

**ASSESS THE KNOWLEDGE AND ATTITUDE  
REGARDING REPRODUCTIVE HEALTH AMONG  
ADOLESCENT GIRLS IN SELECTED SCHOOLS AT  
DHARAPURAM IN VIEW OF PREPARING SELF  
INSTRUCTIONAL MODULE**

**A DISSERTATION SUBMITTED TO  
THE TAMILNADU DR. M.G.R. MEDICAL UNIVERSITY,  
CHENNAI IN PARTIAL FULFILLMENT OF THE  
REQUIREMENT FOR THE DEGREE OF MASTER  
OF SCIENCE IN NURSING  
2009-2011**

**A STUDY TO ASSESS THE KNOWLEDGE AND  
ATTITUDE REGARDING REPRODUCTIVE HEALTH  
AMONG ADOLESCENT GIRLS IN SELECTED SCHOOLS  
AT DHARAPURAM IN VIEW OF PREPARING SELF  
INSTRUCTIONAL MODULE**

**APPROVED BY DISSERTATION COMMITTEE ON \_\_\_\_\_**

**RESEARCH GUIDE :-**

**Prof. Mrs. Vijayarani Prince,** \_\_\_\_\_  
M.Sc(N)., M.A., M.A., M.Phil(N).,  
Principal,  
Bishop's College of Nursing,  
Dharapuram. - 638 656,  
Tamil Nadu.

**CLINICAL GUIDE**

**Prof. Mrs. Hepsi Sujatha,** M.Sc(N)., \_\_\_\_\_  
Vice Principal,  
Department of obstetrics and gynecology,  
Bishop's College of Nursing,  
Dharapuram. - 638 656,  
Tamil Nadu.

**MEDICAL EXPERT:-**

**Dr.Deivamathi,** M.B.B.S., D.G.O \_\_\_\_\_  
Obstetrician and gynecologist  
Nevathetha hospital,  
Dharapuram. - 638 656,  
Tamil Nadu.

**A DISSERTATION SUBMITTED TO  
THE TAMILNADU DR. M.G.R. MEDICAL UNIVERSITY,  
CHENNAI IN PARTIAL FULFILLMENT OF THE  
REQUIREMENT FOR THE DEGREE OF MASTER  
OF SCIENCE IN NURSING  
2009-2011**

**A STUDY TO ASSESS THE KNOWLEDGE AND  
ATTITUDE REGARDING REPRODUCTIVE HEALTH  
AMONG ADOLESCENT GIRLS IN SELECTED SCHOOLS  
AT DHARAPURAM IN VIEW OF PREPARING SELF  
INSTRUCTIONAL MODULE**

**Certified Bonafide Project Work  
Done By**

**MS.SOPHIYA RAJA KUMARI.S**

**M.Sc., Nursing II Year  
Bishop's College of Nursing  
Dharapuram**

---

**Internal Examiner**

---

**External Examiner**

**COLLEGE SEAL**

**A DISSERTATION SUBMITTED TO  
THE TAMILNADU DR. M.G.R. MEDICAL UNIVERSITY,  
CHENNAI IN PARTIAL FULFILLMENT OF THE  
REQUIREMENT FOR THE DEGREE OF MASTER  
OF SCIENCE IN NURSING**

