TRIP REPORT: REVIEW OF LITERATURE AND PROGRAMS

RELATED TO ADOLESCENT FERTILITY

THAILAND

Prepared by: Robert S. Griffin
JHU/PCS Consultant

Dates of In-Country Work:
March 11- April 27, 1985

Population Communication Services
Population Information Program
Johns Hopkins University
624 North Broadway
Baltimore, Maryland 21205
USA
EXECUTIVE SUMMARY

This report is the product of a consultation by JHU/PCS consultant Robert S. Griffin with the National Family Planning Program in Thailand. The consultation took place from 11 March to 27 April, 1985, in Bangkok.

The purpose of the consultation was to review with staff members of the Family Health Division, Ministry of Public Health, the existing literature and programs related to adolescent fertility and to develop recommendations to the NFPF for a strategy for dealing with identified problems. Since the Faculty of Public Health, Mahidol University, was found to be engaged in a parallel study when the consultant arrived, the consultation was recast as a joint effort with both the Family Health Division and the Faculty of Public Health.

Major Findings

Adolescents currently get sex information mainly from their friends and printed materials and to a lesser extent from teachers and parents. The extent and nature of actual classroom teaching of sex education is unclear. Adolescent knowledge on sex education subjects is uneven and quite low in regard to important details.

Surveys of sexuality have focussed on urban settings. Adolescent males appear to be sexually active in large numbers, ranging from 25% to 60% of survey respondents, though this activity appears to occur primarily with prostitutes. Adolescent females appear to be much less active than males.

A large number of unmarried adolescents envision having more than two children. Knowledge of family planning in general is widespread, but specific details about methods are not. Use of contraception by sexually active adolescents is not universal and less efficient methods are common. The condom is the most popular method for both disease control and contraception.

Data on unwanted pregnancies and their consequences are not systematically gathered. Unwanted pregnancy appears to be mainly a problem for married adult women, but a significant number occur among adolescents. Abortion is the most common solution to an unwanted pregnancy, particularly among adolescents. Prostitutes appear to have quite high rates of abortion.

Sexually-transmitted diseases are adolescent diseases with nearly 60% of the cases treated by the Venereal Disease
Division occurring in people age 25 and under. Prostitutes are the reported source of almost all male infections.

Most prostitutes are adolescents. Their use of contraception appears inadequate, their incidence of abortion excessive, and their role in the spread of venereal diseases a major public health problem.

Insufficient evidence of adolescent sexual deviation was found in the course of the review to make judgments about the seriousness of the problem.

Private sector associations have been pioneers in sex education and in the provision of information and services to adolescents especially in Bangkok. The extent to which private physicians provide counselling and services to adolescents on problems related to sexuality is unknown. The public sector, with the exception of the Venereal Disease Division and the Adolescent Clinic at Siriraj Hospital, is not active in attempting to deal with these types of adolescent problems.

Existing data are deemed to be inadequate in regard to the extent of sex education actually taught in the classroom, sex information in mass media, the sexuality of rural youth, the extent to which the NFPP provides services to youth at present, the trends in abortion, the extent of adolescent abortion, and the extent of sexual deviation.

Recommendations

The strategy recommended supports existing private sector efforts, uses the strengths of the Ministry of Public Health to develop and test new approaches and to foster and coordinate further research, and encourages cooperation among the agencies working with adolescents on both research and information and service programs.

Pilot activities recommended for trial include initiatives for sex education under Ministry of Public Health sponsorship for high school and university students and out of school youth, joint efforts between the Family Health Division and the Venereal Disease Division to reach adolescent males and prostitutes with contraceptive and venereal disease information and services, and an assessment of sex education needs of rural youth.

In the research area, studies are recommended on sex information in printed mass media, sex education as it is now being taught in Bangkok high school classrooms, service provision and attitudes of service providers in the NFPP in regard to adolescents, the sexuality of rural youth, and several facets of the problem of unwanted pregnancy.
### List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMA</td>
<td>Bangkok Metropolitan Administration</td>
</tr>
<tr>
<td>CDD</td>
<td>Community Development Department</td>
</tr>
<tr>
<td>KAP</td>
<td>Knowledge, Attitude, Practice</td>
</tr>
<tr>
<td>MOPH</td>
<td>Ministry of Public Health</td>
</tr>
<tr>
<td>NESDB</td>
<td>National Economic and Social Development Board</td>
</tr>
<tr>
<td>NFPP</td>
<td>National Family Planning Program</td>
</tr>
<tr>
<td>PDA</td>
<td>Population and Community Development Association</td>
</tr>
<tr>
<td>PPAT</td>
<td>Planned Parenthood Association of Thailand</td>
</tr>
<tr>
<td>STD</td>
<td>Sexually-Transmitted Disease</td>
</tr>
<tr>
<td>VDD</td>
<td>Venereal Disease Division</td>
</tr>
</tbody>
</table>
REVIEW OF LITERATURE AND PROGRAMS
RELATED TO ADOLESCENT FERTILITY
IN THAILAND

with

Recommendations To The NFPP For A Strategy
To Approach Adolescent Problems

Dr. Yawarat Porapakkham
Dr. Thavatchai Vorapongsathorn
Mrs. Somjai Pramanpol

Faculty of Public Health
Mahidol University

Miss Patama Shiromrat

Family Health Division
Department of Health
Ministry of Public Health

and

Mr. Robert S. Griffin
Population Communication Services
Johns Hopkins University

April, 1985
# REVIEW OF LITERATURE AND PROGRAMS RELATED TO ADOLESCENT FERTILITY IN THAILAND

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<td></td>
</tr>
</tbody>
</table>
LIST OF APPENDIXES

1. Population Ages 13-24
2. Methodologies and Problems in Adolescent Sexuality Research
3. STD's Cost (Letter to the Bangkok Post)
4. List of Educational Media and Materials
5. List of Persons Contacted
I. INTRODUCTION

A. Scope of Work

The objective of this review of the literature and programs related to adolescent fertility in Thailand is to contribute to an assessment of the needs of Thai adolescents for information and services on matters pertaining to sexual development and activity. To this end, the recent literature on adolescent sexuality and related problems — including KAP surveys, academic dissertations and theses, and reports of agencies dealing with youth — have been reviewed and existing programs that offer information, counselling and other services to adolescents, both in the private and public sectors, have been studied. References to the surveys and studies reviewed are contained in the attached Bibliography and descriptions of the study samples and methodologies are contained in Appendix 2. The programs that have been examined are described in Chapter IV.

This research has been carried out jointly by a team made up of staff members of the Faculty of Public Health, Mahidol University, and a staff member and a consultant to the Family Health Division, Ministry of Public Health. The Faculty of Public Health and the Family Health Division have immediate needs for a status report on adolescent fertility and related problems. The Faculty of Public Health needs this data in order to make recommendations on adolescents to the NESDB for the Sixth National Social and Economic Development Plan. The Family Health Division, based on a recent evaluation of the National Family Planning Program, has targeted the pre-marriage age group as a new audience for the NFPP and is seeking to develop an appropriate strategy for information and services to meet the needs of adolescents.

B. Definition of Adolescence

An operational definition of adolescence put forth by the World Health Organization describes it as a period during which:

a) an individual progresses from the point of the initial appearance of secondary sex characteristics to that of sexual maturity;

b) an individual's psychological processes and patterns of identification develop from those of a child to those of an adult; and,

c) a transition is made from the state of total socio-economic dependence to one of relative independence.

These concepts have been applied to the specification of the target group for this study as the 13-24 age group, excluding those legally married. By age 13, the biological changes of adolescence are underway and Thai youth have completed their years of compulsory education. Though 20 is
the age of legal adulthood in Thailand, this study will extend to age 24 because, within the context of Thai culture, many young adults are still making the transition to socio-economic independence during these years. Furthermore, many in the 20-24 age group are still unmarried. And as a practical matter, much of the existing socio-economic data is gathered for and readily available for this cohort.

In this report, the terms "youth" and "adolescents" will be used interchangeably in reference to the target group defined above.

C. Basic Data

According to Thailand's 1980 Census, there are 12.2 million people in the 13-24 age group of which 9.3 million or 77% of the age group were classified as "single" (see Appendix 1). The single group included 5.0 million males and 4.3 million females. The Census classified 1.9 million of the singles as having "municipal residence", of which 1.3 million were in Bangkok, and 7.4 million as having "non-municipal residence". In other words, most of the target group of this study live in rural areas, while those who live in urban areas are concentrated in Bangkok.

The legal age of marriage in Thailand is 17. According to the Thailand Population Monograph (Mahidol University, Bangkok, 1983), the singulate mean age at marriage for Thai women is between 22 and 23. The age at first marriage for women marrying before age 25 has been between 19 and 20 in rural areas and slightly higher in urban areas. Of all women in the 20-24 age group, however, 40% are still single (59% in urban areas and 34% in rural areas).

According to the National Youth Commission, which uses 15-25 as its target age group, 20% of that age group are students. Out-of-school youth are 95% rural and 5% urban.
II. REVIEW OF KAP STUDIES ON ASPECTS OF ADOLESCENT SEXUALITY

A. Introduction

Fifteen surveys, research reports and graduate student theses that deal with adolescent sexuality in some way are reviewed below. Descriptions of the research methods and samples used in each study are given in Appendix 2 along with a brief discussion of methodological problems that confront researchers working on this subject.

The data are a fragmentary patchwork of information. Debhanom (1983) is the only national survey. Most of the respondents in the studies are students in Bangkok or provincial urban areas. Pichai (1980), which has the most systematic information on sex education, is based largely on respondents who are older (62% are over 26) and, to a significant extent, married (27% of the respondents).

Adolescent sexuality is a personal and sensitive subject. Some skepticism about the validity of data collected by interviews and questionnaires is in order. Further, since the purposes of these studies has been either to gather a wide variety of survey data or to test academic hypotheses, the data is insufficient in many cases for the purpose of determining educational or service needs or of designing programs to meet those needs.

The subjects covered in this chapter are sex education, sexual activity, family planning and contraceptive use. Survey data on abortion, sexually-transmitted diseases, and sexual deviation are discussed in Chapter III.

B. Sex Education

Only Muangthong (1982) asked directly whether respondents had ever had formal sex education instruction. Nearly 72% replied that they had and of these 81% had had some in high school.

When asked more generally about sources of sex information, respondents in Pichai ranked sources in order of importance as follows:

1. Books and magazines
2. Teachers
3. Newspapers
4. Friends or peers
5. Movies
6. Doctors
7. Television
8. Radio
9. Parents
10. Posters
11. Relatives

In Rawiwan, (1983) high frequency responses to the
question "have you ever gotten sex information from this source?" were as follows:

<table>
<thead>
<tr>
<th>Source</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=274</td>
<td>n=384</td>
<td></td>
</tr>
<tr>
<td>Newspaper column on sex</td>
<td>93.4%</td>
<td>84.4%</td>
</tr>
<tr>
<td>Sex education lecture</td>
<td>77.4%</td>
<td>81.8%</td>
</tr>
<tr>
<td>Movie with sex theme</td>
<td>71.9%</td>
<td>52.1%</td>
</tr>
<tr>
<td>Erotic &quot;blue&quot; movie</td>
<td>44.2%</td>
<td>9.6%</td>
</tr>
</tbody>
</table>

Debhanom's two surveys asked similar questions on a given piece of sex education information, namely the source of knowledge regarding physical changes in adolescents at puberty. The responses are not directly comparable because the questions were not identical and the most recent survey allowed for multiple answers, but the following generalizations might be made:

- among students in both studies, teachers were an important source of information, especially for girls;
- among males in both studies, friends were important sources of information;
- the 1982 survey showed a greater tendency among girls to get this kind of information from their mothers;
- in the 1979 study, "nobody explained" was often the most frequent answer of the factory group; mothers and friends were cited most often by this group in the 1982 study (which did not have "nobody explained" as a choice);
- the 1982 study showed that a significant minority of urban students were getting sex education from various print media.

