

PN-ABR-794

esm-88725

International Center for Research on Women

1717 Massachusetts Avenue, N.W., Suite 302
Washington, D.C. 20036

Women and AIDS Research Program

*Research Report Series
No. 1*



**AIDS Prevention Among Adolescents:
An Intervention Study
in Northeast Thailand**

by

Earnporn Thongkrajai
John Stoeckel
Monthira Kievying
Chintana Leelakraiwan
Soiy Anusornteerakul
Kanha Keitisut
Pramote Thongkrajai
Narong Winiyakul
Petchara Leelaphanmetha
Christopher Elias

May 1994



This publication was made possible through support provided by the Offices of Health and Women in Development, Bureau for Global Programs, Program Support and Research, U.S. Agency for International Development, under the terms of Cooperative Agreement No. DPE-5972-A-00-0036-00. The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the U.S. Agency for International Development or ICRW.

Authors' Affiliations

Earnporn Thongkrajai

Faculty of Nursing, Khon Kaen University, Thailand

John Stoeckel

The Population Council, Bangkok, Thailand

Monthira Kievying

Faculty of Nursing, Khon Kaen University, Thailand

Chintana Leelakraiwan

Faculty of Nursing, Khon Kaen University, Thailand

Soiy Anusornteerakul

Faculty of Nursing, Khon Kaen University, Thailand

Kanha Keitisut

Regional Communicable Disease Control Center, Region 6, Thailand

Pramote Thongkrajai

Faculty of Medicine, Khon Kaen University, Thailand

Narong Winiyakul

Regional Health Promotion Center, Region 4, Thailand

Petchara Leelaphanmetha

Khon Kaen Provincial Health Officer, Thailand

Christopher Elias

The Population Council, New York

Copyright © 1994 International Center for Research on Women

For more information, contact ICRW, Publications Department, 1717 Massachusetts Avenue, N.W.,
Suite #302, Washington, D.C. 20036
Phone: (202) 797-0007 Fax: (202) 797-0020 E-mail: icrw@igc.apc.org

CONTENTS

Executive Summary	v
1. Background	1
2. Research Objectives and Hypotheses	3
3. Study Methodology	5
Research Design	5
Sample Selection	5
Data Collection	6
Survey Analysis	10
Program Intervention	11
Selection and Training of Peer Counselors	11
Information, Education, and Communication Materials Development	12
4. Research Findings	13
Pre-Intervention Focus Group Discussions	13
Survey Findings	16
Hypothesis 1	17
Hypothesis 2	18
Hypothesis 3	19
Hypothesis 4	20
Interim Hypotheses	21
Summary	22
Post-Intervention Focus Group Discussions	24
Process Evaluation	25
Data Collection	25
Information, Education, and Communication Activities	27
Peer Counselor Activities	28
Summary of Process Evaluation Findings	30
Collaboration between Researchers and Service Providers	33
Involvement of the Community in the Research Process	34
5. Discussion	35
6. Dissemination and Utilization of Research Findings	41
References	43
List of Tables	45
List of Appendices	53

About the Women and AIDS Research Program	117
Publications from the Women and AIDS Research Program	118

Executive Summary

Background

Women in Thailand are at considerable risk of acquiring the human immunodeficiency virus (HIV) from their male partners who pay for sex on an occasional or regular basis. Available data concerning the purchase of sex and low levels of condom use among male adolescents strongly indicated the need for prevention efforts directed toward both male and female adolescents. A school-based intervention program aimed at increasing AIDS awareness and promoting safer sexual behavior among adolescents in Northeast Thailand was developed and formally evaluated using a range of methodologies.

Objectives

The specific objectives of the study were to:

- Describe current levels of knowledge concerning the prevention and transmission of HIV infection and its progression to AIDS among male and female adolescent students in representative high schools, vocational schools, and commercial colleges in Khon Kaen, Northeast Thailand;
- Develop information, education, and communication (IE&C) approaches regarding HIV/AIDS that were appropriate for the local context and useful for peer counselors involved with individual and group counseling, as well as public exhibitions;
- Test the effectiveness of a peer counseling intervention for increasing knowledge concerning AIDS prevention and promoting safer sexual behavior among adolescent students; and
- Explore the development of a methodology that includes both qualitative and quantitative methods for testing HIV prevention interventions among adolescents (and other population groups not traditionally viewed as "high-risk") where self-reporting of sexual behavior is often not accurate.

Methodology

A quasi-experimental research design employing both qualitative and quantitative research methodologies was used to evaluate the impact of a school-based peer counseling intervention. This design was characterized by five sets of interrelated activities: focus group discussions; a baseline survey; an intervention program lasting six months; a follow-up survey; and a final set of focus group discussions. In addition, process evaluation was conducted throughout the development and implementation of the intervention program. Four schools were selected in a two-stage sampling procedure and randomly assigned to either experimental or control groups. The intervention program was implemented only in the experimental schools. All other research activities took place in both experimental and control schools. For the surveys, pre- and post-intervention questionnaire responses were matched. A total of 2,909 matched questionnaires was completed among the four schools. The quantitative analysis tested several hypotheses regarding the improvement of knowledge and change in behavior between students in the experimental and control schools. The quantitative results were compared with findings from the before and after focus group discussions and process evaluation.

Results

Pre-Intervention Focus Group Discussions

These discussions demonstrated that, in general, the students were fairly comfortable discussing sex and related topics, such as sexually transmitted diseases (STDs), acquired immunodeficiency syndrome (AIDS), unwanted pregnancy, and abortion — both in same gender and mixed groups. Students were most comfortable describing the experiences, attitudes, and expectations of unspecified "friends," as opposed to describing personal experiences or practices. Participants in these groups suggested that sexual interaction was fairly common among their peers.

The discussions revealed a broad range of terminology used to refer to sexual behavior in both schools, which was used subsequently in the development of questions for the survey instruments. One particularly interesting set of local terms surrounded the students' description of young girls who go to the discotheque alone — the so-called "gai-lhong" or "lost chickens." These girls were described as being generally "easy," having sex with boys who are relative strangers, often not in return for money or other favors. The phenomenon of the "lost chicken" is intriguing in the context of the general agreement by all students — male and female, vocational and government school — of the importance of female virginity. There seemed to be a threshold effect, suggesting that once sexual experience is gained and, more importantly, it becomes known that a girl is sexually experienced, her peers' expectations regarding her availability for sexual interaction radically change. For example, boys described that they would be uncomfortable discussing sex one-to-one with a girl unless they knew she was sexually experienced and indicated that, while they would "hang around" with such a girl, they would only marry a girl they knew was still a virgin. Expectations of male sexual behavior were, typically, somewhat different. Men were described as more sexually experienced because of the general accepted practice of visiting brothels, a behavior encouraged by greater freedom in the use of alcohol and other substances. Most students were aware of condoms and their utility in preventing STDs and AIDS but expressed some problems concerning their accessibility and appropriate use. In addition, some boys indicated that they would be prepared to use condoms with casual sex partners, such as sex workers, but would be reluctant to use them with their girl friends.

The Intervention

There were two major intervention strategies developed and implemented in the experimental schools. The first focused on creating a learning environment for students that provided accurate information on STDs, HIV and safer sexual behavior in a context that encouraged them to implement the suggested behavior

changes within their personal lives. Specific educational activities that were organized included a mobile AIDS exhibition unit, an AIDS drama competition, and an anti-AIDS caravan. Materials, such as a videotape, a slide show, leaflets, and posters were also developed. Each of these activities was implemented with the full participation of the student community. The second intervention strategy consisted of the training of two peer counselors (one male and one female) for each class in the experimental schools. The selected counselors provided information on AIDS transmission and prevention and were trained in basic counseling skills. The counselors used both individual and group counseling sessions to provide information and help fellow students access resources and services.

Survey Results

The quantitative analyses failed to show any significant differences between experimental and control group schools. The level of AIDS awareness was high in both experimental and control schools at baseline and did not increase significantly in either group, while knowledge regarding condom use increased in the post-intervention survey in *both* schools. Interpreting the data regarding high-risk sexual behaviors and condom use was extremely problematic. We received confusing and ultimately unreliable responses regarding sexual behavior in both the experimental and control group, prohibiting a meaningful statistical analysis. In summary, there is no convincing evidence in the survey findings to warrant accepting any of the hypotheses specified *a priori* as indicators of the success of our AIDS intervention program within this quasi-experimental design.

Post-Intervention Focus Group Discussion

The follow-up discussions in the control schools revealed that significant AIDS educational efforts had been launched in these schools in conjunction with the Government of Thailand's National AIDS Prevention Programme, suggesting that

contemporaneous effects may have limited the ability of the quantitative, survey-based measures to detect a positive impact of the intervention program.

Follow-up focus group discussions in the experimental schools suggested, however, that students had more access to health resources and services, and consequently, more behavioral options when addressing AIDS and related sexual health problems. The attitude toward the peer counseling program was generally very enthusiastic. Students emphasized that, compared to friends, the peer counselors had more accurate knowledge and better access to referrals and information, and were better prepared to discuss emotional and embarrassing issues.

Process Evaluation

Our evaluation of process was greatly facilitated by the establishment of a multidisciplinary research team that met regularly with students counselors, adult counseling service providers, and local policy makers. The student counselors kept confidential records of their activities in "workbooks" which were periodically reviewed with supervisors and other members of the research team. Content analysis of the "workbooks" revealed that students were using the peer counselors as a vehicle for attaining specific advice and service referral. A major benefit to the students of the intervention was, therefore, an increased awareness of how to use optimally the available information and health service resources (e.g. use of the adult counseling center and STD/HIV testing). These interactions also revealed a positive personal impact of the intervention on the student counselors. Over the course of the intervention the counselors matured in their ability to understand the problems of others, discern the most appropriate action, and provide compassionate advice and support. In turn, the counselors became a type of role model within the schools, opening the channel for these newly acquired skills to become more widely disseminated. These benefits of the intervention could be interpreted to mean that the intervention was a success despite the results of the survey data.

Conclusions

Our experiences of implementing the intervention program demonstrated the critical need to employ a range of complementary methodologies, both qualitative and quantitative, to determine the true effectiveness of an intervention. The investigation revealed that there were several limitations to the usefulness of a pre- and post-intervention survey approach. First, in the presence of high levels of accurate knowledge at baseline, there was little room for improvement and, consequently, measures of improved knowledge as an outcome of successful program impact may have been inappropriate. Second, in the face of a rapidly moving epidemic, as in the case of Thailand, other influences outside the specific program intervention (such as national mass media campaigns) were operative and interfered with the ability of a quasi-experimental design to discern positive program impact because of simultaneous changes brought about in the control population. Third, significant under-reporting of risk behaviors and large amounts of missing data on sensitive questions resulted in subsample numbers too low to allow meaningful statistical analysis of data trends. Finally, a nine-month interval between the pre- and post-survey was probably too short a time period to capture any change that may have resulted from the intervention, particularly if the changes had to do with increasing personal awareness of risk, improving life skills, and encouraging mature decision-making. To overcome these limitations a mix of qualitative and quantitative methodologies should be used with particular emphasis on the assessment of the implementation process. A successful understanding of program implementation requires close collaboration between researchers and service providers, as well as authentic community participation. The study also showed that the use of a data collection instrument that is interactive (for example, the student counselor "workbooks" employed in this study) greatly facilitated process evaluation.

1. Background

Throughout the world, inequities in status and power, supported by traditional cultural and political norms, continue to impair the ability of women to protect themselves from acquiring HIV infection (1). Women's risk of HIV infection extends beyond traditional "high-risk" groups, such as commercial sex workers and injection drug users. Adolescent girls and young women are particularly vulnerable to infection in societies where a high value is placed on female chastity, while at the same time cultural expectations support a norm of sexual promiscuity among men. In Thailand, for example, where commercial sex is widely available and generally acceptable, even monogamous women are at considerable risk of acquiring HIV from their male partners who pay for sex on an occasional or regular basis (2,3). The need for effective AIDS prevention efforts in Thailand is further underscored by the explosive growth of the epidemic in this country (1,4,5,6,7).

This study evaluated the effectiveness of a school-based intervention program employing peer counseling networks among adolescents in Khon Kaen, an urban center in Northeast Thailand. Khon Kaen is a town of approximately 300,000 people and serves as a regional commercial and educational center for the Northeast, economically the poorest region of the country.

Prior to initiation of our study, data available from studies in Bangkok revealed that over 80% of sexually active male adolescents reported contact with prostitutes. Overall 45% of these same students also reported having sex with girlfriends. Condom use rates reported by male students were generally low and were similar with both girlfriends and sex workers (3). These data implied that female adolescents in Thailand faced a considerable risk of HIV infection. The risk of early exposure to HIV is of particular concern among this group, given recent data suggesting that young women may have an increased susceptibility to infection per exposure (8).

The choice of an intervention program focused primarily on the development of peer-counseling networks was informed by previous work on the importance of peer referents for behavior change related to sexuality and its consequences (9,10,11). Further, given the role of Khon Kaen as a regional educational center, the application of a school-based approach provided an opportunity to test this intervention strategy among a large group of adolescents from many areas of Northeast Thailand.

2. Research Objectives and Hypotheses

The specific objectives of this study were to:

- 1) Describe current levels of knowledge concerning the prevention and transmission of HIV infection and its progression to AIDS among adolescent students in representative high schools, vocational schools, and commercial colleges in Khon Kaen, Northeast Thailand.
- 2) Develop information, education, and communication (IE&C) approaches regarding HIV/AIDS that were appropriate for the local context and useful to peer counselors involved with individual and group counseling, as well as public exhibitions.
- 3) Test the effectiveness of a peer counseling intervention for increasing knowledge concerning AIDS prevention and promoting safer sexual behavior among adolescent students.

In evaluating this intervention four specific hypotheses were considered:

- a) That there would be a greater increase in accurate knowledge about the transmission and prevention of HIV infection among adolescents in the experimental population when compared to the control population;
 - b) That there would be a greater increase in knowledge about high-risk sexual behaviors and the benefits of condom use among adolescents in the experimental population when compared to control population;
 - c) That there would be a greater willingness and intention to use condoms and to avoid high-risk sexual behavior among adolescents in the experimental population when compared to the control population; and
 - d) That there would be a greater reduction in reported high-risk sexual behaviors among students in the experimental population than in the control population.
- 4) Our final objective was to explore the development of a generic methodology for testing HIV prevention interventions among women (and other population groups) not traditionally viewed as "high-risk," where self-reporting of sexual behavior is often not accurate. This last objective arose out of a concern that certain behaviors, such as sexuality, are often

significantly under-reported in traditional survey research approaches, especially among female adolescents in a culture that values female virginity highly, while simultaneously sanctioning promiscuity among male adolescents. As described in greater detail below, to address this concern we employed a combination of qualitative and quantitative research methods.

3. Study Methodology

Research Design

This study utilized a quasi-experimental research design to evaluate the impact of a school-based peer counseling intervention (described in detail below). The sequence of study activities is outlined in the following table:

Educational Institution	Focus Groups	Baseline Survey	Program Intervention (6 months)	Follow-up Survey	Focus Groups
Experimental Schools	X	X	X	X	X
Control Schools	X	X		X	X

The design was characterized by five sets of interrelated activities: focus group discussions; a baseline survey; an intervention program lasting six months; a follow-up survey; and a final set of focus group discussions.

Sample Selection

A two-stage sample design was utilized with the objective of ensuring the greatest comparability between the experimental and control schools selected for the study. In the first stage all schools in Khon Kaen town were stratified into two groups, government high schools and private vocational schools. Four schools were selected purposively, two each from the two different groups of schools. Criteria for selection included size of female student population, socioeconomic background of students, and location within Khon Kaen town. The rationale for the last factor was to maximize as far as possible the physical distance between the experimental and control schools to avoid possible contamination effects. The

schools were matched as closely as possible on all three factors before final sample selection was conducted.

In the second stage, schools from each of the two groups were randomly assigned to experimental and control groups. Experimental and control groups, therefore, each included one high school and one vocational/commercial school. The names of the schools, type, and number of students are described in the table below. Both male and female students in the four schools were interviewed in the baseline and follow-up surveys.

School	Type	No. of Students
<i>Experimental Group (n = 2245)</i>		
Kam Haen Nakorn School	High School	1042
Khon Kaen Commercial School	Vocational	1203
<i>Control Group (n = 1941)</i>		
Nakorn Khon Kaen School	High School	1001
Khon Kaen Borihan Turakit	Vocational	940

Data Collection

Focus group discussions. Eight focus group sessions were conducted by the research team prior to the baseline survey. These focus group discussions were conducted in a total of four schools and, to avoid influencing the pre-intervention survey results, were conducted at schools other than those included in either the experimental or control groups described above. These sessions included six homogeneous, same-gender groups (3 male, 3 female) and two mixed-gender groups, lasted 60 to 90 minutes each, and took place in both government high schools and private vocational schools.

A particular emphasis in the focus group discussions was placed on attempting to identify changeable high-risk sexual behaviors. Students were asked to describe what activities (such as attending the discotheque) might be associated with sexual

risk taking and to explore the nuances of language used to describe these behaviors. There are a plethora of words in the Thai language that allow indirect expression of sexual innuendo. These terms are used to describe sexual activity without "embarrassment." These expressions were used to identify proxy indicators of high-risk sexual activity and were included in the development of questions for the survey instrument. A copy of the pre-intervention focus group discussion guide is attached as Appendix 1.

