

# BUILDING ON EVIDENCE FROM PROGRAMMES AND RESEARCH

*Report of a State Level Workshop  
held at CIRT Pune  
from 4<sup>th</sup> to 5<sup>th</sup> January 2008*



**- Organising Partners -**

Directorate of Health Services, Government of Maharashtra  
&

Institute of Health Management, Pachod

**- Supported by -**

Govt of Maharashtra & The John D. and Catherine T. MacArthur Foundation

# STATE LEVEL WORKSHOP ON ADOLESCENT REPRODUCTIVE AND SEXUAL HEALTH IN MAHARASHTRA

4<sup>th</sup> and 5<sup>th</sup> January, 2008



A workshop on Adolescent Reproductive and Sexual Health (ARSH) was conducted at the Central Institute of Road Transport, Bhosari, Pune on 4-5 Jan 2008. The workshop was conducted jointly by the Department of Health Services, Government of Maharashtra and Institute of Health Management, Pachod (IHMP). Eighty seven participants attended the workshop, twenty from the Department of Health Services, Government of Maharashtra and the rest from professional and research organisations and non government organisations that are working in the field of Adolescent Reproductive and Sexual Health (ARSH) in Maharashtra.

The workshop was also the occasion for the launch of the Safe Adolescent Transition and Health Initiative (SATHI) programme a multi site, intervention research programme in ARSH. The programme is being implemented by the Department of Health Services, Government of Maharashtra in collaboration with Institute of Health Management, Pachod in ten districts of Maharashtra and by Institute of Health Management, Pachod in collaboration with the Population Foundation of India and five NGOs in five districts of Maharashtra. The implementing NGOs are:

1. Late Shriram Ahirrao Memorial Trust, Dist Dhule
2. Sanskruti Savardhan Mandal, Dist Nanded
3. Gramin Vikas Mandal, Dist Beed
4. Apeksha Homoeo Society, Dist Amravati
5. Youth Welfare Association of India, Dist Buldhana

The participants in the workshop evolved the following recommendations for the Government of Maharashtra and other organisations working in the field of Adolescent Reproductive and Sexual Health (ARSH).

---

---

## Summary of Conclusions and Recommendations

### Session I Early Marriage and Sexual Debut: An unaddressed issue

#### Recommendations

The session on age at marriage included three presentations. These included both formative and intervention research. The key recommendations are:

#### Programme

- The media should play a major role in changing norms towards early marriage
- “Early Marriage Prevention Committees”, can be established for delaying age at marriage
- Promote contraceptive use among newly married couples to delay first conception
- Adolescent friendly services should be mainstreamed with RCH
- Social interventions to be implemented to delay early marriage
- Interventions providing schooling opportunities and financial independence for adolescents
- Enforcement of law on legal age at marriage
- Compulsory registration of all marriages
- PHCs must provide services for sexual problems and issues

#### Research

- District wise rural –urban segregated data should be analysed.
- Research is required on long term impact of life skills education programme
- Build an evidence base to demonstrate the impact of awareness and knowledge for enabling behavioural change
- Qualitative research studies to provide a better understanding of the social pressure for early marriage
- Collect caste wise data with regard to age at marriage, school drop out and its relation to age at marriage.

### Session II Adolescent Pregnancy: Situation and consequences

#### Recommendations

The session on “Adolescent Pregnancy: Situation and Consequences” included three presentations. These included two presentations on assessment and determinants of the problem and one on assessing the impact of a community based intervention. The key recommendations from the session are:

#### Programme

- Mainstream focussed obstetric and reproductive health services for married adolescents through an active surveillance system
- Introduce aggressive behaviour change communication to delay age at first conception and address adverse reproductive health outcomes of early conception
- Promote and ensure availability of contraceptives
- Enforce a system of compulsory registration of marriages
- Provide universal pre-marital counselling

- 
- Introduce nutrition education for dietary change
  - Introduce effective home-based care strategies to reduce neonatal mortality
  - Create active village health committees to ensure adolescent health and delay age at marriage

#### *Research*

- Undertake a study to review the effectiveness of Janani Suraksha Yojana.
- Assess determinants of contraception use in rural areas.
- Identify social, economic or health service system factors contributing to the slow decline of neonatal mortality in Maharashtra.
- Study experiences of motherhood among adolescents.
- Prevalence of pregnancy in school going and non school going adolescents girls
- Assess impact of a premarital counselling intervention (through non formal sector)
- Assess impact of BCC materials on behaviour change.
- Assess determinants of utilisation of post-natal care in rural areas.
- Assess determinants of maternal death.

### **Scientific Session III Reproductive Health of Adolescents**

#### *Recommendations*

The session on “Reproductive Health of Adolescents” included three presentations. These included two presentations on assessment and determinants of the problem and one on assessing the impact of a community based intervention. The key recommendations from the session are:

#### *Programme*

- Upscale successful interventions in providing ASRH.
- The SALSEP programme should be revised and revisited.
- Efficacy of social workers from NGOs as trainers as compared to teachers from schools in life skills programmes.
- Inclusion of Life-skill education as part of school curricula.
- Adolescent health component to be introduced through outreach services

#### *Research*

- More studies are required on out-of-school adolescents and young migrants
- Empirical base is required to understand the knowledge-behaviour relationship
- Studies to understand the impact of media on attitudes of young people
- Qualitative research on values and attitudes among youth.
- Studies to map the distribution of reproductive & sexual morbidity among adolescents ( girls & boys )
- Research on health service utilisation patterns of adolescents.
- Knowledge and attitudes towards sexual abuse of adolescents and their parents.
- Impact studies required to assess the effectiveness of peer educators, help lines, different community based intervention models etc.
- Research on development of standards for provision of adolescent friendly services
- Assessing the feasibility of using the ASHA to disseminate information in ASRH

---

---

## **Scientific Session IV**

### **Abortion among adolescents**

#### *Recommendations*

The session on “Abortion among adolescents” included two presentations. Both presentations were on assessment and determinants of the problem. The key recommendations from the session are:

#### *Programme*

- To increase the quantum of service providers for safe abortion services for married and unmarried adolescents
- Provide post abortion care and address post abortion complications following spontaneous abortions in married adolescent girls.
- To train providers on non-judgemental service provision for adolescents.
- To increase awareness on safe abortion, early reporting of abortions and legal provisions
- To increase utilization of Emergency Contraception and MVA
- Provision of Sex Education through various channels

#### *Research*

- Assess impact of abortion complications on reproductive health of adolescents.
- Research on spontaneous abortions and their sequelae through multi site research settings.
- Qualitative research on safe abortion –experiences of abortion seekers after undergoing abortion; association between rape and abortion; induced abortion
- Determinants of utilisation of abortion services and on factors related to access of abortion services
- Assess efficacy of Pre and Post marriage counselling on abortion.
- Distribution & Determinants of unsafe abortion; abortion in unmarried girls

## **Scientific Session V**

### **Attitudes and Behaviours related to Sexuality among adolescents**

#### *Recommendations*

The session on “Attitudes and Behaviours related to Sexuality among adolescents” included five presentations. Of these, three presentations were on assessment and determinants of the problem and two assessed the impact of interventions. The key recommendations from the session are:

#### *Programme*

- Integrate the body literacy module into life skill education; implement life skills education through schools
- Training material should reach adolescents through schools
- Need to recognize a young person’s right to information and services in non-threatening, non-judgmental and confidential ways.
- Distribution of scientific literature describing sexual health along with personality development.

---

## *Research*

- Efficacy and impact of educating males.
- SRH Status of special groups – sex workers, street children etc.
- ASRH needs of sexual minorities, special groups e.g. mentally challenged, children's sexual behaviour, CSW's children, children living in slum area
- Efficacy of parents as providers of life skills education.
- Information needs of early and late adolescents and factors influencing their needs
- Efficacy of programmes to increase parent connectedness on decreasing risky sexual behaviour.
- Interventions with media portrayals to improve attitude and behaviour related to sexuality among adolescents and gatekeepers.
- Further studies on parent and child connectedness.

## **Scientific Session VI Life Skills Education**

## *Recommendations*

The session on "Life Skills Education" included five presentations. Of these, two presentations were on assessment and determinants of the problem and three described interventions. The key recommendations from the session are:

## *Programme*

- Include boys in life skills programmes.
- Introduce question box method in life skills programmes.
- Compulsory LSE through school and training of teachers in their curriculum –B.ED programmes; implementing LSE programme through existing systems.
- Development of adolescents centres in some of the government hospital on pilot basis  
Experiment with Life Skills Education for both School going and out of school adolescents in non school settings.

## *Research*

- Perceptions of Life Skills education in adolescents, providers and stakeholders
- Evaluation and review of life skill education programmes
- Correlation of sexuality education or life skill education and behaviour change.
- Identifying support structures to enhance and maintain positive behaviour among urban adolescent males.
- Efficacy of provision of LSE by teachers.
- Impact of life skill education on reducing risky behaviour of adolescents.
- Effectiveness of various strategies (peers/health care provider/ NGO's) to reach out to out of school adolescents.
- Research to develop need based content for life skills.
- Long term effects of life-skill module and counselling services.

---

---

## **Scientific Session VII**

### **HIV/AIDS among adolescent and youth: tip of the iceberg?**

#### ***Recommendations***

The session on “HIV/AIDS among adolescent and youth: tip of the iceberg?” included two presentations. The key recommendations from the session are:

#### ***Research***

Studies that identify factors associated with vulnerability of adolescents to RTI/STI

Provider initiated HIV testing Vs VCTC - what are its implications

Assessing the impact of various counselling skills

More research in finding out HIV/AIDS cases

Effectiveness of various interventions stages in reducing prevalence of RTI/STI

Utilization of ARSH services by adolescents

Health care seeking behaviour by adolescents for STI/RTI problem

Creation of a natural data base

Apply research methods to examine the appropriateness of different methods of estimation

## **Scientific Session VIII**

### **Adolescent Nutrition: Investing in the future**

#### ***Recommendations***

The session on “Adolescent Nutrition: Investing in the Future” included three presentations. All the presentations three described interventions, of which two were impact studies. The key recommendations from the session are:

#### ***Programme***

- BPL population should be provided subsidized food inputs.
- Nutrition education should be an integral part of public awareness programmes.

#### ***Research***

- Bioavailability of iron and other nutrients.
- Effect of iron supplementation on haemoglobin status
- Nutritional deficiencies among adolescent boys and girls in rural and urban areas.
- Efficacy of Kitchen Gardens and of iron fortified foods
- Effect of tea on anaemia
- Nutrition studies in tribal, rural, urban areas.
- Nutrition status for adolescent boys.
- Research on sustainable activities to develop awareness and decrease malnutrition.

**Report of the State Level Workshop  
on  
Adolescent Reproductive and Sexual Health  
in Maharashtra**

**Key note Address: Why invest in young people's sexual and reproductive health? The situation and needs of youth in Maharashtra**

**- Shireen Jejeebhoy, Population Council, New Delhi**

**KEY FINDINGS**

**Marriage and conception is initiated early in Maharashtra**

Almost 40% of all females marry before the age of 18 and about one in six young men marry before the age of 21. The trend of early marriage (Women aged 20-24 who are married by the age of 18) showed a decline (48% to 38%) between 1998-99 and 2006-7 (NFHS2 and NFHS3) but this was not marked. The incidence of Neonatal mortality, infant mortality & low-birth weight is high in Maharashtra and there is limited access to health care in rural Maharashtra.



**Early exposure to sex**

Youth in Maharashtra reported indulging in premarital sex and sexually active young men are more likely to report multiple partners. Further non consensual sex is quite prevalent. The superficial awareness of sexual health is relatively high but in-depth awareness is limited. A large majority of youth (80-90%) believe sex education is important and necessary. There are large gender differences in awareness of sexual health and social norms condone premarital relations for males but not for females.