Major sources of sex education information found by Priya (1980) were as follows:

<table>
<thead>
<tr>
<th>Source</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=459</td>
<td>n=504</td>
<td></td>
</tr>
<tr>
<td>Books</td>
<td>30.7%</td>
<td>16.1%</td>
</tr>
<tr>
<td>Teachers</td>
<td>13.5%</td>
<td>25.4%</td>
</tr>
<tr>
<td>Friends</td>
<td>24.8%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Newspapers/magazines</td>
<td>13.5%</td>
<td>23.0%</td>
</tr>
<tr>
<td>Parents</td>
<td>5.0%</td>
<td>9.7%</td>
</tr>
</tbody>
</table>

According to Priya's respondents, advice on a sexual problem would be sought mainly from these sources:
Male
n=459

Female
n=504

Close friend, same sex 66.9% 31.2%
Sibling, opposite sex 2.7% 16.3%
Parents 1.5% 11.1%
Teachers 2.4% 1.6%
Never consult anyone 18.7% 34.9%

Finally, in Priya, in answer to a question about the adequacy of their knowledge of sexual matters, 79.5% of the males and 84.5% of the females answered that they had either no knowledge, inadequate knowledge, or they weren't sure that their knowledge was correct.

The Pichai (1980) study ranked respondents on their ability to give correct information on various topics. Here are selected results:

<table>
<thead>
<tr>
<th>Information Item</th>
<th>Percentage Giving the Correct Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masturbation and nocturnal emissions</td>
<td>65.7%</td>
</tr>
<tr>
<td>menstruation</td>
<td>65.5%</td>
</tr>
<tr>
<td>Sexuality (male and female)</td>
<td>60.7%</td>
</tr>
<tr>
<td>Hygiene of reproductive organs</td>
<td>57.9%</td>
</tr>
<tr>
<td>Family planning</td>
<td>57.6%</td>
</tr>
<tr>
<td>Venereal diseases</td>
<td>55.6%</td>
</tr>
<tr>
<td>Fertility and conception</td>
<td>53.9%</td>
</tr>
<tr>
<td>Male anatomy and physiology</td>
<td>47.5%</td>
</tr>
<tr>
<td>Sexual deviation</td>
<td>46.4%</td>
</tr>
<tr>
<td>Female anatomy and physiology</td>
<td>39.3%</td>
</tr>
</tbody>
</table>

The Debhanom surveys asked questions on various pieces of sex education information. For example, both surveys asked the cause of menstruation. In both surveys, female students were most likely to answer correctly, while males in all categories and rural out of school females were prone to give wrong answers or not answer the question.

Asked about the cause of pregnancy, nearly all groups in both surveys scored a high percentage of correct answers. However, rural factory workers in the 1979 survey preferred to not answer the question but, when they did answer, only 27.9% were correct. The 1982 survey asked a related question on knowledge of the fertile period. "Don't know" answers came from nearly 50% of the respondents, though the urban, female, school, and older categories did somewhat better than their opposites.

In both surveys, an attitudinal question about masturbation was asked that elicited similar responses. A large group in most categories felt it was normal behavior, but other large groups "didn't know" or "weren't sure".
Discussion. The data on sex education are sparse and do not present a comprehensive picture of adolescent knowledge of sexuality. Generalization is difficult, but a few tentative points might be made.

- The teacher, often maligned as a possible channel for sex education, may in fact be more active and important than commonly assumed. More knowledge is needed of what actually happens in terms of sex education in the classroom.

- Knowledge of sexuality among youth seems to correlate with the educational status of respondents. But there appears to be a good deal of ignorance across the board in regard to important details of sexual information.

- Print media may be important sources of sex education information for certain groups, particularly urban students.

- Boys seem to rely on their friends and printed matter for sex information while girls, who also read and consult friends, may also occasionally learn from their teachers or mothers or may prefer to remain ignorant.
C. Sexual Activity and Experience

Three studies asked direct questions about sexual intercourse with these results:

Positive responses to the question "Have you ever had sexual relations?" in Suporn (1984) and Rawiwan (1983) were as follows:

### Suporn

<table>
<thead>
<tr>
<th>Age</th>
<th>Male (n)</th>
<th>Female (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 and under</td>
<td>45.1%</td>
<td>5.3%</td>
</tr>
<tr>
<td>20 and over</td>
<td>68.2%</td>
<td>7.5%</td>
</tr>
</tbody>
</table>

### Rawiwan

<table>
<thead>
<tr>
<th></th>
<th>Male (n=274)</th>
<th>Female (n=384)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Ages</td>
<td>12.0%</td>
<td>3.6%</td>
</tr>
</tbody>
</table>

In Muangthong (1982), positive answers to "Do you practice sexual intercourse at present?" were:

<table>
<thead>
<tr>
<th></th>
<th>Male (n=812)</th>
<th>Female (n=964)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>33.0%</td>
<td>1.7%</td>
</tr>
</tbody>
</table>

Six studies focus primarily on the adolescent male sexual activity.

Debhanom (1983) reports the "percentage of males who have visited..."

<table>
<thead>
<tr>
<th></th>
<th>All (n=4146)</th>
<th>Urban (n=2950)</th>
<th>Rural (n=1196)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brothels</td>
<td>25.8%</td>
<td>28.1%</td>
<td>19.7%</td>
</tr>
<tr>
<td>Massage parlors</td>
<td>0.9%</td>
<td>1.0%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Both</td>
<td>4.7%</td>
<td>5.7%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Neither</td>
<td>68.5%</td>
<td>65.2%</td>
<td>77.6%</td>
</tr>
</tbody>
</table>

Debhanom (1979) on the question above reports:
Schools

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brothels</td>
<td>18.1%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Massage</td>
<td>1.5%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Parlors</td>
<td>6.1%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Both</td>
<td>74.4%</td>
<td>82.5%</td>
</tr>
</tbody>
</table>

Factories

<table>
<thead>
<tr>
<th></th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brothels</td>
<td>37.2%</td>
<td>26.5%</td>
</tr>
<tr>
<td>Massage</td>
<td>4.5%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Parlors</td>
<td>28.6%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Both</td>
<td>29.6%</td>
<td>62.8%</td>
</tr>
</tbody>
</table>

Chalosri and Prayong (1983) report the "percent of adolescent males who have had relations with..." (n=458):

- Prostitute: 45.4%
- Girlfriend: 5.2%
- Other: 2.2%
- Never: 47.2%

Muangthong (1982) identifies the "percentage of males with experience..." (n=812):

- At brothels: 50.9%
- At massage parlors: 32.9%
- With girlfriends: 7.9%

Muangthong also ascertained that 2.2% of the female respondents had had relations with their boyfriends.

Renu (1982) reports responses from both sexes to questions about "ever having had intercourse with...":

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lovers</td>
<td>16.9%</td>
<td>0.9%</td>
</tr>
<tr>
<td>Girl/boyfriends</td>
<td>45.5%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Prostitutes</td>
<td>66.7%</td>
<td>-</td>
</tr>
</tbody>
</table>

From among his population of sexually active males, Suporn identified their partners as:

<table>
<thead>
<tr>
<th></th>
<th>Age 19 and Under</th>
<th>Age 20 and Over</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=209</td>
<td>n=780</td>
</tr>
<tr>
<td>Prostitutes</td>
<td>47.4%</td>
<td>41.3%</td>
</tr>
<tr>
<td>Girlfriends</td>
<td>20.6%</td>
<td>17.3%</td>
</tr>
<tr>
<td>Both prostitutes and girl</td>
<td>17.2%</td>
<td>25.8%</td>
</tr>
<tr>
<td>Other</td>
<td>14.8%</td>
<td>15.6%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
In the only study that touched on rural sexuality, Bencha (1981) provides indirect data that premarital sex occurs in villages, but its extent is not quantified. The typical consequence of premarital sex appeared to be early marriage. Bencha notes (p.39) that "rumor and gossip work effectively as social control and premarital sex with or without family planning would result in early marriage," which acts both to prevent pregnancy out of wedlock and to preserve the reputation of the parents.

Discussion. From the fragmentary data presented above, it would appear that adolescent males in the respondent groups — mainly students — are significantly sexually active, (defined as "ever" or present practice of sexual intercourse). In the only study in which data on non-students were clearly segregated (Debhanon, 1979), adolescent male factory workers were seen as even more active than the student groups. The large majority of sexual activity of adolescent males appears to take place with prostitutes.

The higher numbers of boys in Muangthong and Renu that admit to having sex with girlfriends than girls with boyfriends probably support the common opinion that girls are reluctant to give information about their sexual activity.

D. Family Planning and Contraception

The two Debhanom studies report somewhat inconsistent results on knowledge of family planning. In the 1983 survey, the percentages of correct answers to the question "what is family planning?" were as follows:

<table>
<thead>
<tr>
<th>Male</th>
<th>Female</th>
<th>Students</th>
<th>Out of School</th>
<th>Factory</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=1976</td>
<td>n=2091</td>
<td>n=1748</td>
<td>n=1950</td>
<td>n=369</td>
<td>n=2900</td>
<td>n=1167</td>
</tr>
<tr>
<td>21.7%</td>
<td>20.5%</td>
<td>26.8%</td>
<td>18.1%</td>
<td>9.8%</td>
<td>23.3%</td>
<td>15.5%</td>
</tr>
</tbody>
</table>

The 1979 survey, with data organized somewhat differently, yielded these percentages of correct answers to the same question (n for all subgroups is 199 or 200):

<table>
<thead>
<tr>
<th>Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
</tr>
<tr>
<td>M</td>
</tr>
<tr>
<td>32.3%</td>
</tr>
<tr>
<td>Rural</td>
</tr>
<tr>
<td>M</td>
</tr>
<tr>
<td>9.5%</td>
</tr>
<tr>
<td>Urban</td>
</tr>
<tr>
<td>M</td>
</tr>
<tr>
<td>56.6%</td>
</tr>
<tr>
<td>Rural</td>
</tr>
<tr>
<td>M</td>
</tr>
<tr>
<td>67.5%</td>
</tr>
</tbody>
</table>

An explanation to the large difference in the scores of the factory groups in the two surveys is not immediately apparent.

In contrast to the groups represented above, Debhanom and Somsak (1980) found that 89.9% of the masseuses in their survey gave the correct answer on the meaning of family
The two Debhanom surveys asked adolescent respondents how many children they would like to have in their future families.