Focus group discussions were conducted again after preliminary analysis of the baseline and follow-up surveys. These eight sessions were held in both experimental and control schools where the surveys took place. The objective of these sessions was to obtain further explanation, clarification, and interpretation of specific survey findings, as well as to provide a qualitative assessment of the impact of the intervention program in the experimental schools. The repeat focus group discussions provided an opportunity to explore alternative explanations for the study findings and allowed students to act as an interpretive screen for the study results. They also allowed us to investigate the possibility of contemporaneous effects that may have influenced the study findings.

Baseline and Follow-up Surveys. A baseline survey was conducted among all students in the four schools prior to the implementation of the intervention program in the experimental schools. The questionnaires were anonymous, and self-administered voluntarily on the same day for all classes. The teachers devised a system based on seating arrangements whereby pre-numbered questionnaires could be distributed in such a way that the same student received the same numbered questionnaire for both the pre- and post-intervention survey. Students were instructed to deposit the completed questionnaires in a covered box with a deposit slot. Questionnaires were collected directly by research staff, thus insuring anonymity while simultaneously allowing for computer matching of pre- and post-intervention responses for individual students. A total of 2,909 matched questionnaires was completed among the four schools.

The follow-up survey was conducted after completion of the intervention program. Procedures for administration of the questionnaires were identical to those used for the baseline survey. Copies of the pre- and post-intervention survey instruments are attached as Appendices 2 and 3. The major content areas of the pre- and post-intervention survey instruments are outlined below:

	<u>Pre-Intervention</u>	<u>Post-Intervention</u>
Sociodemographic and Personal Variables	X	
Knowledge Questions	X	X
Behavioral Practices	X	X
Situational Questions		X
Condom Technique		X

An extensive list of questions related to sociodemographic variables, household conditions, and general coping behaviors were asked in the baseline survey. Since the pre- and post-intervention surveys were matched, these questions were not repeated on the follow-up survey. The main body of the survey included questions concerning knowledge, attitudes, intentions, and practices related to AIDS, risky sexual behavior, and prevention strategies. These questions were identical in both the pre- and post-intervention survey. Based on the process evaluation that took place during the implementation of the intervention program (described below), two additional sets of questions were included in the follow-up survey that were not asked at baseline.

The first set of additional questions asked students to respond to a number of hypothetical situations regarding issues of sexual behavior or its consequences. This grew out of the impression among the research staff supervising the counseling training that one of the benefits of the intervention program was an increase in the student's ability to use optimally the available information and health service resources. Since it was known at the time of implementation that

the baseline survey had revealed that knowledge concerning HIV transmission and AIDS was high among all students in both experimental and control schools (a finding not anticipated when the baseline survey was designed), we felt it would be unlikely that program benefit would be reflected in measures of improved knowledge. Consequently, we felt that questions asking for anticipated behavioral responses to specific situations might provide a more discerning measure.

The final set of questions was included because, although most students reported some knowledge of condom use, once the intervention started it was discovered that specific knowledge of appropriate condom application, use, and disposal was often inaccurate. The final question set, therefore, asked students to specifically describe the sequence of steps to be followed in correctly using a condom.

Process Evaluation. In addition to formal focus group discussions and the analysis of survey findings, the research team conducted a process evaluation of the intervention program, focusing on how the various components of the intervention were carried out, the problems encountered and how these were solved. This evaluation was conducted through regular meetings among the research team, periodic meetings with school officials and teachers as well as the student counselors, and monthly meetings with local Ministry of Public Health personnel. To facilitate insight into the role of the student counselors, each peer educator was provided with a "workbook" in which to record their interactions and discussions with individual student peers. This workbook provided an on-going diary of each student counselor's activities and included information about problems encountered, as well as advice given. Content analysis of these diaries provided the study coordinators with concrete examples of the peer counselor's activities and a basis to form opinions regarding the impact of the intervention program. In addition to providing a valuable tool for process evaluation, these diaries greatly facilitated the on-going training of peer counselors provided by their supervisors. As described above, the process evaluation exercise suggested

additions to be made to the follow-up survey that were not anticipated prior to initiation of the intervention program.

Survey Analysis

The primary independent variable of interest was the intervention program (e.g. experimental vs. control school). Descriptive analyses of the data were also stratified by sex. Other variables explored included type of educational institution, student's age, class in high school, grade point average, major area of study, occupation and education of parents, and whether or not the student resided with family. Since Khon Kaen is a regional educational center, a significant proportion of students are from surrounding provinces and districts and reside either with relatives or in other boarding arrangements. The initial focus group discussions suggested that students living on their own in dormitories or other arrangements apart from family had more "independence" and potentially greater sexual mobility.

The dependent variables considered were knowledge about transmission and prevention of HIV infection, knowledge about high-risk sexual behaviors and the benefits of condom use, intentions to use condoms and to avoid high-risk sexual behaviors, self-reported symptoms of STDs, and type and frequency of high-risk sexual behavior.

Cross-tabulations between the independent and dependent variables were analyzed within the experimental and control groups. Differences in proportions of the dependent variables between the baseline and follow up surveys were calculated. This provided an initial test of the hypotheses by analyzing the changes of parameter in the experimental and control populations. Significance of differences in these changes was calculated by using Chi-square.

Program Intervention

The following is a description of the intervention program developed and applied in the two experimental schools.

Selection and Training of Peer Counselors

The AIDS Prevention Program was implemented in the selected schools through a network of female and male peer counselors. The counselors were chosen by a committee comprised of teachers and student council members on the basis of several criteria, including demonstrated leadership qualities and overall scholastic achievement. There was a total of 58 classes in the experimental schools, 30 classes in the governmental schools and 28 classes in the vocational schools. Two peer counselors, one female and one male were selected from each class, resulting in a total of 116 counselors. An intensive training course was held for the peer counselors. The following topics were included in the curriculum: anatomy and physiology of human reproduction; common diseases of the reproductive system in adolescents; the epidemiology and transmission dynamics of HIV and AIDS; social and behavioral factors which influence women's risk of HIV infection; HIV/AIDS prevention strategies; dynamics and transmission of other STDs; family planning; and the art of counseling and communication.

The peer counselors were supervised by the research team who coordinated the student counselor's activities in cooperation with their classroom teachers and the school's adult counseling staff. The major functions of the peer counselors were as follows:

- 1) They served as the service referral link between students and the joint counseling clinic provided under the Health Promotion Center, Region 4, and Communicable Disease Control Center, Region 6, Khon Kaen, Ministry of Public Health. The latter health offices also provide confidential testing and treatment for HIV and other STDs, as well as counseling on sexual matters and contraception. Each member of the peer groups was given a workbook/diary for recording his/her activities

throughout the intervention period as a tool for assisting our process evaluation.

- 2) They educated their fellow students through displays, video presentations, slide shows, distribution of IE&C materials, group discussions, seminars and other means of communication including through drama and games on the etiology, detection, transmission, spread, prevention and treatment of STDs and AIDS.
- 3) They assisted in preventing and minimizing peers' problems and helped them seek further counseling and medical advice, as well as treatment when necessary.

In addition to providing a referral link between the school-based network of peer counselors and the counseling clinic, student counselors and supervisors met on a monthly basis with researchers and officials from the Khon Kaen Provincial Health Office. This office represents the Ministry of Public Health in Khon Kaen and is responsible for national health policy implementation and cooperation with other agencies. The purpose of the meetings was to brief the provincial officials on the activities and progress of the school-based counseling intervention. This liaison activity was intended to sustain interest in the intervention program so that if the program proved successful it could be integrated by the Provincial Office into local and regional school-based AIDS prevention programs.

Information, Education, and Communication Materials Development

Researchers from the Faculty of Nursing at Khon Kaen University and the Communicable Disease Control Center and Health Promotion Center in Khon Kaen were responsible for the development of Information, Education, and Communication (IE&C) materials for the program intervention. These materials, which were targeted specifically to both female and male adolescents, included a videotape, slide show, leaflets, and posters. In addition, they prepared a handbook on AIDS and its prevention for both male and female adolescents and a training manual for the peer counselors.

4. Research Findings

For clarity, results will be presented in the following chronological sequence: 1) pre-intervention focus group discussions; 2) survey findings; 3) post-intervention focus group discussions; and 4) discussion of the process evaluation. This presentation relates to the four principle study objectives as follows: Objectives 1 (to describe the current levels of knowledge concerning HIV) and 3 (testing the effectiveness of the peer counseling intervention), including the four specified quantitative hypotheses, will be addressed under "survey findings"; Objective 2 (development of locally appropriate IE&C approaches) will be discussed under "process evaluation"; and Objective 4 (identification of a generic methodology) will be the focus of the subsequent "discussion" section, as it relates to the totality of the research enterprise.

Pre-intervention Focus Group Discussions

As described earlier, eight focus group discussions were conducted prior to development of the survey instrument and initiation of the intervention program. These discussions were conducted in the local Thai dialect by trained researchers from the Khon Kaen Faculty of Nursing and subsequently transcribed in Thai. An English summary of the findings of these focus group discussions, prepared following their analysis, is attached as Appendix 4.

In general the students were fairly comfortable discussing sex and related topics, such as STDs, AIDS, unwanted pregnancy, and abortion—both in same gender and mixed groups—although female high school students seemed to be less vocal in the mixed group when discussing more specific sexual behaviors. It was the impression of the discussion leaders that students were most comfortable describing the experiences, attitudes, and expectations of unspecified "friends," as opposed to describing personal experiences or practices. The general impression from these groups was that sexual interaction was fairly common, especially in the

vocational schools where the students estimated that 90% of male students were sexually experienced. One explanation offered for the apparent greater sexual experience of the vocational school students was that a large percentage of them were living away from family in private dormitories. Such students had greater independence and often spent considerable sums of money going to discotheques and movies. They discussed how some of the young women would occasionally exchange sexual favors for money to be able to pursue this lifestyle and that often their customers were arranged through the dormitory owner.

The group revealed a broad range of terminology used to refer to sexual behavior in both schools. Some of these terms were specific to the local (Esaan) dialect of Thai, others were more generally used Thai words, such as Aow (a vernacular "to want") and Funn ("to stab or cut through a body part"). These terms were used subsequently in the development of questions for the survey instruments.

One particularly interesting set of local terms surrounded the students' description of young girls who go to the discotheque alone—the so-called "gai-lhong" or "lost chickens." These girls were described as being generally "easy," having sex with boys who were relative strangers, often not in return for money or other favors. The phenomenon of the "lost chicken" is intriguing in the context of the general agreement by all students—male and female, vocational and government school—of the importance of female virginity. The term used to denote loss of virginity was "lose the body," following which such girls were described as being a "dead thing" and "easy." A more general term, Sia Dek ("rotten child") was used to describe both boys and girls engaged in "bad behaviors" such as sexual activity, drinking, or taking drugs.

There seemed to be a "threshold" effect, suggesting that once sexual experience is gained and, more importantly, it becomes known that a girl is sexually experienced, her peers' expectations regarding her availability for sexual interaction radically change. For example, boys described that they would be uncomfortable discussing sex one-to-one with a girl unless they knew she were

sexually experienced. They also indicated that, while they would "hang around" with such a girl, they would only marry a girl they knew was still a virgin.

Expectations of male sexual behavior were typically somewhat different. Men were described as more sexually experienced because of the generally accepted practice of visiting brothels, a behavior encouraged by greater freedom in the use of alcohol and other substances, such as marijuana and seconal ("lao-hang"). As a consequence, men were generally regarded as being at higher risk of HIV and other sexually transmitted diseases.

The focus group findings suggested that the general knowledge among all students concerning AIDS was fairly high and students reported high levels of access to AIDS prevention messages through various print and television media. The accuracy of such AIDS-related knowledge seemed to be greater in the government high schools than in the vocational schools, a finding attributed to the inclusion of AIDS education in the high school curriculum. Most students were aware of condoms and their utility in preventing STDs and AIDS. Some problems, however, were expressed concerning accessibility and appropriate use. As in many other places, boys indicated that they would be prepared to use condoms with casual sexual partners, such as sex workers, but would be reluctant to use them with their girlfriends.

The level of intimacy between lovers may also be a major determinant of failure to use condoms. The boys generally believe that once they have sexual relations with a steady girlfriend, she will not become "messed up" (i.e., sexually involved) with other boys. They think, therefore, that condoms should only be used as a means of preventing pregnancy. Girls, however, commonly use other methods of family planning. The first sexual encounter (for which most boys say they "plan", but for which most girls do not) often occurs without the use of any means of contraception or STD prevention. After unprotected sex, both male and female students state that girls are the ones who suffer; they experience a "missed period" (i.e., pregnancy) and "catching some germs." Though pregnancy and abortion were not examined in depth, the focus group discussion revealed that

most students knew of other students at their schools who had experienced these consequences of unprotected sex.

Survey Findings

Data obtained from the pre- and post-intervention surveys were analyzed on a matched-pairs basis. Of a total of 3,788 students returning questionnaires, 2,909 had complete sets of matched data. Most of the unmatched pairs were students who completed a baseline survey, but did not return a follow-up survey (n=655). A smaller number (n=124) of students returned instruments in the follow-up survey, but had no corresponding baseline comparison. The total population of 2,909 students (1,918 female and 991 male) for whom matched data were available is shown in Table 1. General descriptive information on this group of students is presented in Table 2.

The data concerning the location of the students' hometown confirms the role that Khon Kaen plays as a regional education center in Northeast Thailand. A large proportion of the students are from outside the Khon Kaen Municipal Area, while approximately 23% of all students are from other provinces. While the majority of students live with their parents (many of the students outside the Khon Kaen Municipal Area commute), a significant proportion live with relatives (presumably in Khon Kaen), and approximately 15% live with friends or have other arrangements. The large majority of students come from families where both parents are living together and the parents' occupations reflect those of an urban commercial and light industrial hub in a predominantly agricultural region of the country.

Table 3 summarizes data concerning the baseline knowledge of HIV transmission, prevention, and progression to AIDS for selected variables. Levels of knowledge concerning the prevention of HIV transmission and the progression of AIDS appeared to be generally high among both female and male students in both experimental and control schools. For example, overall 95.9% of the

students knew that having sex with multiple partners puts one at risk of HIV infection. Similarly, 91.8% of students knew that using a condom during sexual intercourse would prevent such infection. This corroborates the impression generated in the pre-intervention focus group discussions.

The principle purpose of the pre- and post-intervention surveys was to evaluate the effectiveness of the peer counseling intervention as a means of increasing AIDS awareness and promoting safer sexual behavior. The quasi-experimental research design was intended to provide comparable data on two sets of schools where the only significant difference was the application of the experimental AIDS intervention program. Four specific hypotheses were stipulated in our research objectives. Each of these will be examined in turn.

Hypcthesis 1: That there would be a greater increase in accurate knowledge about the transmission and prevention of HIV infection among adolescents in the experimental population when compared to the control population.

Table 4 summarizes the results of the pre- and post-intervention surveys for selected variables concerning knowledge about the transmission and prevention of HIV, stratified by sex. As previously noted, the level of knowledge related to HIV transmission and prevention was fairly high in all groups. There were no significant differences observed in knowledge concerning either transmission or prevention of HIV/AIDS among female or male students. Hence, by quantitative assessment, we must reject the first hypothesis.

There was one possible indication of a differential in information uptake, however, between the experimental and control group. Whereas in the pre-intervention survey, 83.1% of the experimental and 78.2% of the control group responded that they would like more information on AIDS, in the post-intervention survey only 8.8% of the experimental, but 18.7% of the control group responded positively to this question.

Hypothesis 2: That there would be a greater increase in knowledge about high-risk sexual behaviors and the benefits of condom use among adolescents in the experimental population when compared to the control population.

Table 5 summarizes the results of the pre- and post-intervention surveys for selected variables concerning knowledge about high-risk sexual behaviors stratified by sex. As with the previous knowledge questions, when the baseline level of knowledge was high, there was no measurable change among either the experimental or control group, or between males and females. On those questions where baseline knowledge was fairly poor (approximately 50% positive response or less) there was some marginal improvement among both experimental and control groups, although this trend was neither statistically significant nor consistent across all strata.

Regarding knowledge relating to the benefits of condom use, an interesting constellation of changes was noted pre- and post-intervention. Table 6 summarizes data on the percentage of positive responses among students concerning the perceived benefits of condom use for preventing both unwanted pregnancy as well as STD/AIDS and "germs" stratified by sex ("germs" is a local term for sexually transmitted infection that was employed in the questionnaire as a result of the findings from the pre-intervention focus group discussion). In the post-intervention survey there was a dramatic increase in the percentage of male students reporting that condoms were beneficial for preventing STDs, "germs," and AIDS in both the experimental and control groups.¹

Among female students a smaller, but still significant improvement was noted, along with an increase in the percentage of female students reporting that condoms were beneficial for preventing unwanted pregnancies. The percentage of male students reporting that condoms prevented unwanted pregnancy actually fell,

¹ It is interesting to note the disparity of these results compared to those in Table 3. When asked if HIV infection can be prevented by using condoms, the vast majority of students in all groups answered "yes." On the contrary, when asked about the specific benefits of condom use, a much smaller percentage reported STD/AIDS prevention as a primary use.

which was an unfortunate consequence of this question unintentionally being asked in a forced choice format. Students could only chose one of the responses listed in Table 6. It appears that during the period of the intervention, students' awareness of the benefits of condom use improved significantly in all schools, as indicated by the across-the-board drop in the number of students reporting that condoms were used for other purposes. (In the post-intervention focus group discussions we discovered that "other purposes" largely referred to their use in school demonstrations.) It is interesting to note that when accidentally forced to chose between the benefits of condom use, the boys selected STD/AIDS prevention over pregnancy prevention (it is unlikely that they "forgot" that condoms provided protection against conception), while the girls were more evenly divided.

