who Nwver Had Sex and Intendeb to Rely on Abstinence-only for HIV Prevention (rather than using condom or using abstinence in combination with condom)

Although abstinence seems to be high among single women, the practice is not all by intention



	Male 18-24	Female 18-24	Male 25-59	Female 25-59
Gross Primary Abstinence	26.9	74.4	19.9	72.7
Net Primary Abstinence	11.2	44.3	13.9	34.5

Source: Table 2

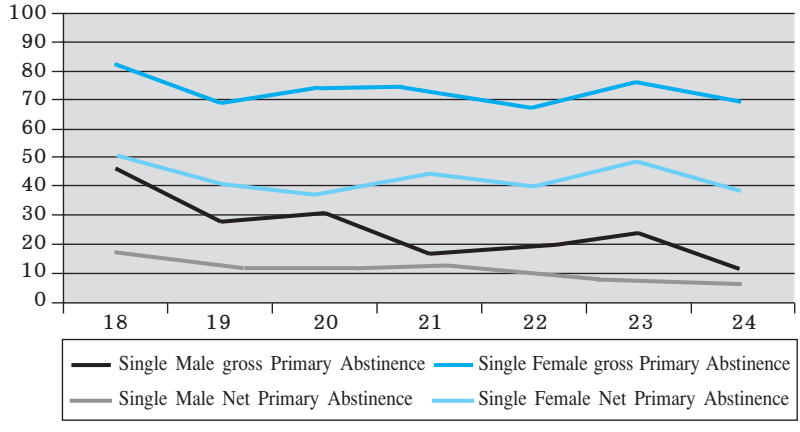
Figure 1 also shows the net primary abstinence by sex and age group. Among men, net primary abstinence is low, i.e., 11 and 14 percent among single men aged 18-24 and 25-59 respectively. It is interesting that as high as almost 90 percent of single men do not practice abstinence or celibacy, they either have already had sex (about 70 to 80 percent) or would prefer to have sex and use condoms to prevent HIV infection (about another 10 to 15 percent) than not to have sex. For single women, net

primary abstinence is 44 and 34 percent among the two age groups respectively. These figures are much lower than gross primary abstinence. Among all single women, about 25 to 30 percent already have sexual experience. Another 33 to 38 percent would choose to have safe sex for HIV prevention rather than abstain from sex. These celibate groups probably do not undergo abstinence by choice. As revealed in Figure 1, the net primary abstinence by choice is only about 44 percent for those aged 18-24 and 34 percent among the older group.

In this regard, campaigns for primary abstinence may not be worthwhile for single men but still may have some effect on a significant minority of single women. In general, abstinence campaigns for men and for women would probably have to be different programs and using different strategies. Because of this difference, however, gender-based stigmatization may increase. Women who are not abstinent, may be blamed more than men who are not abstinent.

Figure 3 Gross and Net Primary Abstinence among Single Young Men and Women Aged 18 to 24

Abstinence among single young people declines gradually by age. At age 24, almost all single men have had sex, about 30 percent of single women already have had sex, and another 30 percent of thme could potentially engage in sex



Source: Table 5

Figure 2 presents the gross and net primary abstinence for young single men and women age 18 to 24 by single years of age. For men, gross and net primary abstinence level off to very low levels by the time the men reach 24 years of age. As pointed out earlier, campaigns to prolong celibacy among single young men will be difficult and may not be needed. This compares with single women where the level of net primary abstinence remains at about 40 percent. Abstinence programs to encourage this group of women to keep their virginity until marriage may be possible but the consequences for gender issues and stigmatization will remain, since the program would be targeting only one sex.

The End of Primary Abstinence: First Sex

If primary abstinence is to be promoted, especially for women, the nature of first sex is important and needs to be investigated. According to the principle of abstinence, women should abstain from sexual relations until marriage. The extent to which the partner of first sex is a spouse or regular partner would, to some extent, signify the current prevalence of abstinence. If first sexual relations are non-marital the prevalence of abstinence until marriage is probably low.

Data in Figure 3 show that the majority of first sexual relations are not marital sex, (either registered or not registered). On the contrary, first sexual relations are mostly "casual", i.e., with boy friends or girl friends, lovers (referred to in Thai as "gigs"), friends, acquaintances, fiances, sex workers, strangers, and relatives. For men, first sex is almost universally non-marital, with 98 percent of young men aged 18-24, and 88 percent of the older generation of males reporting that first sex was non-marital. A very small number of men engage in abstinence until marriage, especially among the new generation of males.

Figure 4 Status of partner of first Sex: Percent of first Sex that is Non–Marital

The majority of first of younger generation women is not within marriage – The difference of generation

	Young People 18-24	Older Adults 25-59
Male	98.1	87.5
Female	65.8	27.1

Source: Table 6

For women, the prevalence of abstinence until marriage is much higher than among men. For women aged 25-59, only about 27 percent had first sex that was non-marital, therefore the majority of these women practiced abstinence until marriage. It is not surprising why abstinence initiatives are very popular in Thailand, especially among current policy makers who are mostly members of this older generation. However, when the younger women are observed, a marked difference is revealed, with the majority of first sex (66 percent) being non-marital.

This increase in the level of non-marital first sex among women probably signifies the very rapid change in Thai society regarding the sex behavior of women. The abstinence promotion program needs to take into account this magnitude of change in sexual behavior of the new generation. Since the majority of first sex is now not marital sex, the provision of sexual health services has to be much more proactive in addressing the HIV prevention needs of these young women. Reliance on an abstinence campaign alone will be very inadequate and risky.

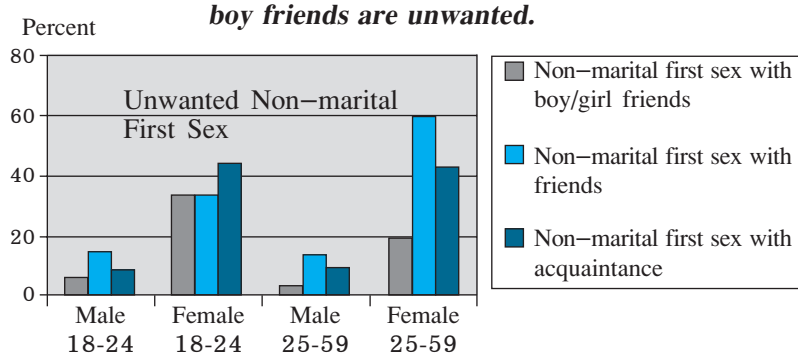
Non-Marital First Sex: Wanted or unwanted, and safe or not safe

If non-marital first sex is unwanted or unsafe the need for better sexual health services becomes even more pressing. Figure 4 shows that the level of non-marital first sex that is unwanted, unintended or forced, is

high, especially among women. For women aged 18-24, about one-third of non-marital first sex with boy friends and friends was unwanted. In contrast, among young and older men, the proportions of non-marital first sex that was unwanted are much lower, ranging from 3 to 15 percent.

Figure 5 Proportion of non–marital first sex being unwanted (unwanted, unintended or forced) among population aged 18-59, by age and sex.

For over one–third of younger women, first sex with their boy friends are unwanted.

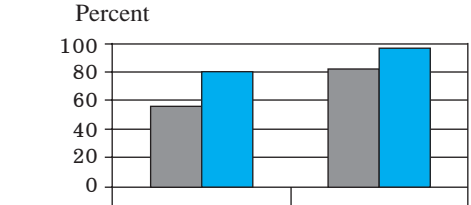


Source: Table 7

Figure 5 shows that non-marital first sex among all population groups was mainly unsafe. The non-marital first sex of the older cohort was the most likely to be unsafe, i.e., ranging from about 82 to 97 percent. For women aged 18-24, up to 80 percent of non-marital first sex was unsafe, while for young men aged 18-24 the percent was 57 percent. It is likely that young men are more prepared for their first sex than are young women. However, the majority of young men had unsafe sex at their first non-marital sex, indicating that even young men are still very vulnerable to HIV infection.

Figure 6 Proportion of non–marital first sex being unsafe (not using condom) among population aged 18-59, by age and sex.

First sex before marriage is significantly unsafe.



	Age 18-24	Age 25-59
Male	56.6	81.9
Female	80.3	96.5

Source: Table 8

Secondary Abstinence

Secondary abstinence refers to abstinence among those who already have had sexual experience but who abstain from having sex for a period of time. Usually the conventional definition covers one year. In this study, the percent of single persons who ever have sexual experience, but did not have sex in the past year is investigated. Again, the gross and net secondary abstinence are examined. The net secondary abstinence will take into account only those abstainers who also prefer abstinence for HIV prevention rather than having safe sex.

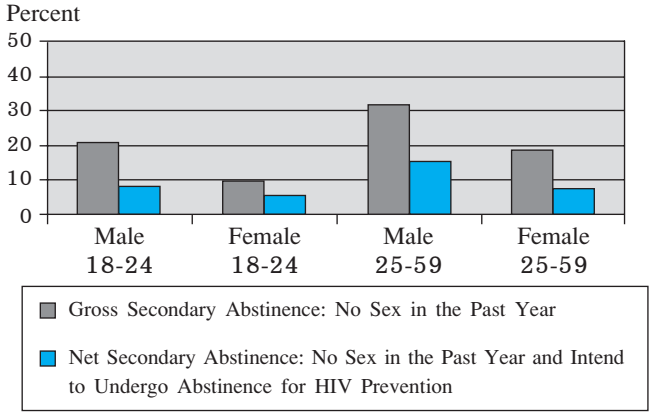
Single men and women who ever have had sex, abstained from sex in the past year to some extent. Among single men aged 25-59 who ever had sex, slightly over 30 percent did not have sex in the past year. This gross secondary abstinence is can be considered high. For younger men, slightly over 20 percent had similar behavior.