**Debhanom (1979) gave these results:**

<table>
<thead>
<tr>
<th>Desired No. of Children</th>
<th>Schools</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>1</td>
<td>5.8%</td>
<td>9.9%</td>
<td>2.5%</td>
</tr>
<tr>
<td>2</td>
<td>59.7%</td>
<td>71.2%</td>
<td>38.4%</td>
</tr>
<tr>
<td>3</td>
<td>23.6%</td>
<td>15.2%</td>
<td>46.0%</td>
</tr>
<tr>
<td>4+</td>
<td>10.9%</td>
<td>3.7%</td>
<td>13.1%</td>
</tr>
<tr>
<td>average</td>
<td>2.6</td>
<td>2.2</td>
<td>2.9</td>
</tr>
</tbody>
</table>

**Factories**

<table>
<thead>
<tr>
<th>Desired No. of Children</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>1</td>
<td>3.0%</td>
<td>4.7%</td>
</tr>
<tr>
<td>2</td>
<td>71.2%</td>
<td>63.7%</td>
</tr>
<tr>
<td>3</td>
<td>20.7%</td>
<td>24.9%</td>
</tr>
<tr>
<td>4+</td>
<td>5.1%</td>
<td>6.7%</td>
</tr>
<tr>
<td>average</td>
<td>2.4</td>
<td>2.5</td>
</tr>
</tbody>
</table>

**Debhanom (1983) produced these results:**

<table>
<thead>
<tr>
<th>Desired No. of Children</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Students Out of School</td>
<td>Factory Workers</td>
<td>Urban</td>
<td>Rural</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2.1%</td>
<td>2.8%</td>
<td>2.8%</td>
<td>2.0%</td>
<td>3.5%</td>
<td>2.7%</td>
<td>2.1%</td>
</tr>
<tr>
<td>2</td>
<td>47.2%</td>
<td>53.8%</td>
<td>56.3%</td>
<td>46.9%</td>
<td>43.1%</td>
<td>51.9%</td>
<td>47.5%</td>
</tr>
<tr>
<td>3</td>
<td>35.4%</td>
<td>30.8%</td>
<td>31.2%</td>
<td>34.4%</td>
<td>34.4%</td>
<td>31.7%</td>
<td>36.3%</td>
</tr>
<tr>
<td>4+</td>
<td>9.4%</td>
<td>7.1%</td>
<td>5.4%</td>
<td>9.6%</td>
<td>14.4%</td>
<td>8.0%</td>
<td>8.8%</td>
</tr>
<tr>
<td>avg.</td>
<td>2.6</td>
<td>2.5</td>
<td>2.4</td>
<td>2.6</td>
<td>2.7</td>
<td>2.5</td>
<td>2.6</td>
</tr>
</tbody>
</table>

**Chanin (1981) reports a contrast between youth (up to age 25) and adults in their conception of ideal family size in terms of the percentage of respondents who choose a given number of children:**
Knowledge of contraceptive methods was reported in the two Debhanom surveys and by Muangthong as follows:

"Have you ever heard of this method?"

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban (n=400)</td>
<td>Rural (n=400)</td>
</tr>
<tr>
<td>Condom</td>
<td>28.9%</td>
<td>56.0%</td>
</tr>
<tr>
<td>Pills</td>
<td>22.5%</td>
<td>54.1%</td>
</tr>
<tr>
<td>IUD</td>
<td>10.7%</td>
<td>23.5%</td>
</tr>
<tr>
<td>Injectable</td>
<td>5.1%</td>
<td>23.3%</td>
</tr>
<tr>
<td>Vasectomy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tubal Ligation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VSC/TL</td>
<td>4.0%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Rhythm</td>
<td>7.1%</td>
<td>28.3%</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>3.5%</td>
<td>12.3%</td>
</tr>
</tbody>
</table>

Muangthong (1982) probed a little deeper on knowledge of contraceptive methods (male n=812, female n=964):

<table>
<thead>
<tr>
<th>Method</th>
<th>&quot;Ever Heard Of&quot;</th>
<th>&quot;Can Explain Well&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>male</td>
<td>female</td>
</tr>
<tr>
<td>Condom</td>
<td>97%</td>
<td>98%</td>
</tr>
<tr>
<td>Pills</td>
<td>95%</td>
<td>98%</td>
</tr>
<tr>
<td>IUD</td>
<td>94%</td>
<td>97%</td>
</tr>
<tr>
<td>Injectable</td>
<td>83%</td>
<td>82%</td>
</tr>
<tr>
<td>Vasectomy</td>
<td>95%</td>
<td>97%</td>
</tr>
<tr>
<td>Tubal Ligation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

On the basis of a test of knowledge on family planning and birth control methods, Chanin (1981) ranked his rural adolescent respondents by age and sex as follows:
<table>
<thead>
<tr>
<th>Age and Sex of Respondents</th>
<th>Level of Knowledge</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Poor</td>
<td>Fair</td>
</tr>
<tr>
<td>Male 11-15</td>
<td>61.7%</td>
<td>30.9%</td>
</tr>
<tr>
<td>Male 16-19</td>
<td>46.5%</td>
<td>30.2%</td>
</tr>
<tr>
<td>Male 20-25</td>
<td>51.1%</td>
<td>28.9%</td>
</tr>
<tr>
<td>Female 11-15</td>
<td>53.3%</td>
<td>33.3%</td>
</tr>
<tr>
<td>Female 16-19</td>
<td>36.1%</td>
<td>39.3%</td>
</tr>
<tr>
<td>Female 20-25</td>
<td>49.2%</td>
<td>27.9%</td>
</tr>
</tbody>
</table>

Use of contraception - any method - by sexually active youth was reported in two studies as follows:

<table>
<thead>
<tr>
<th>Age</th>
<th>Male</th>
<th>Female</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 and under</td>
<td>67.1%</td>
<td>70.5%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>20 and over</td>
<td>80.1%</td>
<td>89.0%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>all ages</td>
<td>77.6%</td>
<td>82.1%</td>
<td>56.7%</td>
<td>135.0%*</td>
</tr>
</tbody>
</table>

* Only 17 female respondents admitted to practicing sexual intercourse at present, but 23 were prudently practicing contraception.

Debhanom (1979) asked how many interviewees had unmarried friends who practiced contraception. The percentage of positive answers was:

<table>
<thead>
<tr>
<th>Schools</th>
<th>Factories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td>9.7%</td>
<td>9.9%</td>
</tr>
</tbody>
</table>

Condom use by sexually active males either specifically or implicitly as a venereal disease prophylaxis was reported variously as 12.4% in Chalosri and Prayong; 40.7% for age 19 and under and 55.6% for age 20 and over in Suporn; and as 32.8%, "sometimes", 14.7%, "everytime", and 52.4%, "never", in Debhanom (1983).

Use of various contraceptive methods was reported in two studies by sexually active respondents of both sexes as follows:
### Table: Contraceptive Use

<table>
<thead>
<tr>
<th>Method</th>
<th>Male</th>
<th>Female</th>
<th>Students</th>
<th>Out of School</th>
<th>Workers</th>
<th>Urban</th>
<th>Rural</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condom</td>
<td>10.6%</td>
<td>0.3%</td>
<td>4.5%</td>
<td>6.4%</td>
<td>3.5%</td>
<td>6.1%</td>
<td>3.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pills</td>
<td>0.1%</td>
<td>0.9%</td>
<td>0.1%</td>
<td>0.7%</td>
<td>1.1%</td>
<td>0.6%</td>
<td>0.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IUD</td>
<td>-</td>
<td>0.1%</td>
<td>0.1%</td>
<td>0.1%</td>
<td>-</td>
<td>0.0%</td>
<td>0.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injectable</td>
<td>0.2%</td>
<td>0.2%</td>
<td>0.1%</td>
<td>0.3%</td>
<td>0.5%</td>
<td>0.2%</td>
<td>0.1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhythm</td>
<td>0.8%</td>
<td>0.1%</td>
<td>0.5%</td>
<td>0.5%</td>
<td>0.3%</td>
<td>0.6%</td>
<td>0.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Withdrawal</td>
<td>1.4%</td>
<td>0.0%</td>
<td>0.4%</td>
<td>1.0%</td>
<td>0.5%</td>
<td>0.7%</td>
<td>0.8%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table: Debhanom (1979) and Somsak Studies

<table>
<thead>
<tr>
<th>Method</th>
<th>1980 Study</th>
<th>1982 Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condom</td>
<td>6.2%</td>
<td>22%</td>
</tr>
<tr>
<td>Pills</td>
<td>59.2%</td>
<td>62%</td>
</tr>
<tr>
<td>IUD</td>
<td>0.7%</td>
<td>-</td>
</tr>
<tr>
<td>Injectable</td>
<td>7.6%</td>
<td>22%</td>
</tr>
</tbody>
</table>

In her review of the literature on prostitution, Euamporn (1985) found contraceptive usage among prostitutes reported in nine studies ranging from 33% to 86%.

**Discussion.** Contraceptive use among adolescents who admit to being sexually active is far from universal. Usage is relatively higher among students in Bangkok, but Suporn
reports a significant reliance on less efficient methods with 26.0% of users practicing either rhythm or withdrawal. Debhanom (1979) reports a similar tendency among urban factory workers. In general, adolescent knowledge about the details of contraceptive use appears weak.

Adolescents do not yet appear to universally support the two-child family norm with many expressing a desire for more than two children. The desire for more than two children appears more pronounced in rural areas as reported by Chanin.

Condom use for disease prevention appears relatively low with the exception of Suporn's Bangkok students age 20 and over at 55.6%. Contraceptive use by prostitutes does not appear to be as widespread as it should be given the risks of pregnancy they must face.
III. PROBLEMS OF ADOLESCENT SEXUAL DEVELOPMENT AND ACTIVITY

A. Unwanted Pregnancy

An unwanted pregnancy is a potential problem for all fertile women. The Population Council, in its 1980 study of abortion in Thailand, estimated that 50,000 unwanted pregnancies occur annually as a result of contraceptive failure. Information on the incidence of unwanted pregnancies is not included in current health service statistics. Data on abortion may be deliberately not reported to protect both doctor and patient since abortion is only legal in certain circumstances in Thailand. Thus, the frequency of occurrence of unwanted pregnancy can only be inferred from fragmentary data on counselling, abortion, child abandonment, and illegitimacy.

Existing data show that unwanted pregnancies occur mostly in adult married couples. For example, one counselling center in Bangkok received an average of over 26,000 inquiries annually over a recent five-year period in regard to unwanted pregnancy. Two-thirds of these women were over 25 years of age and most were married.

The extent to which unwanted pregnancy is an adolescent problem is revealed in bits and pieces from surveys and reports of agencies that cater to adolescents. Suporn has reported that 41.5% of the cases counselled at the Adolescent Counselling Clinic in a recent year were in regard to unwanted pregnancy.

1. Abortion

The most common solution to an unwanted pregnancy is abortion. Abortion is legal in Thailand in some circumstances, including situations that endanger the health of the mother. There appears to be a difference of opinion within the medical profession in the interpretation of the law on this point between those who see the "health of mother" clause permissively and those who see it as having a restrictive meaning. In any event, abortion is commonly practiced, legally or illegally, by both doctor and quack.