While the data on improved perception of the benefits of condom use were encouraging, there were not any remarkable differences observed between the experimental and control groups to support the conclusion that this improvement in AIDS awareness was the result of the intervention program under evaluation. Therefore, by quantitative assessment, we must also reject the second hypothesis that the intervention program would lead to a greater increase in awareness of high-risk sexual behaviors and the benefits of condom use among adolescents in the experimental population when compared to the control population.

Hypothesis 3: That there would be a greater willingness and intention to use condoms and to avoid high-risk sexual behavior among adolescents in the experimental population when compared to the control population.

An attempt was made to measure the willingness and intentions of students to use condoms and practice safer sexual behavior. The results of the inquiry regarding condom use are presented in Table 7. Interpretation of these results is problematic, however, as few students had complete sets of matched responses. In the absence of larger cell frequencies it is impossible to defend the trends

observed in Table 7 as arising from anything other than chance. Consequently, there are insufficient data to support hypothesis #3.

Hypothesis 4: That there would be a greater reduction in reported high-risk sexual behaviors among students in the experimental population than in the control population.

Data regarding high-risk sexual behaviors and condom use were obtained through questions concerning the student's experience of ever having sex, number of sexual partners, condom use in the last intercourse, and (as a proxy) having an STD or "AIDS" test in the last six months. Interpreting the results of the responses obtained from these questions is also problematic, however, because of the data presented in Table 8.

In response to the question "Have you ever had sexual intercourse?" we received confusing and unreliable responses in both the experimental and control group. While there was some increase in the overall percentage of women responding positively to this question, the percentage of males fell in both groups. Since these were matched data, we were able to analyze the consistency of individual's responses. This analysis is summarized in Table 9. It appears that while a significant number of students initiated sexual activity during the study, a fairly large percentage in all subcategories (3.3% to 24.8%) reported that they had previously had sexual intercourse on the baseline survey, but subsequently denied this on the follow-up. One explanation for the unreliability of these responses may be expediency in filling out a long questionnaire. The question concerning previous sexual experience was accompanied by instructions to skip ahead several questions if the student's response was "no." While the first time through the students may have answered accurately, during the post-intervention survey they may have responded in such a way as to skip ahead given their prior experience in filling out the same survey instrument. Indeed, many of the students who answered "yes" to this question nonetheless skipped the following several questions

regarding the specifics of their sexual behavior. (The condom use question discussed under hypothesis 3 was one of these often-skipped questions). As a consequence, there is a significant amount of missing data for these variables. The limited reliability of the responses prohibits a meaningful statistical analysis and provides no firm ground for accepting hypothesis 4.

An alternative explanation for the inconsistent responses other than difficulties related to questionnaire design could be that, as a result of the program intervention or contemporaneous effects, students learned what they were "supposed to say" regarding safer sexual behavior and changed their self-reports. The main importance of the findings in regard to hypotheses 3 and 4 is their indication of the limitations of a survey approach for eliciting accurate reports of sexual behavior among both male and female adolescents. Given the findings of the pre-intervention focus group discussions described above, it seems likely that there was significant under-reporting of sexual activity, especially in the follow-up survey.

Interim Hypotheses

As described in the discussion of methodology, two sets of questions were added to the follow-up survey that were not asked in the baseline. The idea to include these questions arose from the process evaluation which, as described below in greater detail, suggested that students in the experimental schools had an improved ability to use available information and health service resources. The first set of questions elicited specific recommendations for action from students in response to 10 hypothetical situations related to sexual behavior, its potential adverse consequences, and their prevention. These questions sought to identify any differences between experimental and control school students' responses that would indicate a more effective utilization of existing knowledge.

For example, the first situational question was framed as follows: "Pete, age 16, had his first sexual experience with a prostitute. He said he had been persuaded to by his friend and didn't use a condom. One week later, he had low

grade fever and dysuria. Pete was very anxious. If you were Pete's close friend, how are you going to help him?" The results of this question are as follows:

	Experimental <i>n</i> = 1512	Control <i>n</i> = 1263
Ask him to see the school counselor	8.5%	6.8%
Ask him to see a doctor	91.3%	93.0%
Ask him to buy medicine for self care	0.2%	0.2%

In this question there was no significant difference between responses among students from the two sets of schools. Similarly, there was a lack of distinction between schools on the other nine situational questions when tabulated either in aggregate or when stratified by sex. Data on the final set of questions concerned with the accuracy of knowledge regarding condom use technique also failed to show a significant difference between experimental and control school respondents.

Summary

There is no convincing evidence in the survey findings to warrant accepting any of the four hypotheses specified a priori as indicators of the success of our AIDS intervention program within this quasi-experimental design. There is also no quantitative data to support the interim hypotheses that the students' ability to use information and health service resources as presented in hypothetical situations or to report accurate use of condoms would be greater in the experimental group when compared to the control group. This may mean that the intervention program had no significant impact. An alternative explanation, however, is that the pre- and post-intervention survey approach provided an inadequate measure of the intervention's true value, and/or that the forced choice situational questions were too crude to capture the nuanced differences suggested

by the process evaluation. Three specific limitations of the pre- and post-intervention survey approach are suggested by the above results.

First, in the presence of high levels of accurate knowledge at baseline, there is little room for improvement and, consequently, improved knowledge as an outcome of successful program impact may be an insensitive measure. This may be the situation that would explain this study's inability to demonstrate a successful intervention through support for hypothesis 1. One obvious implication of these findings for future intervention studies is the desirability of conducting a pilot survey at baseline to obtain levels of proposed dependent variables before a decision is made for their inclusion in the study. In our study there was little prior information on these variables among students and it was assumed (as it turns out, wrongly) that variable percentages would be "low." The benefits of such a pilot survey would need to be balanced against the extra costs entailed.

Second, in the face of a rapidly moving epidemic which, at least in Thailand, has resulted in a rapidly changing social and policy response, it may be that stronger societal forces outside the specific program intervention are operative and that such contemporaneous events interfere with the ability of a controlled quasi-experimental design to discern positive program impact because of simultaneous changes brought about in the referent control population. This may explain our findings in regard to hypothesis 2, where condom use was noted to have improved dramatically, but in both experimental and control groups. The possibility of contemporaneous effects was explicitly explored in the post-intervention focus group discussions and is summarized in the next section.

Finally, significant under-reporting of risk behaviors and large amounts of missing data on sensitive questions may result in sub-sample numbers too low to allow meaningful statistical analysis of data trends. This was a problem in the case of hypotheses 3 and 4, where exceptionally small numbers of students self-reported sexual behavior. Behavior change is difficult to measure in the absence of reported behavior. Many of these potential limitations were anticipated in the design of this study, hence, plans were made to complement the survey research

with pre- and post-intervention focus group discussions, as well as process evaluation techniques. The following sections summarize these results. We return to the issue of optimal methodology in the subsequent discussion.

Post-intervention Focus Group Discussions

Following the completion of the post-intervention survey and preliminary analysis of the quantitative results, a series of repeat focus group discussions were conducted in both the experimental and control schools. A total of eight groups (four in each of the two groups) were conducted. A copy of the post-intervention focus group discussion guide is included as Appendix 5.

In the experimental schools these discussions revolved primarily around the student's impressions of the intervention program's activities at the school. The attitude toward the peer counseling program was generally very enthusiastic. Students stressed the importance of the personal involvement of the peer counselors, indicating that, even if they had yet to avail themselves of the services offered by the counselors (for example, referral for confidential testing or STD treatment) they now knew where to go if they needed help. They emphasized that, compared to friends, the peer counselors had more accurate knowledge, and better access to referrals and information, and were better prepared to discuss emotional and embarrassing issues. Students felt that they attended to the AIDS prevention messages being presented better when these health issues were presented by peers. Students in the experimental schools also commented on how the peer counselor had become something of a role model. It was evident to them that participation as a peer counselor had led to greater self confidence and, in some cases, to changes in the personal behavior of the peer counselor, thereby providing an important example for the class.

Discussions in the control schools pursued the possibility that contemporaneous events might have interfered with our ability to detect a positive impact in the experimental schools—a possibility suggested by the survey findings

showing that reported attitudes toward condom use had increased significantly in both the experimental and control schools. In these discussions it was discovered that a fairly intense Information, Education, and Communication (IE&C) initiative, including exhibitions and class teaching, had been launched in the control schools during the year of the study in keeping with the policy of the Ministry of Education. During the implementation of this project the Government of Thailand established an intersectoral AIDS prevention initiative. Under this program a major AIDS education initiative was mounted through a broad mass media campaign, as well as through mandated activities within each Ministry of the Thai Government. Students also reported in the control schools that, during the year of the experiment, health teachers began to supply condoms on request.

Process Evaluation

The first step in our evaluation of process was the establishment of a multidisciplinary research team that included members from the Khon Kaen University's Faculties of Medicine and Nursing, the Khon Kaen Provincial Health Office, the Ministry of Public Health Regional Centers for Communicable Disease Control and Health Promotion, and the Population Council. Research staff from the Faculty of Nursing included experts in communications strategy, counseling training, and both qualitative and quantitative research techniques. Regular meetings between this group and officials at the schools, teachers, students, and local policy officials provided ample opportunity for focused discussion concerning the process of project implementation and a forum for troubleshooting problems that arose.

Data Collection

During the initial field work involving the pre-intervention focus group discussions, the team was impressed by how freely students discussed normally

sensitive issues of sexuality and its consequences. These focus group discussions were characterized by much humor and playful teasing. Many of the "double blind" words used by students to imply sexual innuendo are based on word plays, etc. An important insight was gained during one of the mixed group sessions when approximately half way through the session (which was being held outside on the grounds of the school) a teacher walked by and joined the group. Given Thai culture, it would have been unacceptably impolite to ask the teacher to leave, so the discussion continued. The discussion leaders noted a marked change in the rapport and demeanor of the group, however. The playful teasing about sexuality stopped and the discussion became much more clinical and focused on issues such as the biology of HIV.

This was a first suggestion that, while students could relax and talk frankly with outsiders who had made an investment in establishing rapport (e.g., the discussion leaders), they were much more guarded around teachers and school officials. It was the perception of the research team that many students were quite interested in discussing their problems with trusted adults outside the school setting. This was evidenced by the number of students who would "hang around" during the monthly visits of the research staff to the schools and approach the staff for private chats as they were leaving the school. One investigator made her home number available through the peer counselors for students to call if they needed advice. She received many calls through the course of the intervention for information about contraception, sexual relationships, and more general issues regarding the student's "love lives."

These experiences suggest that one of the critical functions of the school-based peer counselors is to provide a link to adult advice that is not associated with the schools. This may reflect a lack of security about the confidentiality of discussions held at school or simply the need to have outside referents who are available when needed, but otherwise not a part of the student's daily lives. This reluctance to discuss sexual behavior with teachers may have influenced the students responses to the pre- and post-intervention surveys, which were administered in

the classrooms and showed a very incomplete level of reporting concerning sexual activity. These low rates of reported sexual activity were at variance with the findings of the focus groups.

Information, Education, and Communication Activities

Two major approaches for development of locally appropriate information, education, and communication (IE&C) strategies regarding HIV/AIDS were employed in this study. One was an environmental enabling approach and the other focused on human resource provision. The environmental enabling approach sought to establish a learning environment for students that encouraged uptake of accurate information regarding STDs, HIV, and safer sexual behavior in a context that encouraged them to implement the suggested behavior changes within their personal lives. Strategies used were based on the principle that communication objectives and behavior change messages would be most effective if integrated with the students' usual activities. The advantage of the peer counselor intervention approach was that it allowed the students themselves to take a major role in creating such an environment.

During the course of the intervention program, many activities were carried out. They included a mobile AIDS exhibition unit, an AIDS drama competition, and an anti-AIDS caravan. Student counselors put their ideas forward to the student council, thereby drawing in the participation of the broader student leadership. After further discussion, activities were implemented under the responsibility of the student counselors and supervision of the school counseling unit. Local health offices were often involved in the process by providing audiovisual aids and printed materials. The mobility of the AIDS exhibition unit increased the number of fellow students reached through the peer counselors. The AIDS drama competition was organized and shown weekly on stage during school lunch time. The researchers and school authorities were involved as judges in the drama competition and awards were made to the best actors. The drama team became widely known in the community and was invited to stage

productions on many occasions, e.g., on the holiday of Queen's birthday and at the Khon Kaen Annual Silk Festival.

The anti-AIDS caravan was regarded as part of the students' study trip to important places during the school vacation. The study tour was used as an opportunity to distribute AIDS information to the public and to communicate more broadly with the community. This activity gave the students a rewarding sense of community participation and increased their confidence, motivation, and effectiveness in providing education and referral for peers as well as others.

Peer Counselor Activities

The second intervention strategy focused on the provision of human resources and consisted of training two counselors (one male, one female) in each class of the experimental schools. The peer counselors were educated intensively with AIDS knowledge and basic counseling skills. Other students could share what they had known and experienced with the peer counselors. The counselors employed both group and individual counseling sessions. The counselors kept confidential records of counseling cases in their workbooks which were periodically reviewed with the counseling supervisors. These diaries provide a rich source of insight into the possible benefits of the intervention.

Content analysis of the student counselors' diaries, as well as impressions formed during the course of the iterative process of discussing with students various "cases," their personal feelings, reactions, and actions revealed that students were using the peer counselors as a vehicle for attaining specific advice and service referral. As time went by the diaries also demonstrated that students were making more efficient use of available resources such as the adult counseling center and STD/HIV testing. For example, a student, after having had sexual intercourse with her boyfriend, visited a peer counselor at home in the evening. The student feared that she would "catch some germs" from her boyfriend because he was under medical treatment at the time. The student counselor gave the girl

information on STDs, AIDS, and condom use and suggested that she visit the referral clinic for testing.

Students and peer counselors reported having more discussions concerning sex and its consequences, including some discussions concerning these topics with parents, relatives, and neighbors. Several girl counselors recorded that they had discussed these issues with male relatives, including their fathers and younger males ("nephews"). It was noted that counselors from the private technical schools recorded having counseled peers mainly on sexual problems, whereas peer counselors from government high schools recorded that young male students requested information about AIDS, stating that "the information will be used for writing up reports for teachers." Myths about AIDS, including fears that HIV can be transmitted by means of using drinking fountains or toilets at school, were revealed by some of the students' inquiries.

It was also noted that female counselors recorded more cases than the male peer counselors, and counseling usually took place between students of the same sex. There was evidence that some boys, particularly homosexuals, primarily chose female peer counselors for advice. The counselors felt that these boys were more comfortable communicating with girls, given their effeminate ("Krateiy"²) lifestyles. As one "Krateiy" student stated in one of the focus groups, "You find it comfortable to be with girls; you will be treated badly by boys. They have such awful behavior: drinking, smoking, hanging around, seducing girls, or going to brothels." Boys who do not follow this norm are often labelled as "Iai-Na-Tua-Mea" (girl-face chap).

In addition to individual counseling, peer counselors held activities for large audiences, such as classes. Evidence of "having sex with friends" is apparent. Girls often requested advice about "having sex with [her] boyfriend without prevention." Boys typically asked for advice only when they were having sex with

²"Krateiy" is a Thai word used to denote a boy or man with feminine characteristics (wearing female clothing and make-up and being "chatty"). As commonly used, the term most often implies that a Krateiy is homosexual or bisexual.

prostitutes and/or experiencing symptoms, including skin rashes. Peer counselors also shared information with their neighbors and found that myths about STDs, including the belief that donating blood may put one at risk of HIV, exist in their communities.

Summary of Process Evaluation Findings

The results of the process evaluation led those members of the research team most intimately involved with the implementation of the counseling intervention program to conclude that this was a worthwhile and beneficial program. We defend this impression despite a lack of meaningful differences between survey responses in the experimental and control schools. There are several dimensions of program "success" we feel were not captured in the survey approach and, as discussed further in the following section, view the survey as only one of a complementary set of program evaluation tools.

The first benefit to the students as a result of the intervention appeared to be an increased awareness of how to use available information and health service resources. One might say that the students gained in "local knowledge" what they already knew in a more abstract sense. Only the latter was captured by the survey instruments. For example, while the students may have already known that someone with fever and dysuria should "see a doctor," the intervention program made them aware of where referral services for STD diagnosis and treatment were located in Khon Kaen and how they were accessed. This locally-specific knowledge about where to turn for advice, support, condoms, or services increased the likelihood that such services would actually be used.

Having noted this during the implementation of the intervention, we tried to measure it in the follow-up survey by including some questions asking for specific responses to hypothetical situations, to investigate if students in the experimental schools would have more informed responses than the control schools. As reported above, however, no significant difference between experimental and control schools was noted. Unfortunately, we do not have baseline data with

which to compare these findings. We suspect that such data may have been similar to that regarding the benefits of condom use—e.g., it might have shown improvement in both experimental and control groups over the course of the intervention period. As previously mentioned, the follow-up focus group discussions in the control schools showed that a fairly intensive intervention had been mounted in them by the Ministry of Education.

Another impression drawn from our process evaluation concerns the personal development of the students involved in the intervention and, in particular, the student counselors. Over the course of the intervention they matured in their ability to understand the problems of others, discern the most appropriate action, and provide compassionate advice and support. These issues are captured poorly in questionnaires and, since at first these effects are most noticeable in the counselors themselves, they might not be evident in a broad survey of the student population in any regard. As supported in the focus group discussions, the counselors became a type of role model within the schools, opening the channel for these newly acquired skills to become more widely disseminated. Examination of the counselor's workbooks revealed that counselors dealt with various personal problems besides those involving AIDS and sexuality. For example, a counselor from the commercial school counseled three girls and one boy from primary and secondary schools in her community. Below are the excerpts from her workbook.