For women, it is interesting to note that secondary abstinence is lower than among men. Once women have sexual experience, they tend to continue having sex on a regular basis. Therefore secondary abstinence may be difficult to practice among these single women. Most of them tend to continue having sexual relations with their partner who tends to be only one person (Table 10). Single women seem to first engage in sex within

a committed relationship, and hence it would be difficult and perhaps not rational, to stop having sex within the relationship on the grounds of practicing secondary abstinence.

Figure 7 Gross and Net Secondary Abstinence: Percent Not Having Sex in the Past Year among Single Persons Who Ever Had Sex, and Percent Not Having Sex in the Past year and Intending to Rely on Abstinence–only for HIV Prevention

Net Secondary Abstinence is very low especially among single sexually active women.



Source: Table 9

Net secondary abstinence is shown by the percent not having sex in the past year and indicating reliance on abstinence-only for HIV prevention (rather than condom use or using abstinence in combination with condom use), among the single who ever had sex before by age. Again, in Figure 6, the extent of net secondary abstinence is shown. The level of secondary abstinence is found to be very low for both sexes and age groups. The levels are especially low among women of both younger and older groups. Only nearly 6 percent of young, single and sexually active women 18 - 24 can be considered as undergoing real secondary abstinence in the past year. The rest continued to have sex in the past 12 months (90 percent) or not having sex but probably unintentionally (4 percent). Policies to encourage single women who have ever had sex to undergo secondary abstinence may be problematic since these women probably have to choose between having a regular sexual relationship with their partner and breaking their relationship, especially since the relationship already has included sexual relations.

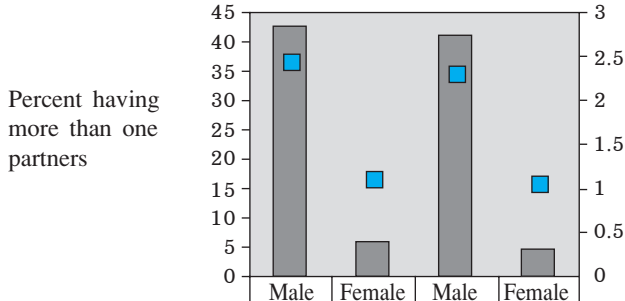
Being Faithful

Being faithful is measured at the gross level by the number of sexual partners of sexually active persons during the past 12 months. Being faithful can be investigated for all marital statuses, including the single population who has ever had sexual experience. The feasibility of advocating that single young people who are sexually active should reduce their sexual partners and be faithful is investigated here.

As seen from Figure 7, among single men who are sexually active, slightly more than 40 percent had more than one partner in the past year. The mean number of partners are 2.44 and 2.31 for younger and older single men respectively. In contrast, single but sexually active younger and older women have averages of only 1.12 and 1.06 partners respectively. The proportion of young women that have more than one partner is very low, i.e., only about 5 percent. Advocacy on "being faithful" or to reduce number of partners would have to take to account this large difference between men and women. Moreover, if single women do reduce the number of sexual partners while single men do not, gender disparity will be further increased and women will be more stigmatized.

Figure 8 Number of Sexual Partners during the past 12 months among single population aged 18-59 who ever had sex during the past 12 months, by age and sex.

Multiple partners are highly prevalent among single sexually active men but not among single sexuakky active wonen.



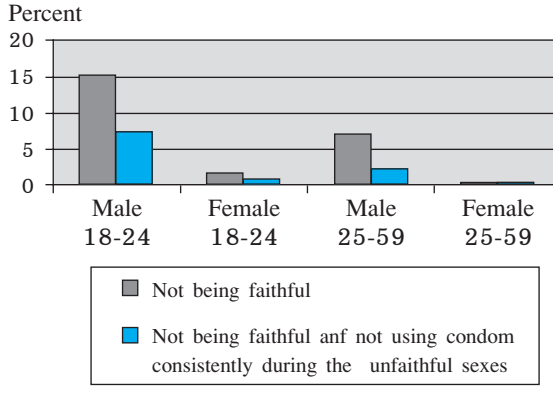
	Male 18-24	Female 18-24	Male 25-59	Female 25-59
Percent having more than one partner	42.7	6.1	40.9	4.7
Mean number of partner	2.44	1.12	2.31	1.06

Source: Table 10

In order to pursue the extent to which young men and women are being faithful in Thai society, Figure 7 presents the proportion of the sexually active population (single or married) who are faithful or not faithful to their partners i.e., having sex in the past year with someone other than a primary partner according to their respective marital status. The figure shows that the unfaithfulness is not prevalent among the older age cohort or among women. However, about 15 percent of men age 18-24 are not faithful to their partners. It should be also noted that half of these men (or about 7 percent) have unsafe sex when have sex that is defined as unfaithful. Among single men 18 - 24 who are sexually active, 18 percent are unfaithful (Table 11). Again about half of these men have unsafe sex.

Figure 9 Proportion of not being faithful and not using condom consistently during those unfaithful sexes, among sexually active population in the past year, aged 18-59, by age and sex.

About 15 percent of young men are not faithful to their partners and half of these men have unsafe sex.



Source: Table 6

Discussion

Findings related to the extent of abstinence, being faithful and condom use as prevention mechanisms have several implications for policy and for the feasibility of the ABC campaign in Thailand. Although abstinence seems to be high among single women, such practice is not all by intention. Primary abstinence is found to be much lower for women and almost negligible for men. The promotion of abstinence targeting on women

alone, although seemingly logical, may lead to stigmatization and increased bias against women. The gender disparity will increase. The new generation of women also differs greatly from their older counterparts. About 70 percent of older generation of women aged 25 - 59 were virgins at marriage, while the other approximately 30 percent had their first sex outside of marriage. Among the younger generation of women age 18-24 the opposite pattern is observed, with the dominant behavior being sex before marriage. A focus on abstinence-until- marriage program would be too naive and not feasible, especially when almost no men of the younger generation abstain from sex before marriage.

The presence of abstinence-until-marriage practice is also not supported by evidence. First sex is found largely non-marital and in many cases first sex is unwanted, unintended or forced, especially among women. The risks are also substantial since this sex is often unsafe sex.

Secondary abstinence is also found to be very low among women, especially among the new generation. Single women, once they have sexual relations with their partner, who is usually the only partner they have had, to stop having sexual relations with that partner on the ground of practicing secondary abstinence would be irrational to many since they are no longer virgins. These women have to rely solely on "being faithful" on the part of their partners, who in many cases are seen to have multiple partners. About 15 - 18 percent of their partners have other partners and one-half of these practice unsafe sex. The reliance on A and B and C in that sequence, seems to generate HIV risk especially for women. The changing behavior and context among the new generation is an important factor that is not in support of this conservative approach which seems to only fit the older generation.

To integrate ABC is therefore not as easy as "abc" as the words suggest. Advocates who try to introduce the three measures together or promote the introduction of condoms into a conservative society pretend and advise that the task should be as easy as "abc". But it is not. The casual notion of ABC, or the ABC that are actually functionally separated and overshadowed by abstinence-only should perhaps to be re-considered and corrected here. Based on our research, we propose that a "CAB" instead of ABC

approach may be more appropriate. That is to say, all persons have the right to access information and services related to condom use in the first place, and then they have their individual options of abstinence and being faithful at all times.

The answer to the question on how condom promotion should be implemented, at least at the same time and to the same level of effort as the traditional measures of abstinence and being faithful, is that it should be promoted rigorously and integrated with other measures rather than promoting A and B and C separately. The "long time no C" scenario in Thailand should be eliminated. The old saying of ABC: "try A first, if not possible, try B and if not possible, use C", as an integrated and comprehensive message may be workable in a conservative setting but the risks are still also significant. To be more effective and bold, the campaign should be the CAB scenario: "always think about safe sex, use C - but remember that you can always have choices of A and B at all times". The message of "try A and A only, if not possible you will be blamed and suffer the consequences," is not only näive, it is also dangerous.

Table 1 Current marital status and sexual experience among population aged 18-59, by age and sex.

Marital Status and Sexual	Male			Female		
	18-24	25-59	Total	18-24	25-59	Total
Unmarried and never had sex	21.5	3.6	7.3	35.2	5.7	11.5
Unmarried but ever had sex	58.4	14.4	23.5	12.1	2.1	4.1
Married (registered)	3.6	51.2	41.3	11.3	56.0	47.2
Married (not registered)	15.8	25.3	23.3	38.3	26.6	28.9
Widowed /divorced /separated by court order	0.7	5.6	4.6	3.1	9.6	8.3
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Weighted N	**613**	**2332**	**2945**	**611**	**2489**	**3100**
Unweighted N	**1512**	**1511**	**3023**	**1512**	**1510**	**3022**

Table 2 Sexual experience and preference on abstinence only for HIV prevention, among single population aged 18-59, by age and sex.

Sexual Experience and Preference on Abstinence only for HIV Prevention	Male			Female		
	18-24	25-59	Total	18-24	25-59	Total
Unmarried and never had sex	26.9	19.9	23.7	74.4	72.7	73.7
Choosing abstinence only	11.2	13.6	12.3	44.3	34.5	40.4
Not choosing abstinence only	15.7	6.2	11.3	30.1	38.1	33.3
Unmarried but ever had sex	73.1	80.1	76.3	25.6	27.3	26.3
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Weighted N	**490**	**418**	**908**	**289**	**194**	**483**
Unweighted N	**1248**	**301**	**1549**	**838**	**145**	**983**

Table 3 Preference for abstinence or condom use for HIV prevention among single persons who never had sex, aged 18-59, by age and sex.