**2009-2011**

## CONTENT

CHAPTER	TITLE	PAGE NO
I	<b>(i)INTRODUCTION</b> <ul style="list-style-type: none"> <li>➤ Background of the Study</li> <li>➤ Need for the study</li> <li>➤ Statement of the problem</li> <li>➤ Objectives of the study</li> <li>➤ Operational definitions</li> <li>➤ Hypotheses</li> <li>➤ Assumptions</li> <li>➤ Delimitations</li> <li>➤ Projected outcome</li> </ul>	1-21 1 5 12 12 12 14 15 15 15 16
II	<b>(ii)CONCEPTUAL FRAMEWORK</b> <b>REVIEW OF LITERATURE</b> <b>PART-I</b> <ul style="list-style-type: none"> <li>➤ Over view of reproductive health</li> </ul> <b>PART-II</b> <ul style="list-style-type: none"> <li>➤ Studies related knowledge on reproductive health</li> <li>➤ Studies related to reproductive health problems</li> <li>➤ Studies related to knowledge and attitude on sex education</li> </ul>	22-51 23 42 46 49
III	<b>METHODOLOGY</b> <ul style="list-style-type: none"> <li>➤ Research approach</li> <li>➤ Research design</li> <li>➤ Setting of the study</li> <li>➤ Population</li> <li>➤ Sample</li> <li>➤ Criteria for sample selection               <ul style="list-style-type: none"> <li>➤ Inclusion Criteria</li> <li>➤ Exclusion Criteria</li> </ul> </li> </ul>	52-61 52 52 52 54 54 54 54 54

	<ul style="list-style-type: none"> <li>➤ Sample size</li> <li>➤ Sampling technique</li> <li>➤ Instrument <ul style="list-style-type: none"> <li>❖ Description of the instrument</li> <li>❖ Scoring procedure</li> </ul> </li> <li>➤ Validity and reliability of the tool</li> <li>➤ Pilot study</li> <li>➤ Procedure for data collection</li> <li>➤ Plan for data analysis</li> <li>➤ Protection of human subjects</li> </ul>	<p>54</p> <p>54</p> <p>55</p> <p>56</p> <p>57</p> <p>58</p> <p>58</p> <p>60</p> <p>61</p>
IV	<b>DATA ANALYSIS AND INTERPRETATION</b>	62-85
V	<b>DISCUSSION</b>	86-91
VI	<b>SUMMARY , CONCLUSION</b>	92-95
	<ul style="list-style-type: none"> <li>➤ <b>IMPLICATION OF NURSING</b> <ul style="list-style-type: none"> <li>Nursing service</li> <li>Nursing education</li> <li>Nursing administration</li> <li>Nursing research</li> </ul> </li> <li>➤ <b>RECOMMENDATIONS</b></li> <li>➤ <b>LIMITATIONS</b></li> </ul>	<p>94</p> <p>94</p> <p>95</p> <p>95</p> <p>95</p>
	<b>BIBLIOGRAPHY</b>	96-100
	<ul style="list-style-type: none"> <li>➤ References</li> </ul>	
	<b>APPENDICES</b>	i-lxxvii

## LIST OF TABLES

Table No.	Title	Page No.
1	Frequency and percentage of demographic variables of adolescent girls	63
2	Frequency and percentage of knowledge scores regarding reproductive health among adolescent girls	73
3	Area wise analysis scores of knowledge score regarding reproductive health among adolescent girls	75
4	Frequency and percentage of attitude scores regarding reproductive health among adolescent girls	77
5	Correlation of knowledge and attitude scores regarding reproductive health among adolescent girls.	79
6	Association of knowledge scores regarding reproductive health among adolescent girls with their selected demographic variables	80
7	Association of attitude scores regarding reproductive health among adolescent girls with their selected demographic variables	83

## LIST OF FIGURES

<b>FIGURE NO</b>	<b>TITLE</b>	<b>PAGE NO</b>
1	Conceptual frame work	21
2	Percentage distribution of adolescent girls according to their age	66
3	Percentage distribution of adolescent girls according to their religion	67
4	Percentage distribution of adolescent girls according to their family income	68
5	Percentage distribution of adolescent girls according to their type of family	69
6	Percentage distribution of adolescent girls according to their residence	70
7	Percentage distribution of adolescent girls according to their educational status of the mother	71
8	Percentage distribution of adolescent girls according to their medium of instructions	72
9	Percentage distributions of knowledge scores regarding reproductive health	74
10	Percentage distributions of attitude scores regarding reproductive health	78