Case 1

Date: November 15, 1992 Time: 10:30 a.m.

Name: XXXXXXXXX XXXXXX

Class: 6th grade

Problem: Not feeling well after receiving a poor math grade.

Guidance: 1. Spending more time on math lesson.
2. Filling up free time with math.

Media used: Math textbook.

Evaluation: From her next math grade.

Observation/Comments: Perceived that she is very determined. Encourage her more. Trust that she can do well; she should trust her ability and herself.

Case 2

Date: December 29, 1992 Time: 12:00 p.m.
Name: XXXXXXXX XXXXXXXX
Class: 5th grade
Problem: Lack of confidence in all areas of her life.
Guidance: 1. Teach her to gain strength and not feel defeated all the time.
2. Teach her meditation.
Media used: Pictures, books, and practice in school meditation room.
Evaluation: From her decision-making next time.
Observation/Comments: Will follow her progress and assess her decision-making, see if she can function well by herself.

Case 3

Date: March 28, 1993 Time: 10:30 a.m.
Name: XXXXXXXX XXXXXXXX
Problem: Complaining that he feels lack of confidence about playing sports.
Guidance: 1. Reassure him.
2. Try it again. Be patient with yourself.
Observation/Comments: If he can do it well, you have done your task.

Case 4

Date: March 1, 1993 Time: 1:50 p.m.
Name: XXXXXXXX XXXXXXXX
Class: 1st grade
Problem: Referred to talk to by parents. Very difficult child, never listens to parents, says bad words, doesn't behave.
Guidance: 1. Calm her down.
2. Teach her some "well-behaved" actions.
3. State how much her parents love her.
Media used: Pictures
Evaluation: Her love and listening to parents.
Observation/Comments: --

A final impression regards the timing of the program evaluation. It is our impression from the process of implementing this intervention that an important program has begun. It may be too soon to expect measurable changes in self-reported behaviors, especially in a setting where reporting any behavior is very sensitive. If the important processes set in motion have to do with increasing personal awareness of risk, improving life skills, and encouraging mature decision-making, then perhaps a nine-month interval between pre- and post- surveys is too narrow to capture any real change that might result from the intervention. And what if the survey results are accurate concerning sexual activity and the majority of students have not yet initiated their sexual lives? If so, the real benefits of the current program will only become manifest at a later date when the confidence, personal awareness, and communication skills provided through the intervention are applied in real-life situations.

Collaboration between Researchers and Service Providers

It is important to stress the importance of a close collaboration between researchers and service providers in this type of intervention program. The most obvious benefit of this collaboration in our study was the process evaluation itself, which would not have been possible if we did not include service providers (e.g., counseling supervisors) on the research team from the start. As described above, this collaboration helped uncover some of the more nuanced benefits of the intervention program, which might otherwise have been dismissed as completely inconsequential.

There is mutual benefit in this type of collaboration. By having direct, rapid access to research findings service providers are more likely to understand their relevance and incorporate them in their personal efforts to improve program functioning. Thus, this type of collaboration potentially fosters a process of organizational development within the service structure. Likewise, through an iterative process of program evaluation, researchers are continually reminded of the intent of the research enterprise and can take prompt steps to improve it if

possible. In this study our specification of an interim hypothesis concerning the use of information in hypothetical situations and incorporation of a means to test it in the follow-up survey is an example of this responsiveness. Research is "closer to the field" and more likely to respond to, meet the needs of, and be utilized by service providers if pursued as a genuinely collaborative endeavor.

Involvement of the Community in the Research Process

In our study we made an explicit attempt to intimately involve the student community in the research process from the start. As described above, the development of locally appropriate IE&C materials depended heavily on the student's input in deciding which activities (i.e., the mobile exhibition, the AIDS caravan, etc.) would be most useful in their schools. In each school, student activities were discussed with the student council prior to their initiation. These steps were essential in the elaboration of a locally effective program as the process evaluation suggested that the active participation of the students was a major element in the success of the intervention.

Student involvement was also essential to the research endeavor itself. Student input via the focus groups provided guidance in the design of the survey instruments as well as an interpretive screen for the survey results. Indeed, the process evaluation itself was only possible because of the student's involvement. For many reasons discussed above, the survey results did not tell us as much as we had hoped about the impact of the intervention. The student counselors' workbooks on the other hand, were a rich source of data about the program.

There were also considerable efforts to involve the broader community of Khon Kaen in the activities of the school-based intervention—i.e., through the AIDS caravan. This was important for the student counselors in increasing their confidence and motivation and for providing further support for their activities in the school. It is hard to judge how much the students' outreach may have influenced attitudes in the broader community, however, since so much else was taking place in Thailand during the course of this intervention.

5. Discussion

In our proposal to conduct this research we discussed the difficulty of conducting survey research concerning sexuality and related topics among adolescents and suggested that a complementary use of qualitative and quantitative methodologies would improve our ability to evaluate the intervention program undertaken. An important objective of our inquiry was, therefore, to explore the development of a generic methodology for testing HIV prevention interventions among women (and other population groups) not traditionally viewed as "high-risk", where self-reporting of sexual behavior is often not accurate.

Our experience of implementing the intervention program described in this report provides several insights for future work. They can be summarized as follows:

- 1) A range of complementary methodologies should be employed simultaneously.
- 2) Evaluation should include an assessment of process, as well as measurement of more general "indicators" of knowledge and behavior.
- 3) Successful understanding of the process of program implementation requires close collaboration between researchers and service providers, as well as authentic community participation.
- 4) The latter is greatly facilitated by the use of a data collection instrument that is interactive (for example, the student counselor workbooks employed in this study).

The need for complementary research methods is apparent. There are limitations to traditional survey research including the anticipated problem of under-reporting of sensitive, sometimes "taboo" behaviors, as well as high levels of baseline knowledge in all students that left little room for demonstrable improvement. The limitations of the KAP survey approach to measuring sexual behavior have been reviewed by others (12,13,14) and are well known to

researchers in this field. These limitations are starkly highlighted by the data reviewed under hypothesis 4 showing that among the male adolescents there was a significant drop in the percentage reporting that they had "ever had sexual intercourse" between the baseline and follow-up surveys.

Perhaps more important, however, is the problem of contemporaneous effects leading to changes in the control group which decrease the power of a quasi-experimental design to discern real and otherwise potentially measurable program impacts. As described, the post-intervention focus group discussions in the control schools revealed that a fairly intense IE&C campaign had been mounted by the Ministry of Education during the same period as our project was implemented in the experimental schools. This may have influenced our ability to demonstrate a significant effect of the peer counseling intervention on important program indicators, such as condom use rates. In other words, the survey findings indicate that the experimental intervention was no more effective than the Ministry of Education's IE&C efforts in the control schools. The important positive interpretation of this finding is that both interventions—our peer counseling intervention, as well as the Ministry of Education's IE&C campaign—had a beneficial public health impact, as reflected in the increases in reported condom use rates. These contemporaneous effects did, however, limit our ability to demonstrate unique benefits of the peer counseling approach using survey indicators. As previously described, the unique benefits of the peer counseling intervention were best highlighted through the qualitative results, especially the process evaluation.

This limitation of survey research in quasi-experimental design may be especially relevant for studying AIDS intervention programs. Historically, this research approach has proved extremely useful in evaluating interventions for improving child survival (15) and as a tool in applied research aimed at improving the operations of family planning programs (16). In these latter instances the intervention is typically meant to affect a change either in an endemic infectious disease outcome (for example, infant mortality attributable to diarrheal disease or

respiratory illness) or some defined aspect of service delivery that is related to desired program impact (for example, immunization coverage or "couple-years of protection"). In either case, however, the fundamental context (e.g., infectious disease prevalence or demand for fertility regulation) remains relatively static during the course of the intervention study. This, of course, is not the situation with AIDS. The rapid pace of the epidemic both globally and, particularly, in Thailand serves to generate considerable demand for more elaborate programs. Over the course of this intervention study, Thailand underwent a tremendous and important change in social policy and response in regard to AIDS. Now that many countries have finally begun to escape from the denial commonly exhibited as a first response to the epidemic, the problem of contemporaneous effects as a limitation to standard quasi-experimental survey research will become more common and, perhaps, typical. Given this trend, the need to employ a mix of complementary methods is essential.

Our study also showed that it is important to include an assessment of process as well as measurement of more general indicators of knowledge and behavior. The pursuit of general indicators is important because of the clarity of such outcomes to policy makers and the persuasive power of numbers in the modern discourse regarding resource allocation and assessment of impact. Process indicators, however, are important both as a tool in interpreting the numerical effects (or lack of effects) and as a means to make the research enterprise more responsive to a changing environment. The best example of this in our study was our ability to specify a set of interim hypotheses during the project implementation and include some means for testing them in our follow-up survey. When the study was designed we had reason to suspect that knowledge of HIV would be limited in the adolescent population of this provincial capital and, therefore, thought that we would be able to demonstrate an improvement in knowledge as an indicator of program success (a priori hypothesis 1). By the time that the project was approved and we were in the field to collect data, however, the level of knowledge had already improved substantially, presumably as a result

of the evolving mass media efforts in Thailand. It was evident from an analysis of the preliminary survey results as well as the focus group discussions that there was little room for improvement in knowledge among either experimental or control students: an observation that led us to hypothesize that experimental school students might be able to better utilize knowledge when presented with hypothetical situations. This hypothesis grew out of the on-going process evaluation employed by the research team.

Our third major insight regarding methodology is that successful understanding of the process of program implementation requires close collaboration between researchers and service providers, as well as authentic community participation. As described above, our ability to conduct the process evaluation in this study depended ultimately on involving both students and service providers in the research enterprise from the start. The iterative process of implementation, assessment, and response that such a collaboration allows increases the relevance and utility of the findings.

Our final insight regarding the conduct of the process evaluation has to do with the benefit of using an explicit and interactive data collection tool. In our study the provision of workbooks for the student counselors to use in recording their activities and impressions proved to be very helpful in crystallizing the evaluation process by focusing the attention of service providers and researchers, as well as students, on the issues raised by implementation of the intervention program. In the absence of such a concrete tool there would be a danger of drifting into complacency about the process of implementation.

In conclusion, our experience in implementing this research project has shed some important light on the complicated methodological issues involved in designing and evaluating AIDS prevention interventions in the context of a rapidly changing epidemic and social policy environment. We have highlighted a number of limitations that arise in the use of a survey-based quasi-experimental design and have documented the importance of including process evaluation techniques as a complementary approach. Several other authors have recently addressed

some of these issues as well, suggesting that new approaches, such as the narrative research method (17), or more explicitly interactive models of personal and situational constraints on sexual behavior (18) be used to design and evaluate successful intervention programs.

6. Dissemination and Utilization of Research Findings

The research findings from the intervention study are being disseminated in four ways. First, a national seminar on Women and AIDS was organized in collaboration with another ICRW - supported project in Chiang Mai, Northern Thailand. This seminar was held in May, 1993, and attracted over 300 researchers, health personnel, and representatives of nongovernmental organizations. Second, the final report will be distributed under the Population Council's Regional Research Paper Series for South and East Asia following approval from ICRW staff and members of the Women and AIDS Program's Technical Advisory Group. This distribution will reach a broad community of AIDS and reproductive health research professionals in Thailand as well as other countries in the South and East Asia Region. In addition, the report will be made widely available to officials in Thailand's Ministries of Public Health and Education. Third, a manuscript will be prepared focusing on the intervention program implementation and the methodological lessons learned. Finally, two local seminars were conducted. These have proved very successful in exchanging ideas and information with local policy makers. As a result, manuals and work books for peer counselors have already been distributed to 17 Provincial Health Offices in the Northeastern region. Many schools have adopted a similar peer counseling network in their own setting, for example, in Khon Kaen and Udonthani Province. In addition, the research team has received several requests for technical assistance from other program staff in the Northeast region.

Results from the research activities also have been brought to broader public attention through performances of the AIDS drama troupe in various settings, for example, at the annual Silk Festival and on other holidays.

References

1. Panos Institute. "Triple Jeopardy: Women and AIDS" London: Panos Publications Ltd., 1990.
2. Nelson K, et al. "Risk Factors for HIV Infection Among Young Adult Men in Northern Thailand." JAMA 1993;270;955-960.
3. Koetsawang S. "Aids prevention among adolescents and young adults: an experimental study in Thailand." Family Health Division. Ministry of Public Health. Bangkok, Thailand.
4. Mann JM. "Global AIDS into the 1990s". Journal of Acquired Immune Deficiency Syndromes. 1990; 3: 438-442.
5. Smith D. "Thailand: AIDS crisis looms". Lancet. 1990; 335: 781-782.
6. Piot P, et al. "The global epidemiology of HIV infection: continuity, heterogeneity, and change". Journal of Acquired Immune Deficiency Syndromes 1990; 3: 403-412.
7. Weniger B, et al. "The epidemiology of HIV infection and AIDS in Thailand." AIDS 5, Supplement 2: S71-S85, 1992.
8. United Nations Development Programme. "Young Women: Silence, Susceptibility, and the HIV Epidemic." New York: 1992.
9. Lama VM. "The determinants of sexuality among adolescent school girls in Kenya". East Afr Med J. 1990; 67: 191-200.
10. Howard M, et al. "Helping teenagers postpone sexual involvement". Family Planning Perspectives 1990; 22: 21-26.
11. Kelly JA, et al. "HIV risk behavior reduction following intervention with key opinion leaders of population; an experimental analysis". Am J Public Health. 1991; 81: 168-171.
12. James NJ, Bignell CJ, and PA Gillies. "The reliability of self-reported sexual behaviour". AIDS. 1991; 5: 333-336.
13. Carballo M, Cleland J, and M Carael. "A cross-sectional national study of patterns of sexual behaviour". J Sex Res. 1989; 26: 287-299.

14. Abramson PR and G Herdt. "The assessment of sexual practices relevant to the transmission of AIDS: a global perspective". J Sex Res. 1990; 27: 215-232.
15. Stoeckel J. Intervention Research on Child Survival. 1992; Singapore: McGraw-Hill.
16. Fisher AA, Laing JE, Stoeckel JE, and JW Townsend. Handbook for Family Planning Operations Research Design. 1991; New York: The Population Council.
17. World Health Organization: Adolescent Health Programme. "A Study of the Sexual Experience of Young People in Eleven African Countries: The Narrative Research Method." 1992; Geneva: World Health Organization.
18. Abraham C and P Sheeran. "In search of a psychology of safer-sex promotion; beyond beliefs and texts". Health Education Research. 1993; 8(2): 245-254.

Tables

1. Number and percentage of female and male students	47
2. General characteristics of the study population	48
3. Levels of knowledge concerning HIV/AIDS	49
4. HIV/AIDS knowledge: pre- and post-intervention	50
5. Selected variables related to risky sexual behaviors	50
6. Perceived benefits of condom use	51
7. Intentions to use condoms	51
8. Previous sexual intercourse	51
9. Reliability of responses regarding prior sexual intercourse	52

Table 1: Number and percentage of female and male students in the study

	Number	Percentage
<i>Experimental Schools</i>		
Female	1267	76.3
Male	394	23.7
Subtotal	1661	100
<i>Control Schools</i>		
Female	651	50.3
Male	642	49.7
Subtotal	1293	100
<i>All Schools</i>		
Female	1918	65.9
Male	991	34.1
TOTAL	2909	100

Table 2: General characteristics of the study population

	Female Students		Male Students		All Students	
	Experimental	Control	Experimental	Control	Experimental	Control
Age (Mean)	17.1	17.8	16.4	16.7	16.9	17.3
Location of Hometown						
Khon Kaen Area	33.3%	18.6%	37.9%	23.9%	34.3%	21.2%
Outside Khon Kaen	42.9%	52.9%	45.4%	57.0%	43.4%	54.9%
Another Province	23.8%	28.5%	16.8%	19.1%	22.3%	23.9%
<i>N</i> (100%) =	1254	646	346	635	1600	1281
Living with Whom at Present						
Parents	70.1%	64.7%	69.3%	13.0%	69.9%	68.7%
Relatives	16.2%	13.9%	18.6%	13.4%	16.7%	13.7%
Friends and Others	13.7%	21.5%	12.1%	13.6%	13.4%	17.6%
<i>N</i> (100%) =	1260	646	345	640	1605	1286
Father's Occupation						
Farmers	25.4%	44.1%	24.2%	39.0%	25.1%	41.6%
Labor workers	13.5%	10.7%	14.9%	13.9%	13.9%	12.3%
Business	19.0%	12.9%	19.0%	13.2%	19.0%	13.1%
Government Officials	34.1%	25.5%	33.2%	27.2%	33.9%	26.3%
Other	8.0%	6.8%	8.7%	6.7%	8.2%	6.8%
<i>N</i> (100%) =	1250	644	343	628	1593	1272
Mother's Occupation						
Farmers	32.7%	50.2%	29.0%	45.4%	31.9%	47.9%
Labor workers	8.6%	6.3%	11.1%	12.0%	9.1%	9.1%
Business	31.1%	25.9%	31.1%	23.1%	31.1%	24.5%
Government Officials	8.4%	4.6%	11.7%	7.1%	9.1%	5.8%
Other	19.1%	13.0%	17.0%	12.4%	18.7%	12.7%
<i>N</i> (100%) =	1222	632	341	619	1563	1254
Parents Marital Status						
Living together	87.7%	85.4%	87.6%	83.2%	87.7%	84.3%
Separated	3.1%	4.7%	5.2%	4.4%	3.6%	4.6%
Divorced	3.8%	3.6%	1.7%	4.0%	3.3%	3.8%
Widowed	4.9%	6.4%	4.9%	7.0%	4.9%	6.7%
Other	0.5%	-	0.6%	1.4%	0.5%	0.7%
<i>N</i> (100%) =	1243	643	347	631	1590	1274