Preference for methods for HIV Prevention	Male			Female		
	18-24	25-59	Total	18-24	25-59	Total
Prefer to use abstinence for HIV prevention	40.9	66.7	50.7	59.5	47.2	54.6
Prefer condom use for HIV prevention	52.3	32.1	44.6	31.6	35.2	33.1
Prefer both	4.5	0.0	2.8	8.8	10.6	9.5
Prefer neither				0.0	2.8	1.1
Not sure	1.5	0.0	0.9	0.0	0.7	0.3
DK	0.8	1.2	0.9	0.0	3.5	1.4
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Weighted N	**132**	**81**	**213**	**215**	**142**	**357**
Unweighted N	**335**	**593**	**928**	**39**	**91**	**130**

Table 4 Preference for abstinence over condom use for HIV prevention among young single persons who never had sex, by single year of age and sex.

Age	Male	Female
18 year	30.9	30.2
19 year	12.7	12.7
20 year	18.2	13.5
21 year	18.2	15.1
22 year	9.1	9.5
23 year	5.5	11.1
24 year	5.5	7.9
Total	**100.0**	**100.0**
Weighted N	**55**	**126**
Unweighted N	**145**	**351**

Table 5 Proportion of young single persons who never had sex and prefer to choose abstinence-only for HIV prevention, by single year of age and sex.

Sexual Experience and Preference on Abstinence only for HIV Prevention	18 years	19 years	20 years	21 years	22 years	23 years	24 years	Total
Male								
Unmarried and never had sex	46.1	28.1	30.8	16.9	18.8	23.8	11.1	27.2
Choosing abstinence only	16.7	12.3	11.0	13.0	10.4	6.3	5.6	11.4
Not choosing abstinence only	29.4	15.8	19.8	3.9	8.3	17.5	5.6	15.9
Unmarried but ever had sex	53.9	71.9	69.2	83.1	81.3	76.2	88.9	72.8
Total	100	100	100	100	100	100	100	100
Weighted N	102	57	91	77	48	63	54	492
Unweighted N	342	208	194	157	103	131	113	1248
Female								
Unmarried and never had sex	82.7	69.2	73.9	72.1	66.7	75.9	69.2	74.6
Choosing abstinence only	50.7	41.0	37.0	44.2	40.0	48.3	38.5	43.8
Not choosing abstinence only	32.0	28.2	37.0	27.9	26.7	27.6	30.8	30.6
Unmarried but ever had sex	17.3	30.8	26.1	27.9	33.3	24.1	30.8	25.7
Total	100	100	100	100	100	100	100	100
Weighted N	75	39	46	73	30	29	26	288
Unweighted N	265	142	115	109	76	68	63	838

Table 6 Proportion of first sex being marital or non-marital sex, among population aged 18 - 59, by age and sex.

First Sexual Partner	Male			Female		
	18-24	25-59	Total	18-24	25-59	Total
Marital sex	1.9	12.5	10.7	34.2	73.0	67.4
Spouse - registered	0.4	7.8	6.5	6.1	31.8	28.1
Spouse - had marriage ceremony but not registered	1.5	4.7	4.1	28.1	41.2	39.3
Non marital sex	98.1	87.5	89.3	65.8	27.0	32.6
Boy/girl friend	68.8	42.6	47.2	58.0	23.1	28.1
Friend	14.1	14.3	14.3	3.0	1.5	1.8
"Gik"	2.7	0.3	0.7	0.3	0.0	0.0
Acquaintance	8.7	10.8	10.5	2.3	1.5	1.6
Fiance	-	-	-	1.5	0.6	0.7
Sex worker	2.7	18.9	16.0	0.3	0.1	0.1
Stranger	0.8	0.5	0.5	0.3	0.2	0.2
Relative	0.2	0.1	0.1	0.3	0.0	0.1
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Weighted N	**481**	**2249**	**2730**	**395**	**2345**	**2740**
Unweighted N	**1175**	**1472**	**2647**	**917**	**1417**	**2334**

Table 7 Proportion of first sex wanted or unwanted among population aged 18 - 59, by whether first sex was marital or non-marital sex, and by age and sex.

First Sexual Partner	First sex being wanted or unwanted						
	Wanted	Not wanted	Not intended	Forced	Total	Weight N	Un-weight N
Male 18-24 Years							
Marital sex							
Spouse-registered	100.0	0.0	0.0	0.0	100.0	2	5
Spouse-had marriage ceremony but not registered	100.0	0.0	0.0	0.0	100.0	6	13
Non marital sex							
Boy/girl friend	93.9	0.6	5.2	0.3	100.0	330	801
Friend	85.3	2.9	11.8	0.0	100.0	68	177
"Gik"	92.3	0.0	7.7	0.0	100.0	13	29
Acquaintance	81.0	0.0	19.0	0.0	100.0	42	105
Fiance	-	-	-	-	-	-	-
Sex worker	84.6	0.0	15.4	0.0	100.0	13	30
Stranger	75.0	0.0	25.0	0.0	100.0	4	10
Relative	100.0	0.0	0.0	0.0	100.0	1	3
Female 18-24 Years							
Marital sex							
Spouse-registered	91.3	8.7	0.0	0.0	100.0	23	44
Spouse-had marriage ceremony but not registered	88.3	9.0	2.7	0.0	100.0	111	222
Non marital sex							
Boy/girl friend	66.2	7.9	18.9	7.0	100.0	228	575
Friend	66.7	8.3	16.7	8.3	100.0	12	33
"Gik"	50.0	0.0	0.0	50.0	100.0	2	2
Acquaintance	55.6	0.0	22.2	22.2	100.0	9	19
Fiance	50.0	-	33.3	16.7	-	6	13
Sex worker	100.0	0.0	0.0	0.0	100.0	1	1
Stranger	100.0	0.0	0.0	0.0	100.0	1	2
Relative	0.0	50.0	0.0	50.0	100.0	2	3

Table 8 Proportion of first sex wanted or unwanted among population aged 18 - 59, by whether first sex was marital or non-marital sex, and by age and sex.

First Sexual Partner	First sex being wanted or unwanted						
	Wanted	Not wanted	Not intended	Forced	Total	Weight N	Un-weight N
Male 25 - 59 Years							
Marital sex							
Spouse–registered	96.0	1.1	2.8	0.0	100.0	176	109
Spouse - had marriage ceremony but not registered	98.1	1.9	0.0	0.0	100.0	106	56
Non marital sex							
Boy/girl friend	96.9	0.6	2.5	0.0	100.0	957	615
Friend	86.6	3.1	10.2	0.0	100.0	322	201
"Gik"	100.0	0.0	0.0	0.0	100.0	7	5
Acquaintance	90.6	0.8	8.6	0.0	100.0	244	160
Fiance	-	-	-	-	-	-	-
Sex worker	92.5	2.1	3.8	1.7	100.0	424	319
Stranger	54.5	0.0	45.5	0.0	100.0	11	6
Relative	0.0	0.0	100.0	0.0	100.0	2	1
Female 25 - 59 Years							
Marital sex							
Spouse - registered	90.3	6.6	2.7	0.4	100.0	741	493
Spouse - had marriage ceremony but not registered	91.6	5.3	1.6	1.6	100.0	966	540
Non marital sex							
Boy/girl friend	80.4	3.9	12.6	3.1	100.0	541	328
Friend	40.5	5.4	35.1	18.9	100.0	37	22
"Gik"	-	-	-	-	100.0	-	-
Acquaintance	57.1	0.0	5.7	37.1	100.0	35	19
Fiance	21.4	50.0	28.6	0.0	-	14	6
Sex worker	100.0	0.0	0.0	0.0	100.0	2	1
Stranger	0.0	40.0	0.0	60.0	100.0	5	3
Relative	100.0	0.0	0.0	0.0	100.0	1	1

Table 9 Condom use at non-marital first sex among population aged 18-59, by whether first sex was wanted or unwanted, by age and sex.

Age and Sex	First sex being wanted or unwanted				
	Wanted	wanted	Not but no intention	Had it Forced	Total
Male 18 - 24	**43.7**	**50.0**	**40.5**	**0.0**	**43.4**
Weighted N	191	2	15	0	208
Unweighted N	450	4	32	1	487
Female 18 - 24	**17.3**	**18.2**	**30.8**	**28.6**	**19.7**
Weighted N	50	6	16	6	78
Unweighted N	134	16	48	15	213
Male 25 - 59	**17.7**	**28.1**	**22.9**	**0.0**	**18.1**
Weighted N	373	9	24	0	406
Unweighted N	225	4	14	0	243
Female 25 - 59	**3.4**	**2.3**	**6.6**	**3.4**	**3.5**
Weighted N	69	3	8	2	82
Unweighted N	39	2	2	2	45

Table 10 Number of sexual partners during the past 12 months among single population aged 18-59 who ever had sex, and preference for choosing abstinence - only for HIV prevention among those who had no sex in the past 12 months by age and sex.

Number of Partners and Preference for abstinence only	Male			Female		
Number of partners	18-24	25-59	Total	18-24	25-59	Total
No sexual intercourse	20.7	32.1	26.2	9.6	18.5	13.4
Choosing abstinence only	8.1	14.9	11.4	5.5	7.4	6.3
Not choosing abstinence only	12.6	17.3	14.8	4.1	11.1	7.1
One to five partners	73.2	64.6	69.0	90.4	81.5	86.6
Six partners and more	6.1	3.3	4.8	0.0	0.0	0.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Weighted N	**358**	**336**	**694**	**73**	**54**	**127**
Unweighted N	**911**	**261**	**1172**	**245**	**53**	**298**

Table 11 Number of sexual partners during the past 12 months among single population aged 18 - 59, who ever had sex during the past 12 months, by age and sex.

