

# **SEXUAL HEALTH STATUS OF ADOLESCENT GIRLS IN RURAL ORISSA**

**A STUDY REPORT**

**2001-02**

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**Study Conducted by:**

**Orissa Voluntary Health Association**

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# 1. Introduction

The term adolescence meaning, "to emerge", or "achieve identity" is a relatively new concept, especially in development thinking. The origins of the term from the Latin word, 'adolescence' meaning to grow, "to mature" indicate the defining features of adolescence. However, a universally accepted definition of the concept has not been established.

WHO defines adolescence both in terms of age (spanning the ages between 10 and 19 years) and in terms of a phase of life marked by special attributes. These attributes include Rapid physical growth and development, Physical, social and psychological maturity, but not all at the same time, Sexual maturity and the onset of sexual activity, Experimentation, Development of adult mental processes and adult identity and Transition from total socio-economic dependence to relative independence. WHO has also defined youth and young people to distinguish adolescents from other similar (and sometimes overlapping) age groupings, which, however differ in these special characteristics. The Youth comprise of persons between 15 and 24 years and the Young people comprise of persons between 10 and 24 years.

Adolescents aged between 10-19 years account for more than one-fifth of the world's population. In India, this age group forms 21.4 percent of the total population (23), characterised by distinct physical and social changes, the separate health, education, economic and employment needs of adolescents can not be ignored. Adolescents are also entitled to enjoy all basic human rights - economic, social, political and cultural - but their inability to exercise these rights places the onus on policy makers and adults to implement separate measures to ensure their rights. Moreover, it is necessary to invest in adolescents as the future leaders and guardians of the nation's development. Adolescents as an age group usually tend to be subsumed under the categories of either youth or children. The formulation of definitions clearly demarcating the age and characteristics of adolescents is only a recent phenomenon, and yet to be widely recognised across the world. The actual interpretation of adolescence as a phase of life remains a social construct that differs between cultures.

In India there is a resistance to the concept of 'adolescence', if it is understood, as in the West, as an extended period of education and training for adult roles. The experience of such a phase is limited in the Indian context. Factors such as a delay in the onset of puberty (due to poor nutritional status) and prevalence of early marriage (signifying adulthood) may explain this. It may further be argued that in India the generation gap cited in the West does not exist. However, with the changing economic and social profile, generation differences in India are becoming increasingly important. The association of adolescence with sexuality is another factor, which increases resistance to the concept, particularly in regard to female adolescence. However, if adolescence is viewed in terms of shifts in "dependency to autonomy, social responses to physical maturity, the management of sexuality, the acquisition of skills, and changes in peer groupings". Then the notion that adolescence is a social stage that occurs only in developed nations must be discarded.

Apart from these objections to the relevance of the concept of adolescence to the Indian scenario, it is also arguable whether the term itself is valid. Adolescents are generally perceived as a homogenous group, yet they can be stratified on the basis of gender, caste, class, geographical location (urban/rural) and religion. Adolescents also include a whole gamut of categories: school and non-school going, drop-outs, sexually exploited children, working adolescents - both paid and unpaid, unmarried adolescents as also married males and females with experience of motherhood and fatherhood (22).

It may be pertinent to ask - are there any common characteristics defining adolescents? The only universal definition of adolescence is to mark it as a period in which a person is no longer a child, and not yet an adult. This is a period of rapid growth and is apparent from the prevalence of new factors - of new capacities, of being faced with new situations, new types of behaviour - which signify opportunities for growth and development, but also risks to health and well-being. The period is characterised by a combination of physical changes (puberty), behaviour changes and shifts in social grouping. Broadly, these changes are Rapid growth and the development of secondary sexual characteristics mark physical changes - The onset of puberty.

There are also psychological changes - The development of a sense of identity distinct from parents and self-worth, the exploration of new relationships with their peer groups, with the opposite sex, families and the community. It is also a time of exploration (of their own bodies, of one's capabilities and potential) and experimentation (in sexual relationships, alcohol and tobacco use). At this stage, media and peers exert a powerful influence. Manifested by change, it is also a stage of extreme vulnerability where, for instance, alcohol use could easily slip into alcohol abuse if there is inadequate access to services and a supportive environment. The support and understanding of parents during this phase is critical in enabling them to meet these challenges (45 & 46).

As they enter puberty boys and girls interest in sex increases. It is universally believed that recently adolescents are characterised with Falling age at puberty, Increasing premarital sexual activity and Falling age at first intercourse. Adolescence is further complicated by the non-simultaneous nature of these changes. Different aspects of behaviour or physical appearance occur at various ages.

Three main stages of adolescence are as follows. Early adolescence (10-13 years) characterised by a spurt of growth and the development of secondary sexual characteristics. Mid adolescence (14-15 years) - this stage is distinguished by the development of a separate identity from parents, of new relationships with peer groups and the opposite sex and of experimentation. Late adolescence (16-19 years) - At this stage, adolescents have fully developed physical characteristics (similar to adults), and have formed a distinct identity and have well-formed opinions and ideas (25). This suggests a need to move beyond an overall emphasis on adolescents towards different interventions at different stages of adolescence.

The lack of reliable data and information on the adolescent age group is a major impediment in preparing a profile of adolescents. Desegregation of data on the basis

of age is in the age groups of 0-15 years or 15-24 years, with adolescents (10-19 years) rarely considered as a distinct age group in official statistics. Moreover, the emphasis on youth (15-35 years in India) results in greater and better quality information on older adolescents in comparison with younger adolescents. The availability of reliable data is a vital pre-condition for planning and identification of appropriate programmes for adolescents. Research and data compilation on adolescents, in fact, is itself an era that calls for policy prioritisation.

The increase in attention towards adolescents is primarily due to recognition of the increased significance of this group as a proportion. At the Executive Board Special Event: Panel Discussion on Adolescent Reproductive Health, 13 June 2000, Geneva, it was pointed out that young people now numbered 1.4 billion and made up the 'largest youth cohort in history'. World wide, the majority of the increase in the proportion of adolescent population is occurring in developing countries (22). In India, as mentioned already, adolescents account for 21.4 percent of the population.

Past fertility decline has reduced the proportion of young people (17). However, with more than 200 million projected to be in this age group, the group is still significant enough to merit separate attention. Moreover, India's future population size will largely depend on its prospects for continued fertility reduction, linked to the success of its Reproductive and Child Health Programme (17).

Since adolescents comprise a major part of the reproductive age group, addressing their needs will be critical in determining India's future population levels. An analysis within the adolescent age group itself indicates that the proportion of 10-14 year olds is greater than the 15-19 year group. This has important implications for policy, as the needs of the two sub-groups are different.

The gender-wise breakdown of the adolescent population does not show any significant disparity between the sexes, with female adolescents accounting for the same proportion of the total female population as male adolescents for the male population. However, the problem of adverse sex ratio is also evident in the adolescent age group. The sex ratio for adolescents in the 13-19 years age group declined from 897.7 in 1981 to 884.2 in 1991, although it rose to 890.4 in 1996. (24)

The complexity of the period of adolescence, and the accompanying changes in physical and social characteristics is usually emphasised, but it is not very well understood by adolescents or adults. A poor understanding of reproductive health and sexual issues is the main cause for the absence of focus on services, information and research on unique features of adolescent reproductive health (ARH). In recent years, the trends of globalisation and liberalisation, the rapid spread of communication and information technology, and shifting social and moral norms may be said to have eroded the traditional bases and defining points for adolescent reproductive and sexual behaviour. This in turn leads to a host of changes in reproductive health concerns. These require immediate attention and appropriate interventions.

In most countries of South Asia, marriage marks the turning point in reproductive behaviour and signals the onset of sexual activity. Age at marriage, therefore, has far reaching consequences on fertility rates, child bearing, and other health issues such

as infant and maternal mortality. In India, the legal age at marriage is 18 for females and 21 for males. Nonetheless, early marriage continues to be the norm. By the age of 15 as many as 26 percent of females are married. By the age of 18, this figure rises to 54 percent. Legislation, advocacy, socio-economic changes (particularly education) are possibly leading to reversals in this trend, with a steady increase in the mean age of marriage.

However, rational statistics obscure regional and rural/urban differentials. In India 50 percent of women aged 20-24 are married before 18 years, with the rural percentage of 58.6 being a sharp contrast to the urban percentage of 27.9 (17). Concerted efforts are thus necessary to raise the age of marriage for adolescents, taking into account regional differences. Most fertility in India occurs within marriage, so the low age of marriage automatically links to early onset of sexual activity, and thereby, fertility. Adolescent fertility is high, but the increase in the age of marriage has resulted in a corresponding decline in age specific fertility. Even so, the NFHS (16) surveys report that as many as 36 percent of married adolescents aged 13-16 and 64 percent of those aged 17-19 are already mothers or are pregnant with their first child.

An analysis of the data has revealed that adolescent fertility rate for India is 116 births per 1000 women in the age group of 13-19 years, with the rate in rural areas being twice as high at 131 than in urban parts of the country. Overall, urban fertility is lower than rural fertility. The correlated factor of literacy is also of importance here, with urban dwellers having comparatively better access to educational facilities which in turn can facilitate a declining trend in fertility. Although fertility has declined, the number of births to adolescents has actually witnessed an increase from 11 percent in 1971 to 17 percent of all births in 1992-93 (16). The age-specific fertility rates though the availability of such data in this age group is limited compared to the 20 plus age group.

With the widespread availability of information, the influence of the media and the breakdown of traditional family structures, sexual behaviour among adolescents may be described as being in a state of flux. While information on sexual activity and behaviour is limited, and the methodologies of existing studies are questionable, a consistent finding is of a high level of pre-marital sexual activity, mainly among adolescent males. A disturbing trend is the lack of use of contraceptives and knowledge of sexually transmitted diseases (and preventive behaviour).

The magnitude of adolescent sexual activity is significant, and is higher in boys than girls. There is also under reporting of non-marital relationships, by adolescent girls due to fears of social disapproval. Men are more likely to be sexually active and at an earlier age than girls, and attitudes on premarital sexual activity remain conservative. Furthermore, the acceptance of pre-marital sexual activity is greater among boys than girls. Parents and teachers play a minor role in giving information, and are usually reluctant to impart such information.

The majority of information on sexual and reproductive issues is obtained from peers (which can sometimes be misleading and inaccurate). Commercial sex workers usually serve as partners for first-time sexual encounters. Contraceptive use is low and rarely used in first-time sexual encounters, including with commercial sex

workers. Contraceptive awareness is usually about sterilisation, which is unsuitable for most adolescents. Knowledge of HIV/AIDS, safe sex and preventive behaviour (like use of condoms) is low, across all ages and education levels. Knowledge of sexual and reproductive issues is extremely poor. In some studies, 50 percent of female adolescents did not know about menstruation, and the limited knowledge was based on social factors (such as not being permitted to cook) than the actual physiological changes.

There is considerable interest among adolescent boys for information on reproductive health. Education did not increase knowledge of sex and reproduction. The educational system does not adequately meet the needs for imparting sex education. Sexual and reproductive decision-making by adolescents is constrained by age and gender factors. Adolescent women have little choice on whom and when to marry, and are usually not in a position to negotiate contraceptive use. This varies slightly with age, with an older wife more likely to make such decisions. There is a huge unmet demand for adolescent health facilities, information and counselling services.

Sexual Behaviour is the sexual activity of an individual as observed by others, as distinguished from a subjective or inner perspective on one's own sexual acts. Other characteristics of sexual behaviour may include conscious, unconscious or innate, or socially determined components, with biological, psychological and developmental influences. Sex is considered as a taboo in our orthodox society. It discourages questions about sex and the existing myths, misconceptions and ignorance continue to be perpetuated and pass to generations. Traditionally, sex has never been considered a taboo in our society.

Behavioural assessment is more important than behaviour therapy. Anyone who has struggled with the application of behavioural techniques to complex behavioural problems is aware that the most difficult part of this endeavour is the development of adequate behavioural measures. Once adequate measures are developed, therapy is often a matter of applying the usual and standard techniques of selective, positive and reinforcement or modelling, as a cursory look at the literature. There are three major components of sexual behaviour-sexual arousal, heterosexual social skills (hetero-social skills) and gender role deviations. Sexual problems may be biochemically or genetically based and there are sophisticated procedures for assessing these biochemical and genetic factors.

The genital aspects of sexual behaviour have received the most attention over the years in studies of sexual problems, and thus assessment procedures utilising the genitals are the most advanced. The genital component of sexual behaviour involves a chain of events beginning with early aspects of sexual arousal through sexual contact of some kind and eventually orgasm. If two or more patterns of sexual arousal and/or behaviour are present, they may or may not be related to one another in terms of frequency or strength.

For instance, some patients may have frequent heterosexual arousal and behaviour with a spouse and still often engage in alternative forms of sexual behaviour. The true bisexual and some fetishistic patients are included in this group. However, deviant sexual arousal is often accompanied by diminished heterosexual arousal.

Diminished heterosexual arousal and behaviour do not, of course, necessarily imply the existence of alternative patterns of arousal.