Table 3. Levels of knowledge concerning the prevention of HIV transmission and the progression of AIDS (Pre-intervention survey results) (Results are percent positive responses)

	Experimental Schools		Control Schools		All Schools		Grand Mean
	F	M	F	M	F	M	
Knowledge of High-Risk Behaviors Related to AIDS							
Multiple partners	97.1	97.2	91.7	94.7	97.1	93.6	95.9
Using same needle for injection	97.5	97.8	93.4	95.6	97.6	94.8	95.9
Homosexual behaviors	96.1	95.8	89.4	92.1	96.0	91.2	97.6
Having sex with prostitutes	98.4	98.8	96.0	96.7	98.5	96.5	97.8
Use of razor/tattooing	77.8	77.7	73.6	72.1	77.8	73.6	76.4
AIDS Prevention Knowledge							
Avoid sexual intercourse	86.6	83.7	82.5	83.5	85.6	83.2	84.8
No drug injecting	94.0	94.0	91.1	91.3	94.0	91.2	93.1
Use of sterile needles	75.6	76.3	73.4	73.0	75.9	73.2	74.9
Having one partner	88.1	88.5	82.5	84.4	88.2	83.8	86.7
Use of condom for sexual intercourse	92.2	93.9	88.0	91.0	92.7	89.9	91.8
Condom use with prostitutes	71.0	70.4	67.6	73.2	70.8	71.2	71.0
Knowledge of AIDS Transmission							
Only HIV+ persons can transfer the virus	89.7	89.1	86.5	90.2	89.6	88.9	89.3
AIDS virus transferred through sexual intercourse	65.0	65.4	62.2	65.9	65.2	64.6	65.0
AIDS virus transfer from pregnant mother to child	96.4	95.2	89.6	93.2	96.0	91.9	94.6
Knowledge of Progression to AIDS							
HIV+ person may have no symptoms for many years	63.3	66.6	62.8	65.3	64.4	64.4	64.4

Table 4. Percentage of positive responses among female and male students on selected variables related to AIDS knowledge pre- and post-intervention

	Pre-intervention		Post-intervention	
	Experimental	Control	Experimental	Control
Knowing AIDS is Caused by Virus				
Female	95.5	95.0	96.0	96.1
Male	93.7	95.4	95.5	95.1
Knowing AIDS can be Detected by Blood Examination				
Female	95.7	95.8	95.7	94.6
Male	91.2	92.4	93.3	95.1
Knowing Use of Condoms can Prevent HIV Infection				
Female	93.5	94.4	92.2	92.1
Male	91.5	94.4	92.4	91.2

Table 5. Percentage of positive responses among female and male students on selected variables related to risky sexual behaviors pre- and post-intervention

	Pre-intervention		Post-intervention	
	Experimental	Control	Experimental	Control
Having Sex with One Partner will Reduce Chance of HIV Infection				
Female	54.8	54.6	60.5	57.9
Male	54.3	58.0	66.3	55.0
AIDS is Likely to Occur Most with Those Who have Multiple Partners				
Female	34.0	30.6	40.2	34.3
Male	41.6	38.6	38.2	38.1
Changing Sexual Behaviors can Prevent HIV				
Female	89.5	88.0	87.8	87.7
Male	86.3	84.1	85.4	84.6

Table 6. Percentages of positive responses for students reporting perceived benefits of condom use pre- and post-intervention

	Pre-intervention				Post-intervention			
	Exper.		Control		Exper.		Control	
	F	M	F	M	F	M	F	M
	N=630	N=226	N=303	N=343	N=630	N=226	N=303	N=343
Benefits of Condom Use								
Prevent pregnancies	11.0	39.4	15.5	34.4	21.1	15.0	28.4	25.1
Prevent STDs, "germs", and AIDS	49.0	39.4	51.5	40.3	60.8	67.3	53.5	54.8
Used for Other Purposes	40.0	21.2	33.0	25.4	18.1	17.7	18.1	20.1
Total	100%	100%	100%	100%	100%	100%	100%	100%

Table 7. Students' intention to use condoms

	Pre-intervention				Post-intervention			
	Exp.		Control		Exp.		Control	
	F	M	F	M	F	M	F	M
	n=8	n=7	n=7	n=13	n=8	n=7	n=7	n=13
Every time i have sex	25.0	28.6	-	7.7	25.0	71.4	28.6	30.8
Only when my partner asks	12.5	-	28.6	23.1	12.5	14.3	51.1	23.1
Only with prostitutes	37.5	42.9	37.1	69.2	37.5	-	14.3	15.4
Try not to use	25.0	28.6	14.3	-	25.0	14.3	-	30.8

Table 8. Percentages positive responses regarding previous sexual intercourse

Pre-intervention				Post-intervention			
Experimental		Control		Experimental		Control	
F	M	F	M	F	M	F	M
4.8	26.9	8.5	22.9	11.5	11.4	11.6	15.8

Table 9. Reliability of responses concerning prior sexual intercourse

	Experimental		Control	
	Female N= 1025	Male N= 294	Female N= 583	Male N= 556
Baseline—No	85.3%	63.3%	81.6%	64.9%
Follow-up—No				
Baseline—Yes	0.1%	2.4%	1.4%	3.6%
Follow-up—Yes				
Baseline—No	10.4%	9.5%	10.1%	12.4%
Follow-up—Yes				
Baseline—Yes	3.3%	24.8%	6.7%	19.1%
Follow-up—No				

Appendices

1. Pre-Intervention Focus Group Session: Objectives and Guided Questions . .	55
2. Baseline Survey Instrument	65
3. Follow-up Survey Instrument	85
4. Summary of the Pre-Intervention Focus Group Discussions	105
5. Guidelines for Post-Intervention Focus Group Discussions	113

Appendix 1

**Pre-Intervention Focus Group Discussion Objectives
and Guided Questions**

AIDS-ICRW

Focus Group Session : Objectives and Guided questions

Objectives of the focus group session are to collect informations on knowledges, beliefs, attitudes and perception regarding AIDS. These include mode of transmission, factors involved in spreading, prevention and treatment as well as how AIDS cases will be detected. Information obtained will be utilized in the formation of questionnaires.

The questions here are suggestions we have indicated the main topics which need to be covered in each of the sections. If the discussion is moving to cover these topics, don't worry about the questions. You may need to move between questions in a different way, depending on each group, and how the discussion flows in each group. Since you are running eight different sessions regarding sexes and ages of the participants, be sensitive with each group climate particularly their responses to the "language" you are using. Here are the established themes of each section.

- Section 1: Major peer, reference and supporting groups/system social environment / acti
- Section 2: Teenager language and their sexual behaviors
- Section 3: General knowledge of AIDS and awareness
- Section 4: Specific knowlege of AIDS and awareness
- Section 5: Use of condom

Remember you are assessing the "process" within the group as well as obtaining "content" derived from the guided questions.

Section 1 : Theme : Major peer, reference or support groupings

Assessment : Here we would like to know whom the students can be rely on for information, and talking to when they are concerned about something. Whom do they trust. it is this information, together with data from the questionnaires which will be used to help decide on how an AIDS promotion campaign will reach them.

Questions :

- When do people usually spend time together in the school ground? and in other places? Do boys/girls usually work together? What about times?
- When are they not working, what do you usually do?
- Where do people usually spend time together?
- What do people usually do when they are together?
- Do kids do much talking at these time?
What do they talk about?
- If there is something with which you are worried, what do you do?
Do you talk to anyone about these things?
To whom do you usually talk?
What kind of things that worry you?
Is it always the same people you talk to about these things, or is it different people?
When there are things about your friends or something between you and your friend that worry you? Is it the same as with other things?
If it is different, how is it different?
What kinds of things that make you worried about your friends?
- If there are same things you want to know about, how do you find these things out?
Do you ask your friends or talk to other peoples about these things?

- To whom do you usually talk?
- Is it different for different things?
- Do you believe in what the others tell you?
- Are there times you don't believe in what the others say?
- How do you realize when you can trust or believe in what have someone told you?
- Who will be the most helpful person when it comes to your very personal problem?
- Do you think parents will be helpful?

Section 2 : Theme : Teenagers language and their sexual behaviors.

Assessment:

1. How easy can the group express themselves on these topics?
2. How did teenagers language develop? Do they develop or initiate the terms by themselves? Has this been influenced by other means? What means? How?

Questions :

- Do you have some "terms" which mean "having sex"?
- Describe how "good boy (girl)" means in your opinion.
- Do you think "sex" is very common topic to talk about?
- How do you think when your classmates start to feel in "love" each other? How do you know they are in "love"?
- If you love someone, describes your feeling toward her/him.

Section 3 : Theme: General knowledge on AIDS and awareness

Assessment :

1. How certain the participants are of their Knowledge i.e., Where is their uncertainty, of what kinds? When participants in the group disagree, which beliefs are easily shaken and which is more certain?
2. Who are information leaders in the group? What are their characteristics? How do they argue or convince the others in the group?
3. Are there any "terms" used for AIDS?

Questions :

- Have you ever heard of AIDS?
- How did you hear about AIDS?
- What have you heard? What is AIDS?
- What are the causes of AIDS?
- Who gets AIDS? Who else?
- How do they get AIDS? How else?
- Why do some people get AIDS? Are there other reasons?
- Is there a way you can prevent AIDS? How?
- What happens when you get AIDS?
- How can you tell if a person has AIDS?
- Can a person have AIDS without signs and symptoms?
- What should a person with AIDS do?
- Are there certain things they should not do?
What are these?

Section 4 : Theme : Specific knowledge of AIDS and awareness.

Assessment : This section is the most difficult area for the participant as well as for yourself as these are mostly personal topics.

1. Can the group bring out their personal experience?
How comfortable are they?
2. What are the group responses and feelings? Who feel comfortable in the group? Who feel very uncomfortable?
What are their characteristics?
3. What are the most similar experiences? What are the most different experiences?
4. Are there any silences at intervals?
Who break up the silences?

Questions :

AIDS as a Problem or Worry

- Do you think AIDS is a problem in Thailand?
Where is it a problem?
Is it a problem for teenagers? If yes, which group of teenagers; Out of or in school?

- Has anyone in your family ever get AIDS? If yes, Who is he/ she? How do you think that person would get AIDS?
- Have you ever worried about someone in your family getting AIDS How do you know that a person will get AIDS?
- Have you ever worried about getting AIDS yourself? What are your feelings? Were you worried, happy, curious or sad with the happening of AIDS with peoples and some students like you?
- Do you find it easy to accept these?
- What made it easy?
- What made it difficult?
- Who do you talk to regarding AIDS?
- Who discussed with you?
- What are their reactions?
- When do you think it is most difficult to talk to a friends/ parents/teachers about something like AIDS?
- How do you think what would make it easier?
- Do you think your friends want to talk to other friends/ parents/ their teachers about AIDS?
- What would you like to talk to them about AIDS?
- What would you like them to know about AIDS?
- What would you like them to know about how you feel about AIDS?
- Have any of you talked to others (aparts from friend/ parents/ teachers) about AIDS?
- Who did you talk to? Who are these people?
- What did you talk about?
- How did you feel about this?
- Are there things you want to talk about but didn't?
- What kinds of things are these?
- Who do you feel the most comfortable to talk to?
- Where do you talk about AIDS?

Catching :

AIDS-the Role of Prostitution

- How do you think you may get AIDS?

- What about your school mates, are there anybody you know who ever visit prostitutes?
- Do you think they might get AIDS?
- Which group are the most likely to get AIDS from prostitutes?
- Is there anyway they can avoid getting AIDS?
- Do you think classmates would do these things to get away from AIDS?
- Which the are least likely? Do you know your friends like these?
- Is it essential for young man at your age to learn sex through the prostitute?
- Is it a "tradition" in your school to bring the newcomers (the first year student) to have sex with the prostitute in order to become "a real man"?

Catching through high risk sexual behaviors

- Do you think it is quite common for school boys/girls to have "sex" with their girl/boyfriends?
- Do you accept this intimate relationship?
- Do you know anyone who has many boy/girlfriends? Do you think they are at risk?
- What do children at your age do for leisure during their free time?

Catching AIDS through drugs and AIDS-related behaviors

- Do you feel smoking/drinking/taking drugs are appropriate for children at your age?
- Do you know anybody in your class who smoke/drink/taking drugs?
- What do you think about these behaviors?
- Do you think these behaviors associated with AIDS?
- If so, is there anyway they can keep themselves from getting AIDS?
- Do you think yourself will get AIDS?
- Is smoking/drinking common in your group?
- Do you think there is time when you can get together and having fun? What kind of things you consider as "fun"?

Section 5 : Theme : Use of condoms

Assessment : Similar to section 4

1. Observe the response of different group toward the topic.
2. Can these topics be easily discussed and feelings be easily expressed?
3. The goal here is to discover how much is known about using condoms, whether they have been used, why or why not, whether talk of condoms occurs, with whom and what is said. This information will be useful for setting both the construction of the questionairs and setting the content of the intervention program.

Questions

- Has anyone ever seen a condom?
- Could someone describe a condom?
- Where could a person get a condom?
- Where could you find condom?
- Is it the same for women-can they get condoms the same way?
- Are there other places?
- Have you ever got a condom?
- Could someone describe how a condom is used?
Any other ways?
- When is a condom used?
- Who used condoms? Who should use condoms?
- What is a condom used for?
- Is it used for any other purposes?
- What do people say about condoms?
What else do they say?
- What do boys say about condoms?
What else?
- What do girls say about condoms?
What else?

- Do people find condoms easy to use?
Do they use them much?
Why do you think they don't use them?
Is this the case for you?
 - Do women (girl) talk to each other about condoms?
Is this anything which is difficult to talk about?
What do women (girl) say about condoms?
Have you ever heard this?
Is this what you say?
 - Do men (boy) talk to each other about condoms?
What did they say?
Have you ever heard this?
 - Have any of you ever talked with other persons about using a condom? What about?
Is this easy or difficult for you to talk about? (What makes it difficult?)
 - Have any of you ever talked to your boy/girl- friends, about condom? What was the contents?
Is this easy or difficult?
What is it the most difficult?
What makes it difficult?
 - Would you like to talk to your friend about condoms?
What would you like to say?
What would you like them to know about condoms?
What would you like them to say to you?
-

Appendix 2

Baseline Survey Instrument

For Researcher Only
Card No.1
Column

Past I Personal Data

- | | | | | | | | | | | | | | | | | | |
|--|------------------------|--------|-----------|-----------|------------------|------------------|-------------|-------------|------------------------|------------------------|------------------------|------------------------|-------|-------|--|--|--|
| <p>1. Sex () 1. Female () 2. Male</p> | --- | 5 | | | | | | | | | | | | | | | |
| <p>(2) Age.....years old</p> | ----- | 6-7 | | | | | | | | | | | | | | | |
| <p>(3) Your grade average in the last semester was...</p> | ----- | 8-10 | | | | | | | | | | | | | | | |
| <p>Your grade point average is.....</p> | ----- | 11-13 | | | | | | | | | | | | | | | |
| <p>Your last class standing is.....</p> | ----- | 14-15 | | | | | | | | | | | | | | | |
| <p>Your major subject.....</p> | ----- | 16 | | | | | | | | | | | | | | | |
| <p>(4) Where is your hometown?</p> | ----- | 17 | | | | | | | | | | | | | | | |
| <p>1. In KhonKaen municipal</p> | | | | | | | | | | | | | | | | | |
| <p>2. Outside KhonKaen municipal</p> | | | | | | | | | | | | | | | | | |
| <p>3. Other provinces (specify).....</p> | | | | | | | | | | | | | | | | | |
| <p>5. At present, who are you living with?</p> | ----- | 18 | | | | | | | | | | | | | | | |
| <p>1. Parents</p> | | | | | | | | | | | | | | | | | |
| <p>2. Relatives</p> | | | | | | | | | | | | | | | | | |
| <p>3. Friends</p> | | | | | | | | | | | | | | | | | |
| <p>4. Others (specify).....</p> | | | | | | | | | | | | | | | | | |
| <p>6. Your parents' occupation</p> | ----- | 19-20 | | | | | | | | | | | | | | | |
| <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Father</td> <td style="width: 50%; text-align: center;">Mother</td> </tr> <tr> <td>1. Farmer</td> <td>1. Farmer</td> </tr> <tr> <td>2. Labour worker</td> <td>2. Labour worker</td> </tr> <tr> <td>3. Business</td> <td>3. Business</td> </tr> <tr> <td>4. Government official</td> <td>4. Government official</td> </tr> <tr> <td>5. Other(specify).....</td> <td>5. Others(specify)....</td> </tr> <tr> <td>.....</td> <td>.....</td> </tr> </table> | Father | Mother | 1. Farmer | 1. Farmer | 2. Labour worker | 2. Labour worker | 3. Business | 3. Business | 4. Government official | 4. Government official | 5. Other(specify)..... | 5. Others(specify).... | | | | | |
| Father | Mother | | | | | | | | | | | | | | | | |
| 1. Farmer | 1. Farmer | | | | | | | | | | | | | | | | |
| 2. Labour worker | 2. Labour worker | | | | | | | | | | | | | | | | |
| 3. Business | 3. Business | | | | | | | | | | | | | | | | |
| 4. Government official | 4. Government official | | | | | | | | | | | | | | | | |
| 5. Other(specify)..... | 5. Others(specify).... | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | |
| <p>(7) Your parents' incomes per month</p> | ----- | 21 | | | | | | | | | | | | | | | |
| <p>() 1. Less than 1,000 Baht</p> | | | | | | | | | | | | | | | | | |
| <p>() 2. 1,000-2,000 Baht</p> | | | | | | | | | | | | | | | | | |
| <p>() 3. 2,000-3,000 Baht</p> | | | | | | | | | | | | | | | | | |
| <p>() 4. 3,000-4,000 Baht</p> | | | | | | | | | | | | | | | | | |
| <p>() 5. More than 5,000 Baht</p> | | | | | | | | | | | | | | | | | |
| <p>() 6. uncertain</p> | | | | | | | | | | | | | | | | | |
| <p>() 7. Others (specify).....67.....</p> | | | | | | | | | | | | | | | | | |