***Recommendations***

**Delay marriage**

There is a need to accelerate the pace of change by programmes for educating girls and parents, to address community norms and enforce existing laws. There is also a need to raise awareness of the negative impact of early marriage and develop community initiatives that support delayed marriage.

---

## **Inform the young**

The gate-keepers (parents, community leaders, educators, health care providers, politicians) should be engaged in order to implement life-skills programs for unmarried adolescent girls. There is a need to build skills in adolescents (both school going and out of school) for making life choices, dealing with gender stereotypes, and coping. There is also a need to build evidence with regard to young people's needs, programmes that have a measurable impact and to counter the back-lash against sex education

## **Make sexual and reproductive health services accessible to the young**

Initiatives to advocate for contraceptive service delivery for the unmarried and implement "Adolescent Services" as suggested in the RCH - 2 policy documents under the RCH programme should begin. Care-givers should be trained to provide non-judgemental services to unmarried and married adolescents. And the heterogeneity of youth in terms of vulnerabilities and needs should be recognised and services to accommodate these differences should be provided.

## **Recognize the vulnerability of married adolescents**

Implement programmes for the about-to-be and newly-married. (To apprise them of safe sex practices, ways of delaying pregnancy and pregnancy related care). Build social networks for married adolescents to combat their social isolation and develop home visiting for married girls in view of the limited mobility & decision making of married girls.

## **Recognize vulnerability of adolescents: the longer term**

Address gender double standards directly - both for girls and boys. Advocate for the enhancement of married girls' autonomy within marital homes. Build life and livelihood skills among young females. Adapt and up-scale lessons learned from successful pilot projects.

### **Session 1**

#### **Early Marriage and Sexual Debut: An unaddressed issue**

*Chairperson- Madhuri Talwalkar, Retd State Demographer*

#### **1. Age at Marriage - Sanjeevani Muley, Gokhale Institute, Pune**



#### **Methodology**

Data from three rounds of NFHS and the RCH survey, 1998 was utilized to examine the trends in age at marriage with regard to the determinants and differentials in age at marriage.

#### **Key Findings**

The study revealed that marriage at lower ages is more common in developed states like Maharashtra, West Bengal and Karnataka. Within Maharashtra early

---

marriage is more common in districts like Nanded, Beed, Jalna and Aurangabad. Determinants of early marriage include education and participation in the modern labour force. Similarly marriage practices at the household level are also a determinant of early marriage. However economic factors are not a determinant of early marriage.

## **2. Sakhya Programm - Medha Kale, Tathapi Trust**

### **Methodology**

An intervention implemented to form a group in nine villages from Osmanabad and Latur District, to combat gender norms and create support systems for women to reduce the incidence of early marriage and counter gender based violence. The interventions consisted of Community Mapping to identify unsafe spaces for girls and women, evolve personal plans for boys to share household work. The intervention also implemented programmes to change social norms, organised cooking competitions for boys, sports competitions for girls. A key intervention was to deliver BCC on early marriage, dowry, violence against women etc.

### **Key findings**

The study resulted in a delay in early marriages and child marriages were opposed. There was a personal change among men and boys in that displayed increased sensitivity towards women. Further girls were accorded increased mobility and opportunities to study.

## **3. Can life skills intervention effectively raise the age at marriage?**

**Ms. M Khale, Institute of Health Management, Pachod (IHMP)**

### **Methodology**

IHMP designed (with the participation of parents) and implemented a one-year life skills course for unmarried adolescent girls in 72 villages. A total of 225 sessions were conducted to cover: Social Issue and Institutions, Local Bodies, Life Skills, Health and Nutrition, Sexuality and Sexual Health.

### **Key findings**

The results of the study showed that the proportion of early marriage reduced and median age at marriage increased. There was evidence that the intervention contributed to this change. Further unmarried adolescent girls displayed improved self esteem, increased knowledge, communication and negotiation skills and mobility.



### **Recommendations**

The session on age at marriage included three presentations. These included both formative and intervention research. The key recommendations are:

---

## Programme

- The media should play a major role in changing norms towards early marriage
- “Early Marriage Prevention Committees”, can be established for delaying age at marriage
- Promote contraceptive use among newly married couples to delay first conception
- Adolescent friendly services should be mainstreamed with RCH
- Social interventions to be implemented to delay early marriage
- Interventions providing schooling opportunities and financial independence for adolescents
- Enforcement of law on legal age at marriage
- Compulsory registration of all marriages
- PHCs must provide services for sexual problems and issues

## Research

- District wise rural –urban segregated data should be analysed.
- Research is required on long term impact of life skills education programme
- Build an evidence base to demonstrate the impact of awareness and knowledge for enabling behavioural change
- Qualitative research studies to provide a better understanding of the social pressure for early marriage
- Collect caste wise data with regard to age at marriage, school drop out and its relation to age at marriage.

## Session II

### Adolescent Pregnancy: Situation and consequences

Chairperson – Sumati Kulkarni, Retd Professor IIPS Mumbai

#### 1. Adolescent Fertility with special emphasis on RCH data-Mr. Sandip Chakraborty (Research Scholar (IIPS Mumbai)

##### Methodology

Study of trends of teenage fertility in Maharashtra using information from Sample Registration System. The changing pattern of teenage fertility was examined using three rounds of National

Family Health Survey dataset

##### Key findings

Maharashtra has comparatively higher adolescent fertility and the decline of Adolescent fertility in Maharashtra is very slow. At present more than two lakh women in Maharashtra give birth in the adolescent age group and are exposed to higher maternal mortality particularly in the districts of Beed, Jalna, Osmanabad, Parbhani and Latur. The children of these adolescent girls too are exposed



---

to higher risk of infant mortality. Education has a substantial impact in the fertility behaviour of the teenagers, however the dataset also reveals that adolescent married women are increasingly delaying pregnancy across all levels of educational attainment.

