

## **CHAPTER VIII**

### **SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION**

#### **8.1 Introduction**

STIs are a major public health concern and have long term implications for individual's health. The Center for Disease Control (CDC), states that women have higher rates of STIs overall, and women and infants are most commonly affected by the long term consequences of these infections, particularly young women are highly vulnerable to STIs. Hence there is an urgent need to know the level of awareness with regard to curable STIs.

World Health Organization (1995) report states that there are an estimated 333 million new cases of curable STIs. The most common of the curable STIs are gonorrhea, syphilis, chlamydia, and trichomoniasis. Sexually transmitted infections continue to take an enormous toll on health, particularly on women's reproductive health. STIs are most frequent in young people aged 15-19 years old. One in 20 young women is believed to contact a curable STI each year, excluding HIV or other viral STIs — including hepatitis B, genital herpes and genital warts, which are not curable<sup>5</sup>.

High frequency of sexual activity among young people in the East Asia and the Pacific Region suggest that they engage in a high level of unprotected sexual activity. This situation inevitably calls for attention to be given to young people's risk of acquiring STI, including HIV/AIDs. However the rate of sexually transmitted infections among adolescents have raised quickly in recent years.

The long term effects of gonorrhea, chlamydia and syphilis are substantial and attention needs to be paid to prevent those infections in young people. The dramatic increase in STI facilitates increased HIV transmission.

Since sexually transmitted infections such as Chlamydia, Trichomoniasis, Syphilis and Gonorrhea are second only to maternal morbidity and mortality as the cause of death, illness and 'years of healthy life lost' among women in their child bearing years, it constitutes a major health problem in India.

The lives of young people today are different from those of previous generations. Young people today live with modern facilities such as internet, television, and mobile services which offers many kind of entertainment, including those that promote unhealthy behaviour. Movies, T.Vserials and magazines offer approaches to sexuality which leads young people to adopt risky activities. Alcohol, tobacco, and illegal drug use are common throughout India. Therefore young people experiment with sex, drugs, alcohol and tobacco. Apart from HIV risk connected with sharing of needles, it is known that alcohol and other drugs affect sexual behaviour and increase the risk of being infected with other STIs among young people. Therefore young people today are exposed to a changing world with more relaxed social norms and greater expression of sexuality in the media than ever before.

The combination of these developments leads some young people into experimentation with sexual activity before marriage which put them at a risk of STI. So once young people are sexually active, then it is important to ensure that they have the necessary information and services to protect themselves from STI including HIV and unwanted pregnancy.

Social factors like the fear of exposure before parents, relatives, neighbours and friends or simply the wish to assert independence from family, have significant impact on the spread of STI among young people and often lead them to avoid the measures that are adopted for STI prevention.

Young people who discover their infection after sexual contact do not have courage to bring their sexual partners for treatment or they may not even tell them about the infection due to social pressures. The infected teenagers do not know where to get treatment. All these lead young people to delay the treatment seeking behaviour and engage them in self- treatment. The peer group also has influence over a young person's decision to take steps for avoiding STI seriously. The common attitude of adolescent is that they are invulnerable. The young people are so preoccupied with maximizing the pleasures in today's life and they don't think much about tomorrow. Time has a different meaning for young people compared to older persons. The fact that HIV/AIDS may lead to death in 10-15 years time is not meaningful for them.

Early marriage being a reality of South Asian Region, sexual activities start at very early age. There are approximately 10 million pregnant adolescents and adolescent mothers throughout India at any given time. This reality results in adolescents facing high risk of acquiring STIs. The studies reveal that pre-marital sex is also not uncommon. It is higher among males than females and higher in urban than in rural areas. A community –based study of RTI prevalence among 451 married women aged 16-22 in rural Tamil-Nadu underscores the extent to which infections go unnoticed in this outwardly “low-risk” population. Forty-nine percent of women in the study reported to have RTI symptoms while clinical and laboratory examination diagnosed 18 percent with an STI, including chlamydia, trichomoniasis and syphilis.

Lack of awareness about symptoms, effects, risks, curability of STIs and availability of STI services are the causes for the sad state of affairs. Awareness of disease and symptoms is essential as it helps in seeking healthcare at an appropriate time and reduces medical expenses. So, knowledge about reproductive health is of great significance that will lead to a healthy life for women students who step into marital life after their graduation.