Dr. Kamphaeng Chaturachinda of Ramathibodi Hospital, who has studied abortion in Thailand, offers an educated guess of the annual incidence of abortion of 300,000 cases in lieu of any reliable statistics. (There are approximately 1,000,000 live births in Thailand annually.) Narkavonnakit (1979) in the Population Council review of the literature was reported as estimating the rural rate of abortion at 37 per 1000 women in the 15-44 age group.

The extent to which adolescents are having abortions is illustrated in several studies which are discussed briefly below. Unfortunately, there are no data to indicate the trend in the numbers of adolescent abortions.

As reported by the Population Council, Pongprote, Suprasert, and Kunstadter (1981) in interviews with 200
Chiangmai women whose pregnancies were aborted in a medical clinic found that 25% were under age 20 and one third were students.

The Ministry of Public Health, Family Health Division, (1982) in its study of rural traditional abortion found that 26.1% of women receiving abortions were in the 15-20 age group and 30.8% were in the 21-25 group. Further, 14.6% were single and 4.5% said they were students.

Suwalee (1980) in her study of abortions at Bangkok hospitals found that at four hospitals the percentage of single women having abortions ranged from 20% to 58%. At Siriraj Hospital, 33% of the women were age 20 and under and another 50% were between 21 and 24.

Kanok (1978) in her study of a Bangkok clinic found that of 406 women receiving abortions, 15% were aged 15 to 19 and 46.6% were in the 20-24 age group. In the same group, 47.0% were single and 24.6% said they were students.

Preliminary data from an study of abortions at district hospitals indicate that 4.4% of the 481 cases studied were single women under 20 years old. Of all cases (single and married), 13.9% were also under 20 years of age.

In three studies of prostitutes, the following frequencies of "ever" practice of abortion were reported: Debhanom and Somsak (1980), 19.4%; Chuanchom (1980), 44.2%; and Debhanom and Somsak (1982), 39%. Among those who had had abortions, the average number of abortions ranged from 1.3 to 1.6.

Student attitudes towards abortion were sampled by three researchers on the question of what a female student should do in the event she finds herself pregnant. In Renu, 40.7% favored abortion while 14.8% recommended carrying the child. In Muangthong, 32.3% of the male students and 33.8% of the females favored abortion while 19.8% of the men and 26.3% of the women would have the baby. Both surveys had high percentages of "don't know" and "no answer" responses.

2. Child Abandonment

Children who are abandoned at birth in public places must by law be turned over to the Department of Public Welfare. The Department's statistics on such abandonments nation-wide for the years 1981-83 were, respectively, 488, 931, and 896. About one third of these were in Bangkok.

Children may be given up openly and legally by parents who for one reason or another feel they can not take care of them. Four private welfare agencies are legally authorized to receive children that the parent or parents wish to give up. They are the Red Cross, which takes only babies abandoned at Chulalongkorn Hospital, Friends for All Children, the Pattaya Orphanage, and the Sahathai Foundation.

In addition to these legal abandonments, there is also a gray or black market in children abandoned at hospitals or elsewhere by women who cannot support or do not want their children and make private arrangements for their adoption.
The Director of Sahathai Foundation estimates that abandonments of all types may total as high as 2,000 per year nation-wide. In her opinion, however, abandonments do not commonly result from unwanted adolescent pregnancies, which typically end in abortion.

3. Illegitimacy.

Data are virtually non-existent on the extent of illegitimacy in Thailand, but it is known to occur widely and to be tolerated culturally if not welcomed. The Sahathai Foundation counsels and supports unwed pregnant women who wish to have and raise their babies. The age distribution of unwed mothers and the total number of cases that the Foundation received in 1982-84 were as follows:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>1982</th>
<th>1983</th>
<th>1984</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 20</td>
<td>43 cases</td>
<td>34 cases</td>
<td>27 cases</td>
</tr>
<tr>
<td>21-25</td>
<td>48 cases</td>
<td>27 cases</td>
<td>22 cases</td>
</tr>
<tr>
<td>All Ages</td>
<td>109 cases</td>
<td>79 cases</td>
<td>69 cases</td>
</tr>
</tbody>
</table>
B. Sexually-Transmitted Diseases (STD's)

1. Survey Research Data

Gonorrhea and syphilis are the two most serious sexually-transmitted diseases in Thailand in terms of their prevalence and the health hazards they present. Data from survey research on adolescents are summarized below.

Knowledge of the existence of gonorrhea and syphilis was queried in three studies with the following results ("percent who had heard of..."):

Debhanom (1983)

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>Urban</th>
<th>Rural</th>
<th>School</th>
<th>Factory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gonorrhea</td>
<td>81.4%</td>
<td>61.1%</td>
<td>78.2%</td>
<td>63.6%</td>
<td>79.4%</td>
<td>61.2%</td>
</tr>
<tr>
<td>Syphilis</td>
<td>53.8%</td>
<td>43.7%</td>
<td>55.2%</td>
<td>36.3%</td>
<td>54.1%</td>
<td>21.7%</td>
</tr>
</tbody>
</table>

Debhanom (1979)

<table>
<thead>
<tr>
<th></th>
<th>Schools</th>
<th>Factories</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban</td>
<td>Rural</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>F</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>31%</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>23%</td>
<td>52%</td>
</tr>
<tr>
<td>Syphilis</td>
<td>25%</td>
<td>38%</td>
</tr>
<tr>
<td></td>
<td>2%</td>
<td>22%</td>
</tr>
</tbody>
</table>

Muangthong

<table>
<thead>
<tr>
<th></th>
<th>Males and Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gonorrhea</td>
<td>89.1%</td>
</tr>
<tr>
<td>Syphilis</td>
<td>87.8%</td>
</tr>
</tbody>
</table>

Of all respondents in Muangthong, 54.0% said they knew the symptoms of gonorrhea while 79.9% said they knew them for syphilis. In Debhanom (1983), 60.7% of the respondents knew a symptom for gonorrhea but urban respondents (63.9%) were more likely to know it than rural youth (51.9%) and students (63.2%) more likely than factory youth (46.6%).

Based on test scores, Chalorsri and Prayong (1983) rated their respondents' overall knowledge of types of venereal diseases and their prevention and treatment as "high", 29%; "medium", 26%; and "low", 45%.

Less than 10% of the respondents in both the "schools" and "factories" groups in Debhanom (1979) felt that they had "adequate" knowledge of venereal diseases.

In Muangthong, 89.1% of all respondents knew that a condom could be used to prevent venereal disease.

Various data are available from the surveys on the incidence of venereal disease.
Respondents in Suporn report STD problems occurring with this distribution:

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Male (n)</th>
<th>Female (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 and under</td>
<td>6.7%</td>
<td>0.7%</td>
</tr>
<tr>
<td>20 and over</td>
<td>16.9%</td>
<td>0.7%</td>
</tr>
</tbody>
</table>

Debhanom (1983) respondents answered the question "have you ever had a venereal disease?" as follows: "yes", 3.9%; "no", 84.4%; "not sure", 14.7%.

Chalosri and Prayong asked their respondents if they ever were diagnosed or thought they ever had a venereal disease. 20.5% answered "yes".

In Kapkeo (1982), 62.5% of the male teachers and 46.1% of the male students reported that they had had a venereal disease. The figures for female teachers and students were 0.6% and 3.9% respectively. Gonorrhea accounted for over 60% of all cases.

In Muangthong, 12.4% of the male students and 0.3% of the female students reported that they had had a venereal disease. Among the males, 5.5% had had gonorrhea and 0.6% had had syphilis.

In Renu, 18.0% of the male vocational students and 0.6% of the female vocational students reported that they had had a venereal disease.

Discussion. General knowledge of venereal diseases seems to correlate with the educational level of the respondents. Knowledge of important details such as symptoms of gonorrhea and syphilis is considerably less widespread.

As reported in the various surveys, the incidence of venereal diseases, especially gonorrhea, among adolescent males would appear to present a significant public health problem.

B. Statistics from the Venereal Disease Division.

The overall prevalence of venereal diseases has been relatively stable over the past ten years. As reported by the Venereal Disease Division of the Communicable Diseases Control Department of the Ministry of Public Health, the prevalence of five major venereal diseases in the population age 15 and over was at 11.19 cases per thousand in 1974, and after fluctuating during the decade, was at 11.69 in 1984. Gonorrhea has been reported to be increasing rapidly in rural areas, however.

The incidence of venereal diseases in the 15-24 age group was reported as follows in 1984 (number of cases):
### Venereal Diseases in Youth

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>33,633</td>
<td>37,741</td>
<td>71,374</td>
</tr>
<tr>
<td>20-24</td>
<td>93,588</td>
<td>46,981</td>
<td>140,479</td>
</tr>
<tr>
<td>15-24</td>
<td>127,221</td>
<td>84,632</td>
<td>211,853</td>
</tr>
<tr>
<td>All Ages</td>
<td>234,152</td>
<td>127,898</td>
<td>362,050</td>
</tr>
</tbody>
</table>

% Aged 15-24 | 54.3% | 66.2% | 58.5%

Among males, 36,918 cases or 15.7% of all male cases were students. Among females, 642 cases or 0.5% of all female cases were students. Prostitutes, most of whom are in the 15-24 age group, accounted for 65.7% of all female cases (83,997).

Among males, 97.5% declared that a prostitute was the source of their venereal disease infection.

Of all cases treated by public health facilities in 1984, 85,631 cases or 23.6% of the total were in Bangkok.

It should be noted that the statistics of the Venereal Disease Division do not include treatment provided by private clinics or self-treatment by purchase of antibiotics from pharmacies so the actual incidence of venereal diseases may be considerably higher.

Dr. Niwat Polnikorn of Ramathibodi Hospital recently attempted to estimate the cost of sexually transmitted diseases in Thailand (see Appendix 3). He estimated direct costs at 660 million baht annually of which 386 million baht (58.5%) would be spent by or for youth.
C. Prostitution

Estimates of the numbers of prostitutes in Thailand, including masseuses and other euphemisms for prostitutes, vary widely. The Police department estimates the number to be upwards of 500,000. The last annual census of prostitutes and sex establishments (1984) by the Venereal Disease Division counted 65,839 girls in 4,689 work places. The Division surveys only 62 provinces, however.

Most prostitutes are themselves unmarried female youth. Debhanom and Somsak (1982) found in their survey of 300 Bangkok prostitutes that 84.0% were in the 15-24 age group. An earlier survey (1980) of 1,000 masseuses by the same researchers found the massage parlor girls to be somewhat older, with 70.6% in the 15-24 age group and 22.8% in the 25-29 cohort.

Contraceptive use by prostitutes reported in survey research is as follows:

- 86.1% in Debhanom and Somsak (1980)
- 65.0% in Debhanom and Somsak (1982)
- 63.5% in Chuanchom (1980)
- 33.0% to 86.0% in 9 studies reviewed by Euamporn (1985).

Among respondents, the incidence of induced abortion was reported as:

- 19.4% in Debhanom and Somsak (1980) with an average of 1.3 abortions per person;
- 39.0% in Debhanom and Somsak (1982);
- 44.2% in Chuanchom (1980) with an average of 1.6 abortions per person.
- 12% to 31% in ten studies reviewed by Euamporn (1985).