## **2. Adolescent mothers and neo natal and post neo natal mortality-**

**Dr Anjali Radkar (Lecturer, Dept. of Health Sciences, Pune University)**

### **Methodology**

The study used three rounds of the NFHS data to examine neonatal and post-neonatal mortality of the children born over a reference period of 5 years to adolescent mothers in Maharashtra.

### **Key findings**

The data shows that over the last fifteen years age at first delivery have increased only marginally, and a substantial number of adolescent mothers have had two or more pregnancies. Neonatal deaths have decreased; nevertheless there is scope to lower these further. On the other hand post-neonatal deaths do not show any decrease. Rural, illiterate women from low socio-economic strata with poor utilization of health services are more likely to experience neonatal and post-neonatal mortality. First order births, premature or small babies and home delivery also contribute significantly towards neonatal death.

## **3. Safe Adolescent Transition and Health Initiative: Reproductive Health of married adolescent girls - results from a pilot study in Maharashtra -Dr Aravind Menon, (Institute of Health Management, Pachod (IHMP)**

### **Methodology**

The intervention was implemented in 50 villages, 50000 population in rural Aurangabad and 27 slums, 30000 population in Pune city. Beneficiaries were provided with BCC, Primary Health Care and were subjected to health surveillance. The intervention sought to influence age at first conception, contraceptive use, low birth weight, treatment seeking for reproductive tract infections and post natal complications.

### **Key Findings**

As a result of the mean interval between marriage and first conception increased, current use of contraceptives rose to more than two fold in the rural and almost three fold in the urban site. Further the percentage of girls reporting symptoms of reproductive tract infections was reduced while the proportion seeking treatment for these infections also rose significantly in both sites. The number of institutional deliveries increased as did the proportion of women receiving post natal care while the incidence of post natal



---

complications reduced significantly. There was also a significant reduction in prevalence of low birth weight babies. Evidence shows that surveillance leading to early antenatal registration and detection led to better utilisation of health care services, and consequently in better reproductive health outcomes. Further evidence reveals that BCC led to better couple communication and increased reproductive health knowledge also led to higher health care utilisation, which in turn resulted in delay in at first conception, use of temporary contraceptives, reduction in post natal and neonatal complications and low birth weight babies.

### *Recommendations*

The session on “Adolescent Pregnancy: Situation and Consequences” included three presentations. These included two presentations on assessment and determinants of the problem and one on assessing the impact of a community based intervention. The key recommendations from the session are:

### *Programme*

- Mainstream focussed obstetric and reproductive health services for married adolescents through an active surveillance system
- Introduce aggressive behaviour change communication to delay age at first conception and address adverse reproductive health outcomes of early conception
- Promote and ensure availability of contraceptives
- Enforce a system of compulsory registration of marriages
- Provide universal pre-marital counselling
- Introduce nutrition education for dietary change
- Introduce effective home-based care strategies to reduce neonatal mortality
- Create active village health committees to ensure adolescent health and delay age at marriage

### *Research*

- Undertake a study to review the effectiveness of Janani Suraksha Yojana.
- Assess determinants of contraception use in rural areas.
- Identify social, economic or health service system factors contributing to the slow decline of neonatal mortality in Maharashtra.
- Study experiences of motherhood among adolescents.
- Prevalence of pregnancy in school going and non school going adolescents girls
- Assess impact of a premarital counselling intervention (through non formal sector)
- Assess impact of BCC materials on behaviour change.
- Assess determinants of utilisation of post-natal care in rural areas.
- Assess determinants of maternal death.

Discussion – *Differentiation between married women and all women was not made in the presentation given by Mr. Sandip Chakroborty. Moreover fewer women marry in Maharashtra but more are getting*

---

*pregnant relatively. Therefore the need is to increase awareness on delaying first birth. The aspect of service delivery needs to be looked at.....Shireen Jeejeeboy*

*According to Dr Anuradha Sahasrabuddhe there are many social issues attached to adolescent pregnancy as it encompasses both married and unwed mothers.*

*Chairperson's remarks – According to NHFS and RCH data there has been a slow decline in neonatal deaths. Factors attributed to this trend should be analysed by regression analysis.*

### **Scientific Session III**

#### **Reproductive Health of Adolescents**

*Chairperson- Dr Poonam Muttreja, Country Director, MacArthur Foundation*

#### **1. Sexual and Reproductive Health Status of Adolescents in Maharashtra –Dr. K. Anil Kumar (Prof, TISS)**

##### **Methodology**

NFHS 3 (2005-06) data is used to examine the differentials in adolescent sexual and reproductive health in Maharashtra. The aspects covered include ANC, INC, PNC, contraception, and recent sexual behaviour patterns.

##### **Key Findings**



About 7 % of married adolescents are either pregnant or have already experienced child birth. These 7 % of girls had already begun the process of child bearing before they reached 18 yrs of age. The extent of institutional delivery and skilled attendance at birth are higher among adolescents, but more than 10 % of adolescent married girls reported post-partum complications. The

size of the child is smaller among younger women; about a quarter of children weighed less than 2.5 kg at birth. The extent of unwanted pregnancies is higher among young people as compared to older women. The actual contraceptive use is very low both among married and unmarried women. The awareness about STI is low surveys as is awareness about HIV / AIDS.

---

## 2. Reproductive Health of Married Adolescents in Rural Maharashtra - Dr PK Das, (Principal, Public Health Institute, Nagpur, GoM)

### Methodology

Baseline survey for a randomized control trial was conducted in 10 districts of Maharashtra, selected on the basis of proportion of girls married below the age of 18 years and RCH composite index. Using systematic random sampling, 20 PHCs were selected from these districts. A total of 1869 married adolescents were interviewed

### Key Findings

The median age at marriage was 16 years; median age at first conception was 16.8 years. Only 2% married adolescents reported contraceptive use. 58 % respondents reported early ( $\leq 12$  weeks) registration of pregnancy; about half (48 %) the respondents reported antenatal complications. The percentage of home deliveries was more than 51 % and the incidence of intra-natal complications was 49 %. About 43 % respondents reported postnatal complications while only 39 % reported treatment seeking for these problems. The proportion of low birth weight babies was more than 30 % ranging from 24 % to 40 % in the districts. One-third of the sample reported symptoms suggestive of reproductive tract infections (RTIs); however only about one-third of these reported treatment seeking for these problems. While more than 85% of the sample had heard of HIV/AIDS, knowledge of testing centres and treatment was very low among the sample.