Hence the present study on awareness about curable sexually transmitted infection (STI) among women students is undertaken. The findings of the study will reveal the level of awareness about STI among the women students, knowledge of contraception, the extent of utilization of STI services and barriers that prevent the utilization of STI services. The suggestions made on the findings of the study will not only help the educationalist to introduce right type of sex education at school and college level and policy makers to frame a suitable policy to meet the young people's need of reproductive health but also among other sections of people who devise suitable strategy to impart training to the health workers.

The specific objectives of this study are:

- i. To study the profile of women students in colleges
- ii. To assess the level of awareness of curable sexually transmitted infection among women students in colleges.
- iii. To find out the level of awareness of contraceptives among women students
- iv. To analyse the association between personal factors and awareness level of women students.
- v. To study the opinion of the women students about coping with the problem of STI in future.
- vi. To make suggestions based on the findings of the study.

There are about 7,110 final students studying in nineteen women's colleges affiliated to Bharathiar University. From each college fifty five students were selected based on random sampling method, generating random numbers from the website. (randominterger.com). A total of 1045 sample students were selected for the study. Care has been taken to include all the courses in the selected nineteen women's colleges. The total sample size came to 994 respondents. The data had been collected with the help of pre-structured interview schedule.

The collected data were analyzed with the help of appropriate statistical tools to find out the level of awareness of STI and level of awareness of contraceptives, among the respondents. The Source of information, barriers to utilize STI services and coping with STI services among the respondents are also studied. The results are summarized below. The concepts and comprehensive reviews of previous studies are dealt in the second and third chapter (Review of literature).

## **8.2. Summary of Findings**

The results of the study is summarized in following section

### **Profile of Respondents**

The students studying Arts courses are higher (52.6%) in percentage than science students (33.5%). Students pursuing computer science courses constitute 13.9 percentage of the total.

59.4 % of the respondents are in the age group of 21-22years, followed by 36 % in the age group of 20-21years. An insignificant number of respondents (4.6 %) are found in the higher age group of 22-23years.

The mother tongue of 868 (87.9 %) of the respondents is Tamil. The sample consists of students having Telugu (4.0 %), Malayalam (3.8 %), and Kannada (2.1 %), Badaga (1.4 %) and Hindi (1.3 %) as mother tongue.

The religion of the students shows that 89.9 % Hindu students, 5.6 % Christians and 4.0% Muslims are included in the sample.

78.8 % of students belong to backward community followed by schedule caste (9.8 %) and most backward caste (5.1 %).29.2 % of the respondents are from Coimbatore district followed by Tirupur district (28.6 %). 13.9% students are from Palghat district of Kerala.

The family size, shows that 53.5% of the respondents have four members and 21.6 % have five members in their family. Education of mothers of respondents shows that 20.8 % of the respondent's mothers are uneducated. However, 692 (69.6 %) respondent's mothers have school education. 9.5% mothers of the sample respondents are graduates and post graduates.

Education of fathers of respondents shows that 13.4 % of the respondent's fathers are uneducated. However, 70.1 % of the respondents' fathers have school education. Fathers of the sample respondents who are graduates and post graduates form only 16.5 % of the total.

681 (68.5 %) of the respondent's mothers are housewives. 20.3 % of mothers of respondents are employed and those who are in business and agriculture is negligible. 42% of the respondents' fathers are employed in Government and private services which is followed by business (35.1 %) and agriculture (19.7%). 32 respondents' fathers are unemployed.

35.3 % of the sample students belong to families with less than Rs.5,000 income and 35.5% of the respondents belong to families with income between 5001-10,000. Majority of the respondents are drawn from poor socio economic background.

129 (13 %) respondents watch TV for more than three hours a day. Those who spent 1-3 hours a day is also (36.7 %) substantial. 49.6% of the respondents watch T.V for one hour.

99% of respondents read news paper. 10 respondents do not read news paper in this age of information boom. There is gradual decrease in the number of students who use internet for more than one hour. 93.7 % of the women students use internet. Sizable number of students (6.3 %) who do use internet is also found in the sample.

53.5 % of the respondents did their schooling in Tamil medium and 46.5% of the respondents' through English medium. 55.1 % of respondents have studied in co-education schools in which the scope for mingling with opposite sex is high. 44.9 % of the respondents studied in girls' school.

### **Level of Awareness**

The analysis reveals that 298 (30 %) of sample respondents are in the high awareness group, 424 (42.7%) in medium and 272 (27.4%) in low awareness category. 72.7% of the women students taken for the study shows high and medium level of awareness group. Hence it is concluded that there is significant awareness about STI among respondents taken for the study.