8. Your parents' marital status	22
<input type="checkbox"/> 1. Living together	
<input type="checkbox"/> 2. Separated	
<input type="checkbox"/> 3. Divorced	
<input type="checkbox"/> 4. Widowed	
<input type="checkbox"/> 5. Others (specify).....	
9. Your parents' education level	23-24
Father Mother	
<input type="checkbox"/> <input type="checkbox"/> 1. Finished compulsory school or primary school	
<input type="checkbox"/> <input type="checkbox"/> 2. Secondary school	
<input type="checkbox"/> <input type="checkbox"/> 3. Diploma, Vocational school	
<input type="checkbox"/> <input type="checkbox"/> 4. Bachelor degree	
<input type="checkbox"/> <input type="checkbox"/> 5. Higher than Bachelor degree	
10. Who is supporting for your study?	25
<input type="checkbox"/> 1. Parents	
<input type="checkbox"/> 2. Relatives	
<input type="checkbox"/> 3. Your own	
<input type="checkbox"/> 4. Others (specify).....	
11. How much money do you spend per month (in average)?	26
<input type="checkbox"/> 1. Less than 1,000 Baht	
<input type="checkbox"/> 2. 1,000-2,000 Baht	
<input type="checkbox"/> 3. 3,000-4,000 Baht	
<input type="checkbox"/> 4. 4,000-5,000 Baht	
<input type="checkbox"/> 5. More than 5,000 Baht	
<input type="checkbox"/> 6. Others (specify).....	
12. Do you have any financial problems?	27
<input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No	

13) When you have financial problem, who do you ask for help in the first place?	28	
()1. Parents		
()2. Relatives		
()3. Classmates		
()4. Teacher		
()5. School counselor		
()6. Others (specify).....		
14) Do you have any school problems, particularly with your studies?	29	
()1. Yes ()2. No		
15) When you have problems regarding your studies, who do you ask for help in the first place?	30	
()1. Parents		
()2. Relatives		
()3. Classmate		
()4. Teacher		
()5. School counselor		
()6. Others (specify).....		
16) When you have personal problems, who do you ask for help in the first place?	31	
()1. Parents		
()2. Relatives		
()3. Classmates		
()4. Teachers		
()5. School counselor		
()6. Others (specify).....		
17) Are there any of the following facilities available in your living areas?(where you live at present)		
	(1)Yes (2)No	
17.1 Market/Shopping Centre	() ()	32
Electricity	() ()	33
Tap water	() ()	34
Telephone/Post office	() ()	35

		For Researcher Only		
		Card No.1		
		Column		
	(1)Yes	(2)No		
17.2 Hospital/Health care centre/ Private clinics	()	()	---	36
Schools	()	()	---	37
Temples/churches	()	()	---	38
17.3 Theatres	()	()	---	39
Hotel/Disco teaque/Restaurant	()	()	---	40
Massage/Barber/Tea shops	()	()	---	41
18. How often do you have the following activities?				
	(1)	(2)	(3)	
	Usually	Seldom	Never	
1. Watching VDO	()	()	()	---
2. Reading Newspapers/ Journals	()	()	()	---
3. Watching films	()	()	()	---
4. Listening to radio/ cassette tape	()	()	()	---
5. Watching TV.	()	()	()	---
6. Going to Disco teaque	()	()	()	---
7. Participating in social activities; New years Day Parties, Loy Kra-Thong festival etc.	()	()	()	---
8. Study tour	()	()	()	---
9. Camping	()	()	()	---
10. Tutoring	()	()	()	---
11. Social recreations	()	()	()	---
12. Shopping	()	()	()	---
13. Reading sex magazine/sex education	()	()	()	---

Part 2 Knowledge on AIDS

- | | | |
|--|-------------------|----------|
| 1. Have you ever heard about AIDS?
()1. Yes ()2. NO | — | 55 |
| 2. Have you ever learned about AIDS in classroom?
()1. Yes ()2. NO | ----- | 56 |
| 3. Have you heard about Aids from the following sources? | | |
| | (1)Yes (2)NO | |
| 1. Radio | () () | — 57 |
| 2. T.V. | () () | — 58 |
| 3. Public communication centre | () () | — 59 |
| 4. Newspapers | () () | — 60 |
| 5. Magazines/Journals/comics | () () | — 61 |
| 6. Poster/Leaflet | () () | ----- 62 |
| 7. Doctor/Nurse/Health workers | () () | — 63 |
| 8. Teachers | () () | — 64 |
| 9. Parents | () () | — 65 |
| 10. Friends | () () | — 66 |
| 4. What is the cause of AIDS?
()1. Bacteria ()2. Virus
()3. Fungus ()4. Parasite
()5. Unknown ()6. Others (specify)
()7. do not know | | — 67 |
| 5. Can you tell if someone has HIV virus by guessing from his/her general appearance?
()1. Yes ()2. NO ()3. do not know | — | 68 |
| 6. Do you think that someone with HIV virus who doesn't have symptoms can pass on the disease?
()1. Yes ()2. NO
()3. do not know | ----- | 69 |

For Researcher Only

Card No.1

Column

- 7 Are the following characteristics signs and symptoms of AIDS?
- | | (1) | (2) | (3) | |
|----------------------------------|-----|-----|------------|----|
| | Yes | NO | don't know | |
| 1. Getting thin/loss of weight | () | () | () | 70 |
| 2. Loss of hair | () | () | () | 71 |
| 3. Weakness/easily get infection | () | () | () | 72 |
| 4. Chronic cold/cough | () | () | () | 73 |
| 5. Chronic diarrhea | () | () | () | 74 |
| 6. Fever of unknown origin | () | () | () | 75 |
| 7. Skin changes | () | () | () | 76 |
| 8. Others (specify)..... | | | | 77 |

8. What are the risk behaviors for getting AIDS?
- | | (1) | (2) | (3) | |
|-------------------|-----|-----|------------|----|
| | Yes | NO | don't know | |
| 1. Kissing | () | () | () | 78 |
| 2. Shaking hands | () | () | () | 79 |
| 3. Sharing cloths | () | () | () | 80 |

Card No.2

Column

- | | | | | |
|--|-----|-----|-----|----|
| 4. Sharing glasses/spoons/ plates/other utensils | () | () | () | 1 |
| 5. Sharing needles/syringes | () | () | () | 2 |
| 6. Biting by mosquitoes | () | () | () | 3 |
| 7. Using public toilets | () | () | () | 4 |
| 8. Having sex with many partners | () | () | () | 5 |
| 9. Having homosexual behaviors | () | () | () | 6 |
| 10. Having sex with prostitutes | () | () | () | 7 |
| 11. Having blood transfusion | () | () | () | 8 |
| 12. Being blood donors | () | () | () | 9 |
| 13. Getting through respiration/ coughing/sneezing | () | () | () | 10 |
| 14. Sharing razors | () | () | () | 11 |
| 15. Swimming in public pools | () | () | () | 12 |
| 16. Tattooing/Ear piercing | () | () | () | 13 |
| 17. Born with AIDS infected mother | () | () | () | 14 |

18. Breast feeding by AIDS- infected mother	() () ()	15
9. Can we detect HIV by the following examinations?	(1) (2) (3) dont' know & Yes No uncertain	
1. Physical examination	() () ()	16
2. Blood examination	() () ()	17
3. Urine examination	() () ()	18
4. Fecal examination	() () ()	19
5. Pelvic examination	() () ()	20
10. At present do we have medicine to cure AIDS? ()1. Yes ()2. NO ()3. do not know		21
11. Can we prevent HIV infection by the following maneuvers?	(1)Yes (2)NO (3)do not know	
1. Vaccination	() () ()	22
2. Drugs	() () ()	23
3. IV infusions	() () ()	24
4. Using condoms	() () ()	25
12. Who are at risks for getting AIDS? (1)Yes (2)No (3)do not know		
1. Postitutes	() () ()	26
2. Male homosexuals (Gay)	() () ()	27
3. Drug addicts	() () ()	28
4. Man/Woman who have sex with many partners	() () ()	29
5. Housewives/general population	() () ()	30
13. Are the following statements <u>TRUE</u> or <u>FALSE</u> ?	(1) (2) (3)Do not know True False & uncertain	
13.a We can get AIDS only by having sex wiht AIDS-infected person	() () ()	31
13.b HIV transmits only	() () ()	32

	(1) True	(2) False	(3) do not know & uncertain	For Researcher Only Card No.2 Column
13.c Sharing the same needles/syringes is the cause of AIDS transmission.	()	()	()	33
13.d Teenagers will not get HIV infection if they have sex within their peer group.	()	()	()	34
13.e HIV-infected person may not manifest AIDS symptoms for many years.	()	()	()	35
13.f There are two types of AIDS infection during sexual intercourse: either from man to woman, or from woman to man.	()	()	()	36
13.g Having oral sex is easy to get HIV infection.	()	()	()	37
13.h HIV can be transmitted through sweat and tears.	()	()	()	38
13.i Deep Kissing is very risky for HIV infection.	()	()	()	39
13.j. Anal sex is very risky for HIV infection.	()	()	()	40
14. The following statement can reduce the opportunity to get HIV infection true or false? (<u>True</u> for reducing and <u>False</u> for not reducing)				
	(1) True	(2) False	(3) Uncertain	
14.a Not having sex	()	()	()	41
14.b Not contacting with AIDS person	()	()	()	42
14.c Not injecting any drugs	()	()	()	43
14.d Having sex with the same partner only	()	()	()	44
14.e Not shaking hands with AIDS person	()	()	()	45

14.f Using condom for sexual intercourse	() () ()	— 46
14.g Taking shower daily at least.	() () ()	— 47
14.h Not donating blood	() () ()	— 48
14.i Having sex only with hygienic persons	() () ()	— 49
14.j Using sterile needles	() () ()	— 50
15. What is your feeling towards the following statements?		
	(1) (2) (3)	
	Agree Disagree Neutral	
15.a Having sex before marriage	() () ()	— 51
15.b Having a baby while in schools.	() () ()	— 52
15.c Having sex before graduating from secondary school.	() () ()	— 53
15.d Married before graduating from schools.	() () ()	— 54
15.e Prostitution is very common in our society.	() () ()	— 55
15.f Boys should learn sex from prostitutes.	() () ()	— 56
15.g Having sex with prostitutes is safe as long as you use condom.	() () ()	— 57
15.h Students who live away from parents are easily spoiled.	() () ()	— 58
15.i For girls, virginity should be treasured until you get married	() () ()	— 59
15.j For boys, virginity means unexperience for sex	() () ()	— 60

Part 3 Attitude towards AIDS

16. Do you agree with the following statement?	(1)	(2)	(3)	
	Agree	Disagree	Neutral	
16.a AIDS is a serious disease which follows by death.	()	()	()	61
16.b Getting sick with AIDS is the result of previous Kramma (KUM-KAOW)	()	()	()	62
16.c If person have sex with the same partner, he will not get HIV infection.	()	()	()	63
16.d AIDS occurs only among those who have abnormal sexual behaviors.	()	()	()	64
16.e Every person has equal chance to get HIV	()	()	()	65
16.f Changing sexual behaviors (not having multiple sex partners, using condoms) can prevent HIV infection	()	()	()	66
16.g Most people do not like to use condom because it feels unnatural.	()	()	()	67
16.h Using condom decrease sexual pleasure.	()	()	()	68
16.i Everyone must die sooner or later, so we should not worry about AIDS.	()	()	()	69
16.j Blood examination to detect HIV is not useful since AIDS cannot be cured.	()	()	()	70
16.k HIV-infected pregnant mothers should terminate her pregnancy.	()	()	()	71

(1) (2) (3)
Agree Disagree Neutral

16.1 If you know that your classmate or neighbor is getting AIDS, you will eventually breaking up the relationships with them.

72

Part 4 AIDS Preventive Behaviors

The following questions are related to your personal information. Some questions may make you feel irritated, annoyed etc, so we wish to apologize for this. However, since these questions are related to AIDS preventive behaviors, it is necessary to explore and understand some data on a realistic basis. The aim of this part is to gain knowledge and to look for the most effective and efficient strategies for future AIDS prevention.

1. Do you think that discussing out sex is common among teenagers?

73

() 1. Yes () 2. NO () 3. Uncertain
(Why? specify).....
.....

2. If yes, what aspects?

74

() 1. Sexual intercourse
() 2. Sex partners
() 3. Sexual pleasure
() 4. Others (specify).....

3. When you have sexual desire, do you the following? How often per month.

(1)Yes (2)NO How often/month
1. Self masturbation () () ()
2. Having sex with prostitutes () () ()
3. Having sex with friends () () ()

75-76

77-78

79-80

Card No.3

4. Others (specify)..... () () ()

1-2

4. Have you ever had any tests for STD?
()1. Never (if never skip to Q.No.6)
()2. 1-2 times
()3. 3-4 times
()4. 5-6 times
()5. More than 6 times
5. Did your tests show that you had an STD?
()1. Yes ()2. NO
(what types)
()1. Do not know
()2. Gonorrhoea
()3. Syphilis
()4. Chancroid
()5. Herpes
()6. Others (specify).....
6. Which of the following best describes your situation with respect to having a boyfriend/girlfriend?
()1. I have one boy/girlfriend
()2. I have more than one boy/girlfriend
()3. In the past I have one but I don't have now
()4. I don't have a boy/girlfriend now and I have never had one.
7. If you have one boy/girlfriend now or have had one in the past, how long you have been together?
()1. Less than 3 months
()2. 3-6 months
()3. 7-12 months
()4. More than 12 months
()5. Others (specify).....
8. Do you think that having sex prior to marriage is acceptable?
()1. Yes ()2. NO
()3. Others (specify).....

3

4-5

6

7

8

For Researcher Only

Card No.3

Column

9. Have you ever had sexual intercourse?
()1. Yes ()2. if No-(skip to question No.18) ----- 9
10. When was the last time you had sexual intercourse?
()1. No. of day ago..... ----- 10-11
()2. No. of weeks ago..... ----- 12-13
()3. No. of months ago..... ----- 14-15
()4. No. of years ago..... ----- 16-17
11. Who was your partner during the last time you had sexual intercourse?
()1. Prostitute
()2. Boyfriend/Girlfriend
()3. Others (specify)..... ----- 18
12. Did you (or your partner) use a condom the last time you had sexual intercourse?
()1. Yes ()2. No. ----- 19
13. Do you like using condom?
()1. Yes (why? for what purposes)..... ----- 20-21
()2. NO (why? given reasons).....
14. Which of the following best describes your behavior regarding use of condom?
()1. I use condom everytime I have sex.
()2. I use condom only when my sex partner asks so/or do so.
()3. I use condom only with prostitutes.
()4. I try not to use condom whenever possible. ----- 22
15. How often do you have sexual intercoures?
()1. 1-2 times/month ----- 23
()2. 3-4 times/month
()3. 5-6 times/month
()4. 7-8 times/month
()5. Very often as wish

16. What are your reasons for having sex?
 (can tick more than one answer)
- ()1. Your loved one need to tie up the relationships
 - ()2. Getting money to support your studies
 - ()3. Gaining sex experience
 - ()4. Being raped
 - ()5. Being deceived
 - ()6. Others (spectify).....

Question 17 should be answered by male students, female students skip to question 18

17. Have you ever had sexual intercourse with a prostitute? — 25
- ()1. Yes ()2. NO

18. For what purpose is a condom used? — 26
- ()1. Making balloons
 - ()2. Prevent pregnancy VD and AIDS
 - ()3. Demonstrating at school exhibition
 - ()4. Others (spectify).....

19. Which of the following items is not addictive? — 27
- ()1. Cigarette
 - ()2. Alcohol
 - ()3. Tonic drink
 - ()4. Marihuana

20. Have you ever use drugs? — 28
- ()1. Yes ()2. No-(if no, skip to question 24)

21. What methods did you use for taking drugs? — 29
- | | (1)Yes | (2)NO | |
|------------------|--------|-------|----|
| ()1. Injection | () | () | 29 |
| ()2. Inhalation | () | () | 30 |
| ()3. Smoking | () | () | 31 |
| ()4. Orally | () | () | 32 |

22. Are you still using any drugs at present?
 () 1. Yes, routinely
 () 2. Not at all
 () 3. Once in a while
 () 4. Others (specify).....

66 33

23. What is your main reason of using drugs?
 () 1. Friends persuade to do so
 () 2. Having problems with friends
 () 3. Having problems with studying
 () 4. Having family problems
 () 5. Others (specify).....