Number of partners	Male			Female		
	18-24	25-59	Total	18-24	25-59	Total
1	57.3	59.1	58.1	93.9	95.3	94.5
2	15.7	16.0	15.8	3.0	4.7	3.7
3	12.5	11.1	11.9	1.5	0.0	0.9
4	4.6	4.9	4.7	1.5	0.0	0.9
5	3.2	4.9	4.0	0.0	0.0	0.0
6	2.1	0.4	1.4	0.0	0.0	0.0
7	0.4	1.3	0.8	0.0	0.0	0.0
8	0.7	1.3	1.0	0.0	0.0	0.0
9	0.7	0.0	0.4	0.0	0.0	0.0
10	0.4	0.0	0.2	0.0	0.0	0.0
11	0.4	0.0	0.2	0.0	0.0	0.0
12	0.0	0.0	0.0	0.0	0.0	0.0
13	1.1	0.0	0.6	0.0	0.0	0.0
14	0.4	0.0	0.2	0.0	0.0	0.0
15	0.4	0.0	0.2	0.0	0.0	0.0
30	0.0	0.9	0.4	0.0	0.0	0.0
41	0.4	0.0	0.2	0.0	0.0	0.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Weighted N	**281**	**225**	**506**	**66**	**43**	**109**
Unweighted N	**752**	**191**	**943**	**225**	**43**	**268**
Mean number of partners	**2.44**	**2.31**	**2.38**	**1.12**	**1.06**	**1.09**

Table 12 Proportion of "faithful" and proportion of "not faithful" in the last year, among sexually active population during the past year, aged 18 - 59, by consistent condom use and by age and sex.

Number of partners	Male			Female		
	18-24	25-59	Total	18-24	25-59	Total
Among single						
Faithful	83.4	93.4	87.8	95.5	97.7	96.4
Not faithful	16.6	6.6	12.2	4.5	2.3	3.6
Use condom consistently	8.1	4.8	6.7	1.5	0.0	0.9
Not use condom consistently	8.5	1.8	5.5	3.0	2.3	2.7
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Weighted N	**283**	**227**	**510**	**66**	**44**	**110**
Unweighted N	**752**	**191**	**943**	**225**	**43**	**268**
Among marriage						
Faithful	87.8	93.1	92.8	99.0	99.8	99.7
Not faithful	12.2	6.9	7.3	0.9	0.2	0.3
Use condom consistently	7.3	4.5	4.7	0.3	0.0	0.0
Not use condom consistently	4.9	2.4	2.6	0.6	0.2	0.3
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Weighted N	**123**	**1837**	**1960**	**314**	**2083**	**2397**
Unweighted N	**262**	**1157**	**1419**	**655**	**1195**	**1850**
All						
Faithful	84.7	93.0	91.7	98.2	99.7	99.5
Not faithful	15.3	7.0	8.3	1.8	0.3	0.5
Use condom consistently	7.9	4.6	5.1	0.8	0.0	0.1
Not use condom consistently	7.4	2.4	3.2	1.0	0.3	0.4
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Weighted N	**406**	**2066**	**2472**	**381**	**2127**	**2508**
Unweighted N	**1014**	**1348**	**2362**	**880**	**1238**	**2118**

Note: Being faithful is defined by matching marital status and status of up to five sexual partners during the previous year.

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COVERAGE AND SUCCESS OF THE NATIONAL MASS MEDIA PROGRAMME ON HIV AND AIDS PREVENTION

Varachai Thongthai
Malee Sabaiying

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COVERAGE AND SUCCESS OF THE NATIONAL MASS MEDIA PROGRAMME ON HIV AND AIDS PREVENTION

Varachai Thongthai
Malee Sabaiying

The National Mass Media Programme on HIV and AIDS Prevention was part of the AIDS Policy launched by the National AIDS Prevention and Control Committee, the Office of the Prime Minister in 1991. It aimed to provide generic information about HIV and AIDS through the mass media. The information on HIV/AIDS, emphasised how HIV was transmitted and how infection could be prevented. The messages were aired every hour on radio and television stations nationwide, and published in newspapers and magazines (UNDP 2004).

It was reported that nine-tenths of those exposed to television had received HIV and AIDS information whilst more than half received information from radio and about one-third from newspapers and magazines (Thongthai and Pitakmahaket 1994). With the 100 percent Condom Programme, targeted at sex workers and their clients, and strong support from the government through allocation of financial resources to fund prevention efforts, the number of new cases of HIV and STIs began to decline. However, in 1997, Thailand faced a financial crisis. The government had to cut back the HIV and AIDS budget, including mass media campaign.

It is not clear what influence the reduction in the HIV and AIDS budget had on the changing the extent to which the mass media was able to provide HIV and AIDS information. Therefore in this chapter we will examine the extent to which people have been exposed to mass media messages about HIV and we will investigate the association between HIV and AIDS knowledge and exposure to mass media.

Exposure to mass media

Mass media are in many types and forms. It can be in a form of printed materials such as newspaper, magazine, and pamphlet, which require that target audiences are able to read. Television and radio, however, are the form of mass media that do not require such ability. The latest form of mass media is the internet, which requires computer literacy besides the ability to read and write. With these different kinds of requirement, levels of exposure to mass media vary among types. In this chapter we focus our discussion on the four main forms of mass media in terms of providing information on HIV and AIDS namely television, radio, newspaper and magazine.

The form of mass media most frequently accessed was television, which nearly all respondents had been exposed to (98 percent). Radio was the second most frequently accessed (85 percent), followed by newspaper (79 percent) and magazine (56 percent) (cited Report 1). These patterns of exposure are consistent with ease of use.

In term of frequency of exposure, the patterns were similar to the percent exposed. The largest proportion of respondents watched television every day. Radio was second, with respondents who listen to radio every day approximately half the size of the percent watching television. Other mass media were accessed on a more irregular basis (cited Report 1).

In comparison with the results from over a decade ago (1993), the level of exposure to mass media has increased. However, the pattern of exposure has not changed. Television was also the most form of mass media accessed by the largest proportion of the population in 1993, followed by radio, newspaper, and magazine (see Table 12.1).

Table 1 Percentage of respondents exposed to mass media and percent who received HIV/AIDS information, by type of mass media, 1993 - 2006

Type of mass media	Exposure		Received information	
	1993	2006	1993	2006
Television	94.7	98.4	91.3	87.7
Radio	68.0	84.8	52.4	41.3
Newspaper	44.9	78.6	35.9	24.2
Magazine	28.5	56.2	-	6.4

Notes: Magazine was included with newspaper in 1993.
Sources: 1993 from Thongthai and Pitakmahaket 1994
2006 from Chamratrithirong et al. 2007

Differentials in exposure to mass media

Males and females were similar in terms of exposure to television. However, males tended to have more exposure to radio and newspaper than their female counterparts (89 percent for males and 81 percent for females in case of radio, and 84 percent for males and 73 percent for females in case of newspapers). In contrast, a larger proportion of female respondents read magazines than did male respondents (60 percent and 52 percent, respectively) (Chamratrirong et al., 2007).

With the exception of television, a higher proportion of youth respondents were exposed to all forms of mass media compared to their adult counterparts (cited Report 1). Since almost all respondents were exposed to television, there was no difference in the proportion exposed to television.

The place of residence had little association with the proportion exposed to the various forms of mass media, especially television and radio. For newspapers and magazines, Bangkok residents had the highest proportion of readers, followed by other urban residents and rural residents (Chamratrirong et al., 2007).

HIV and AIDS information in mass media

Television remained the major source of HIV and AIDS information, followed by radio and newspaper. However, the role of mass media in providing information on HIV and AIDS was less pronounced than a decade ago (see Table 1). The proportion of respondents receiving HIV and AIDS information from mass media was higher in 1993 for all types of mass media. The decreasing in the proportion of respondents obtaining information about HIV and AIDS from the media is in contrast to the increase in the proportion of the population exposed to the various types of media.

Therefore, it can be concluded that the coverage of mass media has increased as more people are exposed to mass media. But they are now less likely to receive information on HIV and AIDS from the mass media.

Roles of radio and television in providing HIV and AIDS information

There were only three types of mass media that are accessed by the majority of the population, namely television, radio, and newspaper. However, only one-fourth of respondents reported that they received HIV and AIDS information from newspapers in the last 12 months as compared to 41 percent who received information from radio and 88 percent who received information from television. Therefore in the following section we will focus on the role of television and radio in providing HIV and AIDS information in the last 4 weeks before the interview.

It can be said that recalling of hearing or seeing any type of information or advertisement depends on whether that information or advertisement appeals to the listeners or viewers. No matter how often the information or advertisement is distributed, audiences will remember only those that are appealing to them. Therefore, the frequency of receiving HIV and AIDS information may imply the appeal of such HIV and AIDS information. It should be noted here that the frequency of receiving HIV and AIDS

information from television or radio is only based on the respondents perception. Whilst in fact, the broadcast of HIV and AIDS information is less frequent than it is reported.

Although most people listen to radio or watch television every day, they seldom receive HIV and AIDS information every day. The majority of respondents stated that they received HIV/AIDS information less than once a week from both radio and television. However, they tended to get information more frequently from television as compared to radio (see Table 12.2). Therefore, it could be argued that HIV and AIDS information from television was more appealing to the audiences than radio.

