CHAPTER 9

MAJOR FINDINGS, SUGGESTIONS AND CONCLUSIONS

The study, “Pedagogical Interventions in Sex and Sexuality: a study among adolescent school children”, was conducted to empirically verify the impact of teaching interventions in sex and sexuality among adolescent girls studying in Government Higher Secondary Schools in Kerala. Major findings of the study, and the suggestions and conclusions evolved from the study are presented in this chapter.

A before-after experimental design with control was adopted for the study. The particular design was selected because the study involved a pre assessment of the dependant variables in two matched groups, an intervention for one of the randomly selected groups and a post assessment of the same variables in both the groups. The dependant variables under study were:

- The respondent’s knowledge regarding sex and sexuality
- Their attitude towards sex and sexuality
- Their body image perception and
- Self esteem.

Objectives of the Study

Major objective of the study was to assess the impact of teaching interventions on sex and sexuality among adolescent school girls. The specific objectives were:
1. To assess the knowledge of adolescent school girls regarding sex and sexuality
2. To study the attitude of adolescent school girls towards sex and sexuality
3. To assess the body image perception of the adolescent school girls
4. To assess the self esteem of the adolescent school girls
5. To design an intervention package on sex and sexuality education for adolescent school girls
6. To assess the impact of the intervention package on the knowledge, attitude, body image perception and self esteem of adolescent school girls

**Hypotheses**

Based on the objectives nine hypotheses related to knowledge, attitude, body image perception and self-esteem were formulated and were tested for significance.

The universe of the study included all the adolescent girls studying in 11\textsuperscript{th} standard in the Government run higher secondary schools in the five Corporations in Kerala, namely Calicut, Thrissur, Cochin, Trivandrum and Quilon.

Multi-Stage Random Sampling was adopted as the sampling procedure in this study. The locale of the present study was the Government Model Girls’ Higher Secondary School, (HSS) Thrissur. The 11\textsuperscript{th} standard commerce division students of the school formed the experimental group and the science division students were treated as the control group for the purpose of the study.
Tool for the data collection was divided into four parts—A structured questionnaire, knowledge inventory on sex and sexuality for adolescent girls, a scale to assess the attitude of adolescent girls towards sex and sexuality, and the Rosenberg self-esteem Scale to assess the self-esteem. An intervention package on sex and sexuality prepared for the purpose was used as the resource material.

**Major Findings**

The socio demographic profile, the nature and quality of interpersonal relationships and interests, perceptions, and experiences related to sex and sexuality among the respondents in experimental and control groups were explored and compared to ensure that the respondents in the experimental and control groups are matched with regard to these variables.

*Socio demographic profile*

It was found that that, the respondents in the experimental and control group are homogeneous with regard to the socio-demographic variables.

*Interpersonal relationships and interests*

An analysis of the questions related to interpersonal relationships and interests, such as the nature of their relationship with parents and friends, their expectations regarding friends, relationships, romance, marriage etc. had the following findings:
Parents do not approve of their wards’ boyfriends where as they approve and accept the friendships of their girls friends with girls.

More than half of the respondents in the experimental group and 44 per cent of the respondents in the control group have reported that they have experienced infatuations and romantic attraction at some point in their adolescent stage. About 92 per cent of the respondents in the experimental and 96 per cent of the respondents of the control group preferred arranged marriage to love marriage.

Majority of the respondents in the experimental and control group have stated that they prefer the company of their friends during the leisure time. The topics mostly discussed with friends by both the groups were their studies, home news, hobbies and personal problems. Sexuality related topics were given least weightage during discussions.

**Sexuality related information, experiences and behaviour**

Discussions on sexuality related topics among girls were found to be minimal. Menstruation and related problems are the most commonly discussed sexuality related topics among the experimental and control group followed by love dreams about marriage partner in the experimental group. Similar pattern was observed in the control group also. Physical growth, reproductive aspects, conception, sexually transmitted diseases, male female friendships and sexual confusions have not been discussed much.
Majority of the respondents in the experimental group and 46 per cent of the respondents in the control group felt that the atmosphere at their home is not conducive to discuss topics on sexuality.

Good majority of the respondents from the experimental and control group stated that they do have many doubts on topics related to sexuality. For majority of the students in experimental and control group, the most common source of information on sex and sexuality were their friends.

When asked about the various media from which they obtained information on sex and sexuality, books were ranked as the major source by the experimental group followed by television movies and magazines. Magazines were listed as the major source by the control group followed by television, books and movies.

Regarding menarche, the above table reveals that 90 per cent of the respondents in the experimental group and 86 per cent of the respondents in the control group had prior information. Mother was the source of information for majority of the respondents in the experimental group (62%) followed by friends, similar findings were observed among the respondents in the control group also.