67 34

24. Are any of your classmate using drugs now?
 () 1. Yes () 2. NO

68 35

25. What methods are they using for taking drugs?
 (1)Yes (2)NO
 a. Injection () ()
 b. Inhalation () ()
 c. Smoking () ()
 d. Orally () ()

69 36
 70 37
 71 38
 72 39

26. What is the main reason for your friend to use drugs?
 () 1. Another friends persuade to do so
 () 2. Having problems with friends
 () 3. Having problems with studying & teachers
 () 4. Having family problem
 () 5. Others (specify).....

73 40

27. Have you ever had blood examination for AIDS?
 () 1. Yes () 2. NO

74 41

28. Do you want to have blood examination for AIDS?
 () 1. Yes () 2. NO

75 42

29. If you know that your closed friend, beloved one, or respected person is getting HIV infection, how will you act toward him?
 () 1. as usual
 () 2. have some difficulties in responding to him
 () 3. others (specify).....

76 43

- 30. Do you think that your present behaviors and daily activities are the risk behaviors for HIV infection? 44
 - ()1. No risk taking
 - ()2. Low risk taking
 - ()3. High risk taking
 - ()4. Uncertain

- 31. Do you know all of risk behaviors for HIV infection? 45
 - ()1. Yes ()2. NO ()3. Uncertain
 - (specify).....
 -

- 32. What do you perceive as your risk behaviors for AIDS and STD? 46
 - ()1. Having sex with prostitutes
 - ()2. Having sex with multiple partners
 - ()3. Taking intravenous drugs
 - ()4. Others (specify).....

- 33. According to question no. 32, do you do any thing to prevent AIDS and STD resulting from your risk behavior? 47-48
 - ()1. Yes (how?).....
 -
 - ()2. NO (why?).....
 -

- 34. Do you need more information about AIDS? 49
 - ()1. Yes ()2. NO

- 35. Through which methods do you like to gain more knowledge on AIDS?

	(1)Yes	(2)NO	
()1. Lectures	()	()	50
()2. Exhibition	()	()	51
()3. VDO, Films, Slides	()	()	52
()4. Reading books	()	()	53
()5. Peer group discussion	()	()	54
()6. Others (specify).....	()	()	55

- | | |
|--|---------------------|
| | For Researcher Only |
| | Card NO.3 |
| | Column |
| 36. Have you heard of your classmates becoming pregnant while studying?
()1. Yes ()2. NO | 56 |
| 37. Have you heard of your classmate/schoolmate having a baby while studying?
()1. Yes ()2. NO | 57 |
| 38. Have you known of anyone who had or has AIDS?
()1 Yes ()2. NO | 58 |

End of Questionnaire

Appendix 3

Follow-up Survey Instrument

--	--	--	--

1-4

For Researcher Only
Card No.1
Column

Part 1 Knowledge on AIDS

- | | | | |
|---|--------|-------|------|
| 1. Have you ever heard about AIDS?
() 1. Yes () 2. NO | — | 5 | |
| 2. Have you ever learned about AIDS in classroom?
() 1. Yes () 2. NO | — | 6 | |
| 3. Have you heard about Aids from the following sources? | | | |
| | (1)Yes | (2)NO | |
| 1. Radio | () | () | — 7 |
| 2. T.V. | () | () | — 8 |
| 3. Public communication centre | () | () | — 9 |
| 4. Newspapers | () | () | — 10 |
| 5. Magazines/Journals/comics | () | () | — 11 |
| 6. Poster/Leaflet | () | () | — 12 |
| 7. Doctor/Nurse/Health workers | () | () | — 13 |
| 8. Teachers | () | () | — 14 |
| 9. Parents | () | () | — 15 |
| 10. Friends | () | () | — 16 |
| 11. Anti Aids volunteers | () | () | — 17 |
| 4. What is the cause of AIDS?
() 1. Bacteria () 2. Virus
() 3. Fungus () 4. Parasite
() 5. Unknown () 6. Others (specify)
() 7. do not know | | | — 18 |
| 5. Can you tell if someone has HIV virus by guessing from his/her general appearance?
() 1. Yes () 2. NO () 3. do not know | — | 19 | |
| 6. Do you think that someone with HIV virus who doesn't have symptoms can pass on the disease?
() 1. Yes () 2. NO
() 3. do not know | — | 20 | |

For Researcher Only
 Card No.1
 Column

7. Are the following characteristics signs and symptoms of AIDS?

(1) (2) (3)
 Yes NO don't know

- 1. Getting thin/loss of weight () () () — 21
- 2. Loss of hair () () () — 22
- 3. Weakness/easily get infection() () () — 23
- 4. Chronic cold/cough () () () — 24
- 5. Chronic diarrhea () () () — 25
- 6. Fever of unknown origin () () () — 26
- 7. Skin changes () () () — 27
- 8. Others (specify)..... — 28

8. What are the risk behaviors for getting AIDS?

(1) (2) (3)
 Yes NO don't know

- 1. Kissing () () () — 29
- 2. Shaking hands () () () — 30
- 3. Sharing cloths () () () — 31
- 4. Sharing glasses/spoons/
plates/other utensils () () () — 32
- 5. Sharing needles/syringes () () () — 33
- 6. Biting by mosquitoes () () () — 34
- 7. Using public toilets () () () — 35
- 8. Having sex with many partners() () () — 36
- 9. Having homosexual behaviors () () () — 37
- 10. Having sex with prostitutes () () () — 38
- 11. Having blood transfusion () () () — 39
- 12. Being blood donors () () () — 40
- 13. Getting through respiration/
coughing/sneezing () () () — 41
- 14. Sharing razors () () () — 42
- 15. Swimming in public pools () () () — 43
- 16. Tattooing/Ear piercing () () () — 44
- 17. Born with AIDS infected
mother () () () — 45

18. Breast feeding by AIDS- infected mother	() () ()	46
9. Can we detect HIV by the following examinations?	(1) (2) (3)	
	Yes No dont' know & uncertain	
1. Physical examination	() () ()	47
2. Blood examination	() () ()	48
3. Urine examination	() () ()	49
4. Fecal examination	() () ()	50
5. Pelvic examination	() () ()	51
10. At present do we have medicine to cure AIDS? ()1. Yes ()2. NO ()3. do not know		52
11. Can we prevent HIV infection by the following maneuvers?	(1)Yes (2)NO (3)do not know	
1. Vaccination	() () ()	53
2. Drugs	() () ()	54
3. IV infusions	() () ()	55
4. Using condoms	() () ()	56
12. Who are at risks for getting AIDS? (1)Yes (2)No (3)do not know		
1. Postitutes	() () ()	57
2. Male homosexuals (Gay)	() () ()	58
3. Drug addicts	() () ()	59
4. Man/Woman who have sex with many partners	() () ()	60
5. Housewives/general population	() () ()	61
13. Are the following statements <u>TRUE</u> or <u>FALSE</u> ?	(1) (2) (3)Do not know True False & uncertain	
13.a We can get AIDS only by having sex wiht AIDS-infected person	() () ()	62
13.b HIV transmits only within the homosexual group	() () ()	63

	(1) True	(2) False	(3) do not know & uncertain	For Research Card No Column
13.c Sharing the same needles/syringes is the cause of AIDS transmission.	()	()	()	64
13.d Teenagers will not get HIV infection if they have sex within their peer group.	()	()	()	65
13.e HIV-infected person may not manifest AIDS symptoms for many years.	()	()	()	66
13.f There are two types of AIDS infection during sexual intercourse: either from man to woman, or from woman to man.	()	()	()	67
13.g Having oral sex is easy to get HIV infection.	()	()	()	68
13.h HIV can be transmitted through sweat and tears.	()	()	()	69
13.i Deep Kissing is very risky for HIV infection.	()	()	()	70
13.j. Anal sex is very risky for HIV infection.	()	()	()	71
14. The following statement can reduce the opportunity to get HIV infection true or false? (<u>True</u> for reducing and <u>False</u> for not reducing)				
	(1) True	(2) False	(3) Uncertain	
14.a Not having sex	()	()	()	72
14.b Not contacting with AIDS person	()	()	()	
14.c Not injecting any drugs	()	()	()	74
14.d Having sex with the same partner only	()	()	()	75
14.e Not shaking hands with AIDS person	()	()	()	76

- 14.f Using condom for sexual intercourse () () () — 77
- 14.g Taking shower daily at least. () () () — 78
- 14.h Not donating blood () () () — 79
- 14.i Having sex only with hygienic persons () () () — 80

- 14.j Using sterile needles () () () — 1
- 15. What is your feeling towards the following statements?

	(1)	(2)	(3)	
	Agree	Disagree	Neutral	...
- 15.a Having sex before marriage () () () — 2
- 15.b Having a baby while in schools. () () () — 3
- 15.c Having sex before graduating from secondary school. () () () — 4
- 15.d Married before graduating from schools. () () () — 5
- 15.e Prostitution is very common in our society. () () () — 6
- 15.f Boys should learn sex from prostitutes. () () () — 7
- 15.g Having sex with prostitutes is safe as long as you use condom. () () () — 8
- 15.h Students who live away from parents are easily spoiled. () () () — 9
- 15.i For girls, virginity should be treasured until you get married. () () () — 10
- 15.j For boys, virginity means unexperience for sex () () () — 11

Part 2 : Attitude towards AIDS

16. Do you agree with the following statement?				
	(1)	(2)	(3)	
	Agree	Disagree	Neutral	
16.a AIDS is a serious disease which follows by death.	()	()	()	— 12
16.b Getting sick with AIDS is the result of previous Kamma (KUM-KAOW)	()	()	()	— 13
16.c If person have sex with the same partner, he will not get HIV infection.	()	()	()	— 14
16.d AIDS occurs only among those who have abnormal sexual behaviors.	()	()	()	— 15
16.e Every person has equal chance to get HIV	()	()	()	— 16
16.f Changing sexual behaviors (not having multiple sex partners, using condoms) can prevent HIV infection	()	()	()	— 17
16.g Most people do not like to use condom because it feels unnatural.	()	()	()	— 18
16.h Using condom decrease sexual pleasure.	()	()	()	— 19
16.i Everyone must die sooner or later, so we should not worry about AIDS.	()	()	()	— 20
16.j Blood examination to detect HIV is not useful since AIDS cannot be cured.	()	()	()	— 21
16.k HIV-infected pregnant mothers should terminate her pregnancy.	()	()	()	— 22

(1) (2) (3)
 Agree Disagree Neutral

16.1 If you know that your classmate or neighbor is getting AIDS, you will eventually breaking up the relationships with them. 23

Part 3 AIDS Preventive Behaviors

The following questions are related to your personal information. Some questions may make you feel irritated, annoyed etc, so we wish to apologize for this. However, since these questions are related to AIDS preventive behaviors, it is necessary to explore and understand some data on a realistic basis. The aim of this part is to gain knowledge and to look for the most effective and efficient strategies for future AIDS prevention.

1. Do you think that discussing out sex is common among teenagers? 24

() 1. Yes () 2. NO () 3. Uncertain
 (Why? specify).....

2. If yes, what aspects? 25

() 1. Sexual intercourse
 () 2. Sex partners
 () 3. Sexual pleasure
 () 4. Others (specify).....

3. When you have sexual desire, do you the following? How often per month.

	(1)Yes	(2)NO	How often/month	
1. Self masturbation	()	()	()	26-27
2. Having sex with prostitutes	()	()	()	28-29
3. Having sex with friends	()	()	()	30-31
4. Playing sports	()	()	()	32-33
5. Others (specify).....	()	()	()	34-35

4. Have you ever had any tests for STD?
()1. Never (if never skip to Q.No.6)
()2. 1-2 times
()3. 3-4 times
()4. 5-6 times
()5. More than 6 times
5. Did your tests show that you had an STD?
()1. Yes ()2. NO
(what types)
()1. Do not know
()2. Gonorrhoea
()3. Syphilis
()4. Chancroid
()5. Herpes
()6. Others (specify).....
6. Which of the following best describes your situation with respect to having a boyfriend/girlfriend?
()1. I have one boy/girlfriend
()2. I have more than one boy/girlfriend
()3. In the past I have one but I don't have now
()4. I don't have a boy/girlfriend now and I have never had one.
7. If you have one boy/girlfriend now or have had one in the past, how long you have been together?
()1. Less than 3 months
()2. 3-6 months
()3. 7-12 months
()4. More than 12 months
()5. Others (specify).....
8. Do you think that having sex prior to marriage is acceptable?
()1. Yes ()2. NO
()3. Others (specify).....

36

37-38

39

40

41

9. Have you ever had sexual intercourse? <input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. if No-(skip to question No.18)	42
10. When was the last time you had sexual intercourse?	
<input type="checkbox"/> 1. No. of day ago.....	43-44
<input type="checkbox"/> 2. No. of weeks ago.....	45-46
<input type="checkbox"/> 3. No. of months ago.....	47-48
<input type="checkbox"/> 4. No. of years ago.....	49-50
11. Who was your partner during the last time you had sexual intercourse?	51
<input type="checkbox"/> 1. Prostitute	
<input type="checkbox"/> 2. Boyfriend/Girlfriend	
<input type="checkbox"/> 3. Others (specify).....	
12. Did you (or your partner) use a condom the last time you had sexual intercourse?	52
<input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No.	
13. Do you like using condom:	53-54
<input type="checkbox"/> 1. Yes (why? for what purposes).....	
<input type="checkbox"/> 2. NO (why? given reasons).....	
14. Which of the following best describes your behavior regarding use of condom?	55
<input type="checkbox"/> 1. I use condom everytime I have sex.	
<input type="checkbox"/> 2. I use condom only when my sex partner asks so/or do so.	
<input type="checkbox"/> 3. I use condom only with prostitutes.	
<input type="checkbox"/> 4. I try not to use condom whenever possible.	
15. How often do you have sexual intercoures?	56
<input type="checkbox"/> 1. 1-2 times/month	
<input type="checkbox"/> 2. 3-4 times/month	
<input type="checkbox"/> 3. 5-6 times/month	
<input type="checkbox"/> 4. 7-8 times/month	
<input type="checkbox"/> 5. Very often as wish	

16. What are your reasons for having sex?

(can tick more than one answer)

()1. Your loved one need to tie up the relationships

()2. Getting money to support your studies

()3. Gaining sex experience

()4. Being raped

()5. Being deceived

()6. Others (spectify).....

57

Question 17 should be answered by male students, female students skip to question 18

17. Have you ever had sexual intercourse with a prostitute?

()1. Yes ()2. NO

58

18. For what purpose is a condom used?

()1. Making balloons

()2. Prevent pregnancy VD and AIDS

()3. Demonstrating at school exhibition

()4. Others (spectify).....

59

19. Which of the following items is not addictive?

()1. Cigarette

()2. Alcohol

()3. Tonic drink

()4. Marihuana

60

20. Have you ever use drugs?

()1. Yes ()2. No-(if no, skip to question 24)

61

21. What methods did you use for taking drugs?

(1)Yes (2)NO

()1. Injection () ()

()2. Inhalation () ()

()3. Smoking () ()

()4. Orally () ()

62

63

64

65

- 22. Are you still using any drugs at present? — 66
 - () 1. Yes, routinely
 - () 2. Not at all
 - () 3. Once in a while
 - () 4. Others (specify).....

- 23. What is your main reason of using drugs? — 67
 - () 1. Friends persuade to do so
 - () 2. Having problems with friends
 - () 3. Having problems with studying
 - () 4. Having family problems
 - () 5. Others (specify).....

- 24. Are any of your classmate using drugs now? — 68
 - () 1. Yes () 2. NO
- 25. What methods are they using for taking drugs?

	(1)Yes	(2)NO	
a. Injection	()	()	— 69
b. Inhalation	()	()	— 70
c. Smoking	()	()	— 71
d. Orally	()	()	— 72

- 26. What is the main reason for your friend to use drugs? — 73
 - () 1. Another friends persuade to do so
 - () 2. Having problems with friends
 - () 3. Having problems with studying & teachers
 - () 4. Having family problem
 - () 5. Others (specify).....