Table 2 Percentage distribution of respondents by frequency of receiving HIV/AIDS information in the last 4 weeks from mass media, type of mass media and sex, 2006

Sex / Type of media	Frequency of receiving HIV/AIDS information					Total	(Cases)
	Every day	Nearly everyday	Once a week	Seldom	Never		
Total							
Television	0.8	13.7	24.0	33.3	28.3	100.0	(6,048)
Radio	0.5	5.1	10.6	23.0	60.8	100.0	(6,048)
Male							
Television	0.5	15.6	27.4	30.7	25.8	100.0	(3,024)
Radio	0.4	4.2	12.8	25.0	57.6	100.0	(3,024)
Female							
Television	1.0	11.8	20.6	35.8	30.8	100.0	(3,024)
Radio	0.6	6.0	8.4	21.0	64.1	100.0	(3,024)

The pattern of frequency of receiving HIV and AIDS information was similar for male and female respondents (see Table 2). This similarity was also observed for different age groups (Chamratrirong et al., 2007).

In term of residence, television messages were more appealing to rural residents, followed by urban residents, and least to Bangkok residents. However, HIV and AIDS information from radio appealed to the general population regardless place of residence (Chamratrirong et al., 2007).

Correlates of receiving HIV and AIDS information from television and radio

The popularity of television and radio in dissemination of AIDS information is not in dispute here. However, in order to effectively deliver HIV and AIDS information to the general population, knowledge of the target audiences is essential. Logistic regression analysis is employed to elicit this information.

The dependent variable in the logistic regression estimated is frequency of receiving HIV and AIDS information from television or radio in the past 4 weeks before the time of interview. The answers were in five categories: receiving information every day, a few times a week, once a week, a few times in four weeks, and never received. For the analysis, the answers were grouped into two categories: ever received HIV and AIDS information and never received HIV and AIDS information. The independent variables in both models were age, sex, marital status, educational attainment, occupation, place of residence, and exposure to radio or television.

The independent variables included in the radio model had more explanatory power than television model (R-square equals 0.1421 and 0.0398, respectively). This finding was as expected, as only 85 percent of respondents were exposed to radio, but nearly everyone exposed to television. However, not all independent variables included in both models were significantly related to the probability of receiving HIV and AIDS information. Moreover, the magnitudes of effects were also different between the two models.

It is shown in Table 3 that sex, marital status, educational attainment, occupation, place of residence, and exposure to television were significantly related to the odds of receiving HIV and AIDS information from television. The table also shows that sex, educational attainment, place of residence, and exposure to radio were significantly related to the odds of receiving HIV and AIDS information from radio.

Table 3 Odds ratio of independent variables on receiving HIV and AIDS information recently from television and radio, 2006

Independent variables	Television	Radio
Youth (ref: Adult)	1.0428	0.8904
Male (ref: Female)	1.4281 **	1.1706 *
Marital status (ref: Never have sex)		
Single	0.9174	0.8578
Register	1.1391	1.0839
De facto	1.2584 *	1.0552
Widow/ divorce	1.1933	0.8920
Education (ref: Elementary)		
Secondary	1.2312 *	1.1201
High school	1.4445 **	1.2254 *
College	1.6874 **	1.2139
Occupation (ref: Agriculture)		
Non-agriculture	1.2277 *	1.1289
Housewife	1.2132	0.9153
Student	1.1400	1.1472
Not working	1.0963	0.9634
Residence (ref: Bangkok)		
Urban	0.8573 *	1.2554 **
Rural	0.7992 **	1.2664 **
Exposure (ref: Never)		
Everyday	6.0516 **	18.1452 **
Nearly everyday	4.3528 **	13.5365 **
Once a week	1.9306 *	7.7166 **
Seldom	1.7776	5.1714 **
R-square	0.0398	0.1421
N	6,048	6,048

* significant at 0.05 level

** significant at 0.01 level

Age had no relationship with receiving HIV and AIDS information from either television or radio. However, males tended to receive HIV and AIDS information more often than did females from both television and radio. Males had odds of receiving HIV and AIDS information that were 1.4 times higher than that of females (odds ratio = 1.4281). Males also had odds that were 1.2 times than those for females for receiving HIV and AIDS information from radio (odds ratio = 1.1706).

Martial status had some effects in receiving HIV and AIDS information from television but not radio. As shown in Table 12.3, respondents who were married but the marriage was not registered had odds of receiving HIV and AIDS information that were 1.3 times higher than that of respondents who never had sexual experience. For other marital statuses, the odds were not statistically significant from the reference category.

Educational attainment affected the odds of receiving HIV and AIDS information from both television and radio. For television, the higher the level of education the higher the odds of receiving HIV and AIDS information. For radio, only respondents who finished a high school level of education had significantly higher odds (1.2 times) of receiving HIV and AIDS information when compared with respondents who completed only an elementary level of education (see Table 12.3).

Occupation was related to the probability of receiving HIV and AIDS information from television but not from radio (see Table 12.3). Respondents who worked in the non-agricultural sector had odds of receiving HIV and AIDS information form television that were 1.2 times higher than the odds of respondents who worked in the agricultural sector receiving information.

Place of residence was related to receiving HIV and AIDS information from both television and radio. The odds of receiving HIV and AIDS information from television were significantly higher for Bangkok residents compared to other urban and rural residents. In contrast, the odds of receiving HIV and AIDS education was lower for Bangkok residents that it was for other urban and rural residents. As shown in Table 3, the odds of urban residents receiving HIV and AIDS information from

television were 14 percent less than those of Bangkok residents, and rural residents had odds that were 20 percent less than those of Bangkok residents. Meanwhile both other urban and rural residents have higher, and similar, odds or receiving HIV and AIDS information when compared to Bangkok residents (1.3 times higher).

Obviously, exposure to television increases the odds of receiving HIV and AIDS information from television, and exposure to radio increases the odds of receiving HIV and AIDS information from radio (see Table 12.3). Therefore, the higher the frequency of exposure, the higher the odds of receiving HIV and AIDS information.

In sum, HIV and AIDS information from television or radio was accessed by different sub-populations. Those most likely to obtain information on HIV and AIDS information from television were male, married but not registered, had an education level higher than elementary level, worked in the non-agriculture sector, lived in Bangkok, and frequently watched television. Those most likely to get HIV/AIDS information from radio were male, had a high school level of education, lived outside Bangkok, and frequently listened to radio.

Knowledge of HIV and AIDS

Since AIDS has been in Thailand for more than two decades, the knowledge of HIV and AIDS is high in the general population (cited Report 1). However, it is not clear to what extent the mass media campaign has had an effect on HIV and AIDS knowledge.

There are two types of knowledge about HIV and AIDS. The first type relates to the risk of infection and the second relates to no risk of infection. In this survey, respondents were asked eleven questions, of which five questions related to risk of infection and six questions related to no risk of infection.

Knowledge is divided into three variables according to the type of question (risk or no risk) and overall knowledge. Each variable has five levels: least, less, moderate, more, and most. For all three variables, most is the

level at which all questions are answered correctly. More is the level that only one answer is answered incorrectly, and moderate is the level that two answers are incorrect. For risk and no risk variables, least knowledge is equal to no knowledge as all answers are wrong. Therefore, less knowledge in the risk variable means that there are one or two correct answers. Likewise, less knowledge in the no risk variable means that there are up to three correct answers.

Since there is less than one percent of respondents who gave incorrect answers in either the risk or no risk questions, least knowledge in the overall variable does not mean no knowledge at all. Less knowledge in the overall variable is a category of eight correct answers, therefore, those who give up to seven correct answers will fall into the least knowledge category.

It can be seen in Table 4 that respondents have more knowledge of risk than of no risk. Two-thirds of respondents correctly answered all risk questions as compared to only one-third of no risk. Overall, nearly one-fourth of respondents have full knowledge of HIV infection.

Table 4 Percentage distribution of level of HIV and AIDS"s knowledge by types, 2006

Level of knowledge	Risk	No risk	All
Least	0.1	0.6	14.0
Less	4.1	17.3	14.3
Moderate	6.3	18.9	21.0
More	21.9	29.3	27.4
Most	67.6	33.8	23.3
Total	**100.0**	**100.0**	**100.0**

The higher knowledge of risk than not risk is also demonstrated in the mean score. The mean score of risk is 4.5 out of 5 score but the mean score of no risk is only 4.7 out of 6 (see Table 5). Meanwhile, males tend to have higher knowledge of HIV infection than do females, as shown by higher overall score of males than females (9.5 and 8.9, respectively). This higher overall score comes from the knowledge of no risky, whilst the knowledge of risk is similar for males and females.

Table 5 Mean score of HIV/AIDS knowledge by type of sex and sex of respondent, 2006

Sex	Risky	Not risky	All
Male	4.5	5.0	9.5
Female	4.5	4.4	8.9
Total	**4.5**	**4.7**	**9.2**

Middle age persons tend to have more knowledge than the youngest and oldest respondents (see Table 6). Persons aged 25-39 year old have the highest score of overall knowledge, followed closely by age group 20-24. The youngest (18-19 years old) and the oldest (40-59 years old) have the same lowest score. This pattern of knowledge is the same for both males and females (see Table 6).

Table 6 Mean score of AIDS knowledge by age group and sex, 2006

Age	Male	Female	All
18-19	9.3	8.7	9.0
20-24	9.6	9.1	9.3
25-39	9.7	9.2	9.4
40-59	9.4	8.6	9.0
Total	**9.5**	**8.9**	**9.2**

Roles of television and radio in HIV and AIDS knowledge

It appears that mass media campaigns, especially on television and radio, do not have any relationship with levels of HIV and AIDS knowledge. Respondents who were never or hardly ever exposed to HIV and AIDS information from television and radio have the same overall knowledge scores as those who were exposed every day or nearly every day (see Table 7) This pattern is also observed when the data are broken down by type of knowledge.