A prerequisite for policy planning and focus is a comprehensive situational analysis of adolescents. Yet, there is a marked absence of reliable data and information on adolescents. There has been an encouraging trend to reverse this in recent years, with a growing awareness of adolescent needs, particularly in the voluntary sector, and an increase in the number of innovative programmes on adolescents. An overview, based on the secondary data available, confirms the need for a separate focus on the health, education, employment and protection of human rights of adolescents. Reproductive health, in particular, represents the most critical area where an emphasis on the special needs and concerns of adolescents are required. In India, given its predominantly patriarchal set up, ideology of son preference, incidence of early marriage and high rates of maternal mortality, a strong focus on the needs of adolescent girls is warranted. However, both sexes are vulnerable to problems such as those of drug abuse, HIV/AIDS and other infections and sexual abuse. A focus on 'adolescents' must be inclusive of adolescent boys as well as girls. Considering these aspects we planned this study on sexual health status of adolescent girls in rural Orissa.

## 2. Objectives of the study

- To assess the sexual health status of adolescent girls in rural Orissa.
- To assess awareness regarding sexual health among adolescent girls of rural Orissa.
- To assess socio-economic factors affecting sexual health of adolescent girls in rural Orissa.
- To devise suitable recommendations, if any for improvement of sexual health status of adolescent girls in rural Orissa.

## 3. Study Area

The sample was designed to provide estimates for rural areas of Orissa as a whole. The sample size is not large enough to provide estimates for individual districts. Within each domain, the sample was selected so as to give every household or study subject in the domain the same chance of being included in the survey.

## 4. Study Methodology

### **Consultation meetings:**

The study topic, schedules and methodologies were discussed and finalised in four consultation meetings attended by consultants and experts in the field of sexual health, population science, gender issues and health research. The overall content and format of the schedule as well as the methodology were determined in these meetings. A meeting was organised on 12.11.2002 at Lokswasthya Bhawan, Bhubaneswar to disseminate the study findings. 16 participants and consultants from different fields participated in the meeting. The draft report of the study was

presented by overhead projector form. Few suggestions emerged during the meeting was also incorporated in the final report of the study.

## i) Sampling Procedure

Multistage stratified random sampling procedure was adopted during the study. The first stage being selection of districts, second stage being selection of blocks, third stage being selection of villages, fourth stage being selection of household units and fifth stage being selection of respondents. In all stages, randomisation is given priority. However in the last two stages, stratification played a major role in the selection of sampling units.

The sample selection and implementation procedures were designed to ensure that the survey provides statistically valid estimates for population parameters and their sampling variances. The stratification was done on the basis of the following hierarchy of variables:

- By region, which are groupings of districts according to their sex ratio and number of sub-centres.
- Within a region, by categories of Community Development Blocks according to female literacy and number of sub-centres.
- Within a Community Development Block, by categories of village according to percentage of scheduled caste and scheduled tribe populations in the village. (Scheduled castes and scheduled tribes are groups that are officially recognised by the Government of India as Underprivileged)
- While selecting sample units due care was given to allot proportional weights to different age groups of adolescent girls and income standard of the households.

We have divided all 30 districts into four groups as follows. One district at random was selected from each group.

Group	Districts falling in the group	District selected at random
HM districts (High sex ratio and More number of sub-centres)	Ganjam	Ganjam
LL districts (Low sex ratio and Less number of sub-centres)	Angul, Balasore, Bargarh, Bhadrak, Boudh, Bolangir, Deogarh, Dhenkanal, Jagatsingpur, Jajpur, Jharsuguda, Kalahandi, <b>Khurda</b> , Koraput, Malkangiri, Nayagarh, Nawrangpur, Phulbani, Puri, Sambalpur, Sonapur	Khurda
LM districts (Low sex ratio and More number of sub-centres)	Cuttack, Keonjhar, <b>Mayurbhanj</b> , Sundargarh	Mayurbhanj
HL districts (High sex ratio and Less number of sub-centres)	Gajapati, Kendrapara, <b>Nuapara</b> , Rayagada	Nuapara

For selecting blocks in the selected districts, two indicators affecting the sexual health of the adolescent girl are selected i.e., female education and number of sub centres. Four categories thus formed are as follows.

- ★ High Female education and More number of sub centres (HM Blocks)
- ★ High Female education and Less number of sub centres (HL Blocks)
- ★ Low Female education and More number of sub centres (LM Blocks)
- ★ Low Female education and Less number of sub centres (LL Blocks)

<b>Particulars</b>	<b>Ganjam</b>	<b>Khurda</b>	<b>Mayurbhanj</b>	<b>Nuapara</b>
HM Blocks	Asika <b>Bhanjanagar</b> Jagannathprasad Rangeilunda	Begunia Bhubaneswar <b>Bolagarh</b> Khurda	Badasahi <b>Betanati</b> Morada	<b>Nuapara</b>
HL Blocks	Belanguntha Buguda Hinjjilikut <b>Kukudakhandi</b>	<b>Balianta</b> Balipatna Jatni	Gopabandhunagar Kullana <b>Raruan</b> Rasagobindapur Saraskana Sukruli	<b>Khariar</b> Sinapali
LM Blocks	Digapahandi Khalikot Kodala Polasara <b>Patrapur</b> Purusottampur Sanakhemundi	Banpur <b>Tangi</b>	<b>Kaptipada</b>	<b>Komna</b>
LL Blocks	Chikiti <b>Chhatrapur</b> Dharakot Ganjam Kaisuryanagar Seragada Sorada	<b>Chilka</b>	Bahalda, Bangiriposi Baripada, Bijatota Bisoi, Famada <b>Jashipur</b> , Karanjia Kunta, Kusuni Rairangpur, Samakhunta Suliapata, Thakurmunda Tiring, Udala	<b>Boden</b>
Name of 4 Blocks sampled	Bhanjanagar, Kukudakhandi, Patrapur, Chatrapur	Bolagarh Balianta Tangi Chilka	Betanati Raruan, Kaptipada Jashipur,	Nuapara, Khariar, Komna, Boden

From each of selected Blocks, two villages are selected one with more SC or ST population and one with less SC or ST population. From each of selected sample villages 10% sample units are selected subject to a maximum of 15. The total number of sample units is thus 4 districts x 4 blocks x 2 villages x 15 households = 480 sample units of 10-19 year adolescent girls. While selecting sample units due care was given to allot proportional weightage to different ages of adolescent girls.

## ii) Data collection procedure

The pre-testing of schedules was done by administering 6 schedules to adolescent girls at Village: Mohantypatna, GP: Jagannathpur, Block: Balianta, Dist: Khurda by two of the most experienced female staff of OVHA, namely Dr. Ambica Mohapatra, BAMS, Ms. Basanta Rani Patnaik, MA (Sociology) on 28.12.2001. A thorough discussion among the above staff with the principal investigator and the field Supervisor was done before the pre-testing. After pre testing a thorough discussion on possible modifications in the schedule was done on 29<sup>th</sup> to 31<sup>st</sup> December 2001

and modifications to the schedule was done accordingly. Thus the schedule was finalised for the study.

The data collection team consisted of four female investigators one supervisor and the Principal Investigator. Experienced Supervisors and Investigators were selected and trained prior to the data collection activity. The training of Field Investigators was carried out from 23<sup>rd</sup> to 25<sup>th</sup> January 2002. The training consisted of classroom training, general lectures, demonstration, practice interviews, as well as actual field practice and additional training for the field editor and supervisor. The actual data collection activity was carried out from 29<sup>th</sup> January to 15<sup>th</sup> March 2002. The schedules were edited on the same day by the supervisor and the Principal Investigator.

Basic information collected on each respondent person includes age, caste, religion, marital status, and age at marriage, education, occupation, family size, family type and annual family income. Information was also collected about KAP of adolescent girls on sexual health through a series of 50 questions. The schedule used for the study was in Oriya. The following qualitative data collection methods were used during the study.

- Body Mapping: By Group of adolescent girls to know health problems encountered by adolescent girls including sexual health problems.
- Village Mapping: By Group of adolescent girls to know services available for Health Problems including STD/ANC/PNC, Health seeking attitude and behaviour, Whom to contact in case of problems.
- Focus Group Discussion: KAP of Mothers on premarital & extramarital sex of adolescents
- Focus Group Discussion: KAP of Adolescent Girls on Coping Mechanism, Self esteem, role of teachers, parents, Physical development and sex education
- Focus Group Discussion: KAP of Adolescent Boys on Sexual Health problems
- Focus Group Discussion: KAP of Husbands on Sexual Health problems.
- In-depth Interview: Of Government Health Officials including ANMs, HWs, AWWs, Doctors etc.

Clinical data on prevalence of STIs, RTI and Problems relating to menstruation were collected in three districts of Khurda, Mayurbhanj and Ganjam in collaboration with local NGOs and Government of Orissa during Family Health Awareness Campaign from 30<sup>th</sup> March to 13<sup>th</sup> April 2002.

### iii) Time plan

★ Brainstorming of the survey:	15 days
★ Preparation of schedule:	1 months
★ Pre-testing and resetting:	15 days
★ Data collection for 480 schedules @ 6 units per day:	1 month and 15 days
★ Logistics support during data collection:	15 days
★ Analysis of data:	3 months
★ Report writing:	1 months and 15 days
★ Draft report:	15 days
★ Preparation of final report:	15 days

#### **iv) Data Analysis and tabulation**

The analysis and tabulation was done using Epi Info Version 6, a word processing, database, and statistics program for public health. This was produced by the Division of Surveillance and Epidemiology, Epidemiology Program Office, Centers for Disease Control and Prevention (CDC), Atlanta, Georgia 30333 in collaboration with the Global Programme on AIDS and World Health Organization (WHO), Geneva, Switzerland.

### **5. Findings of the Study**

#### **i) Literature Review**

We have reviewed considerable amount of literature during the study relating to sexual health in Indian and Orissa Context. The findings of the literature review in brief are given below.

In India, where there is sparse evidence about sexual activity among young people and it is widely assumed that sexual initiation takes place within the context of marriage, recent studies show that approximately one in four unmarried adolescent boys report that they are sexually experienced (18). In both developed and developing countries, there are a number of obstacles, which make it difficult for young people to protect their sexual and reproductive health.

While formal health education programs have been influenced by stereotypical attitudes about young people's sexuality, parents and families across a wide variety of cultures have also sought to deny young people information about sex and reproduction. In countries as different as India and Nicaragua, parents and children report that they do not talk to each other about sex (13 & 47). Often parents and family members do this in the belief that they are 'protecting' young people from information, which they believe, may lead to sexual experimentation. However, evidence suggests that young people who openly communicate about sexual matters with their parents, especially mothers, are less likely to be sexually active or (if girls) become pregnant before marriage (15). There are well-documented studies of behavioural bisexuality among men in countries as diverse as the Philippines (39), India (19), Morocco (5), Brazil (26) and Peru (6).

From countries across the world, there is also evidence that young people and adults talk only infrequently to one another about sex. In India, young people and especially young girls are reported as having consistently poor knowledge about sex and reproduction, including modes of transmission for HIV and the use of condoms as a preventive measure. Parents and family members are reluctant to discuss sexual matters with young people. Women interviewed in a variety of context reports that they were told very little about sex and reproduction prior to marriage (1). In rural and urban areas young people, especially girls, remain uninformed since sex and reproduction are considered distasteful and embarrassing subjects (18). In a recent study conducted in Mumbai, one mother interviewed said that adults do not want to

frighten young girls by talking about sex (13). By way of contrast, and like many of their counterparts in countries elsewhere in the world, young men in this same context are encouraged to be sexually experienced, but reliable sources of information are few and far between. The peer group therefore constitutes an important source of information, as does the developing mass media (18).

It is important to recognise that teachers, like many other adults, find discussing sexual matters with young people difficult and embarrassing (18). Many young people in the developing world do not attend school consistently, and there is evidence that this may be especially true in communities impacted upon by war, famine and other catastrophe including HIV and AIDS. In many parts of the world, including South Asia, young women spend much of time at home, and so may be particularly difficult to reach (43).

In Mumbai, practitioners designing a HIV-prevention program targeting girls found that it was crucial to first gain the support of parents and others in the wider community (4). A program of HIV/AIDS awareness for the wider community then, including local leaders, parents and young men, was launched prior to the initiation of the work targeting girls. Program designers also learned those young women and girls had heavy domestic workloads, including responsibility for the care of younger siblings. It was important therefore to provide crèche facilities to ensure that young women would be free to attend the program. Rather than concentrating solely on HIV and AIDS, the program designers included a range of topics on reproductive and sexual health, as well as discussion of gender issues. Methods included storytelling, role-play and games. The average age of the girls involved in the program was fourteen years. The program proved very popular with the young women and participation increased as the sessions went on. After seven sessions, the young women requested additional sessions. A follow-up survey found that 62 percent of the girls who took part in the session reported that they had subsequently discussed HIV/AIDS with others.