## 3. Experiences in delivery of Adolescent Reproductive Health Services in Maharashtra - Dr. Beena Joshi (NIRRH)

### Methodology

Adolescent Friendly Health Services were provided in various settings such as schools and colleges in both urban and rural areas and at Urban Health Posts in collaboration with the Municipal Corporation of Greater Mumbai to cater to the reproductive health needs of both married and unmarried adolescents and youth.

### Interventions

*At health care level:* Facility up-gradation, human resource development, capacity building, adolescent friendly clinics, networking for referral.

*At community level:* Advocacy, BCC, informal discussions, local committee, involvement of local groups.

*At level of adolescent:* Outreach, effective MIS, BCC, health checkups

### Key Findings

There was increase in the attendance in adolescent friendly clinics and improved knowledge among both male and female students. There was a significant difference in the increase in coital sexual activity in the control area as compared to the experimental area among male students. A significant improvement was also noted in the use of condoms during sexual intercourse.

---

## *Recommendations*

The session on “Reproductive Health of Adolescents” included three presentations. These included two presentations on assessment and determinants of the problem and one on assessing the impact of a community based intervention. The key recommendations from the session are:

### *Programme*

- Upscale successful interventions in providing ASRH.
- The SALSEP programme should be revised and revisited.
- Efficacy of social workers from NGOs as trainers as compared to teachers from schools in life skills programmes.
- Inclusion of Life-skill education as part of school curricula.
- Adolescent health component to be introduced through outreach services

### *Research*

- More studies are required on out-of-school adolescents and young migrants
- Empirical base is required to understand the knowledge-behaviour relationship
- Studies to understand the impact of media on attitudes of young people
- Qualitative research on values and attitudes among youth.
- Studies to map the distribution of reproductive & sexual morbidity among adolescents ( girls & boys )
- Research on health service utilisation patterns of adolescents.
- Knowledge and attitudes towards sexual abuse of adolescents and their parents.
- Impact studies required to assess the effectiveness of peer educators, help lines, different community based intervention models, etc.
- Research on development of standards for provision of adolescent friendly services
- Assessing the feasibility of using the ASHA to disseminate information in ASRH

## **Scientific Session IV**

### **Abortion among adolescents**

*Chairperson - Dr Aparna Shrotri, Gynaecologist Pune*

#### **1. Assessing Induced Abortions among Adolescents in Maharashtra (Cehat Study) - Shelley Saha, NCAS Pune**



#### **Methodology**

The data used in this paper is part of a larger study done by CEHAT in 2001-2002, in which a representative, state-wide, population-based sample of 5712 ever-married women aged 15–54 were interviewed, of whom 406 were between 15-19 years. The study assessed the prevalence and reasons for induced abortion, choice of abortion providers and the cost incurred for it.

---

## **Key Findings**

The majority of the abortions (43.6%) were performed in the first trimester and the possibility of sex selection cannot be ruled out. An equal number of respondents utilised government facilities and private providers. And a large majority experienced health problems following the abortion. Economic constraints may compel many to seek abortion from unqualified providers. There is a high demand but lack of accessibility of temporary contraceptives.

## **2. Spontaneous abortions among Adolescents- Mr. GR Kulkarni, (Institute of Health Management, Pachod (IHMP).**

### **Methodology**

The study covered 824 married adolescents from 60 villages, with an approximate population of 60,000. A detailed history of last abortion was collected and analyzed.

### **Key Findings**

The median age at marriage was 15.0 years, 83 % girls reported that they got married before the age of 16 and median age at first conception was 16.6 years. The rate of spontaneous abortion was 9.3 per 100 pregnancies per year almost all in the first trimester. Induced abortions were sought primarily for unwanted pregnancies revealing a considerable unmet need for family planning services. A large majority (95%) of married adolescents received abortion services from the private sector. 74% of married adolescents who experienced spontaneous abortion reported a complication within one month of abortion and only 40% sought medical treatment within a week of the complication. Spontaneous abortion appears to be a significant contributory factor towards RTI/PID in married adolescents.

### **Recommendations**

The session on “Abortion among adolescents” included two presentations. Both presentations were on assessment and determinants of the problem. The key recommendations from the session are:

### **Programme**

- To increase the quantum of service providers for safe abortion services for married and unmarried adolescents
- Provide post abortion care and address post abortion complications following spontaneous abortions in married adolescent girls.
- To train providers on non-judgemental service provision for adolescents.
- To increase awareness on safe abortion, early reporting of abortions and legal provisions
- To increase utilization of Emergency Contraception and MVA
- Provision of Sex Education through various channels

### **Research**

- Assess impact of abortion complications on reproductive health of adolescents.
- Research on spontaneous abortions and their sequelae through multi site research settings.

- Qualitative research on safe abortion –experiences of abortion seekers after undergoing abortion; association between rape and abortion; induced abortion
- Determinants of utilisation of abortion services and on factors related to access of abortion services
- Assess efficacy of Pre and Post marriage counselling on abortion.
- Distribution & Determinants of unsafe abortion; abortion in unmarried girls

### Scientific Session V

#### Attitudes and Behaviours related to Sexuality among adolescents

Chairperson- Dr. Shalini Bharat Professor & Dean, School of Health Systems Studies TISS Mumbai

#### 1. Risky Sexual Behaviour among Adolescents & Parent and child connectedness - Dr Mallika Alexander, (KEM Research Centre Pune)

##### Methodology

An intervention to address parent child communication was implemented with community involvement for one year. The prevalence of high risk behaviour among youth and the implications of a pilot intervention that addressed Parent Child Communication (PCC) were studied.