Table 7 Mean score of HIV/AIDS knowledge by type and exposure to mass media, 2006

Level of Exposure	Television			Radio		
	Risk	No risk	All	Risk	No risk	All
Every day	4.4	4.4	8.8	4.7	4.6	9.3
Almost	4.5	4.8	9.3	4.4	4.6	9.0
Once a week	4.5	4.7	9.3	4.5	4.8	9.3
Hardly	4.5	4.6	9.2	4.5	4.7	9.3
Never	4.5	4.6	9.2	4.5	4.7	9.2
Total	**4.5**	**4.7**	**9.2**	**4.5**	**4.7**	**9.2**

Other sources of HIV and AIDS knowledge

Besides receiving HIV amd AIDS information from the mass media, respondents were asked about other sources of HIV and AIDS information. Information received face-to-face was obtained from doctors, nurses, public health officers, AIDS volunteers, office mates, friends, relatives, and family members. Other means of obtaining HIV and AIDS information was through classes, group discussion, personal counseling, campaign, and drama. However, apart from two of these sources, all others provided HIV and AIDS information to less than 10 percent of respondents. The sources that provideed information to more than 10 percent of respondents, are public health personnel (12 percent) and participating as a participant in classes - i.e. teaching, training or lecture session (18 percent) (Chamratrirong et al., 2007).

Respondents were also asked whether they had talked about AIDS with the following persons in the four weeks prior to the interview: family members, friends, office mates, acquaintances, training participants, teachers, employers, and AIDS workers. There are only three groups where more than 10 percent of respondents had talked about AIDS. They are family members (17 percent), friends (28 percent), and acquaintances (14 percent) (Chamratrirong et al., 2007).

As we are concerned about the recent experience of receiving HIV and AIDS information, the other means of HIV and AIDS knowledge that will be investigated are family members, friends, and acquaintances. Two logistic regression models are employed. The dependent variable in both models is based on the overall HIV and AIDS knowledge score, with scores of 10 and 11 categorized as good knowledge, and the remaining scores of 9 and less categorized as moderate knowledge. The independent variables in both models are age, sex, marital status, educational attainment, occupation, place of residence, and recently receiving HIV and AIDS information from television and from radio. In the second model, recently talking about AIDS with family member, friend, and acquaintance are added.

In the first model, variables that are significantly related to HIV and AIDS knowledge are age, sex, educational attainment and occupation (see Table 12.7). Youth have odds of have good knowledge of HIV and AIDS that are 19 percent less than those of adulฑt. Male have odds that are two times higher than those of females in terms of being HIV and AIDS knowledgeable person. The higher the level of education the more knowledgeable about HIV and AIDS. A housewife has odds of being knowledgeable about HIV/AIDS that are 1.3 times higher than those for persons working in the agricultural sector. It should be noted that recently receiving HIV and AIDS information from television or radio, does not have a significant relationship with knowledge on HIV and AIDS.

Table 8 Odds ratio of independent variables on HIV and AIDS knowledge, 2006

Independent variables	Model 1	Model 2
Youth (ref: Adult)	0.8111 **	0.8152 **
Male (ref: Female)	2.0503 **	2.0733 **
Marital status (ref: Never have sex)		
Single	1.1140	1.1100
Register	1.1057	1.0738
De facto	1.0552	1.0351
Widow/ divorce	1.0413	1.0256
Education (ref: Elementary)		
Secondary	1.4591 **	1.4548 **
High school	1.8278 **	1.8130 **
College	2.3532 **	2.3541 **
Occupation (ref: Agriculture)		
Non agriculture	1.0655	1.0649
Housewife	1.3429 **	1.3461 **
Student	1.0649	1.0635
Not working	1.1404	1.1380
Residence (ref: Bangkok)		
Urban	0.9656	0.9637
Rural	0.9189	0.9173
Television (ref: Never heard)	0.9208	0.9121
Radio (ref: Never heard)	1.0298	1.0206
Family (ref: Not talking)	-	1.2592 **
Friend (ref: Not talking)	-	0.9949
Acquaintance (ref: Not talking)	-	0.9139
R-square	0.0504	0.0518
N	6,036	6,036

** significant at 0.01 level

When three additional variables are added in the second model, the situation described above does not change. The significant variables remain the same as does the magnitude of the effects. However, only talking to a family member is significantly related to HIV and AIDS knowledge.A person who has recently talked with a family member about AIDS, has

odds of being a knowledgeable person about HIV and AIDS that are 1.3 times higher than a person who has not (see Table 8).

In summary, persons who tend to have good knowledge of HIV and AIDS are older, male, have higher education, and are a housewife. Moreover, a knowledgeable person is one who has recently talked about AIDS with a family member. In other words, family members could be another good source of HIV and AIDS information.

Correlation between knowledge and risk behaviour

Risk behaviour is defined here as sexual experience in the previous 12 months with persons than a spouse and not involving the use of a condom. Approximately 14 percent of the population is defined as having engaged in risk behaviour based on this definition. The proportion of males with risk behaviour is more than four times higher than that of females (22 percent of male and 5 percent of female). The younger the person the higher the level of risk behaviour. This pattern is observed for both sexes (see Table 9).

Table 9 Percent of population who engaged in risk behaviour by age group and sex, 2006

Age	Male.	Female	All
18-19	33.0	11.6	22.5
20-24	35.0	8.4	21.6
25-39	16.5	1.0	9.1
40-59	4.8	0.6	2.6
Total	**22.3**	**5.2**	**13.8**

When comparing AIDS knowledge (see Table 6) with risk behaviour, no clear relationship between the two is apparent. Higher knowledge does not translate into less risk behaviour. Males who have higher knowledge than females tend to be more risk behaviour than females. However, middle age persons, both male and female, who have the highest knowledge scores tend to have lower risk behaviour (see Table 6 and 9).

Hearing about HIV and AIDS from the mass media may influence behaviour. Two logistic regression models are employed to measure the relationship between AIDS information and risk behaviour. The independent variables in the first model are age, sex, marital status, educational attainment, occupation, residence, and AIDS information (receiving AIDS information from television, radio, newspaper, and pamphlet). AIDS knowledge is added in the second model.

Table 10 presents the odds ratio of independent variables on the risk behaviour of the two models. These two models appear to have more explanatory power than previous models (R-square equal 0.1841 and 0.1846). All variables included in the model are significantly related to risk behaviour with the exception of AIDS information (see model 1). Moreover, AIDS knowledge does not have a relationship with risk behaviour (see model 2).

Table 10 Odds ratio of independent variables on risk behaviour, 2006

Independent variables	Model 1	Model 2
Age (ref: 40-59)		
18-19	2.8186 **	2.8200 **
20-24	3.4158 **	3.4225 **
25-39	2.0027 **	1.9978 **
Male (ref: Female)	4.3215 **	4.3495 **
Marital status (ref: divorce/widow)		
Single	1.1275	1.1215
Married	0.1523 **	0.1510 **
Education (ref: Elementary)		
Secondary	1.5570 **	1.5586 **
High school	1.5832 **	1.5916 **
College	1.5858 **	1.5983 **
Occupation (ref: Agriculture)		
Non agriculture	1.0823	1.0871
Housewife	0.3859 *	0.3923 *
Student	0.9130	0.9165
Not working	1.1512	1.1566
Residence (ref: Bangkok)		
Urban	0.8742	0.8707
Rural	0.6331 **	0.6318 **
Television (ref: Never heard)	0.9817	0.9755
Radio (ref: Never heard)	0.9875	0.9958
Newspaper (ref: Never heard)	0.9473	0.9503
Pamphlet (ref: Never heard)	1.0797	1.0830
AIDS knowledge (ref: Most)		
Least		0.9131
Less		1.1691
Moderate		0.9028
More		0.9401
R square	0.1841	0.1846
N	6,027	6,027

** significant at 0.01
* significant at 0.05

Males have odds of engaging in risk behaviours that are four times higher than those of females. Younger persons are more likely to engage in risk behaviours than are older persons. Married persons are less likely to be involved in risk behaviour than are the unmarried. Those who have education higher than the elementary level have odds of engaging in risk behaviour that are one and a half times higher than those of persons with only an elementary level of education. Housewives have the lowest odds of being involved in risk behaviour. Persons living in rural areas are less likely to practice risk behaviour than persons living in other areas (see Table 10).

In summary, there is no relationship between knowledge and risk behaviour. Risk behaviour is determined primarily by demographic and socio-economic factors. Moreover, AIDS information in the mass media has no relationship with risk behaviour.

Conclusion

Increasingly people have access to the mass media, namely television, radio, newspaper, and magazine. Television and radio are the most frequently accessed form of mass media. Only 15 percent never watch television and only two percent never listen to the radio. It is substantial decrease from a decade ago, especially for television. However, even though people are more likely to access the mass media now, compared to a decade ago, they are less likely to receive information on HIV and AIDS from television and radio.

Those most likely to obtain HIV and AIDS information from television are male, married but not registered, have an education level higher than the elementary level, are working in the non-agricultural sector, living in Bangkok, and frequently watch television. Those most likely to get HIV and AIDS information from the radio are male, have a high school level of education, are living outside Bangkok, and frequently listen to the radio.