## LIST OF APPENDICES

APPENDIX	CONTENT	PAGE NO
A	Letter seeking permission for conducting the study	i
B	Letter seeking experts opinion for content validity	ii
C	List of experts of validation	iii
D	Certificate for content validity	iv
E	Certificate for English editing	ix
F	Certificate for Tamil editing	x
G	Questionnaire	
	• English	xi
	• Tamil	xxi
H	Self instructional module	
	• English	xxx
	• Tamil	lvi
I	Answer key	lxxvii



## ACKNOWLEDGEMENT

I am whole heartedly grateful to the **God** almighty who strengthened, accompanied and blessed me throughout the study.

I extend my heart full thanks and gratitude to the **Management**, Bishop's College of Nursing for providing an opportunity to undergo to uplift my professional life.

With deep sense of gratitude, I express my sincere thanks to our beloved Principal, **Prof. Vijaya Rani Prince M.Sc(N), M.A., M.A., M.Phil (N), Bishop's college of Nursing** for her expert guidance, thoughts, comments, invaluable suggestions, constant encouragement and support throughout the period of study.

I express my thanks to **Mr. John Wesley**, Administrator, Bishop's College of Nursing for given me an opportunity to study in this esteemed institution.

I owe my profound gratitude to Head of Department, **Mrs. Glory Suresh, M.Sc (N), Associate Professor**, Department of Obstetrics and Gynecology for her patience guidance, concern, help valuable suggestion throughout my study.

It gives me immense pleasure to thank with deep sense of gratitude to the research guide **Prof. Mrs. Hepsi Sujatha, M.Sc(N),** ,

Department of Obstetrics and Gynecology for her Valuable Suggestions, encouragement, perfect direction, pensive correction,

personal interest, constant support and prayers till the completion of the study.

I acknowledge my genuine gratitude to all the **Head of the institutions** of the schools for granting permission to conduct the study and their extensive guidance, treasured help and expert's opinion in successful completion of the study.

I express my genuine gratitude and obligation to **Dr.M.R.Duraisamy, Ph.D, Associate Prof. (Stat)** for his suggestions in analysis and presentation of data.

I extend my gratitude to **Mr.P.Sampath, M.A.,M.Ed., (English)** for his valuable English editing.

I extend my thanks to **Mrs. D. Siravnjeevi Mary, M.A.,M.Ed., (Tamil)** for his valuable Tamil editing.

I extend my sincere thanks to **Library Staff** for rendering their support and help during the time of my study

I extend my special gratitude to **Vijay Xerox** for their patience, co-operation, understanding the needs to be incorporated in the study and timely completion of the manuscript.

## **ABSTRACT**

Adolescence is considered as a period of transition from childhood to adulthood. This period of life between ages of 10 to 19 years. This period is very crucial, since these are the formative years of life of an individual when major physical, psychological and behavioral changes take place. This is an impressionable period of life, this is also a period of preparation for undertaking greater responsibilities including healthy responsible parenthood in future. Adolescence form prospective human resource for the society

The study was aimed to assess the knowledge and attitude regarding reproductive health among adolescent girls in selected schools at Dharapuram in view of preparing Self Instructional module.

The conceptual frame work used was based on Modified Pender's health promotion Model (revised 2002). The research design used for the study was descriptive survey design. Purposive sampling was used to select the higher secondary schools and Stratified random sampling technique was used to select 300 samples for the study. The tool used for the study was structured knowledge questionnaire to assess the knowledge and five point likert scale to assess the attitude regarding reproductive health. The data gathered were analyzed using descriptive and inferential statistics. Self instructional module was prepared and distributed to all the samples.