Performance of abortions by a physician or other qualified medical person was reported with this frequency:

- 66.7% in Debhanom and Somsak (1980)
- 58.0% in Debhanom and Somsak (1982)
- 8.3% in Chuanchom

Post abortion hospitalization was reported as follows as a percentage of total abortions:

- 23.3% in Debhanom and Somsak (1980)
- 24.0% in Debhanom and Somsak (1982)
- 23% to 26% in three studies reviewed by Euamporn (1985).

The "ever had" incidence of venereal disease infection was reported as follows:

- 41.2% in Debhanom and Somsak (1980) with 22.4% reporting more than one infection.
51.0% in Debhanom and Somsak (1982), all gonorrhea. The two surveys above reported that 80% and 63% respectively of respondents with venereal disease sought treatment in private medical clinics.

Discussion. The linkage between prostitution and adolescent male sexual activity is important to bear in mind. Sexually active male youth, as reported in the survey research above (see Chapter II, Section B), are mainly active with prostitutes. Similarly, the prevalence of venereal diseases among adolescent males is almost entirely attributed to contact with prostitutes.

Inadequate contraception by prostitutes would appear to result in relatively high rates of abortion.
D. Sexual Deviation

In two studies of Bangkok students, respondents reported homosexual behavior as follows:

Suporn

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 19 and Under</td>
<td>6.0%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Age 20 and Over</td>
<td>9.2%</td>
<td>1.2%</td>
</tr>
<tr>
<td>All Ages</td>
<td>8.3%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>

Muangthong

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Ages</td>
<td>4.4%</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

Discussion. Little attention has been paid to deviant sexual behavior among adolescents in the existing research. Suporn's data indicate a significant level of male homosexuality among Bangkok students, but the order of magnitude is not as high in Muangthong.
IV. EXISTING PROGRAMS AND SERVICES

The following descriptions of programs and services are mainly for organizations with activities dealing with problems of adolescent sexual development. However, some organizations that have general youth programs, but no specific activities on sexual problems, such as the Bangkok Metropolitan Administration, the National Youth Commission, and the Community Development Department, have been included because of their broad interests in youth and their potential as channels of communication and service delivery.

Time has not permitted a comprehensive review of all relevant organizations. The nine universities and numerous other institutions of higher education were not surveyed. Nor were the activities and services of major hospitals. Further, data on treatment by private clinics of adolescents with sex-related problems are not available.

Most of the programs described are in the public sector, but private sector agencies have been the pioneers and are major providers of information and services at present.

Lists of educational media and materials on adolescent development and sexuality prepared by these organizations are given in Appendix 4.

Planned Parenthood Association of Thailand (PPAT)

PPAT activities for youth consist of four major projects: sex education, the Youth Counseling Center, the Youth Development Service, and the Tha Sai Project.

1. Sex Education. PPAT has been working with the Ministry of Education on the promotion and development of sex education since 1977. A training for trainers program for provincial education officials and provincial hospital doctors and nurses is on-going and hopes to have trained 1500 people by 1987. A manual on sex education is being prepared with the Ministry for use by teachers. A course on sex education is also being offered for school administrators. PPAT prepared and now distributes a question and answer booklet for adolescents. In addition, audio-visual materials are available for schools and groups to borrow.

2. Youth Counselling Center. This center at the Din Dang housing project provides counselling on sex education and unwanted pregnancy to students and out of school youth. Counselling is available on a person to person basis and by telephone. Counsellors provide information on alternatives but emphasize individual decision-making. Contraceptive supplies and family planning information are distributed by the center.

In a recent three-month period, the center handled 2422 cases. About one half of the cases were single people and nearly two-thirds were under age 25. Subjects of consultations were contraception, 37.9%; sex education, 37%;
and general health problems, 19.8%.

3. Youth Development Service. This project supports a variety of activities including: training of student volunteers to organize sex education counselling; question boxes at three local colleges; seminars for volunteers and teachers; lectures to student groups; development of teaching materials; training for civil registration officials as pre-marriage counsellors; and the development of sex education leaflets for students.

4. Tha Sai District Youth Project. Located at a housing project in Tha Sai district, this pilot project hopes to develop a model for group work in the promotion of responsible parenthood. A variety of youth activities - sports, music, tutoring - are provided based on the interests of project participants.

The Population and Community Development Association (PDA)

PDA's main youth activity is its Youth To Youth Project established in 1980 to provide information, education and services in health and family planning to adolescents in and out of schools. The project's operational methodology is the training of youth volunteers to give information and publicize available services. Major project activities and outputs over the 1980-1984 period include:

1. Youth Volunteer Training. 1320 volunteers - 907 students and 413 out of school youth - have completed training that emphasizes population problems, sex education, family planning, and socially transmitted diseases. These volunteers are in Bangkok (822), Chiangrai (236), and Korat (262).

2. Lectures and Exhibitions. These are organized for interested groups in schools, factories, and slum areas. Speakers with audio-visual aids make presentations on family planning, sex education, population problems, and STD's. 1360 presentations have been made to date to a total audience of over 300,000 people.

3. Counselling. Counselling services are available to both youth and the general public in three forms: person to person, by telephone and by mail. The vast majority of consultations, which have totaled nearly 200,000 over the five year period - have been person to person. Most consultations deal with problems related to family planning and unwanted pregnancy.

4. Provision of Contraceptive Supplies. Volunteers provide out of school youth in slum areas with contraceptive supplies and arrange transportation to a PDA clinic if
necessary. Under this project, 8,677 people have received contraceptive supplies, mainly pills.

Sahathai Foundation

The Sahathai Foundation is a private family welfare organization that offers professional services in family and single parent counselling, foster home care, family rehabilitation, family planning, and adoption. With the exception of a rural public health program in Surin, the foundation's activities are all in Bangkok.

In 1984, the foundation provided in-depth counselling and, in many cases, financial support to 256 family rehabilitation cases with 528 children and 152 single parents or parents-to-be with 126 children.

National Youth Commission
Office of the Prime Minister

The National Youth Commission acts as the national planning, coordination, and promotion body for youth programs. The Commission has no operational youth programs of its own, but does have influence over the policies on youth programs of other agencies. The Commission also collects and synthesizes data on youth programs. For example, according to the Commission, there are 4,000 agencies in Thailand involved in youth activities.

The Commission defines youth as the 15-25 age group. Of this cohort, 20% are in school. Of the out of school youth, 95% are in rural areas. Thus, the Commission has been an active supporter of the development by the Community Development Department of multi-purpose youth centers at the Tambon level.

Department of Non-Formal Education
Ministry of Education

The Non-Formal Education Department provides educational programs for out of school youth. Most are unmarried and in the 16-25 age group. Its programs include functional literacy, school equivalency education, vocational training, and activities based on the needs and interests of various groups.

The Department has done extensive work in developing population education material and integrating it into various educational offerings. (The Department is now carrying out a review of all in and out of school population education.) The thrust of population education work has emphasized the development of critical thinking and individual decision-
making. Information is presented about Thailand's population situation and family planning, but individuals are asked to reflect on their own circumstances and make decisions that are best for them.

Department of Curriculum and Instruction Development
Ministry of Education

The school curriculum for both elementary and high schools includes population education. The approach taken is similar to that of the Department of Non-Formal Education with the emphasis on the development of problem-solving skills. A wide variety of teaching materials have been developed and, to date, 800 high school teachers (one per school) have been trained in population education. The Department plans eventually to train one teacher from each of the 2,000 total high schools in the country.

Sex education is not taught in Thai schools under this name. Physical development is taught in biology and family planning is included in population education material in high schools. Adolescent development is a required course at teacher training colleges.

Each high school has a guidance teacher whose main responsibilities are for educational and vocational guidance, but they may also deal with students' personal problems.

Youth Development Division
Department of Community Development
Ministry of Interior

The target group of the Youth Development Division is unmarried rural youth age 15 to 25. The main activity of the Division is the organization of Tambon youth centers. At present there are about 2,000 such centers covering about one third of the total number of Tambons. These centers are established following youth camps that identify interested youth and youth leaders. The centers exist under the auspices of the local Tambon Council and are supervised and assisted by the Council and the local Community Development Officer. Activities of each center are determined according to local needs and emphasize vocational training and community self-help. While family planning has been included in leadership training activities for youth leaders, the public health activities that youth centers now typically get involved in focus on environmental health and sanitation, e.g., toilet construction, drinking water tanks, and well digging.
Adolescent Counselling Clinic
Siriraj Hospital

This clinic, based at the Siriraj Hospital Family Planning Unit, provides information and counselling on sex-related problems to clients who are drawn mainly from Bangkok's five universities. The most common subject of consultations (41.5% of 800 cases in 1983-4) was unwanted pregnancy. Other problems related to pre-marital sexual activity ranked second in frequency.

The clinic has developed a network of trained youth counsellors at several institutions of higher education in Bangkok. These "co-counsellors" organize educational activities and exhibitions, refer student questions to the clinic at Siriraj, distribute contraceptives, and recently assisted with the administration of a survey on student sexual behavior.

Venereal Disease Division
Department of Communicable Diseases Control
Ministry of Public Health

The Venereal Disease Division implements a national program for prevention and cure of venereal diseases. The Division has a national headquarters, eight clinics in Bangkok, and nine regional centers. The Division provides clinical services, carries out research and training, and prepares and distributes information and educational materials.

While the Division does not specifically identify youth as a target audience, its statistics show that 58.5% of all venereal disease cases it diagnosed in 1984 occurred in people in the 15-24 age group.

National Family Planning Program (NFPP)
Ministry of Public Health

The NFPP has identified the pre-marriage age group as a target group for the Sixth Five Year Plan period. At present, the NFPP does not have a special program for adolescents. But the mass information programs that are aimed at rural audiences do not exclude anyone. Rural children and youth attend presentations and film shows on human reproduction and family planning. In theory at least, contraceptive supplies and services are available to all regardless of age or marital status at all service facilities.

Bangkok Metropolitan Administration (BMA)

The BMA has no specific services at present designed to
deal with adolescent sexual problems. However, the BMA does operate 24 youth centers whose main function is the organization of recreational activities. Also the BMA Health Division provides family planning services and supplies though a network of clinics.
V. CONCLUSIONS

Conclusions in regard to research needs are summarized in Chapter VI.

Sex Education

1. Important sources of sex information for adolescents include friends, books and other print media, parents, and teachers. Males appear to favor friends and print media as sources. Females get information from these sources as well, but may also learn from teachers and parents—presumably their mothers—or they may prefer to remain ignorant. Analysis is needed of the quality and quantity of sex education information available in bookstores, newstands, etc.

2. The extent and nature of sex education in the classroom is unclear. Relatively high percentages of university students claim to have had sex education in high school. Further, the importance in the survey data given to teachers as sources of sex education information would suggest that teachers or schools may offer more sex education than the Ministry of Education would appear to encourage.

3. Factual knowledge of sex education issues is uneven and quite low in regard to important details of the information. Knowledge seems to correlate with the educational status of survey respondents.