Same-sex relationships are highly stigmatised in many developing and developed countries, and homosexually active young men and women may experience marginalisation and social sanctions. Where such behaviours remain stigmatised, accurate information about the risks of HIV infection is rare. Although male-to-male sex exists in every culture, widespread official denial often renders homosexually active men socially invisible. This may place them at enhanced risk of HIV and other sexually transmitted diseases since the expression of their sexuality must be covert. Relatively few programs have targeted homosexually active men in developing countries, and even fewer have concentrated specifically on the needs of younger men (Parker, Khan and Aggleton, 1998). (27)

In India, telephone counselling has been a successful experiment as young people feel quite comfortable asking very personal questions relating to sexuality, sexual behaviour, and HIV/AIDS because of confidentiality through this mode of counselling. UNFPA is supporting University Grants Commission (UGC) for telephone counselling in selected universities through the Population Education Resource Centres (PERCs). Several NGOs are operating telephone hotlines. UNFPA, convened a meeting of representatives from universities and NGOs active in telephone counselling to discuss their experiences and to document the lessons

learned. The meeting discussed issues related to managing telephone counselling, quality of service delivery, improving men's and especially women's access to Tele-counselling, and using database for planning interventions. (Mridula Seth) (33)

Educational and Social Status of Adolescent Girls in Mahabubnagar District, Andhra Pradesh, India: The University Grants Commission (UGC), New Delhi has approved a research project entitled " Educational and Social Status of Adolescent Girls in Mahabubnagar District, Andhra Pradesh; Need for IEC Interventions – A Study". Mahabubnagar District is one of the most backward districts in Andhra Pradesh, India, with a population of the lowest literacy rate in Andhra Pradesh. The main objectives of the study are to find out educational, social, health, nutrition, psychological, emotional problems, and living conditions of girls. Other objectives are to measure the knowledge and awareness of girls on problems associated with adolescence and reproductive health; develop suitable IEC modules; arrange training programmes with the help of IEC modules in a non-formal setting; measure the impact of IEC interventions; and arrange for monitoring, counselling and interviews. (Prof. S. Sreedhara Swamy, President of the Society for Population Activities, Andhra Pradesh, India) (38)

Life Skills Training Modules: The "Life Skills Training Modules" (final draft) was prepared by consultants under Urivi Vikram Charitable Trust (UVCT), New Delhi Project 'Building Life Skills of Young Adults', supported by UN Inter-Agency Working Groups – Population & Development. The activity-oriented modules are meant to help drop out adolescents enhance their knowledge, skills and attitudes by looking within themselves (introspection and reflection) and delving into their experiences (experiential learning) to find out for themselves the areas where they have problems or need to improve. The three approaches used in the modules are content approach, thematic approach and activity approach. The modules could either be used as stand-alone modules or to be integrated into a designed flowing curriculum. (Dr. Prema Sundararajan, Coordinator, Population and Development Project, Kendriya Vidyalaya Sangathan, C-4-C-82, Janar Puri, New Delhi 110 058, India) (37)

Adolescence Health Education Project of the West Bengal Voluntary Health Association (WBVHA), India: WBVHA has launched a new project on Adolescence Health Education among the students community in the age group between 14-19 years (class IX-XII) in four districts of West Bengal involving 120 schools, 80 teachers and 7200 students. Strong core-groups (students' volunteers) from the 10 schools in each district were formed. In the first phase of experimental work, four districts have been chosen in the state of West Bengal. "Model Schools" for adolescence health education promotion were developed in each district. Tollygunge Girls' High School was selected as the first model school in West Bengal. High school students were oriented on various mental and physical changes along with food habit, personal hygiene, social obligations, superstitious beliefs while students of V-VIII standards were taught on the importance of personal hygiene, food habit, cleanliness, etc. IEC materials such as video-film on adolescence were developed in support of this programme. Poster and drama contests among students in 10 schools in each district were organised. KAP studies among the students in all 4 districts were conducted. (WBVHA 19A, Dr. Sudari Mohan Avenue, Calcutta 700014, India) (44)

ARSH advocacy and IEC strategies: The view from fourteen countries: Regional Clearing House on Population Education and Communication has produced three booklets on Communication and Advocacy Strategies containing Adolescent Reproductive and Sexual Health that present a synthesis of trends, lessons learned and best practices of fourteen national case studies. These booklets were compiled by Bangladesh, Cambodia, China, India, Iran, Lao PDR, Malaysia, Maldives, Mongolia, Nepal, Philippines, Sri Lanka, Thailand and Vietnam in order to document their experiences in employing IEC and advocacy strategies to promote adolescent reproductive and sexual health (ARSH). (rechpec@unesco-proap.org) (30)

A Profile of Adolescents in India: "Adolescents in India: A Profile" is a publication of the UN Inter Agency Working Group on Population and Development (IAWG-P&D) with UNFPA as the leading agency of the group. The profile is divided into four sections. The first section outlines the status of adolescents in India focusing on certain indicators such as demographic status, nutrition and health needs, education and literacy levels, vulnerability to HIV/AIDS and drug abuse, economic and employment requirements. Section two maps out the various activities being carried out in relation to adolescents in the UN System. Section three provides a brief description of government policies and programmes on adolescents. Section four presents activities and programmes on adolescents of selected NGOs. It is intended to serve as an advocacy tool and a policy document, bring out the need to reach out to adolescents, to work for them and with them. (fo.ind@undp.org) (3)

Training package on population and adolescence education from India: The Population and Development Cell of the Central Board of Secondary Education (India) has prepared a training package on population and adolescence education to be used for training resource persons and secondary school teachers. (28)

Population Education in Vocational Training Programme: The Directorate General of Employment and Training (DGET), Ministry of Labour (India) in collaboration with UNFPA has developed a three-volume set of training package on population education in vocational training: manual for instructors; guidebook for resource persons; and handbook for trainees. (12)

A need assessment study in adolescence education in Mysore district, India: The 441- page report published by the Regional Institute of Education, Mysore is an outcome of their research project entitled "Needs Assessment Study in Adolescence Education in Mysore District." The specific objectives of the study were: to know the level of knowledge awareness and practice among adolescents about different stages of the process of growing up, STD & HIV/AIDS and drug abuse; to know the attitude of key informants about the introduction of adolescence education in schools; and to identify the different sources of knowledge of adolescents related to the process of maturation. (The Head, Regional Institute of Education, Mysore 570006, Karnataka, India) (31)

Transition to adulthood: programmes and practices in India: In India, the Population Council has focused research attention on adolescents, particularly girls that most development programs have overlooked. Realising a scanty in data gathering to evaluate these programmes, the Population Council conducted a documentation project to record innovative strategies from seven governmental and NGO

programmes addressing a range of adolescent issues, from health and education to life skills and empowerment. The full report is published in "Adolescents in Transition: Programmes and Policies in India", edited by Sagri Singh, the Project Director. (35)

The "Young Inspirers" in Lucknow, India: Realising that young people in India seek information on sexuality from unreliable sources and hence they are misinformed, the Sex Education, Counselling, Research, Training and Therapy (SECR) launched a programme on Spearhead Youth Health-Leadership Training for Youth in Sexual and Reproductive Health in Lucknow, India. Selected youth were trained as peer counsellors calling themselves the "Young Inspirers." Their role is not only to promote sexual and reproductive health and holistic concept of healthy living in youth, but also to design and implement the youth club and its activities on a voluntary basis. (34)

Reproductive Health of Humankind in Asia and Africa: A global Perspective: This book is published in two volumes by B. R. Publishing Corporation, 3779, 1st Floor, Kanhaiya Nagar, Tri Nagar, Delhi 110035. This book focuses on reproductive health of mankind from several Asian and African countries. The first chapter contains a comprehensive conceptual model to deepen the clarity and holistic understanding of the theme. Interestingly this concept has been broadly focussed beyond the narrow confines of reproducing women. Moreover, the first part critically examines its multi dimensional relevance in the society at large. Appropriate coverage is also given to nutrition, gender and empowerment of women to promote reproductive health. In short, this book serves as an excellent reference material for all those who are concerned with reproductive health and research, programme development and teaching in the world. (21)

Common sexual problems and solutions: This book is written by Dr. Prakash Kothari, published by UBS Publishers Distributors Ltd, 5 Ansari Road, New Delhi - 110002. It examines various modes of sexual behaviour with a view to clear myths and misconceptions, provide accurate information and thereby help people to develop patterns of sexual behaviour that are healthy, promote happiness and assist them to perform on a higher plane of well-being. (20)

Encyclopaedia of AIDS and Sexual Behaviour is edited by B. K. Sinha, published in three volumes by Anmol Publications Pvt. Ltd., New Delhi 110002. The encyclopaedia describes the meaning of terms relating to AIDS and Sexual Behaviour. (36)

Meeting the needs of young clients: a guide to providing reproductive health services to adolescents by Barbara with Jane Schueller: This handbook is published by Family Health International, USA. This manual helps service providers and health workers strengthen the reproductive health care and services offered to young women and men. The focus is on two important aspects of reproductive health i.e. prevention of unwanted pregnancies and prevention of sexually transmitted infections (STIs) including HIV/AIDS. This can also be used as a tool for designing, improving and implementing adolescent health programmes by health workers, service providers, NGO workers, programme managers and health educators. (2)

Sexual Anxiety by Eric Carlton: This is a study of male impotence published by Martin Robertson & Co. Ltd., 108 Cowley Road, Oxford. This study analyses the specialist literature, much of which is not yet known to, or even available to the layman. Discussions with specialists were also done including that with the therapists working in the subject area. A content analysis is done of popular press and periodical material, particularly women's magazines and explicit fringe literature. Case studies were also personally conducted and which have never been reported in any other books or journals. (7)

Reproductive Health Matters, Volume 6, Number 12, November 1998. This issue of the journal deals with sexuality. This journal is published by Blackwell Science Ltd, Post Box 88, Oxford. This issue contains 20 articles relating to sex, sexuality and sexual health. An article on differential perspectives of men and women in Mumbai, India on sexual relations and negotiation within marriage was also included authored by Annie George. This paper report on a study of sexual negotiation in marriage among 65 married women and 23 married men of reproductive age in a low-income area in Mumbai, India, using repeat in-depth interviews. Differing perspectives on sexual pleasure, sexual coercion and female and male sexuality resulted in ongoing negotiations to attain or avoid sex. Women felt it was not appropriate for them to express their sexual needs, whereas men wanted women to be more sexually active and expressive. Women were more likely to experience sexual pleasure when they experienced marital harmony. Women were more likely to experience sexual pleasure when they experienced marital harmony. Women were commonly asked to have sexual relations against their wishes but negotiated to limit this, while many men felt they had a right to sex in marriage. Women and men believed that frequency of sex should diminish with increasing duration of marriage and completed childbearing, though men adhered to this belief less. Safer sexual practices were barely on the agenda for negotiation within marriage. The outcome of negotiation was never fixed both women and men had the potential to influence it in their favour. The changing access to resources may contribute more opportunity and space for women to influence the nature of their sexual experience. (14)

It also contains a paper on talking about sex by Radhika Chandiramani. This paper describes a telephone helpline on sexuality based in New Delhi, India and analyses the language used by the men and women who have phoned the helpline to talk about sex and their experience of their bodies and their sexuality. Eight out of ten callers are men and many people call more than once. The men seem to place their women sexual partners in certain categories, which are, defined by the activities they engage in with them, or think they can engage in and the social and emotional relationships they share with them. Caller's perceptions of sexual acts and bodily processes appear to be based on and restricted by male centred and male defined assumptions. Women seem to accept these, even at the expense of their own uncertain understandings and experience. Men commonly complain about the women's body shape and size, and how they smell and taste, but they understand little about how women's bodies are constructed or what gives women sexual pleasure. Thus both women and men are perpetuating a male dominated set of values about sex and sexuality and classifying women's sexuality on the basis of the little they know about women's sexual desires and needs. (10)

Youth Sexuality: A study of knowledge, attitudes, Beliefs and Practices among urban educated Indian Youth 1993-94 by Family Planning Association of India, Sex education counselling research and training/Therapy (SECRIT), Bajaj Bhawan, Nariman Point, Mumbai. The editor of this work is Dr. Mahinder C. Watsa. The study found out that on an average, males (16 years) were about two years younger than females (18 years) when they had their first sexual experience. Female respondents probably are more under social pressure and gave socially acceptable responses. This study revealed that correct knowledge on common and reproductive factors was generally poor among youth. However, more males than females had correct knowledge on all factors including conception, except for females above 19 years of age. Only over a third of the respondents could ask their teachers to clear their doubts on sex, sexuality and reproduction, although less than five percent stated that they were shy to ask. There is need not only for introducing sex education in schools, but also for parents especially the mother who can induce a sense of confidence among the children. (42)

Attitude and perceptions of educated urban youth to marriage and sex: a report of a study conducted by Sex education counselling research and training/Therapy (SECRIT), Family Planning Association of India, Bajaj Bhawan, Nariman Point, Mumbai. The editor of this work is Dr. Mahinder C. Watsa. The study was done in November 1990. Boys and Girls of 15-29 year age group were studied. The results indicate that the attitudes of the young people towards marriage and sexuality are more or less same in all the four regions of the country. Few young people have given advanced opinion to their sexual behaviour and its consequences, particularly at the time of entering into marriage. Males and females still continue to prize virginity. (41)