The mean score for the 994 sample respondents is 88.3310 and the standard deviation is 13.4519. It confirms that a wide variation exists in the levels of awareness among women students.

### **Dimensions of STI Awareness**

The STI awareness is also studied in nine dimensions such as

- i. Knowledge and Belief about STI
- ii. Knowledge on STI Transmission and its effects

- iii. Knowledge about symptoms of STI
- iv. Belief about STI patient's materials
- v. Attitude towards STI infected personals
- vi. Knowledge about usage of sterilized materials
- vii. Knowledge about screening and treatment of STI
- viii. Knowledge about STI during pregnancy
- ix. Attitude about young age sex

The scores given by the respondents to the components of each dimension reveal the following.

“A person who has STI should be cared with compassion in the hospital” has got the highest score of 3768 (75.8%) followed by “STI will infect people because of illegal contacts”. The lowest score 3157 (63.5%) for the statement “untreated STIs cause damage to reproductive systems” shows that the respondents have reasonable knowledge about the consequences of untreated STIs.

The respondent's knowledge about the component “Disease that spreads through sexual contact is called STD” stands first with the score of 3895(78.4%). The scores for the statements that “All the STI do not reduce immunity” and “all the STI are not killer diseases” are 43.7% and 50% respectively which indicate their poor awareness about transmission of STI.

Awareness about symptoms such as burning sensation, itching and discharge of yellow fluid revolves around the score of 57%. The score indicate that the respondents are aware of symptoms of STI.

The score of 3273(65.8%) for the statement “using the same toilet seats used by STI infected will not transmit infection” shows the correct knowledge of the respondents on usage of toilet seats used by STI infected person.



The score of (3661)73.6% for the statement “drinking from the glass used by STI person will not transmit infection” shows that the respondents have adequate knowledge about drinking from the glass used by STI person.

The score of 2688(56.1%) for the variable ‘isolation of STI infected persons cannot stop spreading the disease’ highlights that the respondents have appropriate attitude towards isolating STI infected person. The score of 2621(52.7%) shows the awareness on the component “even without any minor symptom one can be a carrier of STIs”.

The respondent’s knowledge about usage of sterilized material score of 2710 (56.57%) highlights that the sample students are aware of using new disposable syringe. The score of 2797 (56.2%) shows that the respondents are aware of using sterilized instrument.

The respondent’s high level awareness about the screening procedure is evident from the high score of 3495(70.32%) and 3271(65.8%) for two statements “STI is screened through blood test and urine test” and “Not taking medication for STI will lead to infertility” respectively. However, the score of 2408(48.45%) for the statement “Knowledge about STI cannot guarantee for prevent of STI transmission” shows that the respondents are aware that knowledge about STI will not lead to prevention.

The score of 3509(70.6%) of respondents to the component “There is risk of getting STIs by receiving a blood transfusion with untested blood” highlights the awareness of the risk of STI involved in blood transfusion with untested blood. However the women students score of 2831 (56.9%) shows that, they are aware of the component “STI infected pregnant women could cause blindness to unborn baby”.

It is quite heartening to know that the respondents consider that premarital sex is wrong as it is evident from the high score of 4970 (81.75%). The score of 3182(64.02%) for the component 'STIs are found among 15-30 years old' shows the high level of awareness of the respondents.

### **Personal Factors and Awareness about STI -Test of Hypothesis**

The one-way anova and T-test conducted to find out the relationship between personal factors and awareness score reveal the following.

1. There is significant difference among the women students in their STI awareness score based on the course of study as the calculated F value 14.557 is higher than the table value of 3.338 is significant at one percent level.
  2. There is significant difference among the women students in their STI awareness score based on the community as the calculated F value 4.040 is higher than the table value of 3.338 is significant at one percent level.
  3. There is significant difference among the women students in their STI awareness score based on the education of mother as the calculated F value 3.184 which is higher than the table value of 2.614 is significant at five percent level.
  4. There is significant difference among the women students in their STI awareness score based on the family income per month as the calculated F value 2.850 is higher than the table value of 2.614 is significant at five percent level.
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1. There is no significant difference among the women students in their STI awareness score based on the age as the calculated F value 1.176 is less than the table value of 2.614 which is not significant.

2. There is no significant difference among the women students in their STI awareness score based on the place of residence as the calculated F value 2.026 is less than the table value of 2.381 which is not significant.
3. There is no significant difference among the women students in their STI awareness score based on the education of father the calculated F value 1.697 is less than the table value of 2.614 which is not significant.
4. There is no significant difference among the women students in their STI awareness score based on the time spent on watching TV as the calculated F value 0.234 is less than the table value of 2.381 which is not significant.
5. There is no significant difference among the women students in their STI awareness score based on the type of school they have studied as the calculated T-test value 1.102 is less than the table value of 1.962 which is not significant.