Sexual Activity

4. Sexual activity has been surveyed almost entirely in urban settings, presumably on the assumption that urban adolescents are more likely to be sexually active and encounter the associated problems. The distinction between urban and rural requires some clarification since migration among young people is common in Thailand. For example, factory workers in the city of Korat may come from rural backgrounds, but may soon adapt to urban life-styles.

5. Adolescent males appear to be sexually active in large numbers, typically 25% to 60% of survey respondents, but the majority of this activity appears to be with prostitutes.

6. Adolescent females, as reported in the student surveys, are much less active than males, though this difference could be partially explained by female reluctance to admit to premarital sexual activity.

Family Planning and Contraception

7. Data on desired number of children suggest that a large minority of adolescents would like to have more than two
8. "Ever heard of" knowledge on contraceptives appears high, but knowledge of supporting details seems much less widespread.

9. Use of contraception by sexually active adolescents is far from universal. Bangkok students tend to practice contraception more than other groups but, as Suporn reports, rhythm and withdrawal which are less efficient and do not require purchase of contraceptives or clinic visits are common. The condom is the favored method in almost all surveys.

10. The condom is used to a moderate extent for disease prophylaxis with prostitutes.

Unwanted Pregnancy

11. Data on unwanted pregnancy and its consequences - abortion, child abandonment, and illegitimacy - are not systematically collected. Judgements about the extent of these problems must be based on fragmentary data, educated guesses, and inferences. There is an important need to establish or improve data-gathering in these areas (see VI. Gaps in the Research).

12. Unwanted pregnancy appears to be mainly a problem of adult married women. However, at certain urban locations, unmarried adolescents account for 25% to 50% of the abortion caseloads, according to various surveys. Similarly, counselling centers for adolescents report unwanted pregnancies as a frequent subject of consultation.

13. Prostitutes appear to have quite high rates of abortion.

14. Child abandonment occurs, but apparently not on a very large scale. Since most abandonments are anonymous, the extent to which this is an adolescent problem is not known.

15. There are unwed pregnant adolescents who choose to have their babies, but the extent to which these are consequences of unwanted pregnancies is unknown. Sahathai Foundation provides support to a relatively small number of women in this category (60 to 100 cases annually).

Sexually-Transmitted Diseases

16. Knowledge of STD's appears to follow the pattern of knowledge of contraception: there are high levels of "ever heard of" knowledge, but considerable lack of understanding of important details, such as disease symptoms.

17. Nearly 60% of all STD cases occur in people in the 15-24
age group. Students account for 15.7% of all male cases, reflecting their reported sexual activity.

Almost all males report that they got their disease infection from a prostitute. Prostitutes account for nearly two thirds of all female cases. Therefore, it would appear that adolescent males and prostitutes are the logical target groups for increased efforts at control and prevention of STD's.

Prostitution

18. Most prostitutes are adolescents. Their use of contraception appears inadequate, their incidence of abortion excessive, and their role in the spread of STD's a major public health problem. Prostitutes should be considered as a special target group for NFPP attention.

Sexual Deviation

19. Inadequate data are available to make judgements on the seriousness of this problem. Further study is recommended.

Existing Programs and Services

20. The private sector associations have been active in the provision of information and services to adolescents, especially in Bangkok. These services have been effective in reaching adolescents judging from utilization statistics. However, the extent to which these services are meeting the needs of adolescents in Bangkok is not known.

21. Nothing is known about the extent to which private physicians are providing counselling, contraception, and abortion services to adolescents.

22. The models used by the Siriraj Adolescent Counselling Clinic and those of PPAT and PDA each have most of these features: confidential counselling, use of youth volunteers, location away from work or school, anonymity through hotline telephone counselling. An evaluation by users of these services would be useful.

23. PDA and PPAT have produced a large quantity of sex education information in various forms for adolescents. Any new efforts in sex education should review these materials carefully to prevent unnecessary duplication.

24. With the exception of STDs, the public sector has not been active in the problem areas described above either for adults or adolescents. This is understandable since the problems are tied up with activities that are either illegal or considered to be immoral or culturally unacceptable. Guidance from policy-makers is necessary on the extent to which the Ministry of Public Health can commit resources to
programs aimed at affecting these public health problems.
VI. GAPS IN THE RESEARCH

A variety of research topics are indicated by this review of the literature. Adolescent sexuality and related problems appears to be an under-researched area in Thailand and many opportunities await interested researchers.

1. Sex Education

What is actually happening in classrooms? The Ministry of Education is emphasizing population education, but individual teachers, schools and private sector agencies appear to be active in teaching sex education in schools. To what extent is sex education being taught in high schools? By whom? In what subjects? What content?

What is happening at the tertiary level in terms of sex education and related counselling? A survey of all universities and teacher training colleges is in order.

What is the extent and quality of sex education information from the mass media? Printed matter, movies, radio and television might all be surveyed, but the initial emphasis should be on printed material including a survey of condom advertising. What kind of coverage does this material have? How frequently does it appear? Is the information correct? Does it contain a biased point of view? A survey of mass media sex information might be commissioned from a university faculty of mass media or journalism.

What is the distribution and impact of existing sex education programs and materials produced by PPAT and PDA? An evaluation or detailed review of these efforts would greatly assist future development of sex education programs and materials.

2. Sexuality of Rural Youth

A KAP survey or other approach to rural, out of school youth is in order since virtually all of the respondents to existing surveys are students or urban residents. Out of school rural youth make up the large majority of adolescents in Thailand, but the presumption of existing research is that problems exist in urban areas. This assumption needs to be tested.

3. Incidence of Unwanted Pregnancy and Venereal Disease among Various Urban Groups

An attempt to review output data and other indicators on unwanted pregnancies and venereal diseases among various groups of urban adolescents, e.g., vocational students, factory workers, etc., would greatly assist program planners in the setting of priorities for the establishment or
expansion of service programs.

4. Services for Youth.

To what extent are contraceptive services actually being provided to youth through the present NFPP and through private sector clinics? What are the attitudes of service providers to giving contraceptives to unmarried youth? What sources of contraceptives do sexually active youth now use?

Private associations and Siriraj Hospital are active providers of counselling services for youth in Bangkok. Is there residual unmet need for such service in Bangkok?

5. Abortion

Abortion would appear to be a major public health problem in Thailand, yet there is no systematic basic data on the subject. There would appear to be a need for regular data collection on abortion including numbers of cases, age of client, marital status, urban-rural residence, clinical versus traditional methods, the use of private versus public sector facilities, complications and related data. Time series data would show the trend in abortions and analysis of data could given a picture of the extent to which abortion is an adolescent problem and a problem related to prostitution.

Profiles of abortion cases could be compiled from the records of existing clinics without compromising the confidentiality of clients in order to focus on the extent to which adolescents are currently getting abortions.

6. Unwed Mothers.

To a certain extent unwanted pregnancies are carried to term. Some of these cases are adolescents. The Sahathai Foundation provides support for pregnant single women and unwed mothers. Without compromising the confidentiality of recipients of the Foundation's support, demographic profiles of unwed mothers, especially adolescents, could be developed. The Foundation has expressed an interest in assisting in such research.

7. Sexual Deviation

Sexual deviation in youth has not been studied in depth. The extent of the problem and what, if anything, can be done about it are subjects for research and experiment.

8. Research Methodology

Given the difficulties in collecting verifiable data on adolescent sexuality, comparative study and experimentation with various data gathering approaches appears in order.
9. Evaluation of Counselling Services

An evaluation by clients and counsellors of the models for counselling adolescents now in use should provide useful information for the improvement and, if necessary, expansion of these services.
VII.  A STRATEGY FOR THE NFPP TO APPROACH PROBLEMS OF ADOLESCENT FERTILITY

A. Introduction

This review of the literature and programs related to adolescent fertility has yielded evidence in general of adolescent health problems linked to sexuality. These include unwanted pregnancy, venereal disease, abortion complications, and inadequate contraceptive use. In addition, the research has revealed considerable adolescent ignorance in regard to important aspects of contraception, family planning and other sex education subjects. An adolescent's ideal future family size is likely to exceed the norm recommended by the National Family Planning Program.

At the same time, this review has demonstrated that much is not known or is known incompletely about adolescent sexuality problems. For example, further data are needed in regard to the extent, trends, and socio-economic incidence of unwanted pregnancy among adolescents; the effectiveness and distribution of existing formal sex education efforts and sex information available from newsstands, etc.; the needs and problems of rural youth; and the coverage of existing NFPP and private sector services for adolescents.

The review has identified the vigorous activities for youth in Bangkok, mainly sponsored by private sector agencies. Judging by their utilization by the public, these programs of information, counselling, and services are clearly meeting the needs of the adolescents who use them.

All of the adolescent problems related to sexuality have information and education dimensions. From the brief study of the activities of the Ministry of Education done in this review, it would appear that that Ministry is not oriented to actively providing information appropriate to adolescent health problems deriving from sexuality.

Two other government bodies, the Bangkok Metropolitan Administration and the Community Development Department, would appear to have the potential to provide information and services to adolescents. The BMA has extensive networks of public health clinics and youth recreation centers. The CDD administers over 2,000 rural youth centers at the Tambon level.

At present, the only government bodies actively grappling with the problems of adolescent sexuality are the Adolescent Counselling Center at Siriraj Hospital and the Venereal Disease Division of the Communicable Disease Control Department. The Siriraj program is new and relatively small, but is developing a clientele among Bangkok university students. VDD statistics show that most patients in the Division's clinics are adolescents, but nevertheless, the Division has no comprehensive strategy for preventive or curative medicine targeting youth.

Aside from the VDD, the Ministry of Public Health is not
actively considering or confronting the health problems of adolescent sexuality. This is understandable as knowledge of these problems is not widespread and their order of magnitude is not clear. Further, the problems themselves are often seen to be involved with activities that are illegal, immoral, or otherwise culturally unacceptable.

Nevertheless, the Ministry of Public Health does have a set of strengths that position it well to deal with aspects of adolescent health problems. At the provincial level, the Provincial Chief Medical Officer has access to the school system via existing school health activities. The Ministry is the respected national authority on public health and medical matters. In provincial urban and rural areas, the Ministry has an extensive infrastructure of information and service facilities. Finally, the Ministry is in the position to coordinate needed research on adolescent fertility and sexuality issues.

Thus, with the foregoing in mind, a strategy for dealing with adolescent sexuality problems is recommended that:

- utilizes the strengths of the Ministry of Public Health to carry out pilot activities to test approaches to adolescent sexuality problems;

- continues to support private sector information and service programs;

- encourages research, coordinated by the Ministry, to further define adolescent sexuality problems;

- encourages cooperation among agencies dealing with youth in both research on adolescent problems and the delivery of information and service programs.

The long-term objectives of this approach would be to reduce the incidence of unwanted pregnancy and venereal disease and related problems among adolescents. The specific activities recommended here would aim primarily to increase adolescent knowledge on the problems and how to prevent them from occurring. Most of the recommended activities would be pilot projects that would be carefully evaluated before replication. The research components would aim to probe further into the nature and extent of adolescent problems and provide more information about specific groups of adolescents.
B. Pilot Activities

1. High School Sex Education

The purpose of this activity would be to gather information in order to make recommendations to the Ministry of Education for a sex education component to the Health Education curriculum at Teacher Training Colleges. It would also seek to clarify the definition of sex education in high school. The activity would also test an approach to high school sex education under Ministry of Public Health sponsorship in order to make recommendations to that Ministry on future programs.