Majority of the respondents in the experimental and control group stated that sexuality related topics like sexual thoughts, masturbation, sexual deviations, reproductive system, heterosexual relationships etc. are neither discussed at home nor are they discussed in school. Discussions with friends were the most common method adopted by adolescent girls in both the groups to satisfy their curiosity regarding sex and sexuality.
Regarding the age at which reproductive health information has to be imparted to adolescents, majority of the respondents in the experimental and control group opined that information related to emotional changes during adolescence, and reproductive organs, the education need to be given between the age of 12 years and 15 years. Regarding topics such as moral values related to sexuality, conception, child birth and family planning, etc they expressed that, the information need to be given only after they complete 18 years or before marriage.

About 94 per cent of the girls from experimental group and 98 per cent of the girls from control group have reported that they have not been exposed to any kind of sex magazines.

Romantic talk appeared to be the predominant sexual behavior in which the respondent from the experimental group was engaged in followed by sitting close to a boy friend (14%). 10 per cent of the respondents in the experimental group and 8 per cent of the respondents in the control group reported holding hands. Sexuality related daydreaming was reported by only 8 per cent of the girls in experimental and 15 per cent of the girls in control group.

Majority of the respondents from the experimental and the control, reported that they have not experienced sexual abuse in response to the question, have you ever-experienced sexual exploitation? But when questions related to various forms of sexual abuse was asked, the response was high. Majority of the respondents in experimental and control group have reported that they have been subjected to eve teasing many times
during the past one year. Pinching their body part was the second most form of abuse that has been experienced followed by vulgar talks and staring at body parts. Rubbing at their body parts by the perpetrators, caressing, fondling etc. was also reported by 16 per cent of the respondents in the experimental and 18 per cent of the respondents in the control group. Staring at body parts was reported by 14 per cent of the respondents in experimental and almost double the respondents in the control group (26%). Exhibitionism was reported by 14 per cent and vulgar talks were reported by 12 per cent of the respondents.

Majority of the respondents who had the faced abuse have experienced it during their travel or when they were in a public places and most of the times the abusers were strangers.

**Knowledge, attitude and self esteem of the respondents**

Majority of the respondents in the experimental and control group came under the low knowledge category prior to intervention, but it was found that all the respondents in the experimental group have moved to higher knowledge level categories after intervention. About 24 percent of the respondents in the experimental group reached the high knowledge category where as no one were there in the category before intervention. These findings clearly indicate that introduction of intervention has lead to substantial gain of knowledge among the respondents.

Majority of the respondents in the experimental and control group had only moderately positive attitude towards sexuality before intervention and only 26 percent had
a positive attitude. But after the intervention, majority of the respondents in the experimental group have shifted from the moderately positive to positive attitude group (78%). This clearly indicates that an attitude change has occurred as a result of the educational intervention.

Majority of the respondents in the experimental as well as control group came in the moderate self esteem category before intervention. Only 38 percent of the respondents in the control group and 40% of the respondents had high self esteem. But after the intervention the percentage of respondents with high self esteem in the experimental group has gone up to 52 percent. This indicates that more than half of the adolescent girls have moved to the high self esteem category following intervention.

The analysis of the data on knowledge, attitude and self esteem showed that the intervention has lead to improvement in knowledge, attitude and self esteem among the adolescent girls from the experimental group.

**Impact of pedagogical interventions in sex and sexuality on the knowledge, attitude and self esteem of the adolescent girl**

Impact of pedagogical interventions in sex and sexuality on the knowledge, attitude, and body image perceptions of the adolescent girls in both the groups were analyzed using the knowledge inventory and attitude scale constructed for the purpose. Rosenberg self esteem scale was used to assess the self esteem. Mean percentage scores of each respondent for all the scales were computed and were used for testing the impact of pedagogical interventions on Knowledge, attitude, body image perception and self esteem.
**Impact of pedagogical interventions on knowledge regarding sex and sexuality**

Statistically significant improvement was noticed in the knowledge levels of the respondents in the experimental group after the intervention, hence the hypothesis, “The experimental (intervention) group will have significantly better knowledge regarding sex and sexuality than the control (comparison) group after intervention” was accepted to be true.

**Impact of pedagogical interventions on attitude towards sexuality**

Regarding the attitude of the adolescent girls towards sexuality the following hypotheses were tested and accepted to be true:

1. Pedagogical interventions in sex and sexuality will inculcate positive attitude towards sex and sexuality among the experimental group.
2. Body image perception will improve significantly with pedagogical interventions in sex and sexuality.
3. Pedagogical interventions in sex and sexuality will lead to attitudinal change in the following dimensions of sex and sexuality:
   a. Attitude towards menstruation,
   b. Attitude towards sex education,
   c. Attitude towards sexual expressions and experiences.