Attitude of parents, teachers, community leaders and administrators towards introduction of sex education in secondary school curriculum, 1995 by Dr. N. Pradhan: This was published in "Researches in Population Education 1980-2000", Published by Population education cell, Directorate of Teacher Education and State Council of Educational Research and Training, Orissa, Bhubaneswar. The study indicates that there is no significant difference between high qualified and low qualified parents in their attitude towards introduction of sex education in secondary school curriculum. There is no significant difference between male and female teachers in their attitude towards introduction of sex education in secondary school curriculum. There is no significant difference between community leaders and teachers in their attitude towards introduction of sex education in secondary school curriculum. There is also no significant difference between administrators and teachers in their attitude towards introduction of sex education in secondary school curriculum. There is also no significant difference between administrators and community leaders in their attitude towards introduction of sex education in secondary school curriculum. Study was limited to Koraput District of Orissa. (29)

Sex Problem among the adolescents and Need for Sex education: by Baijayantimala Satapathy, 1997: This was published in "Researches in Population Education 1980-2000", Published by Population education cell, Directorate of Teacher Education and State Council of Educational Research and Training, Orissa, Bhubaneswar. The study reveals that physical growth and development give more problems to the adolescents. Cognitive, emotional and social development during adolescent also

creates some problems with them. Adolescents face a lot of sex-problems during this period. They are not aware of the fundamentals of sex. Sex education should be compulsory in our education system. (32)

Evaluation of adolescent education activities organised in project schools of Orissa: 1998-1999, by P. K. Tripathy, P. Satpathy: This was published in "Researches in Population Education 1980-2000", Published by Population education cell, Directorate of Teacher Education and State Council of Educational Research and Training, Orissa, Bhubaneswar. The results indicate that adolescent education programme has created awareness among students with regard to spread of AIDS/HIV, adolescent development, knowledge about sex education. (40)

Situational Analysis for Sexual Health in the state of Orissa for Interventions in Sexual Health, August 1997, prepared by Centre for development research and training (CENDERET), Xavier Institute of Management, Bhubaneswar. This study reported that there is underdiagnosis, underestimation and underreporting of HIV/AIDS and STD cases in Orissa. Programmes providing health education and medical treatment for sexual health do not seem to have a field presence. A global assessment of public, private and NGO sectors reveals that strengthening of sexual health project is necessary. (8)

Girl child in India: the situational analysis (Indian country paper, DWCD, 1999) points out that a large number of adolescents are undernourished and the problem is more among girls (45%) than boys (20%), primarily due to deep rooted gender discrimination. Girls need 10% more iron as a result of menstrual blood loss, but their consumption is much less. (11)

## ii) Individual Schedules

### District-wise age group of respondents

Age group →	Early adolescents	Mid adolescents	Late adolescents	Total	%
<b>District</b>					
Ganjam	36	33	51	120	25
Khurda	23	40	57	120	25
Mayurbhanj	32	38	50	120	25
Nuapara	35	32	53	120	25
<b>Total</b>	<b>126</b>	<b>143</b>	<b>211</b>	<b>480</b>	<b>100.0</b>
<b>%</b>	<b>26.25</b>	<b>29.79</b>	<b>43.96</b>	<b>100.0</b>	

Three main stages of adolescence are as follows. **Early adolescence (10-13 years)** characterised by a spurt of growth and the development of secondary sexual characteristics. **Mid adolescence (14-15 years)** - this stage is distinguished by the development of a separate identity from parents, of new relationships with peer groups and the opposite sex and of experimentation. **Late adolescence (16-19 years)** - At this stage, adolescents have fully developed physical characteristics (similar to adults) having a distinct identity and have well-formed opinions and ideas. We have taken 26.25%, 29.79% and 43.96% respondents from early, mid and late adolescents respectively. Good care was taken to include adolescent girls of all age groups in the sample. The mean age of respondents is 14.877 years with standard deviation of 2.243. The median age is 15 years with lowest of 10 years and highest of 19 years.

### Educational status of respondents

Educational status	Frequency	%
Illiterate	109	22.7
1-3 standard	33	6.8
4-5 standard	69	14.4
6-7 standard	79	16.5
8-10 standard	180	37.5
Above Matric	10	2.1
<b>Total</b>	<b>480</b>	<b>100.0</b>

22.7% respondents were illiterate while 37.5% respondents were educated upto 8-10 standard. 16.5% were educated upto 6-7 standard and 14.4% educated upto 4-5 standard. 21.2% respondents have educational status below 6<sup>th</sup> standard.

### Currently perusing education

Going to school/College	Frequency	%
Yes	169	35.2
No	311	64.8
<b>Total</b>	<b>480</b>	<b>100.0</b>

Among respondents 35.2% are currently going to school/college while 64.8% have already drop out.

### Marital status of respondents

Marital Status	Married	Unmarried	Total
Frequency	19	461	480
%	<b>4.0</b>	<b>96.0</b>	<b>100.0</b>

Among the respondents 96% were unmarried and 4% are married. As expected married respondents were more among late adolescents.

### Age at marriage of respondents

Age at marriage in years	Frequency	%
12	1	5.3
13	1	5.3
15	5	26.3
16	5	26.3
17	5	26.3
18	2	10.5
<b>Total</b>	<b>19</b>	<b>100.0</b>

The mean age at marriage of 19 married respondents were 15.842 with a standard deviation of 1.537. Age at marriage as low as 12 and 13 years are also found.

### Occupation of respondents

Occupation	Home work	Labour	No work	Sewing	Student	Total
Frequency	200	64	37	10	169	480
%	<b>41.7</b>	<b>13.3</b>	<b>7.7</b>	<b>2.1</b>	<b>35.2</b>	<b>100.0</b>

The occupation of respondents are mostly home work (41.7%) followed by student (35.2%), labour (13.3%), No work (7.7%) and sewing (2.1%). The percent of students are distinctly low among the population. At the adolescent age all should be ideally students. So the major occupation of dropouts is homework and labour.

### Family type:

Family Type	Joint family	Nuclear family	Total
Frequency	90	390	480
%	<b>23.1</b>	<b>76.9</b>	<b>100.0</b>

There are 23.1% joint families and rest 76.9% families were nuclear families.

### Age at menarche of respondents

Age at menarche in years	Total	%
Not applicable	90	<b>18.8</b>
10	1	<b>0.2</b>
11	15	<b>3.1</b>
12	115	<b>24.0</b>
13	151	<b>31.4</b>
14	84	<b>17.5</b>
15	20	<b>4.2</b>
16	4	<b>0.8</b>
<b>Total</b>	<b>480</b>	<b>100.0</b>

During the study 18.8% respondents the menstruation cycle has not started. The mean age at menarche is 12.972 with a standard deviation of 0.992. the median age at menarche is 13 years with a minimum of 10 years and maximum of 16 years. Highest 31.4% respondents have age at menarche of 13 years followed by 24% have 12 years and 17.5% have 14 years. The percentage of respondents with age at menarche less than 12 and more than 14 are low.

### Pain during menstruation and Menstruation cycle of respondents

Cycle of Menstruation	Pain during menstruation			
	Yes	No	Total	%
Regular	111 (28.46%)	189 (48.46%)	300	76.9
Irregular	47 (12.05%)	43 (11.03%)	90	23.1
<b>Total</b>	<b>158</b>	<b>232</b>	<b>390</b>	<b>100.0</b>
<b>%</b>	<b>40.5</b>	<b>59.5</b>	<b>100.0</b>	

We come across 40.5% respondents who experience pain during menstruation. 28.46% respondents have regular menstruation and experience pain during menstruation while 48.46% respondents do not experience pain during menstruation and have regular menstruation. 12.05% respondents have irregular menstruation cycle and experience pain during menstruation. 11.03% respondents do not experience pain during menstruation and have irregular menstruation. 23.1% has irregular menstruation.

### Mode of washing and mode of drying clothes

Mode of washing	Mode of Drying				%
	In sun	In shadow	Using disposables	Total	
With only water	81 (20.77%)	27 (6.92%)	0	<b>108</b>	27.7
With shop and water	182 (46.67%)	83 (21.28%)	0	<b>265</b>	67.9
Using disposables	0	0	17 (4.36%)	<b>17</b>	4.4
<b>Total</b>	<b>263</b>	<b>110</b>	<b>17</b>	<b>390</b>	<b>100.0</b>
%	67.4	28.2	4.4	<b>100</b>	

While inquiring about the mode of washing and mode of drying clothes we found that 27.7% wash with only water and 28.2% dry in shed. 46.67% wash with shop and dry in sun. 4.36% use disposables.

### Knowledge on legal age at marriage of boys

Age at marriage of boys	Frequency	%
21 years	52	<b>10.8</b>
Wrong Answers	317	<b>66.0</b>
DK	111	<b>23.2</b>
<b>Total</b>	<b>480</b>	<b>100</b>

10.8% have knowledge on legal age of marriage of boys.

### Knowledge on legal age at marriage of girls

Age at marriage of girls	Frequency	%
18 years	188	39.2
Wrong answers	188	39.2
DK	104	21.6
<b>Total</b>	<b>480</b>	<b>100</b>

39.2% know the legal age of marriage of girls.

### How conception takes place

How conception takes place	By sexual intercourse	Don't know	Total
Frequency	337	143	480
%	<b>70.2</b>	<b>29.8</b>	<b>100.0</b>

70.2% respondents know how conception takes place while 29.8% do not know the same.

### When one should suspect pregnancy

<b>Signs</b>	<b>Frequency</b>	<b>%</b>
Stopping of monthly cycle	179	<b>37.3</b>
Vomiting	129	<b>26.9</b>
Increase in abdomen size	51	<b>10.6</b>
Increase in interest to eat pickles	10	<b>2.1</b>
Head reeling	3	<b>0.6</b>
Loss of appetite	2	<b>0.4</b>
Don't know	106	<b>22.1</b>
<b>Total</b>	<b>480</b>	<b>100</b>

37.3% correctly identified that stopping of monthly cycle as the sign by which one should suspect pregnancy. 26.3% said that vomiting is the sign and 22.1% did not know the answer. 10.6% stated other signs.

### Should women have decision making power about conception

<b>Should women have decision making power about conception</b>	<b>Frequency</b>	<b>%</b>
Yes	352	<b>73.3</b>
No	35	<b>7.3</b>
Can't say	93	<b>19.4</b>
<b>Total</b>	<b>480</b>	<b>100</b>

73.3% respondents opined that women should have decision making power about conception. They should decide when to conceive. 7.3% opined otherwise and 19.4% could not decide.

### Knowledge on mode of avoiding unwanted pregnancy

<b>Mode of avoiding unwanted pregnancy</b>	<b>frequency</b>	<b>%</b>
Using condoms	<b>42</b>	<b>8.8</b>
Use of herbal medicines	<b>8</b>	<b>1.7</b>
Oral pills	<b>41</b>	<b>8.5</b>
Advice of doctors	<b>49</b>	<b>10.2</b>
Don't know	<b>340</b>	<b>70.8</b>
<b>Total</b>	<b>480</b>	<b>100</b>

70.8% do not know how to avoid unwanted pregnancy while 10.2% wanted to take advice of doctors about the same and few have answered wrongly.

### Heard about contraception:

Heard about contraception	Frequency	%
Yes	385	80.2
No	95	19.8
<b>Total</b>	<b>480</b>	<b>100</b>

80.2% have heard about contraception while 19.8% do not heard about contraception.

### Four contraception methods Heard by the respondents

Methods of contraception heard	Frequency	%
2-3 methods	187	48.6
Tubectomy	128	33.2
Oral pills	39	10.1
All four methods	23	6.0
Condoms	5	1.3
Vasectomy	3	0.8
<b>Total</b>	<b>385</b>	<b>100</b>

Among those who knew about contraceptive methods 48.6% knew about 2-3 contraceptive methods while 6% knew about four contraceptive methods. 33.2% knew about only tubectomy. Few know about all four methods. Less number of respondents knew about condoms and vasectomy.

### Ideal number of children for a couple:

Number of Boys	Number of Girls					Total
	0	1	2	3	DK	
0	0	0	1	0	0	1
1	5	356 (76.56%)	13 (2.80%)	0	0	374
2	5	52 (11.18%)	29 (6.24%)	1	0	87
3	0	0	2	0	0	2
DK	0	0	0	0	1	1
<b>Total</b>	10	408	45	1	1	465

Highest number of respondents wanted one only and one girl (76.56%) while 11.18% wanted two boys and one girl. 465 respondents among 480 mentioned boy or girl in their answer.

### Ideal Number of children for couple (either boys or girls)

Number of Children	Frequency	%
1	7	46.7
2	7	46.7
3	1	6.6
<b>Total</b>	<b>15</b>	<b>100</b>

Among 15 respondents who did not mention boy or girl in their answer, 46.7% each preferred one and two children respectively. 6.6% preferred three children.

### Knowledge on methods of avoiding unsafe sex:

Methods	Using condom	Birth control pills	Doctor's Advice	Herbal medicine	Don't know	Total
<b>Frequency</b>	53	10	58	24	335	<b>480</b>
<b>%</b>	11.0	2.1	12.1	5.0	69.8	<b>100.0</b>

Knowledge level of respondents on methods of avoiding unsafe sex shows that 69.8% respondents don't have the knowledge. 12.1% said that they would take advice of doctors on the matter and 11% preferred using condoms for avoiding unsafe sex. Few respondents mentioned herbal medicine and birth control pills as possible methods of avoiding unsafe sex.