The model to be tested involves a low-cost, passive approach to sex education that seeks to make information available to those who want it. Two models would be tested in provincial urban areas. Target areas for the first model would be the Muang districts of five provinces: Chiangmai, Khonkaen, Mahasarakham, Buriram, and Ubon.

The steps in the development and testing of this model, to be carried out by personnel of the Provincial Chief Medical Officer and, if appropriate, municipal health personnel, would include the following;

- a short needs assessment that tests student knowledge on key sex education topics and reviews existing sex education, if any. This assessment and the analysis of data gathered would be done jointly by health personnel and school staff. It would serve to identify needed content for sex education and would also demonstrate the existence of knowledge problems to school personnel.

- seeking out interested school staff to assist in sex education. At least five school personnel might potentially be interested and helpful in developing and carrying out sex education activities at the school level: the guidance teacher, the physical education teacher, the school nurse, the health teacher, and the science teacher.

- development of a permanent display on school grounds to be prepared jointly by health personnel and school staff. This display area would contain an exhibit on subjects - which would change periodically - of interest to adolescents but with some sex education content as well; leaflets and booklets available on various topics for whoever would like them; the name of a teacher or student leader who has cassette tapes on various subjects that can be borrowed for private listening; the names and contact addresses and telephone numbers of people who can provide confidential counselling; a question box for anonymous questions and bulletin board space for answers to be posted. Over time, efforts would be made to involve students in display preparation on topics that are of special interest to them.
identification and training of counsellors for adolescents. These counsellors might be school staff, health personnel, or staff of local private associations.

- on request, classroom sex education lectures.

- data collection, analysis, and evaluation. Given the pilot nature of this activity and the inadequacy of knowledge of adolescent sex-related problems, data collection and analysis on the nature and frequency of problems and the usefulness of the information and counselling provided are very important.

The second model would be tested in all districts of two provinces that have district hospitals, excluding Muang districts, of two provinces to be selected. In these districts, a similar process of program development would be carried out with the local high schools except that it would be implemented by the Health Promotion Section of the District Hospital instead of the Provincial Health Office.

Both models would be introduced to schools under the auspices of the Provincial Chief Medical Officer. It is anticipated that materials already developed by private sector associations could be procured for use in these programs. These activities would aim to institutionalize the availability of sex education information at the school level and would seek to place responsibility for continuing display development and re-supply of information materials on school personnel.

2. Sex Education and Counselling at Two Universities

A model similar to that described above for high schools would be tested at Chiangmai and Khonkaen Universities. The model would include the same steps in program development listed above. However, the locus of support for this activity on the university campuses would probably emerge in the Medical Faculties, Nursing Faculties, Psychology Departments or related fields. Care should be taken in identification and training of counsellors appropriate for university students.

3. Sex Education for Out Of School Youth in Provincial Urban Areas

This pilot activity would also adapt the model described for high schools. It would be tested in Chiangmai and Khonkaen cities. This model would differ in some respects from the high school and university schemes, however. Its base of support could be the university, the provincial health office, the provincial hospital, or the local MCH center. Its counselling personnel could be selected from these organizations or from local private associations. Its display areas would be in public places frequented by youth such as movie theaters. Finally, since out of school youth are at scattered locations, this program may include a schedule of promotional visits to factories, for example, to make its services known.
4. Information and Service Support to the Venereal Disease Division

Venereal disease is mainly an adolescent health problem. Most young men get infected from prostitutes and prostitutes appear to have high rates of abortion and correspondingly high rates of non-use of contraceptives or use of inefficient methods. The activities proposed below would attempt to support the Venereal Disease Division's work and deal with the two problems of venereal disease and prostitute abortions.

Suggested activities include:

- distribution of family planning information and supplies and contraception injection service to female clients of VDD clinics, especially prostitutes. Training and supplies would be provided by the Family Health Division to the VDD.

- development of a joint outreach program by the VDD and FHD of information and contraceptive distribution to prostitutes. The information component would include data on venereal diseases and contraception. The Population and Community Development Association might also be involved in this program in Bangkok.

- reviewing the feasibility of distribution of contraceptive information and supplies through private VD clinics in Bangkok.

- research on how to increase practice by adolescent males of condom use.

5. Sex Education for Rural Youth

Little is known about the sexuality of rural youth and attendant problems, if any. This activity proposes to sample Tambon Youth Centers of the Community Development Department to attempt to identify rural youth problems in regard to adolescent sexuality and, when and where discovered, develop an experimental approach to dealing with these problems.

To gather information, members of Tambon Youth Centers in two provinces would be surveyed in cooperation with the CDD. In addition to the analysis of this data, seminars of leaders of the youth centers would be held at the district or provincial levels to discuss survey results and the leaders' own perceptions of problems and needs. The leaders would also be given the opportunity to suggest ways and means of dealing with problems identified using the Youth Centers. The hoped for outcome of these information gathering and analysis efforts would be the development of one or more experimental approaches to problems of rural adolescents. These approaches would be tested directly and evaluated.
C. Research

1. Sex Information in Printed Mass Media

A survey of sex information available in printed form in shops and bookstores is recommended to determine what kind of information is available, the extent of its distribution, the nature of its readership, the frequency of its distribution, and the accuracy of the information presented. This survey would include, for a given period of time, newspaper columns, magazine columns and articles, books and other commercial printed matter. It is anticipated that one of the Faculties of Mass Communication at either Thammasat or Chulalongkorn University would be interested in this project on a contract basis.

2. Studies of Adolescent Sexuality Problems

a. Profiles of unwed mothers. Sahathai Foundation has a program to support unwed mothers. Profile information, similar to that suggested above, would be of interest along with follow-up data on the ultimate situation of the children involved. Sahathai Foundation has expressed interest in cooperating in such data analysis.

b. Abortion complications. To what extent is non-medical abortion a public health problem in Thailand? Data on abortion complications could be gathered from hospitals and analyzed. Geographical data might be especially helpful to family planning service providers. Prostitutes, who have high rates of abortion and may have less inhibitions about discussing their abortion histories, might be considered for survey research.

c. Profiles of adolescents who come for counselling at the Siriraj Hospital Adolescent Clinic. Over 40% of the adolescents who sought help at this clinic in the past year had an unwanted pregnancy. Profiles of these youth would be of interest as would their reasons for coming to the Clinic. This data might also help determine the extent of unmet need for counselling services in Bangkok.
3. Study of Service Provision to Youth by the NFPP and the Attitudes of Service Providers

The extent to which the MOPE and private physicians currently provide consultation and services to youth is unknown. Further, the attitudes of service providers towards giving contraceptives to unmarried youth is also unknown. Both subjects should be surveyed. This information would be useful in the development of orientation materials for NFPP staff on adolescent sexuality problems.

4. Sex Education in the Classroom

It is not clear exactly what is taught as sex education in Bangkok high schools. A survey of such schools to determine what is taught and by whom would greatly assist sex educators in the development of further programs for Bangkok schools. This study should be carried out in cooperation with PPAT and PDA.

5. Survey of Rural Out Of School Youth

A KAP survey or anthropological study of rural adolescent sexuality appears to be in order as the existing data base, with few exceptions, focuses on urban adolescents, presumably because adolescent sexuality problems are more apparent in urban areas. The nature and extent of rural adolescent sexuality, its possible affect on the age of marriage, the extent of rural adolescent abortion are among issues that would be of interest to the NFPP and agencies providing services to rural adolescents.
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**Single Marital Status**

<table>
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<tr>
<th>Age</th>
<th>Total in age group</th>
<th>Single in age group</th>
<th>% Single</th>
<th>Single M</th>
<th>Single F</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-14</td>
<td>2,294,395</td>
<td>2,209,629</td>
<td>96.3%</td>
<td>1,111,945</td>
<td>1,097,684</td>
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<tr>
<td>15-19</td>
<td>5,408,251</td>
<td>4,744,611</td>
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<td>2,238,005</td>
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<tr>
<td>20-24</td>
<td>4,521,029</td>
<td>2,411,918</td>
<td>53.3%</td>
<td>1,426,255</td>
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<tr>
<td>Total 13-24</td>
<td>12,223,675</td>
<td>9,366,158</td>
<td>76.6%</td>
<td>5,044,805</td>
<td>4,321,352</td>
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**Municipal Residence**

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<th>% Single</th>
<th>Single M</th>
<th>Single F</th>
</tr>
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<tbody>
<tr>
<td>13-14</td>
<td>342,034</td>
<td>329,337</td>
<td>96.3%</td>
<td>160,943</td>
<td>168,394</td>
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<tr>
<td>15-19</td>
<td>1,014,496</td>
<td>928,483</td>
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<td>458,883</td>
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<td>20-24</td>
<td>1,006,208</td>
<td>702,925</td>
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<td>383,297</td>
<td>319,628</td>
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<td>Total</td>
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<td>1,960,745</td>
<td>83.0%</td>
<td>1,003,123</td>
<td>957,622</td>
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## Non-Municipal Residence

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<th>% Single</th>
<th>Single M</th>
<th>Single F</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-14</td>
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<td>951,002</td>
<td>929,290</td>
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<td>15-19</td>
<td>4,393,765</td>
<td>3,816,128</td>
<td>86.8%</td>
<td>2,047,723</td>
<td>1,768,405</td>
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<td>20-24</td>
<td>3,514,821</td>
<td>1,708,993</td>
<td>48.6%</td>
<td>1,042,958</td>
<td>666,035</td>
</tr>
<tr>
<td>Total</td>
<td>9,860,947</td>
<td>7,405,413</td>
<td>75.1%</td>
<td>4,041,683</td>
<td>3,363,730</td>
</tr>
</tbody>
</table>

Appendix 2, Page 1

Methodologies and Problems in Adolescent Sexuality Research

A. Methodologies and Study Samples

1. Bencha Yoddumnern (1981). The researcher led a team of social scientists who spent five weeks in a northern central plain village in 1978. Fifteen key informants in the village were interviewed in depth along with 45 women who had been married one to five years. The interviews were guided by question schedules that probed married life and family planning behavior.

2. Chalosri and Prayong (1982-83). The researchers distributed a self-administered questionnaire to 458 male students from nine vocational, commercial, and high schools in Muang District of Chiangmai Province. Simple random samples of 50 boys from each of the eight co-educational schools and 100 boys from the all-male school were selected.

3. Chanin Chareonkul et al. (1981). In two Tambons of Korat Province, a total of 849 subjects (375 males and 474 females) were interviewed according to a schedule of questions on various subjects including health and family planning. Of the sample population 45% of the females and 49% of the males were age 25 and under.


5. Debhanom (1979). Trained interviewers conducted individual interviews based on a pretested questionnaire with 1600 unmarried adolescents in the 15-20 age group. The sample was half male, half female; half urban (Bangkok), and half rural (Korat); half students, and half factory workers. Respondents were selected from three schools and six factories in Korat and 41 schools and four factories in Bangkok.