### **Level of Awareness about Contraceptives**

The analysis reveals that 281 (28 %) of sample respondents are in the high awareness group, 447 (45%) in medium and 266 (27%) in low awareness category. 73% of the women students taken for the study shows high and medium level of awareness group. Hence it is concluded that there is awareness about contraceptives among respondents taken for the study is significant.

The mean score for the 994 sample respondents is 27.41 and the standard deviation is 4.26. It confirms that a wide variation exists in the levels of awareness among women students.

The component-wise analysis includes seven components such as

- Having contact without condoms will lead to STI
- Unsafe sexual behaviour leads to STI infection
- STIs will infect people because of illegal contacts

- A person who has STI should be cared with compassion in the hospital.
- Untreated STIs cause damage to reproductive system
- When the medical personnel treats STI infected persons, they will not get STIs
- Maintaining social relationship with STI infected person will not transmit infection

The scores assigned by the respondents to all the components are more than 70% which shows the high level of awareness of all the components. The two variables such as ‘Condoms prevent pregnancy and STIs’ and ‘Copper T or loop is a female contraceptive method’ have the score 4101 (82.5%) and 4053 (81.5%) respectively. This shows the influence of media such as news paper and TV. The important finding of this study is the score for the variable ‘Having contact in safe period prevents STI transmission’ is 3913(78.7%) shows that the wrong awareness of safe period contact which actually is not the protection against STI and pregnancy.

## **Personal Factors and Awareness of Contraceptives –**

### **Test of Hypothesis**

1. There is significant difference among the women students in their contraceptives awareness score based on the course of study as the calculated F value 6.767 is higher than the table value of 3.338 which is significant at one percent level.
2. There is significant difference among the women students in their contraceptives awareness score based on the age of respondents as the calculated F value 5.877 is higher than the table value of 3.338 which is significant at one percent level.

3. There is significant difference among the women students in their contraceptives awareness score based on the community as the calculated F value 4.440 is higher than the table value of 3.338 which is significant at one percent level..
4. There is significant difference among the women students in their contraceptives awareness score based on the place of residence as the calculated F value 18.495 is higher than the table value of 3.338 is significant at one percent level.
5. There is significant difference among the women students in their contraceptives awareness score based on the time spent on watching TV as the calculated F value 6.965 is higher than the table value of 3.338 which is significant at one percent level.
6. There is significant difference among the women students in their contraceptives awareness score based on the type of school as the calculated F value 2.300 is higher than the table value of 1.962 is significant at five percent level.
1. There is no significant difference among the respondent awareness about contraceptives based on family income per month as the calculated F value 1.320 is lesser than the table value of 2.614 is not significant.
2. There is no significant difference among the women students in their contraceptives awareness score based on the education of the mother as the calculated F value 0.357 is lesser than the table value of 2.614 which is not significant.

### **Sources of Information about STI**

The sources of information about STI are Parents, Relatives, Sisters, Friends, Television / Radio, Teachers, Family doctor, News paper/books/magazines, and Internet

The scores obtained by the respondents to the various sources shows that friends are the major source of information regarding STI as these components gets the maximum score of 3338 (67%). It is to be noted that the parents have least score of 1405 (28%) in the list of sources of information. Another important finding of the study is that the score of 2894 (58%) shows that women students used news paper/books/magazines as source to get information with regard to STIs as this components stands second in rank. The next source of information is TV which is shown from the score of 2824(57%). The score 2521(51%) indicates that respondents receive information from internet which shows the influence of the growth of technology on youngsters.

### **Coping with STI Services**

The following components are included in the interview schedule to study the opinion of the respondents regarding coping with the STI if infected in future.

- Meeting any health professional
- Discussion with confidante
- Visiting hospital
- Consult parents
- Going to STI clinic only
- Get the suggestions of friends
- Going to far away STI clinic
- Self medication
- Ignore the symptoms of STI

The scores given by the respondents to the various options show that the health professional's assistance is first preference of the respondents as this component has the highest score of 3630(73%). Sharing the problem and getting advice from their confidante is the next preference as this component has got a score of 3305(66.5%). Visiting hospitals, going to STI clinics and consulting parents about STI services are the other means to cope with STI as these components have the score of 3437(64.1%), 3023(60.8%), and 3051 (61.3%) respectively. The women students who would ignore the symptoms of STI is low as the score of 1432 (28.8%) for the component is the least.