### Birth-spacing preference:

Spacing in years	Frequency	%
1	38	7.9
2	113	23.5
3	147	30.6
4	36	7.5
5	125	26.0
6	1	0.2
8	2	0.4
DK	18	3.9
<b>Total</b>	<b>480</b>	<b>100</b>

Highest (30.6%) respondents preferred birth spacing of 3 years followed by 5 years by 26% respondents and 2 years by 23.5% respondents.

### One should insist on using condoms during pre-marital sex

Should insist using condoms	Total	%
Yes	192	40.0
No	62	12.9
Can't Say	226	47.1
<b>Total</b>	<b>480</b>	<b>100</b>

40% respondents said women should insist on using condoms by male sexual partners while 12.9% said they should not insist on using condoms. 47.1% said that they cant say.

### Knowledge on spontaneous abortion

What is spontaneous abortion	Frequency	%
Abortion by ones own free will	86	17.9
Abortion without interference	121	25.2
Don't know	273	56.9
<b>Total</b>	<b>480</b>	<b>100</b>

56.9% respondents said that they do not know about spontaneous abortion while 25.2% respondents opined it is the abortion resulted without human interference. 17.9% said that it is the abortion by ones own free will.

### What to do during spontaneous abortion

What to do during spontaneous abortion	Maintain hygiene	Take Doctors advice	Consult Gunia	Don't Know	Total
Frequency	30	131	2	317	480
%	6.3	27.3	0.4	66.0	100

66% respondents do not know what to do during spontaneous abortions while 27.3% opined about taking doctors advice. 6.3% wanted to maintain hygiene during spontaneous abortions. Few respondents wanted to consult a Gunia.

### Knowledge on ideal place of abortion

Place of abortion	Frequency	%
Hospital	370	77.1
Home	12	2.5
Nursing home	1	0.2
Don't know	97	20.2
<b>Total</b>	<b>480</b>	<b>100.0</b>

77.1% said that abortions should be done at a hospital while 20.2% did not know the answer. Some respondents said that abortions could be done at home.

### Who should conduct abortion?

Who should conduct abortion?	Doctor	Dhai/ANM	Don't know	Total
Frequency	300	83	97	480
%	<b>62.5</b>	<b>17.3</b>	<b>20.2</b>	<b>100</b>

62.5% said that abortion should be done by a doctor while 17.3% said that it should be done by a Dhai/ANM and 20.2% do not know the answer.

### Person takes decision about sexual health in family

Decision taken by	Self	Mother	Father	Sister in law	Husband	Elder Brother	Total
Frequency	20	271	167	1	17	4	480
%	<b>4.2</b>	<b>56.5</b>	<b>34.8</b>	<b>0.2</b>	<b>3.5</b>	<b>0.8</b>	<b>100</b>

In most cases 56.5% mother takes decision regarding sexual health in family followed by the father 34.8% cases. Among married respondents most cases husband takes decision. In very few cases 4.2% the adolescent girl took decision about sexual health herself.

### Practice of using different mass media

Hours in a week	Television	%	Radio	%	Newspaper	%
0	198	41.25	331	68.96	392	81.67
1-7	103	21.46	108	22.5	88	18.33
8-14	108	22.5	28	5.83	0	0.00
>14	71	14.79	13	2.71	0	0.00
<b>Total</b>	<b>480</b>	<b>100</b>	<b>480</b>	<b>100</b>	<b>480</b>	<b>100</b>

The practice of using different mass media is very poor among adolescent girls. 81.67% adolescent girls do not read newspaper. 68.96% does not listen radio while 41.25% do not watch television. Television viewing practice of adolescent girls is better than radio listening and newspaper reading.

### Practice of discussion about sexual health

Discussing with	Frequency	%
Mother	161	33.5
Friend	176	36.6
Sister	58	12.1
Husband	19	4.0
Cant discuss with any one	66	13.8
<b>Total</b>	<b>480</b>	<b>100</b>

Highest 36.6% are found to be discussing with friends followed by 33.5% with mothers and 12.1% with sister and 4% are discussing with husbands (all married respondents). 13.8% cannot discuss with anyone.

## Heard about STD

Heard about STD	Frequency	%
Yes	53	11.0
No	427	89.0
<b>Total</b>	<b>480</b>	<b>100</b>

Only 11% respondents heard about STD while rest 89% respondents do not heard about STD.

## Educational status wise distribution of respondents who heard about STD

Education	Heard about STD			
	Yes	No	Total	%
Illiterate	3	106	<b>109</b>	<b>22.7</b>
1-3 standard	2	31	<b>33</b>	<b>6.8</b>
4-5 standard	4	65	<b>69</b>	<b>14.4</b>
6-7 standard	6	73	<b>79</b>	<b>16.5</b>
8-10 standard	33	147	<b>180</b>	<b>37.5</b>
Above Matric	5	5	<b>10</b>	<b>2.1</b>
<b>Total</b>	<b>53</b>	<b>427</b>	<b>480</b>	<b>100</b>
<b>%</b>	<b>11.0</b>	<b>89.0</b>	<b>100</b>	

Educational status wise distribution of respondents who heard about STD shows that more respondents of 8-10 standard and above matric have heard about STD.

## Distribution of respondents who heard about STD according to family type:

Family Type	Heard about STD				
	Yes	%	No	%	Total
Joint	13	14.4	77	85.6	<b>90</b>
Nuclear	40	10.3	350	89.7	<b>390</b>
<b>Total</b>	<b>53</b>	<b>11</b>	<b>427</b>	<b>89</b>	<b>480</b>

More Respondents from joint family have heard about STD than that of nuclear families.

## Knowledge whether STD are curable:

Knowledge whether STD are curable	Frequency	%
Yes	36	67.9
No	15	28.3
Can't Say	2	3.8
<b>Total</b>	<b>53</b>	<b>100</b>

67.9% thought that STD is curable while 28.3% thought that it is not curable.

### Knowledge on symptoms of STD

Knowledge on symptoms of STD	Frequency	%
Vaginal discharge	5	9.4
Painful intercourse	1	1.9
Pain in lower abdomen	4	7.5
Pain during urination	2	3.8
Mental distress	4	7.5
Itching of vagina	6	11.3
2-4 of above answers	21	39.7
Don't know	10	18.9
<b>Total</b>	<b>53</b>	<b>100</b>

Among those who heard about STD 18.9% do not know its symptoms, rest have recognised some of the symptoms of STD.

### Knowledge on spread of STD

Knowledge on spread of STD	Frequency	%
Sexual intercourse	20	37.7
Infected mother to child	3	5.7
Eating together	2	3.8
Using patients clothes	1	1.9
Both by sexual intercourse and from infected mother to child	13	24.5
Do not know	14	26.4
<b>Total</b>	<b>53</b>	<b>100</b>

Among those who heard about STD, 26.4% do not know how STD spreads while some thought that eating together and using patient's clothes spreads it. Most of them knew how it spreads.

### Knowledge on prevention of STD

Knowledge on prevention of STD	Frequency	%
Using condom during sex	17	32.1
Avoiding sex with multiple partners	14	26.4
Cleanliness and personal hygiene	4	7.5
Doctor's advice	10	18.9
Don't know	8	15.1
<b>Total</b>	<b>53</b>	<b>100</b>

Among those who heard about STD 15.1% do not know how it can be prevented while some also thought that cleanliness and personal hygiene could prevent it. 18.9% thought it can be prevented by doctor's advice.

### Knowledge on place of treatment of STD

Knowledge on place of treatment of STD	Frequency	%
Clinics	12	22.6
Hospitals	39	73.6
Quacks	1	1.9
Don't know	1	1.9
<b>Total</b>	<b>53</b>	<b>100</b>

Among those who heard about STD Most respondents knew the place of treatment of STDs.

### Knowledge on problems if STD are not treated in time:

Knowledge on problems if STD are not treated in time	Frequency	%
Disease would be serious	31	58.4
Problem in conceiving	1	1.9
Abortion	2	3.8
Leading to AIDS and Death of patient	18	34.0
Don't know	1	1.9
<b>Total</b>	<b>53</b>	<b>100</b>

Among those who heard about STD most of them knew the problems if STD are not treated in time. High percent of respondents 34% thought that it could lead to AIDS and death of patient.

### Heard about AIDS

Heard about AIDS	Yes	No	Total
Frequency	209	271	480
%	<b>43.5</b>	<b>56.5</b>	<b>100</b>

43.5% respondents have heard about AIDS while 56.5% have not heard about AIDS.

### Distribution of respondents who heard about AIDS according to family type:

Family Type	Heard about AIDS				Total
	Yes	%	No	%	
Joint	46	51.1	44	48.8	<b>90</b>
Nuclear	163	41.8	227	58.2	<b>390</b>
<b>Total</b>	<b>209</b>	<b>43.5</b>	<b>271</b>	<b>56.5</b>	<b>480</b>

More respondents of joint family have heard about AIDS than that of the nuclear families.

## Educational status wise distribution of respondents who heard about AIDS

Education	Heard about AIDS			
	Yes	No	Total	%
Illiterate	4	105	<b>109</b>	<b>22.7</b>
1-3 standard	2	31	<b>33</b>	<b>6.8</b>
4-5 standard	14	65	<b>69</b>	<b>14.4</b>
6-7 standard	37	42	<b>79</b>	<b>16.5</b>
8-10 standard	142	38	<b>180</b>	<b>37.5</b>
Above Matric	10	0	<b>10</b>	<b>2.1</b>
<b>Total</b>	<b>209</b>	<b>271</b>	<b>480</b>	<b>100</b>
<b>%</b>	<b>43.5</b>	<b>56.5</b>	<b>100</b>	

With increase in education status more respondents heard about AIDS. All the 10 above matric respondents heard about AIDS.

### Knowledge whether AIDS is curable:

Knowledge whether AIDS is curable	Frequency	%
Yes	63	30.1
No	131	62.7
Don't know	15	7.2
<b>Total</b>	<b>209</b>	<b>100</b>

Among respondents who heard about AIDS, 62.7% thought that it is not curable while 30.1 thought that it is curable. 7.2% do not know the answer.

### Knowledge on spread of HIV

Knowledge on spread of HIV	Frequency	%
Sexual intercourse	60	28.7
Receiving infected blood	14	6.7
Using contaminated syringe	11	5.3
From infected mother to child	1	0.5
2-3 right answers	108	51.6
Do not know	15	7.2
<b>Total</b>	<b>209</b>	<b>100</b>

Among respondents who heard about AIDS, 7.2% do not know how it spreads while others knew about various methods by which it spreads.

## Knowledge on prevention of AIDS

Knowledge on prevention of AIDS	Frequency	%
Using condom during sex	23	11.0
Receiving safe blood	11	5.3
Using disposable syringe	20	9.6
Avoid multiple sex	35	16.7
Don't eat with patient	1	0.5
More than one right answer	69	33.0
Don't know	50	23.9
<b>Total</b>	<b>209</b>	<b>100</b>

Among respondents who heard about AIDS, 23.9% do not know how it can be prevented.

## Main Problem for which visited hospitals:

Problems for which visited hospitals during last year	Frequency	%	Combined %
Etching of urinary opening	2	1.5	7.6
Menstruation disorders	8	6.1	
Worm infestations/ Stomach problems	5	3.8	92.4
Jaundice	1	0.7	
Tooth problems	1	0.7	
Injury	2	1.5	
Eye/ear problems	3	2.3	
Skin diseases/scabies	5	3.8	
Diarrhoea	10	7.6	
Upper respiratory infections	24	18.2	
Fever/malaria	71	53.8	
<b>Total</b>	<b>132</b>	<b>100</b>	<b>100</b>

Analysing reasons for which respondents visited hospitals, we found that only 7.6% respondents have visited hospital for causes relating to sexual health while 92.4% visited for causes other than sexual health. Most number of persons has visited hospitals for malaria/fever.

# Focus Group Discussions:

## Focus Group Discussion of Fathers:

### 1. Village: Badampada, GP: Jamuni, Block: Kaptipada, Dist: Mayurbhanj:

- ⇒ Regarding sexual problems, the group is not that aware and they are not able to say why and how the problems spread. They think that in case of any problems faced by adolescent, they inform their parents first and then they refer the doctor in case it is necessary.
- ⇒ The group tries to avoid answering to the question of rape. Some say that cases are rare and in case there is one, they go to the doctor and try to keep the matter subdued.
- ⇒ Regarding AIDS, some of are aware of it while majority is not aware. They are not able to give reasonable answer to what people who migrate do to satisfy their sex drive.
- ⇒ They are quite aware about family planning methods like vasectomy, copper-T, condoms, etc.
- ⇒ Regarding sex education to young people nearly all of them agree that it is necessary and they feel that in case village level worker go around the village explaining the thing would be more successful rather than advertising in TV or radio or posters.
- ⇒ They also feel that proper training should be given to the adolescent boys and girls. They also feel that as the operation on family planning is being done free, this should encourage people to undergo operations.