No notable improvement was observed in the attitude towards pre and extra marital relationship after intervention hence the hypothesis “pedagogical interventions in sex and
sexuality will lead to change in the attitude towards pre and extra marital relationship”, is rejected.

The findings of the above clearly indicate that pedagogical interventions in sex and sexuality have lead to significant improvement in the attitude towards sexuality. Among the six sub dimensions of attitude, only in the dimension on pre and extra marital relationship no significant change was observed after intervention.

**Impact of pedagogical interventions on self esteem**

It was found that there is significant improvement in the self esteem of the respondents in the experimental group after the intervention. Hence the hypothesis “Self esteem improves significantly with pedagogical interventions in sex and sexuality” is accepted to be true.

Correlation between knowledge of the respondents and their attitude towards sex and sexuality was also found to be significant at 0.01 levels and the correlation was positive. It indicates that there exist a positive and significant correlation between knowledge and attitude.

Correlation between knowledge on sex and sexuality of the respondents and self esteem is found to be significant at 0.01 levels and positive. This indicates that there exist a positive significant correlation between knowledge on sex and sexuality and self esteem of the adolescent girls.

A significant and positive correlation was worked out between self esteem and
body image perception. Hence the hypothesis that an adolescent with a healthy body image perception will have better self esteem was accepted to be true.

As the correlation between attitude towards sex and sexuality and self esteem (0.622) was found to be significant and positive. This indicated that there is a significant correlation between attitude towards sex and sexuality and self esteem.

Hence all the following hypotheses were accepted to be true:

1. The experimental (intervention) group will have significantly better knowledge regarding sex and sexuality than the control (comparison) group after intervention
2. Pedagogical interventions in sex and sexuality will inculcate positive attitude towards sex and sexuality among the experimental group.
3. Body image perception will improve significantly with pedagogical interventions in sex and sexuality
4. Self esteem improves significantly with pedagogical interventions in sex and sexuality
5. Pedagogical interventions in sex and sexuality will lead to attitudinal change in the following dimensions of sex and sexuality:
   a. Attitude towards menstruation,
   b. Attitude towards sex education,
   c. Attitude towards sexual expressions and experiences and
   d. The general attitude towards sexuality.
6. There is a significant correlation between knowledge of the respondents and their attitude towards sex and sexuality.

7. There is a significant correlation between the knowledge on sex and sexuality and self esteem.

8. An adolescent with a healthy body image perception will have better self esteem.

9. There is a significant correlation between attitude towards sex and sexuality and self esteem.

   No significant improvement was observed in the attitude towards pre and extra marital relationship after intervention, hence the hypothesis “pedagogical interventions in sex and sexuality will lead to change in the attitude towards pre and extra marital relationship”, is rejected.

**Suggestions**

Adolescent sexuality is multi dimensional nature and involves sexual attitudes, behaviour, practices and activity. Its definition encompasses the whole person, including sexual thoughts, experiences and values of being a male or female. These feelings about one’s sexuality define one’s role in society and influence one’s feelings about relationships. Sexuality is influenced by many factors including age, disease and hormones; it is shaped by parents, family, culture and society. There is a lack of genuine concern and sensitivity among the parents, educators, policy makers and the society to cater to the important and basic need of the adolescents, ie. the need to integrate the emerging sexual self into their personality. The following suggestions have been put
forward in the light of the findings of the present study:

1. Adolescents need to be provided with comprehensive gender sensitive, vibrant and interesting intervention sessions on sexuality with a holistic perspective rather than some dry scientific discourse. The present sexuality education being conducted by the schools are largely a restrictive, corrective education which stresses more on the don’ts associated with the sexual behaviour or on reproductive and sexual heath concerns. Only such initiation will help our adolescent girls to handle exploitative and abusive situations. The girls need the security of correct information to grow up into healthy women, with positive values and attitudes.

2. Schools are one of the best agencies to impart sexuality education. The interactions the researcher had with the teachers and principals of various schools in Thrissur district showed that even the schools with genuine interest and concern, lack necessary expertise and resources. Only through localized initiatives and networking, the schools will be able to overcome this limitation. The schools, family counseling centres, AIDS prevention projects, and organizations like Childline can form an effective network. In a very positive move, the State Government has appointed Counselors in the State schools during this academic year. These counselors could act as the nodal persons for initiating networking of the schools as well as for introducing sexuality related interventions in schools.

3. Existing infrastructure in schools such as health clubs, parent teachers association, science clubs etc has to be utilized for sexuality education.
4. The possibility of exclusive programmes like telephone hotlines for adolescents needs to be explored.