In general, the level of HIV and AIDS knowledge is high. Nevertheless, knowledge on the risks of becoming infected are higher than knowledge of the means of not becoming infected. The misunderstanding of the means that are not risk factors for infection could cause discrimination against people with HIV and AIDS. Males have slightly more knowledge than females. Although HIV and AIDS information received from television or radio has little relationship with HIV and AIDS knowledge, family members are another good source of HIV and AIDS information.

AIDS knowledge has no relationship with risk behaviour. Likewise, HIV and AIDS information from the mass media has no effect on risk behaviour.

A decline in the coverage of the National Mass Media Program on HIV and AIDS prevention has been observed between 1994 and 2006. The following recommendations are made to increase coverage.

Recommendations

1. There is still room to emphasise knowledge of the means that will protect against the risk of becoming infected with HIV .
2. Contents of HIV and AIDS information should be oriented towards females, those with less education, rural dwellers and those working in the agricultural sector.

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IMPLEMENTATION STRATEGIES: MASS MEDIA AND ADOLESCENTS' RISK BEHAVIORS

Youngyud wongpiromsan
Sirinan Kittisuksathit

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All risk behaviors of teenagers including those related to sexual factors, drugs, and excitement searching behaviors such as gambling, motorcycle racing, can be viewed as learning experiences in which the learning process leads to risk behaviors. Many of the influences that lead to young people to engage in risk behavior come from the media and their friends.

To understand how young people learn self-control during their teenage years, we must understand the nature of each age period. The latest work on teenage brain development indicate large changes around the prefrontal lobe area of teenagers (for girls aged around 11 years old and for boys at around 12 years of age). This part of the brain has a duty in maintaining self-control. In this stage, prefrontal lobe area develops enormous nerve fibers linking to each other without[S1] making orders of myelinization. Thus, it is not strange that teenagers will feel confused and frustrated at these ages.. The next process involves a reordering of nerve fibers. Basically, if there are any nerve fibers that have no functions, they will be pruned and gradually disappear, and if any nerve fibers have been used often (through learning), they will become thicker and form their myelinization. The reordering of nerve fibers of the prefrontal lobe area continues until the ages of 20-25 years old.

Viewing the learning process from the changes occurring inside the teenage brain, and linking this process with their behaviors, we can conclude that teenagers will face both threats and opportunities in learning about self-control. This is a period when teenagers have to make decisions and consider outcomes[S2]. In terms of threats, there will be two characteristics as follows:

1) Having no learning means their nerve fibers have been pruned and disappeared because the teenagers have never learned how to control themselves or how to make decisions. Factors related to support and understanding from their family, school, media, environment and other social influences encourage them to learn in accurate ways.
2) Misleading learning results from the forming of thick nerve fibers that develop the wrong myelinization. The wrong myelinization results in having experience of various risk behaviors. Research in alcoholism in adults, suggests that addiction usually originates from a habit of heavy drinking during teenage years. Other risk behaviors such as speeding when driving, gambling, are also developed during the teenage years. In the same way, sexual risk behaviors of teenagers can be seen to result from misleading learning and interpretation of incorrect value (such as focusing on their sexual appearances, having one night stand affairs) and the search for excitement without regard to values. Risky sexual behaviors are linked to excitement in both the normal media and underground media.

Media can be both dangerous and beneficial to the learning process of teenagers. Incorrect interpretations of media messages can result in copying inappropriate behaviors and expose young people to risk behaviors without self-control. On the other hand, appropriate media messages are an important way for teenagers to engage in accurate and appropriate learning, that results in teenagers knowing themselves and understanding others. This promotes pride in teenagers and develops creativity and a

sensed of responsibility for society. Furthermore, appropriate media messages can develop in teenagers a capability in decision making and problem solving, help them build meaningful relationships, and developing the skills to judge what is appropriate media content. Through access to appropriate media messages, teenagers can learn how to manage their emotions and their stress, which we call a life skill/life immunity or strength of mind.

We can summarize the important strategies regarding media and teenagers in three phrases: elimination of negative aspects of the media; expansion of positive aspects; and building life immunities.

Strategy of elimination on negative media

Eliminating negative aspects of mass media does not mean prohibiting teenagers from accessing media, but it does mean decreasing opportunities to access the negative influences in media. In general, there will be laws and regulations to control negative media. But sometimes the laws and regulations may fail, due to lack of control by the offices who apply the regulations. Sometimes, the regulations may not be comprehensive enough to control negative influences, and this type of media can proliferate in the "grey area", for example, pornographic media and the "black area" media, where the media presents violence in sex with various types of unusual sexual activities. Consequently, there is a lot of disseminations of "black area" media as light penalties do not intimidate them.

Sometimes even the legal mass media is required to classify their categories based on groups of audiences, divided into categories for adults and youths/adolescents in order to limit exposure of content to the appropriate ages. The government has designed systems to classify content of television programs based on the ages of their audience groups. Factors that the officers use to classify content are based on level of violence; gender of the audience and appropriateness of language used. For instance, the "Chor "ฉ" program" is classified as content produced for adults. These programs can be shown late at night (after 22.00) because

some scenes may contain violence, inappropriate pictures of sex or offensive language, and hence the content is viewed as not suitable for children, youth, teenagers and adolescents. The program produced for "18 type" is designed to be suited for anyone whose age is over 18 years old, as this type of program will have medium rates of violence, sexual context and inappropriate language usages. If teenagers are aged under 18 years old, there should be an adult to accompany them or watch the program together with them to provide advice about the content. Programs which have been marked as "Nor 13 or น 13" have been designed for teenagers aged 13 years old and over but they are not suitable for younger children, as they might have some hidden violent scenes or some inappropriate languages in some parts of the program. If this rating system was comprehensive the negative influence of television programming would be decreased. A system of classification of media content based on age groups can be used in other types of mass media such as movies, games, magazines and books.

Preventing teenage access to the negative aspects of media can be effective if there is participation, surveillance, and examination from communities, and civil society. All sectors should collaborate with the government and form regular systems to monitor the media. There should be strengthening of the capacity of parent networks, and the foundation of a family network to provide surveillance of the media that teenagers consume, particularly TV. The most important factor that should be strengthened as a next step is to increase the exposure of teenagers to positive media.

Expansion of positive media

The most important factor to promote teenager access to positive media is the quality of those media. Besides positive content that supports the learning process of teenagers, the format and style of presentation of media must be attractive to teenagers as they will be the persons who select their own media to consume. This differs from younger children, whose parents have opportunity to select media that is appropriate for them and that contributes to skills development.

In Thailand there is a range of public media. This includes television media, in which the TV station is called TITV, is provided with a budget derived from tobacco revenues. This budget, which can be up to 2,000 million Baht, is sufficient for producing good quality media. As teenagers comprise one-sixth of the population, it is necessary for TITV to devote some of these resources to produce good quality media to educate and provide necessary knowledge to this group of audience. Programming could include soap operas that reflect teenager's lives, documentaries to educate teenagers about sexuality, features about drugs and violence from being addicted to drugs. Talk shows or debates which focus on teenagers and their on going concerns should be developed and moderators of such programs should encourage or influence teenagers to participate in these shows. Variety programs could also promote teenagers who are good model for society.

The lessons learned from the ETV program produced by the Thai Ministry of Education can be a 'Good Practice' for television programs. ETV programming supports knowledge for children, youth, adolescents and their families under the campaign, "New home of knowledge". Though this program has been produced with the limitation of broadcasting via cable and says satellite, it has become successful through co-operation with the Thai Health Promotion Foundation to produce high quality programs for youth and teenagers.

Radio media is very popular among teenage audiences as they are able to listen to radio programs without interference from parents. Furthermore, they can listen to programs wherever and whenever they want. Most radio programs focus on sport and music, alternating with discussion from the radio DJ (Disc jockey who moderates the programs). Not surprisingly, these DJs have turned into mentors or role models to teenagers, and provide advice or suggestions to them. Thus, it is necessary to develop the understanding and capacity of DJs so they can serve as appropriate models and contribute positively to the development of teenagers. It is very important that DJs should understand teenagers, and are able to provide advice and reinforce positive social values. This goal could be achieved through

continuing collaboration with other sectors, particularly through the networks of programs producers. Additionally, there should be more variety in radio programming besides music and sports, such as the program named **"Magazine on Air"**. In this type of program it is possible to include more content or create new formats of programs such as dramas involving the experiences of teenagers. The first channel for teenagers should produce programs for education, which can develop from youth models, and that could be broadcast during the prime time of 16:00 - 22:00. If radio stations are able to provide one or more hours of airtime per day this would be sufficient to create additional and accessible and innovative media.

Print Media can be easily accessed by teenagers, so it is no surprise that a book such as "Harry Potter" became so popular among youths and teenagers. This book sold millions of copies worldwide. The problem is how we can produce youth-oriented literature that is informative, accessible, and popular. An example of such literature is the books written by **Judy Blume.** Her books were very successful. They were not only full of entertainment but are also inserted with details of life skills required by teenagers in the area of love, sex, experience with drugs, alcohols and different types of friends, etc. Because teen culture is international, if local language editions of these and other high quality literature was available, or is Thai writers were encouraged and aided to produce similar types of books, this would be very beneficial..

The other important form of printed media are magazines and teenage books. There are two strategies to develop this area. First, teenagers could be supported to work with the publishing industry to produce produce good quality printing media. This would save save costs and would reflect teenage concepts, individual and ideology of their age (similar to the **"One Baht Book"** that were popular with students a generation ago and which were influential in the years 1971-1976). Secondly, for teenage magazines currently distributed in the market, most of which focus on values of sex and consumerism that are not appropriate for teenagers and therefore should be carefully censored by relevant officers, we should

promote informational columns, insert life skills information and other impart other knowledge, such as found in "Khu Sarng, Khu Som (คู่สร้าง คู่สม) which is a renowned adult-oriented magazine.