### 2. Village: Siletpani, GP: Daralipara, Block: Komna, Dist: Nuapara:

- ⇒ Some of them feel that if they masturbate or if someone has sex with his wife then he loses energy.
- ⇒ Also they feel that due to people marrying at younger age the child born is weak and prone to diseases. Some people do engage in sex with prostitutes when they go out of the village but are not aware of the dangers.
- ⇒ When asked if they know the repercussion then they feel that only weakness is felt and no other danger.
- ⇒ Very few participants are aware that AIDS is caused due to sexual interaction but nothing more.
- ⇒ They feel that NGO functionaries should give sex education, but the first duty of the parents is to impart this education. Birth control methods are used and the group is aware of it.

## **Focus Group Discussion of Mothers:**

### **1. Village: Mahantipatna, GP: Jaganathpur, Block: Balianata, Dist: Ganjam:**

- ⇒ Cleanliness is very much observed by the womenfolk of this group. The group is very much aware about the age at which girls should marry.
- ⇒ They think that if the girls are married and young then, they face problems like childbirth to other health hazards. They are also advocating the need of similar treatment of boys and girls.
- ⇒ They all know about the reason for STD and AIDS. The information they have got from TV and radio.
- ⇒ They do not give satisfactory answer to a question on rape and what should one do to tackle such a problem.
- ⇒ Regarding birth control procedures the group is very aware. Copper-T, condoms, pills are used by the women. They choose the ones that suit them. They also think that people should not have more than 2 children. They feel that there should be at least 5 years between children. They feel that the body needs to recover sufficiently after childbirth. They feel that good relationship should be there for total harmony.
- ⇒ In case of any problem they consult each other for comfort. They feel that if someone keeps oneself clean then there is no chance of any STD.

### **2. Village/Grampanchayat: Dharambandha, Block/Dist: Nuapada**

- ⇒ The group consisted of some non-Oriya migrant. All of them seem to be aware of their sexual health problems.
- ⇒ They know what are AIDS and its causes.
- ⇒ They are also aware of the methods for controlling birth.
- ⇒ In case of any problem they usually don't tell their parent about it but in case it becomes a big problem then they tell their parent through some other relative like sister-in-law, etc.
- ⇒ When they have any major sexual health problem they go to Nuapada because there are lady doctors there. Some of them seem to think that all problems would become all right with time.

### **3. Village: Jharapokhari, GP: Chikilakhali, Block: Chatrapur, Dist: Ganjam:**

- ⇒ The group is aware of sexually transmitted diseases.
- ⇒ They are also aware of the methods for controlling birth.
- ⇒ When they have any major sexual health problem they go to Berhampur or Chatrapur because there are lady doctors there.
- ⇒ The group is aware of birth control methods like Copper – T, Condoms, Operations, etc
- ⇒ The group is also aware about AIDS.

**4. Village: B.Jaganathpur, GP: Nimakhandi, Block: Kukudakhandi, Dist: Ganjam:**

- ⇒ The group is not sure as to why AIDS occur but are afraid now as someone from their nearby village died due to AIDS. But the group is aware about STD and other sexual diseases. They did consult their mother when they first had any problem and they do expect that their children did the same.
- ⇒ The children don't consult their friends first then their parents first. When they have any major sexual health problem they go to Berhampur because there are lady doctors there.
- ⇒ To a question that in case they are faced with a situation like rape they think that they would consult their parent first and if they feel the need then they would go to the police. Nearly all of them had faced some kind of problems like commenting or molesting.
- ⇒ Some of them present faced the problem of white discharge.

**5. Village: Kuarpur, GP: Makadapada, Block: Kaptipada, Dist: Mayurbhanj:**

- ⇒ The group is aware of birth control methods. The group is aware of AIDS and its causes.
- ⇒ They also feel that men should be very understanding of their wives. They are bound to have repercussions if they do not have proper relationship with their wives and they do not have to go elsewhere to satisfy their desire because having more than one partner can lead to problems.
- ⇒ One of the participants has three children who were born with the help of test tube.
- ⇒ The group feels that the men should be more understanding of their wives.

**Focus Group Discussion of Husbands:**

**1. Village: Narayanpur, GP: Samantarapur, Block: Patrapur, Dist: Ganjam:**

- ⇒ The husbands are aware of HIV/AIDS and STD and that it passes on to others.
- ⇒ They depend very much on local medicine for sexual health problem of the women folk of the village. In case of emergencies they are taken to the hospital which is about 3 miles from the village.
- ⇒ Sex education is a must and should be taught to the child by his parents or by the teachers of the schools.

**2. Village/GP: Patapur Sasana, Block: Bolagarh, Dist: Khurda:**

- ⇒ The group is quite aware of AIDS/STD, know about how it occurs and also the effects of having multiple partners.
- ⇒ Nearly all of them agree that STD and AIDS are dangerous diseases but are not very much informed about it.
- ⇒ They also feel that men should be very understanding of their wives as they are bound to have repercussions if they do not have proper relationship with their wives. They do not have to go elsewhere to satisfy their desire because having more than one partner can lead to problems.

## **Focus Group Discussion of Adolescent Boys:**

### **1. Village: Ambajoda, Grampanchayat/Block: Betanati, Dist: Mayurbhanj:**

- ⇒ The entire participants are of the same age. They are quite aware of sex and are quite acquainted with it as they have seen Adult movies (as they admit). They feel that uncleanness results in sexual diseases and also if somebody changes partners. They feel that forceful sex even within marriage is bad.
- ⇒ They inform that they do have urge for sex and to get out of it they either control themselves or some even masturbate. Regarding multiple sexual partners they have no reservations. Regarding migrant labors they have not much idea. Some of them feel that if they masturbate or if someone has sex with his wife then he loses energy and some people take milk etc. to compensate the loss.
- ⇒ Regarding sexual problems they inform their friends first then they go the doctors if necessary. Only if the case is important then they go and inform their parents as they feel shy.
- ⇒ They are quite unaware about AIDS and how it happens.
- ⇒ The change that took place in them on the onset of Puberty did not surprise them as they had already read about them from books.
- ⇒ They feel that in case NGO functionaries tried to teach the adolescent boys and girls regarding sexual health then it would work better. Circulation of papers would also be of good help.

### **2. Village: G. Rambha, GP: Dadaralunda, Block: Bhanjanagar, Dist: Ganjam:**

- ⇒ They are not very much aware of sexually transmitted diseases.
- ⇒ They are not able to answer freely regarding masturbation but have the idea that in case someone masturbates then he becomes weaker and leaner.
- ⇒ They are aware of people having multiple partners and are aware that birth control method can be availed at the hospital.
- ⇒ They are aware of AIDS and also how to prevent it.
- ⇒ Regarding sexual problems they inform their friends first then they go the doctors if necessary. Only if the case is important then they go and inform their parents as they feel shy.

### **3. Village: Sialati, GP: Kotenchua, Block/Dist: Nuapada**

- ⇒ They inform that they do have urge for sex and to get out of it they either control themselves. Some of do know about masturbation.
- ⇒ Regarding multiple sexual partners they have no idea.
- ⇒ They think that if some one has automatic discharge or someone masturbates then that is bad.
- ⇒ They do not inform their parent if they have any sexual problem.
- ⇒ They feel that it is very important for men to understand the needs and problems of their wives for a better relationship.

**4. Village: Bilakhauruni, GP: Badakumari, Block: Bolagarh, Dist: Khurda:**

- ⇒ Whatever knowledge the group has about AIDS/STD has been got from Newspaper, TV, etc. They are aware of the means to avoid AIDS and also they give more stress on cleanliness.
- ⇒ Regarding sexual problems they inform their friends first then they go the doctors if necessary. Only if the case is important then they go and inform their parents as they feel shy.
- ⇒ Some of them feel that if they masturbate or if someone has sex with his wife then he loses energy.
- ⇒ They are quite aware of sex and are quite acquainted with it as they have seen Adult movies (as they themselves admit).
- ⇒ They also are aware of birth control method like Condoms, copper-t, Operations like Vasectomy, etc.
- ⇒ They feel that both, boys and girls should be given equal opportunity in all fields.

**Focus Group Discussion of Adolescent Girls:**

**1. Village: Uasapadar, GP: Kalakeswar, Block: Chilika, Dist: Khurda:**

- ⇒ The discussion started with question on AIDS and the group is very much aware of the causes and precautions concerning it.
- ⇒ They all consult their mother in case of any problem related to sexual health. They feel that cleanliness is best way to avoid problem.
- ⇒ The group thinks that the role of parent and teachers is very vital in teaching about sexual health. They do not go to doctors to deal with minor problems related with genitals. They prefer indigenous methods.
- ⇒ They are also aware of birth control method and also ways to save themselves from other STD.
- ⇒ The group seems to be very much aware of things and they usually get the information from TV and Radio.

**2. Village/GP: Jalamundayi, Block: Komna, Dist: Nuapara:**

- ⇒ The girls are aware of the problem of sexual health. In case of any sexual problem they tell it to their friends first.
- ⇒ In case of any problem they go to Nuapada for treatment, in case of any major problem. They feel that the role of teacher and parent is very essential in teaching about sexual health.
- ⇒ The group is quite aware of birth control methods but they give more stress on herbal medicines. The group is not very much aware of AIDS.

**3. Village: Begunia, GP: Begunia, Block: Jashipur, Dist: Mayurbhanj:**

- ⇒ According to the group the main duty of the parent is to teach their children about sexual health. They avoid answering to a question as to what they do to quench their sexual urge.
- ⇒ The group is aware of AIDS and is also aware of the methods to avoid it.
- ⇒ Regarding birth control methods the group is adequately knowledgeable.

### **Brief Summary of Focus Group Discussions:**

It has been observed that the respondents in some groups were quite free and frank in their views while some were placid. Some of the main discoveries during investigations were as follows:

- ⇒ Many respondents are aware about STD and AIDS but lacked special knowledge about its prevention and its curability etc.
- ⇒ Many felt that in case of any problem, they consulted their friends instead of their parent. This proves that sexual health problems are not discussed freely within the family, which is not an ominous sign.
- ⇒ The general consensus was that NGOs and village level workers had a major role to play in spreading knowledge about Sexual Health.
- ⇒ There is a major problem with Sexual health in the villages particularly, white discharge, etc. This problem is due to different factors but mainly due to uncleanness.
- ⇒ They also feel that there should be cordial relationship between husband and wives. This would lead to less problems in their marriage and ultimately lead to a reduction in sexual health and AIDS problem because the scope for extra-marital affairs and visiting to prostitute.
- ⇒ The main problem can be solved by education the people about the problems and how to avoid being affected.
- ⇒ Adolescent girls are often the victims of gender discrimination both inside and outside the four walls of their home. Violence against women is also increasing in rural areas.

### **iii) In-depth Interviews:**

As a part of the study we have conducted several in-depth interviews to gather information relating to sexual health status of Orissa. We have interviewed some key officials of Government and NGOs who are working in the health and development sector and in sexual health field. Discussion on sexual health status of adolescent girls in rural Orissa was held. During qualitative data collection we interviewed physicians, health administrators, social scientists, NGO functionaries and other important officials of the health and development sector. This also helped us know the key issues relating to sexual health which needs to be studied. We have interviewed officials from the following institutions in this process.

- State AIDS Cell, Bhubaneswar
- State Management Agency-CARE, PSH Project, Bhubaneswar
- Family Planning Association of India, Orissa Branch, Bhubaneswar
- Parivar Seva Sanstha, Bhubaneswar
- Evangelical Mission Hospital, Khariar, Dist: Nuapara
- SDMO, Bhanjanagar, Dist: Ganjam
- Anganwadi Worker in Village: Mangalajodi, GP: Sundarpur, Block: Tangi, Dist: Khurda
- Auxiliary Nurse Midwife (ANM) of Village/GP: Angarpada, Block: Raruan of Mayurbhanj District

- Anganwadi Worker in Village: Godadhuapadar, GP: Birighat, Block: Khariar, Dist: Nuapara

### **Synopsis of the In-depth Interviews:**

During discussion it emerged that about 90% sexual health problems in rural areas are treated by quacks. People often prefer quacks as their medicines sometimes work fast, as they often give higher antibiotics from the start of treatment. This creates resistance among patients and in future higher antibiotics will be needed to cure diseases. STD patients mostly male are reporting syphilis, Gonorrhoea, Sanchroid in rural areas. Dailies about 3-4 patients are reporting and 5%-10% of all patients is coming for treatment of STDs. The problem of AIDS is now coming to district. Migrated labourers who return from Surat mostly spread it.

The need for sex education and the perception of adolescent girls to sex education in schools should be studied. School AIDS programmes should be started and adolescent girl's perception on this should be studied. The adolescent views of the aspects of sexual health should be known to chuck out future programmes on sexual health. Their viewpoint on curriculum of sex education in schools should be known. One of the key issues nowadays was to introduce sex education in syllabus of 9<sup>th</sup>, 10<sup>th</sup> and 11<sup>th</sup> standard. Teaching on HIV/AIDS and RCH should be given in classroom as well as through non-formal teaching. Drug addiction and alcoholism etc. should also be studied. Teachers' training on RCH is a must. The stigma attached to STD and AIDS are also important aspects of sexual health. The issue of care and support of HIV positive persons is of prime importance.