##### Key Findings

Opportunities exist for the formation of romantic partnerships and sex within these and other casual partnerships and many sexual experiences occur under unsafe circumstances. Further an unsupportive family environment is strongly associated with the formation of a premarital sexual relationship. This occurs where parent child communication is limited and there is a gap between parent's and adolescents' perception of the communication. Among parents mothers emerge as the primary confidante but communication and interaction is more between mothers and daughters. The study shows that many barriers exist that hinder communication.



#### 2. Attitudes and Behaviours related to Sexuality among adolescents - Dr. Hemant Apte (Independent Researcher)

##### Methodology

The study was conducted to document knowledge, opinions and behaviour among rural adolescents who had migrated to Pune for higher education. The context was some aspects of sexuality and to explore the reasons for their preoccupation with semen.

##### Key Findings

Adolescents do not have adequate scientific information on sex related matters since they do not have any formal channel for seeking information. Knowledge of reproductive anatomy and physiology is inadequate and incorrect and the main sources of information are their ill-informed peers, pornographic material, television, etc. There is a great deal of anxiety about

---

sexual performance which is related to shape and size of the penis, quality and quantity of semen and 'sexual capacity'. Fear of failure, coupled with performance anxiety drives many of them to test their 'sexual performance' with sex workers. Fear of consequences of masturbation exists in their mind but there is also an equally strong desire to indulge in masturbation because it is a certain way of relieving 'tension'. A sense of shame and guilt is associated with masturbation

### **3. Knowledge, Attitudes and Behaviours related to Sexuality among adolescents - Dr. Anant Sathe (Independent Consultant)**

#### **Methodology**

The study was an effort to help policy makers, programme planners and educators to better understand the needs of adolescents and develop appropriate need based ARSH programmes. A questionnaire was designed and adolescent boys and girls were interviewed on issues of concern and with whom they share these concerns, sources of information related to sexuality, access to information, knowledge and concerns about sexual development, knowledge of STD, HIV / AIDS and premarital sexual behaviour

#### **Key Findings**

The majority of respondents felt that there is a lack of authentic information on sexuality. They do not know whom to approach for clarifications and felt that their information was improper, as it created negative feelings like guilt, shame, dejection, depression and occasionally, even doubts about their own masculinity or femininity. Knowledge about STDs is poor and respondents feel that no forum is available to them where they can discuss sexuality issues without fear & guilt.

### **4). Understanding the links between masculinity and sexual risk: implications for programming for young men and women -Ms. Sujata Khandekar Mumbai**

#### **Overview of the project**

The project was implemented in a phase wise manner to analyse the construction of masculinity and links with sexual risk and violence. The programme then utilised this information to apply the lessons for working with young men: *Yaari-dosti* and with young women (*Sakhi Saheli*).

#### **Impact of the project**

Impact was observed in phases that most participants went through. These were in terms of denial of gender-based inequality or justification of gender-based inequality. However later there was Self-questioning on gender-related attitudes and acknowledgement of gender-based inequality. Finally there was a change of gender-related attitudes and a change in behaviour demonstrating an attitude of gender-equality.

---

## 5). Body literacy (Understanding the body together with Sexuality) – Audrey Fernandez, Tathapi

### Methodology



A survey of 32 school and adolescent sex education programmes in Pune city was undertaken. Thereafter, a Body Literacy Programme was developed after conducting the survey. It was specially designed with a positive approach to understand one's own body together with one's own sexuality. It was evaluated after one year.

### Key Findings of Survey

Except for programmes run by women's organizations - programmes almost always excluded issues of gender and power, and almost all the programmes were for girls and excluded boys. In place of sexuality only pubertal changes, menstruation and reproduction were covered and most programmes reached children above the age 13. The approach adopted in these programmes is not positive and stressed on the 'dangers' of sex such as infections or pregnancy rather than a positive approach. The children enjoyed the sessions, often telephoning the office with questions and requests for more sessions.

### Key Findings of Intervention Research

Showed that the children had a space to talk about gender restrictions and expected roles and found answers to questions most adults would not answer. As a result they felt empowered and were able to stand up to violence against them (particularly in school).

### Recommendations

The session on "Attitudes and Behaviours related to Sexuality among adolescents" included five presentations. Of these, three presentations were on assessment and determinants of the problem and two assessed the impact of interventions. The key recommendations from the session are:

### Programme

- Integrate the body literacy module into life skill education; implement life skills education through schools
- Training material should reach adolescents through school
- Need to recognize a young person's right to information and services in non-threatening, non-judgmental and confidential ways.
- Distribution of scientific literature describing sexual health along with personality development.

---

## Research

- Efficacy of educating males.
- SRH Status of special groups – sex workers, street children etc.
- ASRH needs of sexual minorities, special groups e.g. mentally challenged, children's sexual behaviour, CSW's children, children living in slum area
- Efficacy of parents as providers of life skills education.
- Information needs of early and late adolescents and factors influencing their needs
- Efficacy of programmes to increase parent connectedness on decreasing risky sexual behaviour.
- Interventions with media portrayals to improve attitude and behaviour related to sexuality among adolescents and gatekeepers.
- Parent and child connectedness.

Chairperson's Remarks – *We need to stop problematising the issue of "Sex". We should concentrate and talk about the physiological aspects related to "self efficacy". In schools we have to evaluate how children look at things differently. The role of the father needs to be defined and taken into account. More interventions are required to look at the wider perspective.*

### Scientific Session VI Life Skills Education

Chairperson- *Dr. Ravi Verma, Regional Director (ICRW, New Delhi)*

#### 1) Jigyasa life skills education - Ms. C. Bhargav (Adarsh Mahila Gruh Udyog, Latur)

**Jigyasa** – a project on Education of Life Skills for Adolescents is being implemented since 2000. It gives information to adolescents about their physical, psychological and emotional changes including their confused state of mind in a modular form.