5. Magazines and books were reported as the most important sources of sexuality related information in the present as well as many other studies. Authentic literature on sexuality should be made available in the school libraries.

6. Parents play a significant role in inculcating healthy attitude towards sexuality in their children. Any information and expertise provided to them will go a long way in enabling our adolescents. Neighbourhood groups like residents associations as well as the school parent teachers associations can act as forums to educate the parents regarding the importance of sexuality education for their children.

7. Despite advancements in literacy, sexual abuse of young girls is becoming rampant in the State. Latest was the suicide of three girls studying in 12th standard from Aleppy District, the causes for which was the repeated sexual abuse they had been suffering and they did not have the confidence to disclose or seek support. There is an urgent need to provide adolescent girls brief and issue based intervention programs to help them tackle issues related to sexual abuse.

Innovative ventures in this area need to be documented and published. One such programme worth mention was the initiative, planned under the Rural Superintendent of Police, Sri. Vijayan, Aluva. He has initiated a move to educate the school girls on effective ways of handling sexual exploitation with the help of residents associations, N.G.O’s and the Police Department.
8. In spite of the efforts by the State Government, the adolescent education programme for the secondary school students, have not materialized yet. Unless and until we come up with evidence based information regarding the need and importance of such programmes, similar initiatives will be thwarted on and again by the so called moral guardians of our society. Hence, extensive descriptive as well as intervention research need to go into the area of adolescent sexuality.

9. Replication of the present study can be undertaken as well as different models for sexuality education has to be further explored. Peer education strategy has been found to be effective in many of the issues. The effectiveness of peer education and other strategies also need to be studied.

10. Findings of the present study indicate that body image perception and self esteem emerge as two of the major concerns during adolescence especially so for the girls. Issues such as low self esteem and poor body image perception are positively correlated with irresponsible sexual behaviour such as love affairs leading to sexual abuses, initiation of early sexual activities etc. among girls. Hence these need further exploration and intervention.

11. Social work with adolescents has to be included as one of the urgent and essential concerns by social work profession.

12. The present study might be replicated with a larger sample, which would facilitate generalizability.
13. The degree of influence that extraneous factors such as family, the media, religion and peers has on the individual’s acquisition of sexuality insights need to be tested further in order to determine the association between sex education programs and such insight. To conduct similar studies among pre-adolescents.

14. Scope of educational interventions with adolescents both boys and girls could be explored further and such initiatives have to be documented and published.

**Conclusion**

Adolescents actually comprise a sizable population in our country. We have 225 million adolescents comprising nearly one fifth of the total population (census 2001). Among this about 47 per cent adolescents are females.

Findings of various studies conducted in India, over the past 15 years, on adolescent’s knowledge, attitude and practices related to sexuality have shown that the knowledge and attitude of adolescents regarding sex and sexuality are inadequate as well as incomplete. These studies have also emphasized that there is an alarming rise in problems related to sex and sexuality over the years, which require intervention at various levels. Moreover, most of the studies conducted in the area of adolescent sexuality were descriptive by nature.

Coming to the Kerala scenario, the move by the Union Ministry of Human Resource Development to introduce Adolescent Education Programme (2005) through the State Council for Educational Research and training has generated a lot of criticism and
stiff resistance in the state and had to be dropped temporarily despite the alarming rise in the sexuality related problems among adolescent population. A planned intervention, focusing on helping our adolescents to develop healthy knowledge and a positive attitude towards their emerging sexuality has become the need of the hour. It is against this background, that the present study was conducted to empirically verify the efficacy of teaching interventions in sex and sexuality for adolescent girls and to evolve an intervention model, for sex and sexuality education of adolescent girls from the lower socio-economic strata of the society, whose access to such information is limited.

The findings of the present study very clearly indicate that teaching interventions in sex and sexuality has a significantly positive impact on the knowledge and attitude towards sex and sexuality. Moreover, the interventions have enabled the girls in strengthening their self esteem and body image perceptions.

But sexuality education is still viewed with scepticism and we still hesitate to include sexuality education in the school curriculum. By denying our adolescents an opportunity to understand the intricacies and complexities of growing up, we are denying them the right to sexual health i.e., a capacity to enjoy and control one’s sexual and reproductive behaviour, a freedom from fear, shame, guilt, false beliefs and other psychological factors inhibiting sexual responses and impairing sexual relationships and a freedom from organic disorders, diseases and deficiencies that interfere with sexual and reproductive functions (WHO).
It is hoped that this study will add more clarity and strength to the need for introducing teaching interventions in sex and sexuality to the adolescent population of the State. It is also hoped that the findings will help to evolve an effective and plausible model of teaching intervention for adolescent girls

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