While studying rural adolescent girl's sexual health we should include school going as well as non school going adolescent girls with out of school adolescent girls (college going). The adolescent sexuality in Orissa should be studied, taking into account the major issues like, Reproductive Tract Infection, Sexually Transmitted Diseases, Pre marital sex relationships, Trauma, Physical problems, Unwanted pregnancies and High risk abortions. Other major areas of study may be psychological issues relating to adolescence, personality development, child sexual abuse, dangers of back street abortions, Planned Parenthood and contraception. Myths and misconceptions, perceptions about condoms are also prime issue of sexual health.

Anganwadi workers are stocking condoms. Mostly male persons take these from them for contraceptive purpose only and not for preventive measure for STD/HIV/AIDS. Public are not aware about STD/HIV/AIDS, they are somewhat aware about family planning. Consumption of condoms is low as very few people are taking it. If people will be more aware about STD/HIV/AIDS, they will start to take more condoms, which will also help the family planning cause. Auxiliary Nurse Midwives (ANM) reported that 2% patient with White discharge is there in the village. They are advised to consult doctors in Hospital and to use condoms during sexual activity. People are not interested to take condoms and to use them during sexual intercourse. They try also aware people on HIV/AIDS and STDs in the village.

## iv) Body Mappings

Village: Dadhibamanpur, GP: Jaripada, Block: Chilika, Dist: Khurda

We have given a set of sketch pens and one sheet of poster paper to a small group of adolescent girls and requested them to draw a body map of women and identify sexual health problems affecting different parts of the body. The identified various organs of the body including breasts and place inside the belly where child stays before birth. They could not name it as the womb. They also showed vagina and termed it as urinary opening in the picture. Few sexual health problems identified by them were as follows:

- ★ Pain in abdomen
- ★ Etching of the vagina
- ★ Burning sensation in the vagina

Village: Angarapada, GP: Angarapada, Block: Raruan, Dist: Mayurbhanj

We have given a set of sketch pens and one sheet of poster paper to a small group of adolescent girls and requested them to draw a body map of women and identify health problems including sexual health problems affecting different parts of the body. They identified Breasts, Urinary opening (vagina), Egg, Sperm and Uterus in the Body map with other vital body organs. Some health problems including sexual health problems identified by them which affect different parts of the body starting from head to foot are as follows.

- ★ Dandruff
- ★ Falling of hair
- ★ Greying of hair
- ★ Night Blindness
- ★ Ear ache (ear infection)
- ★ Mouth ulcer
- ★ Tooth ache
- ★ Goitre
- ★ Chest pain
- ★ Belly ache, Lower abdominal pain, Burning during urination before menstruation
- ★ White Discharge and AIDS in the urinary opening (vagina)
- ★ Arthritis
- ★ Crack in feet

Village/GP: Dakhinapur, Block: Kukudakhandi, Dist: Ganjam

We have given a set of sketch pens and one sheet of poster paper to a small group of adolescent girls and requested them to draw a body map of women and identify health problems including sexual health problems affecting different parts of the body. They identified Breasts, Urinary opening (vagina), two eggs, Sperm, Uterus and a child in the womb in the Body map with other vital body organs. They also identified modes of transmission of AIDS and suggested some prevention measures including condom use. Some health problems including sexual health problems

identified by them which affect different parts of the body starting from head to foot are as follows.

- Dandruff
- Lice in the hair
- Greying of hair
- Head reeling
- Headache
- Night Blindness
- Flowing of mucus from eyes
- Ear ache (ear infection)
- Cyst in the nose
- Bleeding from the nose
- Pimples in the face
- Tooth decay
- Throat cancer
- Goitre
- Crack in the lips
- Chest pain
- Tongue infection
- Fungal infection in the nail
- White and red spots in the face
- Dryness of the skin during winter
- Abdominal cancer
- Lower back ache
- Accumulation of Dirt in the Naval point
- White Discharge and AIDS in the urinary opening (vagina)
- Feeling of weakness, abdomen ache, head reeling, body pain, loss of appetite and feeling lightness of body during menstruation
- Burning feeling during urination
- Etching near urinary opening
- Mucus discharge from vagina
- White Discharge
- AIDS due to blood transfusion, injection and sexual contact
- Redness in the inner thigh area due to friction
- Lack of sensation (reversible) in the limbs
- Arthritis
- Crack in feet
- Filariasis in feet
- Fungal infection in the finger gaps of feet

Village: Junani, GP: Badi, Block: Khariyar, Dist: Nuapara

We have given a set of sketch pens and one sheet of poster paper to a small group of adolescent girls and requested them to draw a body map of women and identify health problems including sexual health problems affecting different parts of the body. They identified Breasts, Urinary opening (vagina), Egg, Sperm, Uterus in the Body map with other vital body organs. Some health problems including sexual

health problems identified by them which affect different parts of the body starting from head to foot are as follows.

- Lice in the hair
- Head reeling
- Night Blindness
- Puss in the ear
- Bleeding from the nose
- Pimples in the face
- Dark White Spots in the Tooth
- Blood discharge from gums
- Tooth ache
- Cold
- Tongue infection
- Crack in the lips
- Goitre
- Lower back ache
- Pain in nipples
- Stomach ache
- Burning feeling during urination
- Menstruation from the vagina
- White Discharge
- Etching of vagina
- Crack in feet

## v) Village Mappings

Village: Sahebjenapali, GP: Chikalakhandi, Block: Chatrapur, Dist: Ganjam

We have given a set of sketch pens and one sheet of poster paper to a small group of adolescent girls and requested them to draw the map of their own village and identify houses, roads, public utilities and any other thing of their choice. They identified Houses, wells, playground, roads, village squares, tube wells, lamppost, water taps, Anganwadi centre, school, shops, temples and ponds. They also drew an indicator to identify north, south, east and west directions in the village. They constructed three wells, two tube wells and one spot where tube water is available. They constructed 56 houses. They could not identify the place for treatment/advice for sexual health problems inside the village.

Village: Godadhuapadar, GP: Birighata, Block: Khariar, Dist: Nuapara

We have given a set of sketch pens and one sheet of poster paper to a small group of adolescent girls and requested them to draw the map of their own village and identify houses, roads, public utilities and any other thing of their choice. They identified Houses, tube well, roads, school, Anganwadi Centre, Mountains, Trees, Ponds, Sunder River, Grove of trees, They identified three tube wells, and one school. They identified the road to Khariar and to Birighata. They also drew an indicator to identify north, south, east and west directions in the village. They also

drew trees in the mountains to indicate that the mountains are not barren. They constructed total 28 houses in the map. They could not identify the place for treatment/advice for sexual health problems inside the village.

Village: Etamundi, GP: Maudi, Block: Jashipur, Dist: Mayurbhanj

We have given a set of sketch pens and one sheet of poster paper to a small group of adolescent girls and requested them to draw the map of their own village and identify houses, roads, public utilities and any other thing of their choice. They identified houses, the road to Jashipur, The Khairi Bhandana River, The Rama Tirtha Temple, Forest, Open field, Two ponds, Agricultural fields, Seven tube wells, School and Anganwadi Centre. They constructed 41 houses in the map. They could not identify the place for treatment/advice for sexual health problems inside the village.

Village: Saleswar, GP: Baliana, Block: Baliana, Dist: Khurda

We have given a set of sketch pens and one sheet of poster paper to a small group of adolescent girls and requested them to draw the map of their own village and identify houses, roads, public utilities and any other thing of their choice. They also drew an indicator to identify north, south, east and west directions in the village. They identified, trees, mountains, ponds, houses, Shops, Temples, school, Tube wells, Clubs, Agriculture Land, The Khetrapal Road, Open field, canals, Mountains, Electricity polls, and the road from Baliana to Saleswar. The canal is in the north side of the village. The Khetrapal road is in the east direction of the village. They identified three temples, three ponds, three tube wells and 36 houses. They could not identify the Anganwadi centre. They could not identify the place for treatment/advice for sexual health problems inside the village.

## vi) Clinical Data

### Sexual Health Camps conducted:

1. Sexual Health Camp At: Bhimpur, Via: Jagannathpur, Block: Baliana, Dist: Khurda:
2. Sexual Health Camp At: Chikalakhandi, Block: Chhatrapur, Dist: Ganjam:
3. Sexual Health Camp At: Jashipur, Block: Jashipur, Dist: Mayurbhanj:

### Sexual health problems identified:

SI No.	Particulars	Mayurbhanj	Ganjam	Khurda
1.	Total estimated target population	2450	2732	3073
2.	Number of cases attended at the camp	130	81	92
3.	Percent of cases attended the camp	5.31	2.96	2.99
4.	Number of RTI/STI cases	93	25	14
5.	Percent of cases with RTI/STI	71.54	30.86	15.2

### **Synopsis of Findings:**

- ⇒ Percent of cases attended in the camps are high at Mayurbhanj district than that of Ganjam and Khurda District.
- ⇒ Percent of cases with RTI/STI are high at Mayurbhanj than that of Ganjam and Khurda district. In Khurda district the percent of RTI/STI cases identified is the lowest
- ⇒ STD/RTI and other sexual health problems are quite prevalent in Orissa.
- ⇒ People sometimes are reluctant to come to the campsite for treatment of STD/RTI and other sexual health problems.
- ⇒ Among persons treated patients with ulcers and with discharge have been treated and referred to nearest referral units for further advice and treatment.
- ⇒ All types of STDs such as Gonorrhoea, syphilis, sanchroid and other types of sexual health problems are quite prevalent in Orissa.
- ⇒ We found that patients with white discharge are more in the three camps conducted in rural areas during the study.

## **6. Limitations of the Study**

- The study could not give district wise figures as the sample size was not adequate.
- During qualitative data collections and in-depth interviews certain degree of reservations were noticed among some for sharing the facts freely.
- Field Investigators, in some cases used the local people for interpretation that might have certain impact on the study.

## **7. Conclusions from the tables**

- ⇒ 22.6% of adolescent girls interviewed were illiterate. Drop out rate among them is 64.8%.
- ⇒ 4% respondents were married and 13.3% respondents were working as labour.
- ⇒ Median age at menarche is 13 years with a minimum of 10 years and maximum of 16 years.
- ⇒ Knowledge of adolescent girls on various aspects of sexual and reproductive health is very poor.

- ⇒ The knowledge of contraception is mostly that of permanent methods (tubectomy 33.2% in comparison to condoms 1.3%) which is unsuitable for adolescent girls.
- ⇒ Less number of respondents have the knowledge on spontaneous abortions (25.2%) and 69.8% do not know how to avoid unsafe sex. Very few (4.2%) adolescent girls take decision regarding sexual health
- ⇒ Practice of using different mass media is very poor among adolescent girls.
- ⇒ Percent of respondents heard about STD and HIV/AIDS are 11% and 43.5% respectively which is very poor. More number of respondents heard about AIDS than STD. Some of those who heard about STD/HIV/AIDS, do not know about symptoms of STD/AIDS, how it spreads and how it can be prevented etc.
- ⇒ Analysing the problems for which adolescent girls came for treatment we found that 7.6% came for sexual health problems and 92.4% for other problems. 53.8% came for treatment for malaria.

## 8. Recommendations

- K The unique and serious problems of adolescents should be addressed in two levels i.e. policy level and service delivery level
- K Steps should be taken to increase the availability of data and information on adolescents, which would serve dual purpose of providing tool for advocacy, and to suggest directions for future policy.
- K We must also address the problems of early marriage of adolescent girls to increase enrolment and retention rates in schools and colleges. Legislation, advocacy, socio-economic changes (particularly education) are strongly recommended for reversing this trend with an increase in the mean age at marriage.
- K With increasing premarital sexual activity, the problems of unsafe abortions and unwed mothers should be addressed with full vigour.
- K Interventions to improve the status of adolescent girls should aim to impact upon the decision-making powers of adolescent girls.
- K Improvement of reproductive and sexual decision making by rural adolescents must be improved.
- K Abortions and the accompanying health risks can be reduced significantly by the use of contraceptives.

- K Attitude towards contraceptive use must be improved with availability of quality services for inducing preventive behaviour.
- K Information and knowledge about HIV/AIDS/STD must be imparted for inducing preventive behaviour. There is need to go beyond high-risk groups and address behaviour change in general reproductive age group and adolescent age group.
- K Adolescent girls must be equipped with the social skills to negotiate sexual behaviour and understand the importance of preventive behaviour.
- K There is critical need for life skill education, especially for adolescent girls, which would definitely translate into lower risk behaviour.
- K There is a huge unmet need and demand for adolescent reproductive health facilities, information and counselling services. This unmet need and demand must be fulfilled by appropriate agencies.
- K Improved level of literacy with attitudinal change of the society, as a whole is required to end gender discrimination.
- K Empowerment of adolescent girls and women is a must to improve the sexual health status of adolescent girls.
- K Concerted efforts must be put in to further examine, analyse and address the problem of violence against women, which inflicts severe mental and physical injuries to the victims.
- K Reform of education sector by addressing problem of access, quality of schooling, and incentives to increase enrolment and retention rates.
- K There should be a gender sensitive education policy where, scheduled castes and scheduled tribes must be given special attention.
- K Despite constitutional and legal provisions, children continue to be employed and occupied in work. Policy makers must give adequate attention to this area.
- K For dropouts the most effective way of education and literacy is the non-formal education. Further strengthening of non formal education must be effected especially for adolescent girls and boys.
- K Further research and data compilation on adolescents is an area that calls for policy prioritisation.
- K Problems of adverse sex ratio are evident in the adolescent age group. The reasons for adverse sex ratio and its consequences for adolescents should be studied with that of gender discrimination.