Impact of the intervention – 4165 adolescent students from different schools of Latur district have participated. The counselling centre run by the organization has helped in solving their personal & family problems. The students state that the project is important and necessary. They feel that the training should be given to everyone whether one goes to school or not.



---

## 2). Inculcation of scientific temperament about health related areas encompassing sexual, reproductive and social dimensions - Dr. Shaila Dabholkar - Parivartan, Satara

### Methodology

The work of **Parivartan** in the field of adolescence is focused on holistic health interventions encompassing physical, mental, sexual, reproductive and social dimensions. The work has been done in three distinct phases: -

*Phase I* One day workshops were organized for the adolescents in groups up to 50. A knowledge based intervention was delivered to the group by a team of specialists.

*Phase II* -Specific objectives were



1) Inculcation of scientific temperament in school going adolescents about health related areas encompassing physical , mental , sexual ,reproductive and social dimensions.

2) School teachers were trained and monitored as facilitators

### Key Findings

The organization was able reached up to 50,000 students and trained

300 school teachers from 150 school over 3 years in 6 talukas of Satara District .

1) More than 80% schools completed the curriculum,

2) More than 85% students scored more than 40% marks in post test examination

## 3). Qualitative research on the process of empowerment in the context of life-skills programmes for adolescents- Ms. Neha Madhiwala and Ms. Pranoti Chirmulaye (CSER Sahayog, Mumbai)

### Objective

Objective was to document life skills programmes from the perspectives of the trainers and to develop a conceptual understanding of the 'change' process in the short/medium term.

### Methodology

The study was exploratory, using a qualitative methodology and was conducted at five sites – Mumbai, Goa, Paithan block in Aurangabad district and Jhalawar district in Rajasthan with local collaborating organizations formal system. Participants were selected purposively. The methods used included focus group discussions and in-depth interviews.

### Key Findings

Life-skills programmes are shaped by the socio-cultural contexts and evolve strategies to meet context-specific needs. However, programmes in the same context can have dramatically

---

different visions and experiences based on the history of the institution. Programmes develop strong symbiotic relationships with the families and the community of the students and the trainees develop very complex multi-faceted relationships with the trainers, often expecting them to intercede with their families/parents, serve as role models and providing emotional and social support. Common aspects across all programmes are – the development of a sense of personhood/self, the ability to think through, relate to parents, function in the public space, resist hostility or exploitation, the ability to aspire and dream more than their peers, albeit expressed and illustrated in very different ways. All programmes self-identify themselves as alternatives or complements of the formal school system. They emphasise the fact that they provide information that adolescents need, but do not receive and create a space for adolescents to speak and express themselves.

#### **4) Kishori: the adolescent empowerment project -Dr. Anjali Babar, Sion Hospital Mumbai**

##### **Methodology**

The “Kishori” project was implemented with the aim of empowering the adolescent girls, and establishing an Adolescent Centre at Urban Health Post, Dharavi. The first phase concentrated on Formation of Core Committee, conducting Baseline survey in study area, Development of training package for key trainers and Training of Anganwadi workers (AWW). The second phase concentrated more on Peer educators training Peer educators conducting the training programme for the adolescent girls attending the classes and evaluation of the effectiveness of the programme

##### **Key findings**

74.4% had heard about AIDS

38.9% know how AIDS is transmitted

60.9% AIDS cannot be prevented

39.5% mosquitoes responsible for transmitting

49.2% infected blood or blood products

52.2% unprotected sexual intercourse

83.5% not aware that homosexuality is the mode of transmission



#### **5) Empowering girls with life education skills - Mumbai experience - Dr. R. R. Shinde and Dr Shreekala (Dept of PSM, SGSMC Mumbai)**

##### **Methodology**

‘Adolescent Girls Initiative’ a project launched by Preventive & Social Medicine Dept, KEM Hospital in collaboration with Public health Dept, Mumbai Municipal. Corporation & UNICEF, aimed at reaching out to school drop-out adolescent girls in slums of Mumbai with family life

---

education skills. Sessions included: Balanced diet & anaemia, family & gender equality, changes during growing up, Maternal & Child Health, STI & HIV/AIDS, Negotiation & Assertion Skills and Vocational Guidance and about 6225 adolescent girls have been trained till now. The strengths of the programme are participatory methodology of training with reinforcement through different activities, games. The active involvement of health post staff in conducting community workshop for girls and other programmes increased community awareness.

### **Key Findings**

The girls liked, enjoyed and actively participated in the programme and generated demand for such workshops in the community. The rapport that was thus developed with the health post staff increased health seeking among the population.

### **Recommendations**

The session on “Life Skills Education” included five presentations. Of these, two presentations were on assessment and determinants of the problem and three described interventions. The key recommendations from the session are:

#### **Programme**

Include boys in life skills programmes.

Question box method in life skills programmes.

Compulsory LSE through school and training of teachers in their curriculum –B.ED programmes ; implementing LSE programme through existing systems.

Development of adolescents centres in some of the government hospital on pilot basis

#### **Research**

Perceptions of Life Skills education in adolescents, providers and stakeholders

Review of life skill education programmes

Correlation of sexuality education or life skill education and behaviour change.

Identifying support structures to enhance and maintain positive behaviour among urban adolescent males.

Efficacy of provision of LSE by teachers.

Impact of life skill education on reducing risky behaviour of adolescents.

Effectiveness of various strategies (peers/health care provider/ NGO's) to reach out to out of school adolescents.

Research to develop need based content for life skills.

Long term effects of life-skill module and counselling services.