6. Debhanom (1983). Trained interviewers, all from Bangkok, conducted individual interviews based on a pretested 145 question questionnaire with 4,146 adolescents in the 13-20 age group. The sample distribution represented all four regions of the country and Bangkok with respondents chosen from 15 provinces. In each province, the provincial capital district and one other was chosen for sampling. The distribution of respondents in the survey was: male, 1994 and female, 2152; urban, 2950 and rural, 1196; students, 1748, out of school youth, 2012 and factory workers, 386. The sample also included a small number of married youth (79).

7. Debhanom and Somsak (1980). The researchers conducted
Appendix 2, Page 2

interviews (45 minutes each) based on a pretested questionnaire with 1000 masseuses selected from 13 parlors in Bangkok.

3. Debhanom and Somsak (1982). The researchers conducted interviews based on a pretested questionnaire with 300 prostitutes selected from 13 second class hotels in Bangkok.

9. Kapkeo (1982). A pretested KAP questionnaire was distributed for completion by 224 teachers and 256 students at eight northern region teacher training colleges. The sample was set up to be evenly divided between married and single and male and female respondents.

10. Muangthong (1980-81). A pretested, 96 question, multiple choice questionnaire was distributed to 1,973 Chulalongkorn University students by student volunteers who also collected the completed questionnaires. The volunteers sought out cooperative respondents and aimed to get a target number of respondents per faculty and per class. No consideration was given to age or sex in the questionnaire distribution which resulted in 812 males and 964 females. The respondents came from all five class years and 11 of 14 faculties.

11. Pichai (1980). A pretested multiple choice questionnaire consisting of a test of knowledge on sex education and a Likert type attitude scale towards sex education was administered on a timed basis to 360 senior year undergraduates (141 males and 219 females) majoring in Health Education at two campuses of Srinakharinwirot University. The sample consisted of 100% of the Health Education majors who were mainly adults. Of the respondents 62% were over age 26 and 27% were married.

12. Priya (1979). A questionnaire was administered to 965 Bangkok high school students in the 15-21 age group. Of these students, 483 were attending government schools and 482 were attending private schools.

13. Rawiwann (1984). A questionnaire test of sex education knowledge was administered to 658 Bangkok high school students. The sample included 284 students from nine general high schools, 125 vocational students from four schools, and 249 commercial students from eight schools. The sample consisted of 274 male students and 384 females.

14. Renu (1982). A questionnaire was administered to 1113 students from 12 vocational high schools in Bangkok. The sample consisted of 528 males and 585 females.

15. Suporn (1984). A questionnaire was drafted with the
Appendix 2, Page 3

assistance of student volunteers who distributed it to friends and collected the completed forms. The total sample was 3,420 students (1,813 males and 1,607 females) from Bangkok universities, teacher training colleges and vocational schools.

B. Problems in Research Methodology

1. Non-Response to Questions.

Information on non-response to questions is not always given in research reports. But where it has been given, "no answer" responses seem to occur in three types of questions: items on personal sexual behavior, hypothetical or attitudinal items, and certain knowledge items. Some examples of questions with high non-response rates are given below.

Personal Sexual Behavior.

Suporn asked respondents to name sex-related personal problems. "None" was a choice given, but nevertheless, 21.9% of the females 19 and under and 28.2% of the females 20 and over did not give any answer.

Chalosri and Prayong asked questions regarding the first person with whom the respondent had had sexual relations, the reason for it, and current partners. All questions had "never had sexual relations" as an answer. Still over 13% of the respondents gave no answer to these questions.

In Muangthong, no response was forthcoming to "method of relieving sexual desire at present" from 40.1% of the men and 25.6% of the women. Similarly, non-response rates to "have you ever had sexual relations with your lover?" were 22.4% for males and 16.2% for females.

Hypothetical and Attitudinal Questions

In Muangthong, 22.2% of the men and 35.6% of the women gave no answer in response to "reasons for future use of contraception". Similarly, 22.5% of the men and 3.1% of the women gave no answer to the question about what a female student should do if pregnant (24.8% of the males and 36.8% of the females had answered "don't know").

In Dehanom (1979), high levels on non-response occurred on questions regarding attitudes towards child-spacing, the teaching of sex education in schools, and the morality of abortion.
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Knowledge Items

Several knowledge questions in Debhanom (1979) had high non-response rates. These items included the cause of menstruation, the best method to test for pregnancy, how pregnancy occurs (females only), the meaning of family planning, sources of information on venereal diseases (females only), and the best method to prevent venereal diseases.

2. Validity of Data

Adolescent sexuality is a personal and sensitive subject. Females appear to be more reticent than males. For example, many more males claim to have sex with girlfriends than females with boyfriends. The margin of error in existing studies due to false answers is unknown.

3. Superficial Knowledge Questions

Muangthong illustrates the problems with common "ever heard of" knowledge questions by asking not only "ever heard", but also "can explain well" in regard to methods of contraception. The numbers of "can explain well" responses are considerably below the "ever heard of" answers. Not all studies have probed the knowledge of respondents to see whether their knowledge is correct or how extensive it is.

4. Questionable Value of Attitude Questions

Is it useful to ask a single girl whether she thinks abortion is sinful or not? Situational factors would probably affect her behavior more than her attitude on this issue, especially if she finds herself unwittingly with an unwanted pregnancy.

5. "Need to Know" Questions

A respondent may not know where to get contraceptives or where to get an abortion, but is probably quite capable of finding out if the need arises. Thus, the utility of this type of question is unclear.

6. Questions about the Behavior of Friends

Such questions as "do you have friends who are sexually active?" or "friends who have had a venereal disease?", etc., may give some indication of behavior within a group or may be useful as interview tactics, but would seem to have little statistical value.
STD's cost

SIR: There must be some misunderstanding of my discussion on the cost of sexually transmitted diseases in Thailand at the seminar on STD research. Your figure of 7,000 million bahts was too high. In fact, there are three parts of STD's cost:

1. Direct, including medical services, lab, treatments and medicine.
2. Indirect, including loss of work.
3. Inestimable, including disabilities, infertility and death.

The total direct cost for each patient per year at Ramathibodi Hospital was 550 bahts. The VD Control Division reported VD cases per year at around 400,000 but this included only five diseases (syphilis, gonorrhoea, chancre, LGV and granuloma inguinale). If we include other important STDs like trichomoniasis, genital herpes, genital warts, candidiasis, nonspecific urethritis and pelvic inflammatory diseases, together with unreported cases who get treatment at the drug stores or private clinics, the real figures will be at least three times that of the VD control division report. The figure of 1.2 million cases per year would be more accurate. Therefore, the direct cost for 1.2 million cases would be 660 million baht, and the indirect cost about 800 million baht.

Thus, the figure of around 1,000 million baht would be more accurate for the present situation of STD in Thailand.

Niwat Polnikorn, M.D.
Ramathibodi Hospital
Lists of Educational Media and Materials

I. Population and Community Development Association

Lecture Topics

1. Population Education
2. Sex Education
3. Family Planning
4. STD's
5. Parasites
6. Improving the Quality of Life
7. Dental Health
8. Narcotics
9. Personal Hygiene
10. The Work of PDA

Movies

1. This Life Still Has Hope
2. The Golden Year
3. Peace
4. Fat and Thin
5. Happy Family
6. Emergencies
7. Human Reproduction
8. Boy to Man
9. Girl to Woman
10. New Life
11. Cheerful Revolution

Slide Sets

1. Family Planning
2. Population Education
3. Sex Education
4. Venereal Diseases
5. Parasites
6. The Work of PDA
7. Adolescent Development
8. Narcotics
9. Thai Children Today

Videos

1. Cheerful Revolution
2. Parasites (Zentai Company)

Contraceptive Exhibition Kit - One Set
Appendix 4, Page 2

Books and Booklets

1. "If You're Going To Love..."
2. "This Life Offers Many Choices"
3. "Youth"

Leaflets for Women and Girls - 4 subjects
Leaflets for Youth - 2 subjects

Reports

1. Sex Education
2. History of Family Planning
3. Choosing the Sex of Children

II. Department of Non-Formal Education

Books

1. Buatong's Dream
2. New Home
3. The Gift Was the Reason
4. You're 15 (for girls)
5. Handbook for Functional Literacy
6. Life Experience (for Levels 3-4)
7. Population-Education for High Schools
8. Guidelines for Organizing Population Education
9. A Home Waits for Us

III. Venereal Disease Division, MOPH

Booklets

1. Venereal Disease Prevention Week, 13-19 December, 1982
2. AIDS
3. Gonorrhea and False Gonorrhea
4. Venereal Diseases
5. Symptoms and Treatment of Venereal Diseases
7. Have Fun Without V. D.

Sticker - "Don't treat yourself for VD"

Posters

1. Sexually-Transmitted Diseases
2. Infected Sex Organs, Female
3. Infected Sex Organs, Male
Appendix 4, Page 3

IV. Planned Parenthood Association of Thailand

The PPAT has by far the most educational media and material. The quality is so great that, for reasons of brevity, only types of materials and numbers of titles will be given here.

1. Video tapes. 36 titles.

2. Audio tape cassettes. 4 two-hour programs.

3. Slide sets. 21 sets.

4. Booklets, leaflets, and other printed material. 41 titles.

5. Exhibition sets (photos). 16 sets.

6. Movies. 29 titles.
Appendix 5

List of Persons Contacted

1. Dr. John F. Parsons, UNFPA
2. Dr. Andy Fisher, Population Council
3. Dr. John Laing
4. Dr. Suporn Koetsawang, Sirirat Hospital
5. Ms. Somchit Tipprapa, PDA
6. Dr. Saisuree Chutikul, National Youth Commission
7. Ms. Pensuk, Department of Non-Formal Education,
   Ms. Patrada Yomanak
   Dr. Tawee Nakabutr
8. Mr. Charoong Pasuwan, PPAT
   Ms. Ladda Jitwatanapad
   Ms. Sunan Duangchan
9. Ms. Pusadee Witayasanayut, Community Development Dept.,
   Ms. Somlak Youth Development Division
   Mr. Thanee
10. Ms. Darawan Dhammasaksa, Sahathai Foundation
11. Ms. Areerat, Department of Curriculum and Instruction
    Development, Curriculum Development Center
12. Dr. Amnuay Traisupha, Dept. of Communicable Diseases
    Control,
    Venereal Disease Division
    Mr. Charoon
13. Dr. Somporn Phonam, Khonkaen Univ., Faculty of Medicine
    Dr. Chuanchom Sakonhdhavat
    Mr. Manop
14. Mr. John Williams, Holt Children's Services
15. Dr. Kamhaeng Chaturachinda, Ramathibodhi Hospital
16. Dr. Nonglak Kirtiputra, School Health Division, MOPH
17. Ms. Mary McGovern, FPIA
    Mr. Promboon Panichapkdi
    Ms. Pimsuda
18. Mr. Chojiro Kunii, JOICFP
   Ms. Sumie Ishii, "
   Ms. Machiko Yagishita "
   Ms. Rissa M. Stella "

19. Mr. Haruo Konagai, JFPA