- κ Sex education should be introduced in syllabus of 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> standard in Orissa.
- κ There should be gender sensitive behaviour of medical staff in addition to creation of space and privacy for patients.

## 9. Appendices

### i. The Study Team

<b>Name</b>	<b>Designation</b>
<b>Principal Investigator</b>	
Mr. H. S. Dutta,	Programme Officer, OVHA, Bhubaneswar
<b>Field Supervisor cum Tabulator</b>	
Mr. Nirakar Sahu,	Programme Assistant, OVHA, Bhubaneswar
<b>Consultants</b>	
Dr. Seva Mohapatra,	Jt. Director (RCH), Department of Health and Family Welfare, Government of Orissa, Bhubaneswar
Dr. S. C. Tripathy,	Jt. Director (AIDS), State AIDS Cell, Government of Orissa, Bhubaneswar
Dr. Pradeep K. Tripathy,	Head, PG Department of Statistics, Utkal University, Bhubaneswar
Dr. Gita Mohanty,	Secretary, Vijaya, Bhubaneswar
Mr. K. K. Swain,	Secretary, OVHA, Bhubaneswar
Mr. D. C. Nayak,	Treasurer, OVHA, Bhubaneswar
Mr. Ajay Tripathy,	Executive Director, OVHA, Bhubaneswar
Mr. Basudev Panda	Programme Co-ordinator, OVHA, Bhubaneswar
<b>Computerised analysis</b>	
Ms. Vandana Tripathy,	Student, M. Sc. (Epidemeology), CMC & H, Vellore
<b>Analysis of FGDs</b>	
Mr. Anand Patro	FOE, OVHA, Bhubaneswar
<b>Field Investigators</b>	
Ms. Gitanjali Sahu	Field Investigator
Ms. Susama Sahu	Field Investigator
Ms. Sucheta Badajena	Field Investigator
Ms. Haimabati Mahanta	Field Investigator

## ii. List of Collaborating NGOs

The following NGOs have helped us during the data collection activity in their respective field areas.

<b>SI No</b>	<b>Collaborating NGO</b>	<b>Place of data collection</b>
1.	PECUC, Bhubaneswar	Mahantypatna and Saleswar villages of Baliana Block
2.	IYDP, Khurda	Patapur sasan and Bilakhauruni villages of Bolagarh Block
3.	SAMANWITA, Tangi	Dadhibanampur and Uasapadar villages of Chilika Block Mangalajodi and Kuhudi villages of Tangi Block
4.	KWWO, Chhtrapur	Jharapokhari and Sahebjenapaly villages of Chhatrapur Block
5.	CARD, Ganjam	B. Jagannathpur and Dakhinapur villages of Kukudakhandi Block
6.	LIPICA, Ganjam	Gouduni and Narayanpur villages of Patrapur Block
7.	NEC, Bhanjanagar	G. Rambha and Ranikiari villages of Bhanjanagar Block
8.	ITDC, Nuapara	Jadamunda and Siletpani villages of Komna Block Godadhuapadar and Junani villages of Khariar Block Bhainsadani and Bireshkela villages of Bolden Block
9.	Mahila Vikas, Nuapara	Dharam bandha and Siallati villages of Nuapara Block
10.	CREFTDA, Jashipur	Begunia and Itamundi villages of Jashipur Block Angarpada and Sirakoli villages of Raruyan Block
11.	BGUK, Kaptipada	Kuanarpur and Badampada villages of Kaptipada Block
12.	SPARDA, Mayurbhanj	Udipura and Ambajoda villages of Betanati Block

### iii) REFERENCES:

1. Bang, R. A., Bang, A. T., Baitule, M., Choudhary, Y., Sarmukaddam, S., & Tale, O. (1989). High prevalence of gynecological diseases in rural Indian women, *Lancet*, 1(8629): 8-88.
2. Barbara & Schueller, Jane, Meeting the needs of young clients: a guide to providing reproductive health services to adolescents.
3. Bezbaruah, Supriti & Janeja Mandeep K., "Adolescents in India: A Profile", UN Inter Agency Working Group on Population and Development (IAWG-P&D) and Inter Agency Support Unit, UNFPA, (fo.ind@undp.org)
4. Bhende, A. (1993). Evolving a Model for AIDS Prevention Education Among low-Income Adolescent Girls in Urban India. Women and AIDS Research Program Report-in-Brief. Washington, DC: International Center for Research on Women.
5. Boushaba, A., Tawil, O., Imane, L and Himmich, H. (1998) Marginalisation and Vulnerability: Male Sex Work in Morocco. In P. Aggleton (ed.) *Men Who Sell Sex: International Perspectives on Male Prostitution and HIV/AIDS*. London: UCL Press.
6. Cáceres, C. and Jiménez, O. (1998) Fletes in Parque Kennedy: Sexual Cultures Among Young Men Who Sell Sex to Other Men in Lima. In P. Aggleton (ed.) *Men Who Sell Sex: International Perspectives on Male Prostitution and HIV/AIDS*. London: UCL Press.
7. Carlton, Eric, *Sexual Anxiety: study of male impotence*, Martin Robertson & Co. Ltd., 108 Cowley Road, Oxford.
8. Centre for development research and training (CENDERET), Situational Analysis for Sexual Health in the state of Orissa for Interventions in Sexual Health, August 1997, prepared by Centre for development research and training (CENDERET), Xavier Institute of Management, Bhubaneswar.
9. Centre for Population and Development Studies, Hyderabad and International Institute for Population Sciences, Mumbai, National Family Health Survey, 1998-99 (NHFS-2) Orissa, Preliminary Report, March 2000.
10. Chandiramani, Radhika, talking about sex in George, Annie, *Reproductive Health Matters*, Volume 6, Number 12, November 1998: sexuality, Blackwell Science Ltd, Post Box 88, Oxford.
11. Department of Women and Child Development, Girl child in India: the situational analysis (Indian country paper, DWCD, Government of India, 1999)
12. Directorate General of Employment and Training (DGET), Population Education in Vocational Training Programme: Ministry of Labour (India) and UNFPA.
13. George, A. and Jaswal, S. (1995) 'Understanding Sexuality: Ethnographic Study of Poor Women in Bombay'. Women and AIDS Program Research Report Series. Washington DC: International Center for Research on Women.
14. George, Annie, *Reproductive Health Matters*, Volume 6, Number 12, November 1998: sexuality, Blackwell Science Ltd, Post Box 88, Oxford.
15. Gupta, G.R., Weiss, E., & Mane, P. (1996). 'Talking About sex: a Prerequisite for AIDS Prevention'. In L.D. Long & E.M. Ankrah (eds.). *Women's Experiences: an International Perspective*. Columbia University Press: New York.
16. International institute of Population Sciences, National Family Health Survey 1992-93, Mumbai, 1995

17. International institute of Population Sciences, National Family Health Survey 1998-99, Mumbai, 2000
18. Jejeebhoy, S.J. (1998). Adolescent Sexual and Reproduction Behavior: a Review of Evidence from India. *Social Science and Medicine*, 46(10): 1275-1290.
19. Khan, S. (1998): Through a window darkly: Men who sell sex to men in India and Bangladesh. In P. Aggleton (ed.) *Men Who Sell Sex: International Perspectives on Male Prostitution and HIV/AIDS*. London: UCL Press.
20. Kothari, Dr. Prakash, *Common sexual problems an solutions*: UBS Publishers Distributors Ltd, 5 Ansari Road, New Delhi - 110002.
21. Mahadevan, Kettan, et. Al., *Reproductive Health of Humankind in Asia and Africa: A global Perspective*: B. R. Publishing Corporation, 3779, 1st Floor, Kanhaiya Nagar, Tri Nagar, Delhi 110035.  
Men Who Have Sex With Men (MSM) in Developing Countries - Implications for HIV Prevention, *Critical Public Health*.
22. Ministry of Health and Family Welfare: India Country Paper prepared for United Nations Population Fund sponsored South Asia Conference on the Adolescents, July 21-23, Government of India, New Delhi, 1998.
23. Ministry of Human Resource Development, Department of Youth and Social Affairs: *National Youth Policy, 2000*, Government of India, New Delhi, 2000.
24. Office of the Registrar General, *Sample Registration Bulletin*, New Delhi, 1996.
25. Pandey, J., Yadev, S. B., Sadhu, K. K., *Adolescence Education in Schools: Package of Basic Materials*, National Population Education Project, National Council of Educational Research and Training, New Delhi, 1999.
26. Parker, R. (1996) *Bisexuality and HIV/AIDS in Brazil*, In P. Aggleton (ed.) *Bisexualities and AIDS: International Perspectives*. London: Taylor and Francis.
27. Parker, R., Khan, S. and Aggleton, P. (1998) *Conspicuous By Their Absence?*
28. Population and Development Cell, Central Board of Secondary Education, *Training packages on population and adolescence education from India: The Population and Development Cell of the Central Board of Secondary Education, India*.
29. Pradhan, Dr. N., *Attitude of parents, teachers, community leaders and administrators towards introduction of sex education in secondary school curriculum, 1995* in "Researches in Population Education 1980-2000", Population education cell, Directorate of Teacher Education and State Council of Educational Research and Training, Orissa, Bhubaneswar.
30. Regional Clearing House on Population Education, *Adolescent reproductive and sexual health (ARSH) advocacy and IEC strategies: The view from fourteen countries: (rechpec@unesco-proap.org)*
31. Regional Institute of Education, Mysore, *A need assessment study in adolescence education in Mysore district, India: Regional Institute of Education, Mysore 570006, Karnataka, India*.
32. Satapathy, Baijayantimala, *Sex Problem among the adolescents and Need for Sex education: 1997*: in "Researches in Population Education 1980-2000", Population education cell, Directorate of Teacher Education and State Council of Educational Research and Training, Orissa, Bhubaneswar.
33. Seth, Mridula. *Telephone counselling in selected universities through the Population Education Resource Centres (PERCs)*. UNFPA, New Delhi

34. Sex Education, Counselling, Research, Training and Therapy (SECRT), The "Young Inspirers" in Lucknow, India:
35. Singh, Sagri, ed., Transition to adulthood: programmes and practices in India: "Adolescents in Transition: Project Director, Programmes and Policies in India".
36. Sinha, B. K. ed., Encyclopaedia of AIDS and Sexual Behaviour, Anmol Publications Pvt. Ltd., New Delhi 110002.
37. Sundararajan, Dr. Prema, Life Skills Training Modules: The "Life Skills Training Modules" (final draft) Urvi Vikram Charitable Trust (UVCT), New Delhi, UN Inter-Agency Working Groups – Population & Development, Population and Development Project, Kendriya Vidyalaya Sangathan, C-4-C-82, Janar Puri, New Delhi – 110 058, India.
38. Swamy, Prof. S. Sreedhara, Educational and Social Status of Adolescent Girls in Mahabubnagar District, Andhra Pradesh, India: The University Grants Commission (UGC), New Delhi (Society for Population Activities, Andhra Pradesh, India)
39. Tan, M. (1996) Silahis: Looking for the Missing Filipino Bisexual Male. In P. Aggleton (ed.) Bisexualities and AIDS: International Perspectives, London: Taylor and Francis.
40. Tripathy, P. K. & Satpathy, P., Evaluation of adolescent education activities organised in project schools of Orissa: 1998-1999, in "Researches in Population Education 1980-2000", Population education cell, Directorate of Teacher Education and State Council of Educational Research and Training, Orissa, Bhubaneswar.
41. Watsa, Dr. Mahinder C., Attitude and perceptions of educated urban youth to marriage and sex: a report of a study conducted by Sex education counselling research and training/Therapy (SECRT), Family Planning Association of India, Bajaj Bhawan, Nariman Point, Mumbai.
42. Watsa, Dr. Mahinder C., Youth Sexuality: A study of knowledge, attitudes, Beliefs and Practices among urban educated Indian Youth 1993-94, Family Planning Association of India, Sex education counselling research and training/Therapy (SECRT), Bajaj Bhawan, Nariman Point, Mumbai.
43. Weiss, E., Whelan, D., Gupta, G.R. (1996). Vulnerability and Opportunity: Adolescents and HIV/AIDS in the Developing World. Washington DC: International Center for Research on Women.
44. West Bengal Voluntary Health Association (WBVHA), Adolescence Health Education Project of the, India: (WBVHA 19A, Dr. Sudari Mohan Avenue, Calcutta 700014, India.
45. World Health Organisation (SEARO): Adolescence: The critical phase, the challenges and the potential, New Delhi, 1998.
46. World Health Organisation (SEARO): Strategies for Adolescent Health and Development in Southeast Asia Region, New Delhi, 1998.
47. Zelaya, E., Marín, F.M., García, J., Berglund, S., Liljestrand, J., & Persson, L.A. (1997). Gender and Social Differences in Adolescent Sexuality and Reproduction in Nicaragua. *Journal of Adolescent Health*, 21: 39-46.