- 27. Have you ever had blood examination for AIDS? — 74
 - () 1. Yes () 2. NO

- 28. Do you want to have blood examination for AIDS? — 75
 - () 1. Yes () 2. NO

- 29. If you know that your closed friend, beloved one, or respected person is getting HIV infection, how will you act toward him? — 76
 - () 1. as usual
 - () 2. have some difficulties in responding to his

30. What activities do you do and how often?

	0	1	2	
	never	sometimes	often	
1. Going to Dicoteque	()	()	()	— 77
2. Participating in social activities	()	()	()	— 78
3. Having sex with prostitute	()	()	()	— 79
4. Having boy/girlfriend	()	()	()	— 80

Card NO.3

Column

5. Having sex with boy/girlfriend				— 1
6. Having many sex various partners	()	()	()	— 2
7. Hugging/kissing with boy/girlfriend	()	()	()	— 3
8. Physical contacting with boy/girlfriend	()	()	()	— 4
9. Reading journals about sex	()	()	()	— 5
10. Injecting addicted substance				— 6
31. What behaviors on the list of question No.30 are risk behaviors for AIDS and sexual transmitted diseases?				
	0	1	2	
	no risk	low risk	high risk	
1. Going to Discoteque	()	()	()	— 7
2. Participating in social activities	()	()	()	— 8
3. Having sex with prostitutes	()	()	()	— 9
4. Having boy/girlfriend	()	()	()	— 10
5. Having sex with boy/girlfriend	()	()	()	— 11
6. Having many sex partners	()	()	()	— 12
7. Hugging/kissing with boy/girlfriend	()	()	()	— 13

			For Researcher Only	
			Card No.3	
	0	1	2	Column
	no risk	low risk	high risk	
8. Physical contacting with boy/girlfriend	()	()	()	— 14
9. Reading journals about sex	()	()	()	— 15
10. Injecting addicted substance	()	()	()	— 16
32. Do you know all risk behaviors for "AIDS"?				— 17
()1. Yes			()2. No	
()3. Uncertain (reasons).....				
33. From question NO.31. Do you prevent yourself from "AIDS" by changing your risk behavior?				— 18
()1. Never				
()2. Yes (specify).....				
()3. NO (reasons).....				
34. Do you need more knowledge in order to prevent yourself?				— 19
()1. Yes			()2. No.	
35. How do you like to get knowledge about "AIDS"?				
	(1)	(2)		
	Yes	NO		
1. By lecture	()	()		— 20
2. By exhibition	()	()		— 21
3. By Video, morey, slide	()	()		— 22
4. By reading books	()	()		— 23
5. By discussion with neer	()	()		— 24
6. Others (specify).....	()	()		— 25
36. Have you heard your classmate becoming pregnant during her school?				— 26
()1. Yes			()2. NO	
37. Have you heard your classmate have a baby during her school?				— 27
()1. Yes			()2. NO	
38. Have you known any "AIDS" patients?				— 28
()1. Yes			()2. NO	

Part IV Aids Situations and Sexual transmitted Diseases.

If the following given situations happen to you, what will you do? Choosing one answer only that is the most appropriate to you.

1. Pete, 16 years, had his first sexual experience with a prostitute. He said he had been persuaded to do so by his friend and didn't use condom. One week later, he had low fever and dysuria. Pete was very anxious. If you were Pete's close friend, how are you going help to him? — 29
- ()1. Ask him to see the school counselor
 - ()2. Ask him to see a doctor
 - ()3. Ask him to buy medicine for self care
 - ()4. Others (specify).....
2. Duan, your classmate, has no money, so her friend suggest her to "sell" sex to get money. However, she can't make her decision. Finally, she came and asked for your help. What are you going to do? — 30
- ()1. Ask Duan to refuse her friend's suggestion and break up the relationship
 - ()2. Let Duan follow her friend's suggestion and keep secret
 - ()3. Ask Duan to see the school counselor
 - ()4. Other (specify).....
3. Saifa is a "misconduct" student. He has a broken family and uses drug. One day, he decides to give up. So he come and ask for your help? What are you going to do? — 31
- ()1. Tell him that you can't help and try to avoid him because you're afraid he will cling on you.

()2. Listen to him and ask him to see the school counselor.

()3. Ask him to consult your father/mother/relatives.

()4. Others (specify).....

4. Oom is a cheerful girl, but she does not like studying. She often goes out at night. One day, Oom come to see you "Help me, please" she said " I have a baby". You are her most reliable friend, What are you going to do? — 32

()1. You can't help so you ask her to see others.

()2. Listen and ask her to see consult a teacher.

()3. Try to find out who is Oom's husband.

()4. Others (specify).....

5. Sornram is a handsome boy. You know that Sornram usually has sex with his peers. Sornram has a girlfriend, Nonglack, who is your close friend. What are you going to do? — 33

()1. Inform Nonglack about Sornram's behaviors and not to have sex with Sornram.

()2. Ask Nonglack to break up her relationship with Sornram to cut out any problems before hand.

()3. Inform Nonglack and find out ways to correct Sornram's behaviors.

()4. Others (specify).....

6. Darin is your classmate. She was raped by HIV infected man. You know that she is getting HIV infection. What are you going to do? — 34

()1. Sympathize Darin but can't help her.

()2. Avoid social contact with Darin as much as you can.

()3. treat her as usual.

()4. Others (specify).....

7. Manus tells you that "newsaday, it's very difficult to find a vergin woman" What is you response to Manus's statement? — 35
- ()1. Give feedback to Manus. You look down woman too much.
 - ()2. It is very common. It's not only woman, man too!
 - ()3. I never think about this, it is not the time to concern with what you said.
 - ()4. Others (specify).....
8. Khae is your classmate. One day, you found condoms and pills in Khae's hand bay. What's your reactions? — 36
- ()1. You belive that Khae is not vergin anymore.
 - ()2. You think that Khae is a very modest girl. this is very impressive.
 - ()3. You can't conclude what Khae is.
 - ()4. Others (specify).....
9. Thongkaew , a girl from a small village is your classmate. Someone told you that Thongkaew provides sex services. What is your opinion? — 37
- ()1. It's very personal and one's right to do so.
 - ()2. It's very bad for the school.
 - ()3. Checking information and advise her to change behavior.
 - ()4. Others (specify).....
10. Chomdown consult you that her boyfriend want to have sex with her as to tie up the relationship. She wants your opinions. What will be your advice.? — 38
- ()1. You can love him, but not having sex with him.
 - ()2. You can have sex with him, but not becoming pragnant.

()3. Reconsider whether he really love her or not.

()4. Others (specify).....

Part V Knowledge about Using Condom.

The following statement are steps for putting on condom. Please rearrange it in a correct order.

1. Put the condom on at the end of the penis.
2. Put the condom on when the penis becomes fully erected.
3. Squeezing out air while pulling along condom.
4. Pulling the condom all the way down to the length of the penis.
5. After ejaculation, put one finger at the inner rim of the condom.
6. If the condom tear during intercourse, remove it and put on the new one.
7. Pull out the condom before the penis becomes soft.
8. Check the expired date of the condom before using.
9. Wrap the used condom and throw away.
10. If using spermicidal cream, apply it on the surface of the condom before inserting into the vagina.

1 = CORRECT

2 = INCORRECT

--	--	--	--	--	--	--	--	--	--

Appendix 4

Summary of the Pre-Intervention Focus Group Discussions

Summary of the Focus Group
Sessions
(AIDS - ICRW Project)

- 1 Setting & Session Conducted : 6 homogenous groups
4 heterogenous groups

types	Homogenous.G	Heterogenous.G
government school	2 male, 2 female	4 mixed G
vocational school	1 male, 1 female	
Total	6 homogenous G	4 mixed G

- 2 Time range : 60 minutes - 90 minutes

- 3 Derived data :

- 3.1 Major peers, references, and supporting groups/
system, social environment & activities

At home most high school students spent most of their free time playing sports, listening to music and watching TV. Only a few admitted that they spent their time "helping parents" around the houses. In school, before morning class, there usually gather for "unfinished" home work. During breaks, boys will gather in their group "looking at girls" whilst girls will chat among themselves on non specific subjects ranging from funnies, movie stars, singers to sex. Occasionally, they will be teasing their friends who are already have some love affairs. For those who have not had any boyfriends, they will be teasing for "becoming an old maid." Girls admitted that they become jealous of their friends who already have boy/girl friends. Few admitted that they have had "broken heart" experience.

Vocational school students appeared to "Mix" between male and female more than government high school students. Hanging around shopping arcades, going to discotheques are most apparent activities. Going out with boy/girlfriends were also apparent. Most of them live away from home, so helping with house work has never been mentioned. Boys admitted that they usually gather for "having good time" (Drinking, playing cards, singing along with guitars and watching pornographic films and visiting brothels)

Most agreed that for financial problems they will discuss with parents, education problems with teachers, but for "personal problems" with friends.

Vocational school students stated that living away from parents leads to more self control and being more independent on their own. Most come from different districts or different provinces. High school students admitted that those staying away from parents would have no ones to control their personal discipling, thus they can easily be "spoiled". A few stated that any decision making will be based on themselves rather than relying on friends/parents.

3.2 Teenager Language and their sexual behavior

It was found that many slang words about sexual behavior were used among the students both in high school and in vocation school. Those are UUB, AOW, Kuen-Sawan, Phun, Khaa-Khong, Dabb, Chuck Wao, Khong-Toai, and thee morr.

However, it was found that sexual behavior between students in both schools was difference. Among high school students, a few student has boy/girl friend. Male high school student prefer to have girlfriend who is studying in other schools. The students agreed that sex is natural as for every human being. Everyone must has sex. But sexual while in school is not suitable or appropriate because of " we are too young with no incomes.

Regarding to the acceptance of women who have had sex before marriage the responses were both accepted and rejected. The reasons for rejecting are relating to culture, particularly ESAN culture. Virginity is very much respected. Male high school student said he will not marry with women who had sex experience before married, except just for hanging around with.

Among vocational school student, there was evident that about 90% of male students had sex experiences during schooling. If they have to talk about sex, the male students feel uneasy in front of female students. They feel free to talk within their group. If they like to talk to female student, they will determine with whom they can talk. They will not express directly, but they will use the double-blind words. Their decision depends on personal characteristics of the female student. If she is known to have sex before, they would feel free to talk to.

They also believed that female students who had sex experience can discuss about sex more freely than who has not have sex experience. Thus, they feel more comfortable to talk about sex with their girlfriend who had sexual relationship with than who not had sexual relationships with.

Female vocational school students did not like having sexual relationship before marriage. They, however, accepted that some of their female schoolmates have sex experience during school. They said that these particular group are girls who are living in the private dormitories and need extra money. They spend a lot of money for going to Discoteque restaurants, and movies. When the money gets short, often the dormitory owner will help her to get a customer. Some girls use family planning, and those who do not when getting pregnant, they will go for abortion.

For girls who go to Discoteque alone are called "Dek-Lhong" lost child Dek-Lhong aged between 14-15 years. When they are pleased, with a man (boy) they will go to sleep with, usually in the male place.

It was shown that female student both in high schools and vocation schools did not agree on having sex before marriage. It was also found that sexual behavior of female student in both school are difference. This may due to the fact that high school students are living with their parents or relatives, while most vocational school students are living in the private dormitorries. They are easy to be convinced and become interested in the other activities apart from school.

3.3 General Knowledge of AIDS

Students in both schools, high school and vocational school do have good general knowledge of AIDS. Sources of information are televiaion, newspaper, magazines, libraries and others.

On risk behaviors of the students, they agreed that male students are more prone to get HIV infection than female. Because male students have more chances e.g. having sex with prostitute after drinking smoking marihuana, cigarette and taking "Lao-Hang" (seconal). They give reasons that teenagers are impulsive, trial-error periods. Some who can not take control themselves, finally finish their school life.

3.4 Specific Knowledge of AIDS

It was found that there was difference between students in two schools, high school and vocational schools. High school students do have better specific knowledge of AIDS than vocational schools. The reason is that AIDS is included in the high school curriculum. The students did their reports, Aids exhibitions on special occations.

Some vocational school students believe that sharing toilet is the cause of HIV infection, high fever and fatigues after having sex with prostitutes are the symptoms of AIDS.

Students in both schools, believed that causes of AIDS are misunderstanding, one's own behavior, rapid changes in the environment, careless, and the hostility of the prostitute (who already had Aids and would like to give it out to others).

3.5 Use of Condom

Students in both school know about condom. The slangs for condom are suea Kun Phon, Look-Phonge and Meechai. They said they know how to use, where to get and to buy condom. There are about 99% of male students who have sex with condom. Several said they will fill the air into condoms and use when erection. The objective for using condom are preventing sexual transmitted diseases and pregnancy. Many boys said they will use condom when having sex with other womwn, except with their girlfriend. For female high school students, they know condom in the class; health education subject and school exhibition. They wish to have condoms selling in the department store like sanitary napkins for women.

Appendix 5

Guidelines for Post-Intervention Focus Group Discussions

Post Intervention Focus Group Discussion Guide

(Please review and bring along with you the pre-intervention Focus Group Discussion Guide).

This guide is a summary of the Pre-intervention Focus Group Discussion Guide.

There are five groups of questions :

1. Major peers, reference and supporting groups/system/Social environment/activities.
2. Teenager languages and their sexual behaviors.
3. General knowledge of AIDS and awareness.
4. Specific Knowledge of AIDS.
5. Use of condoms.

1. Major peers, references etc.

examples

- 1.1 What are activities you do together?
 - 1.2 What issues do you discuss among friends?
 - 1.3 What worries you? How you go about it?
 - 1.4 Who can help? in what circumstances?
- etc.

2. Teenages language

- 2.1 What is "good child's behaviors"?
 - 2.2 What is teenager's love?
 - 2.3 If you love someone,
What does it mean?
What do you expect?
- etc. . .

3. General knowledge of AIDS?

- 3.1 What is AIDS?
 - 3.2 What causes AIDS?
 - 3.3 How does one get AIDS?
- etc.

4. Specific or local knowledge of AIDS?

4.1 How is AIDS in Khon Kaen? ..

4.2 How many cases up to present?

etc.

5. Use of condoms.

5.1 Have you ever seen condom?

5.2 Have you ever used condom?

5.3 What do you think about condom?

5.4 If you friends carry condom with them, what do you think?

5.5 Have you ever talk about condoms with you friends?

etc.

ABOUT THE WOMEN AND AIDS RESEARCH PROGRAM

The Women and AIDS Research Program was initiated in August 1990 with support from the Offices of Health and Women in Development of the U.S. Agency for International Development. The objective of the program was to support research in developing countries to identify the behavioral, sociocultural, and economic factors that influence women's vulnerability to HIV infection. The program also sought to identify opportunities for intervention to reduce women's risk of HIV infection.

The first phase of the program supported 17 research projects worldwide: seven in Africa, five in Asia, and five in Latin America and the Caribbean. The studies focused on women and men in rural and urban communities, school-based and nonschool-based adolescents, and traditional women's associations. The focus of the second phase of the program, which began in August of 1993, is to support eight of the original seventeen projects in the design, implementation, and evaluation of interventions developed from the research findings of the first phase of the program. The second phase of the program is expected to be completed by February of 1996.

Publications from the Women and AIDS Research Program

ICRW Policy Series

1. **Women and AIDS: Developing a New Health Strategy** by G. Rao Gupta and E. Weiss.

Research Report Series

1. **AIDS Prevention Among Adolescents: An Intervention Study in Northeast Thailand** by E. Thongkrajai, J. Stoeckel, M. Kievying, C. Leelakraiwan, S. Anusornteerakul, K. Keitisut, P. Thongkrajai, N. Winiyakul, P. Leelaphanmetha, and C. Elias.
2. **An Investigation of Community-Based Communication Networks of Adolescent Girls for HIV/STD Prevention Messages in Rural Malawi** by D. Helitzer-Allen.
3. **Young Women, Work, and AIDS-Related Risk Behaviour in Mauritius** by S. Schensul, G. Oodit, J. Schensul, S. Seebuluk, U. Bhowan, J. Prakesh Aukhojee, S. Ragobur, B.L. Koye Kwat, and S. Affock.
4. **A Psycho-Educational Program To Motivate and Foster AIDS Preventive Behaviors Among Female Nigerian University Students** by C.U.B. Uwakwe, A.A. Mansaray, and G.O.M. Onwu.
5. **Sociocultural Factors Which Favor HIV Infection and the Integration of Traditional Women's Associations in AIDS Prevention in Senegal** by C.I. Niang
6. **Women and AIDS in Natal/KwaZulu, South Africa: Determinants to the Adoption of HIV Protective Behaviour** by Q. Abdool Karim and N. Morar.
7. **Female Sexual Behavior and the Risk of HIV Infection: An Ethnographic Study in Harare, Zimbabwe** by M. Bassett and J. Sherman.
8. **Understanding Sexuality: An Ethnographic Study of Poor Women in Bombay** by A. George and S. Jaswal.
9. **Evolving a Model For AIDS Prevention Education Among Underprivileged Adolescent Girls In Urban India** by A. Bhende.
10. **Women and the Risk of AIDS: A Study of Sexual and Reproductive Knowledge and Behavior in Papua New Guinea** by C. Jenkins and the National Sex and Reproduction Research Team.

16

- 11. Experimental Educational Interventions for AIDS Prevention Among Northern Thai Single Female Migratory Adolescents** by K. Cash and B. Anasuchatkul
- 12. The Culture, Class, and Gender Politics of a Modern Disease: Women and AIDS in Brazil** by D. Goldstein.
- 13. AIDS and Sexuality Among Low Income Adolescent Women in Recife, Brazil** by A. Vasconcelos, A. Neto, A. Valença, C. Braga, M. Pacheco, S. Dantas, V. Simonetti, and V. Garcia.
- 14. Guatemala City Women: Empowering a Vulnerable Group to Prevent HIV Transmission** by B. Bezmalinovic, W. Skidmore DuFlon, and A. Hirschmann.
- 15. Female Low Income Workers and AIDS in Jamaica** by G.E. Wyatt, M.B. Tucker, D. Eldemire, B. Bain, E. Le Franc, D. Simeon, and C. Chambers.
- 16. Strengthening Intergenerational Communication: An AIDS Prevention Strategy for Adolescents (Mexico)** by M. Givaudan, S. Pick de Weiss, M. Alvarez, M.E. Collado, E. Weiss, and G. Rao Gupta.
- 17. Strengthening Intergenerational Communication: An AIDS Prevention Strategy for Adolescents (Zimbabwe)** by D. Wilson, J. McMaster, M. Armstrong, N. Magunje, T. Chimhina, E. Weiss, and G. Rao Gupta.

For more information, contact ICRW, Publications Department, 1717 Massachusetts Avenue, N.W., Suite 302, Washington, D.C. 20036
Phone: (202) 797-0007 Fax: (202) 797-0020 E-mail: icrw@igc.apc.org