---

## Scientific Session VII

### HIV/AIDS among adolescent and youth: tip of the iceberg?

Chairperson - Dr R Gangakhedkar Deputy Director (NARI)

#### 1. Status of HIV/AIDS programme in Maharashtra- Dr. Raghuram Rao State consultant MSACS Mumbai

Overview of HIV/AIDS programs in Maharashtra with special focus on National AIDS Control Program

#### 2. Adolescents: STIs/HIV: Key challenges- Dr.R.R.Gangakhedkar, Deputy Director, Clinical Sciences, National AIDS Research Institute, Pune

Various underlying factors enhancing vulnerability of adolescents to HIV are declining age at first sexual experience and adolescence related issues e.g. curiosity about human sexuality, unmet information needs about sexuality, high influence of peers, perception of invulnerability, and high likelihood of substance use. There is also ignorance about safer sex practices, taboo on discussions in sexuality, socio economic and rural differences. Thus young people in rural area do not have access to adequate education, free time, cash income and services and the exodus from rural to urban has made this population more vulnerable and has increased number of street children, informally employed (including those employed as CSW).



#### *Recommendations*

The session on “HIV/AIDS among adolescent and youth: tip of the iceberg?” included two presentations. The key recommendations from the session are:

#### *Research*

- Studies that identify factors associated with vulnerability of adolescents to RTI/STI
- Provider initiated HIV testing Vs VCTC - what are its implications
- Assessing the impact of various counselling skills
- More research in finding out HIV/AIDS cases
- Effectiveness of various interventions stages in reducing prevalence of RTI/STI
- Utilization of ARSH services by adolescents
- Health care seeking behaviour by adolescents for STI/RTI problem
- Creation of a natural data base
- Apply research methods to examine the appropriateness of different methods of estimation

---

## Scientific Session VIII

### Adolescent Nutrition: Investing in the future

Chairperson – Dr Shashi Chiplunkar, Research Scientist in  
Nutrition Agharkar Research Institute, Pune

#### 1) Nutrition and anaemia among adolescents – Dr. Deshmukh P.R. (Dept of PSM, MGIMS, Sevagram)

##### Methodology

A cross-sectional study was carried out in adolescent girls of four villages of Kasturba Rural Health Training Centre, Anji. The relevant information was collected with anthropometric measurements and haemoglobin estimation. The prevalence of anemia was found to be 59.8% and the significant determinants were found to be low socioeconomic status, low iron intake, vegetarian diet, history of worm infestation and history of excessive menstrual bleeding. Multivariate logistic regression analysis suggested that strongest predictor of anemia was vegetarian diet followed by history of excessive menstrual bleeding, iron intake <14mg followed by 14-20mg and history of worm infestation. It was also seen that age, education, socioeconomic status, BMI and status of menarche did not contribute significantly. The objective was to study the “effectiveness” of a weekly iron supplementation regimen in urban-slum, rural and tribal girls of Nashik district.

##### Key Findings

The overall prevalence of anaemia came down significantly to 54.3% from 65.3%. The decline was statistically significant in tribal girls and among rural girls. But the decline was not statistically significant among urban slum girls. The program had performed poorly in urban-slum areas, as the mean number of tablets consumed in urban-slum areas was much less than the amounts consumed by tribal and rural girls. Considering the biological and operational feasibility as well as the effectiveness of the intervention, weekly iron supplementation of the adolescent girls should be universally started to correct the iron stores of a women before she becomes pregnant

#### 2) Reducing iron-deficiency anemia and changing dietary behaviour among adolescent girls, in Maharashtra -Lt Col (Dr) Anil Paranjape

##### Methodology

A three- year community intervention trial was done with unmarried girls 10-19 years in 16 slums- ten interventions and six control slums. Baseline and End line data was collected with two cross sectional samples. Weekly iron and folic acid tablets supplements were given in the first three months and ongoing nutrition education was given through home visits & meetings



by community health workers. A total of 811 girls were surveyed for information on dietary and morbidity history, anthropometric measures, menstrual history, frequency of meals in a day, consumption of lemon with meals, consumption of locally available iron rich foods, and workload within and outside the house

### **Findings**

End line comparisons of the intervention and control sites showed that there was a significant increase in numbers of girls who ate more than three meals a day and consumed lemon with their meals as well as in the frequency of eating fruits. Between baseline and end line blood testing showed that mean levels increased from 5.8 to 9.5 gm/dl for severely anaemic girls and from 8.9 to 11.2 gm/dl for moderately anaemic girls.

### **3) Addressing health of adolescent girls in tribal parts of Maharashtra-Dr. Kalpana Mutatkar**

#### **Methodology**

“Comprehensive and Sustainable Human Development of Tribal people of Maharashtra”, also called “Adivasi Utthan Karyakram”, is being implemented in 250 villages in 9 talukas of 7 districts of Maharashtra. The main objective of the project is to bring sustainable and holistic tribal development with a focus on malnutrition and malnutrition-related mortality and morbidity, mainly among 0 – 3 yrs children.

Intervention strategies relate to confidence building and capacity building activities at two stages i.e. through ashram schools and also through local village health functionaries like Anganwadi workers, ASHA and women volunteers for non school-going adolescent girls in the community. Information is imparted on issues like reproductive anatomy and physiology, creating health awareness with a life cycle approach, urgent need of addressing social issues like age at marriage, high fertility and the role of education. Nutrition education and arranging food supplements for the needy and iron supplements for correction of anaemia is given priority.

#### **Recommendations**

The session on “Adolescent Nutrition: Investing in the Future” included three presentations. All the presentations three described interventions, of which two were impact studies. The key recommendations from the session are:

---

### *Programme*

- BPL population should be provided subsidized food inputs.
- Nutrition education should be an integral part of public awareness programmes.

### *Research*

- Bioavailability of iron and other nutrients.
- Effect of iron supplementation on haemoglobin status
- Nutritional deficiencies among adolescent's boys and girls in rural and urban areas.
- Efficacy of Kitchen Gardens and of iron fortified foods
- Effect of tea on anaemia
- Nutrition studies in tribal, rural, urban areas.
- Nutrition status of adolescent boys.
- Research on sustainable activities to develop awareness and decrease malnutrition.