Internet media has become the most popular form of media among a segment of the youth market, as the internet responds to individual needs. Though this type of media can be criticized because of access to pornographic websites, exchange of misleading information in chat rooms which can lead to sexual abuse/harassment, and explicit video clips posted on the internet, the need to produce good quality websites is still necessary. For instance, the contents of the website www.sexmustsay.com of PATH (Full name) explain the problems of sex among teenagers, the information is updated continuously and provides information that teenagers want and like. To encourage teenagers to access good quality websites is a major task that must be carried out. Promotion and advertising of information websites can be done via schools, or through any other channel that is accessed by teenagers. One such mechanism has been adopted by the committee of safe and creative media that has requested hosts of search engines to post good quality websites as a priority for search engines, and they should use keywords attractive to the needs of teenagers such as **"sex"** or **"Peeping (แอบดู)"**, etc.

Building life immunity

Assisting parents and teenagers to improve mass media content is essential, and we can do this by working with forums and institutions that regularly communicate with parents. In particular, there is a need to involve schools and other educational institutions that regularly organize meetings with parents and teachers, into the process.

Many parents do not recognize the negative aspects of mass media that might lead their children/teenagers to be at risk. Many parents do not know how to protect their children from accessing media with negative content. Easy rules for parents regarding media and their children are the three "Musts" and two "No(s)". The three musts are that there is

agreement among parents and children about the time children can access media, particularly watching television and using the internet; (2) parents must assess appropriate TV programs for their children, they should screen programs for their children before the children are allowed to access the program, and; (3) they must let children access only suggested programs. The two No(s) are: (1) not placing a computer and/or television in the childs bedroom (especially teenagers, who often can not control themselves viewing inappropriate programs or visiting inappropriate websites) and; (2) not negative media content (such as pornographic books or magazines, DVD or VCD) in the house because it is easy for teenagers to find and watch/consume these media, and the most difficult part for the parents is explaining to their children if these materials are owned by them.

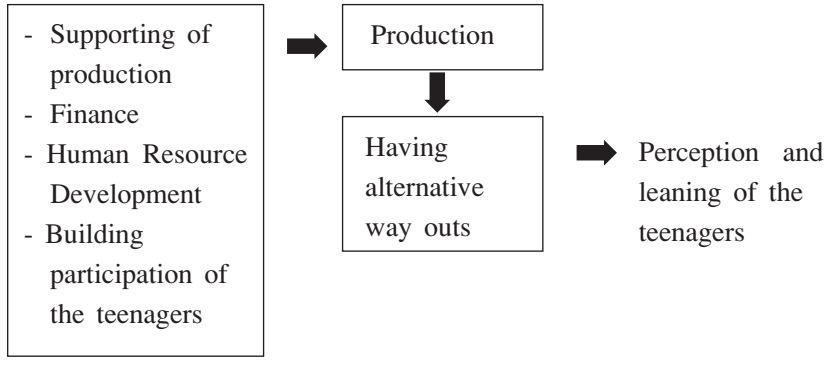
Teenagers can build up their own life immunity and life skills against accessing bad media by developing and implementing their own curriculums of positive learning processes and good learning media. In many countries, they teach children to distinguish between good and bad media based on their contents in shows and advertising. These curriculums can be included in subjects such as health. To increase effectiveness of the curriculum, the content should be designed to build upon WHO's concepts of emphasizing healthy skills and life skills, rather than teaching knowledge that can not be applied in daily life. In addition, the skills should be integrated with various subjects such as language study, social studies etc. All teachers should be trained as advisors so that they can recommend to teenagers what media should be accessed and promote appropriate content on TV, radio, printed material and from websites.

The most important part of building life immunity is to build the capacity of teenagers to form their own association/clubs that can be used to raise awareness and to update their knowledge on the mass media including constructing accurate and positive values related to sex and consumer products. Theses associations should be able to develop leaders that can play major roles, with the support of teachers, in designing curricula that promotes the use of positive media. Helping teenagers learn how to plan and manage all activities will be more productive that having teachers lead

groups. Furthermore, teenagers should be empowered to solve their problems by providing them with opportunities to exchange ideas and experiences with other teen groups and becoming involved in campaigns to improve media content.

Conclusion

Thailand lacks media that presents positive messages to teenagers and which is accessible to them. To overcome this problems a strategy is required. Such a strategy should cover all actions as shown in the table below:



If we look at the desired results, we can say that role of the media is to protect teenagers from becoming involved in risk behaviors. The media should assist the learning process of teenagers so that they can increase their life skills/life immunities as well as strengthening their skills in living. A key part of this strategy is ensuring that teenagers will be able to access and utilize the positive content of media.

Providing teenagers with access to supportive media, requires developing public television, radio programs for the teenagers, books, magazines youth literature, youth and teenagers columns in newspapers and creative websites for teenagers. Urgent action is required in all these areas to ensure that teenagers are able to, and desire to, access media content that provides them with the information and skills to live safe and satisfying lives..

These actions require the full participation of parents and other segments of society. Financial support is needs, expertise in producing content must be sought and developed, and creative talents in many areas must be harnessed. All this requires the full participation of society.

Based on the action plan outlined above, we argue that the following actions are required:

- First Action: Financial support must be generated. For example, public television requires capital to produce teenage-oriented programming. Having a media fund that can support various formats of productions is required. Currently, the Office of Health Promotion supports many programs. There should be specific support for each category of programs in order to increase effectiveness and efficiency. Other financial motivations to develop youth-oriented material are required. This could include tax deductions to any sponsors who support educational programs that contribute to the positive learning processes of the teenagers, or developing a Corporate Social Responsibility (CSR) program where the private sectors and private organizations support programming for young people.

- Second Action: The second area of action is human resource development. In this area it is crucial to involve educational institutes so that they can assist in building the capacity required to produce and promote positive media content. It is necessary for those involved in this process to understand teenagers and to be able to have the creativity to respond to the desires and needs of teenagers. There is a needed to study international foreign programs in this area. Furthermore, there is a need to develop teenage psychological counselors who can provide input into the required content of media that is designed to provide skills and learning to teenagers. The experience of program development of ETV over the last three years has shown the importance of developing good quality program production.

- Third Action: The third action required promoting youth involvement in the process of developing positive media content. The role of youth is to participate both the creative and production process. Youth should also participate in promotion in order to increase access to appropriate media and also monitoring of media. Youth involvement plays an important role in preventing the adolescent health risk behavior in Thai society.

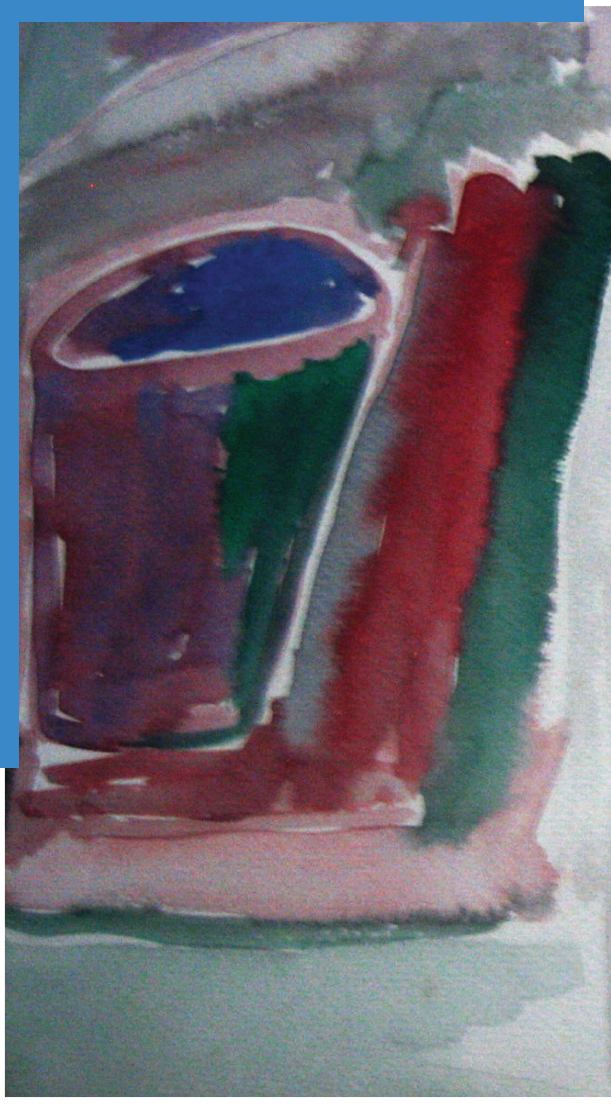
Space Modification I (ac 1989)

The painting says :

The water color signifies the modification of space and relationship between individuals, including plots among persons with and without HIV, brush of stigma, barriers and distances around them ; yet yielding to love and attraction, the painting spaces the beautiful colors, sex and risks.

This book provides a comprehensive analysis of the sexual behavior of Thais. It draws primarily upon the 2006 National Sexual Behavioral Survey, which is a nationally representative survey of Thai adults.

The emphasis of individual chapters is on risk behaviors, with the chapters analyzing risk behaviors in relation to HIV policy and programs. The book provides a welcome addition to the literature on HIV policy and programs at an opportune time. While the HIV program in Thailand has increasingly devoted most of its resources to caring for those people who have HIV, several chapters point to the need to focus more attention on the prevention of the disease. Policy options for prevention-based approaches are provided.



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