### **Barriers to utilize STI services**

The following components are included in the interview schedule to study the barriers to utilize STI services in case of being infected in future.

- Fear of parents
- Fear of relatives
- Fear of neighbors
- Fear of the staff in the STI clinic
- STI service providers do not ensure confidentiality
- The service providers are not friendly in nature
- Feelings of shame and embarrassment
- STI clinics are not located in convenient places
- Negative Opinion on the Individual who visits STI Clinics

The analysis of scores given by the respondents to the various options reveals that the feeling of shame and embarrassment is the main barrier to utilize STI services as this component gets the maximum score of 4009 (81%).

Fear of parents with the score of 3647(73%), Fear of neighbors' with the score of 3536 (71%) and STI clinics not located in convenient places with the score of 3537(71%) are the other barriers.

## **Suggestions**

It is observed that, (vide p.98) a wide variation exists in the levels of awareness among women students taken for the study. Majority of them have medium level of awareness about STI. Hence the following suggestions are made.

### **Introduction of comprehensive awareness programmes at school level**

It is suggested that a comprehensive awareness programmes can be introduced with thematic concepts and messages at the school level.

### **Set up counseling centers**

It is suggested to set up counselling centers in all the institutions exclusively for youth where they can freely discuss the sensitive health issues in privacy.

### **Tie up with health professionals**

Institutions may have the tie up with health professionals to have screening procedures once in every two months.

The respondent's score of awareness about symptoms such as burning sensation, itching and discharge of yellow fluid is not significant (vide p.117). Hence it is suggested.

### **Dissemination of scientific information through media**

There is a need to inculcate the scientific information in the awareness programmes on the symptoms of STI among the youth population so that the adult population in future may be healthy. In addition,



Dissemination of scientific STI information exclusively for youth can be telecasted through media and posters

The finding of the study reveals the wrong perception of safe period contact which actually does not protect against STI (vide p.155). Hence the following is suggested.

### **Include Reproductive Health aspects in the School and College Curricula**

The information on reproductive health like menstruation, conception, diseases related to reproductive organs should be disseminated through curricular and extracurricular activities in schools and colleges. The same information can be disseminated through youth organizations for the youngsters outside educational institutions.

It is observed (vide p.171) that there is significant relationship between awareness of women students and education of mother. Hence the following is suggestion is made

### **Intervention program for Mothers**

An intervention program on reproductive health and disease related to reproductive health can be conducted exclusively for mothers of young girls.

The study reveals that parents are the least preferred source of information (vide p. 179) which actually is dangerous. Hence the following is suggested.

### **Group discussions at Educational Institutions**

A group discussion program on disease related to reproductive health can be conducted by the educational institutions involving social workers, health professionals, young girls and their mothers so that the communication gap between the parents and their children can be reduced. The same program can be conducted for boys involving their fathers at the institutional level.

The analysis reveals that (vide.p.185) that meeting any health professional in case of being infected in future is the option for many respondents. Hence the following is suggested.

#### **Increase the number of STI Clinics**

No of STI clinic should be increased with wide publicity and youth friendly Centers should be encouraged to bring out healthy generation. The clinics may be set up at Block level.

It is suggested that there is a clear need for educational programmes to address issues of gender power relations, promote communication skills, informed choice and sexual responsibility among boys as well as girls

The state Government may take initiative in this regard

#### **8.4. Directions for future research**

The present study provides the following base for future research among young people.

- The present study focuses on curable STI awareness among women students in colleges and hence the future studies may focus on both men and women students in colleges and out of college.
- An intervention study of STI awareness can be conducted for parents and teachers.
- The current study focuses on awareness level of contraceptives and the future studies may include the contraceptive practices among the unmarried young people.

## **8.5. Conclusion**

The present study is about curable STI, the immediate problem affecting youth both men and women. The lack of awareness about the seriousness of infection is likely to affect the health of future generation. An earnest attempt is made in this piece of research work to highlight the awareness level about STI and contraceptives among women students who are stepping into married life after their graduation. The study also reveals the sources of information about STI, the perception of women students to cope with STI in case if they get affected in future and also the possible barriers that would affect the use of STI services.

The suggestions made on the basis of finding of the study would help the policy makers to take appropriate policy decisions and implement them. The researcher would feel amply rewarded if the suggestion made in the research work is carried out by the policy makers.