The mean score of knowledge are 13.17(S.D.4.54) and attitude are 31.25(S.D 5.65). Area wise analysis of knowledge score was done. It revealed that the highest mean score in the area of anatomy and physiology of female reproductive system is 4.036 (SD±1.5) which is of 44.8%, where as in the area of puberty and pubertal changes showed

the lowest mean score 0.59(SD±0.76) which is of 29.5% The correlation co-efficient of knowledge and attitude is (0.60) which is postively correlated. Significant association was found between knowledge scores when compared to medium of instruction( $\chi^2=15.73$ ) and residence( $\chi^2=23.02$ )and there is no significant association between knowledge scores when compared to age , type of family, religion, family income, educational status of the mother. Significant association between attitude scores when compared to religion ( $\chi^2=23.5$ ), educational status of the mother ( $\chi^2=15.27$ ) and medium of instruction ( $\chi^2=7.84$ )and there is no-association between attitude scores when compared to age, family income, residence, ,family type .

Self instructional module will improve the knowledge regarding reproductive health among adolescent girls which will help them to practice, disseminate the knowledge to others and prevent reproductive health problems

# *Chapter - I*

# *Chapter - II*

# *Chapter - III*

# *Chapter - IV*



# *Chapter - V*

# *Chapter - VI*

# *References*

# *Appendices*

**ASSESS THE KNOWLEDGE AND ATTITUDE  
REGARDING REPRODUCTIVE HEALTH AMONG**

**ADOLESCENT GIRLS IN SELECTED SCHOOLS AT  
DHARAPURAM IN VIEW OF PREPARING SELF  
INSTRUCTIONAL MODULE**

**MS.SOPHIYA RAJA KUMARI.S**

**M.Sc., Nursing II Year**

**Bishop's College of Nursing  
Dharapuram.**

**A DISSERTATION SUBMITTED TO THE  
TAMILNADU DR. M.G.R. MEDICAL UNIVERSITY,  
CHENNAI IN PARTIAL FULFILLMENT OF THE  
REQUIREMENT  
FOR THE DEGREE OF MASTER OF SCIENCE  
IN NURSING  
2009-2011**

# **CHAPTER-I**

## **INTRODUCTION**

*“Live as long as you may; the first twenty years are the longest half of your life”*

*Southey R., (2003)*

### **BACKGROUND OF THE STUDY**

Adolescence is considered as a period of transition from childhood to adulthood. This period of life between ages of 10 to 19 years. This period is very crucial, since these are the formative years of life of an individual when major physical, psychological and behavioral changes takes place. This is an impressionable period of life this is also a period of preparation for undertaking greater responsibilities including healthy responsible parenthood in future. Adolescence form prospective human resource for the society.

**Hockenberry M J and Wilson D.,(2009)**

Health is defined as a state of complete physical, mental and social weellbeing and not merely an absence of disease or infirmity.

**World health organization (1948)**

Reproductive health is defined as a state of complete physical, mental and social well being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and its functions and processes.

**World health organization (1994)**

Between the ages of 10 and 20 years, Children’s undergo rapid changes in body size, shape, physiology and psychological and social

functioning. Hormones set the developmental agenda in conjunction with social structures designed to foster the transition from childhood to adulthood.

**Arun B K., (1996)**

Adolescence (between the ages of 10-19 years WHO) is a unique phase of life during which a child goes through tremendous physical, emotional and social change. The term puberty is used to describe a specific phase of sexual maturation lying between childhood and adulthood (ie) the point of life when reproduction becomes possible.

**Gupta P., (2007)**

Adolescent is a biological process in the continuum of life which is characterized by the appearance of secondary sex characteristics and the achievement of reproductive capacity. Puberty is a gradual process culminating in menstrual cycle in female. It is temporarily linked to the onset of breast or genital development in the majority of individuals

**Yadav S .,(2007)**

Emergence of AIDS has focused everybody's attention towards the role of sex education. AIDS and other sexually transmitted diseases are common today, but many parents, teachers and students do not understand these diseases and their prevention.

**Situmoray A .,(2005)**

The changing social environment, increasing nuclear families, more opportunities of social interactions among adolescents, less supervision, permissive attitude of society, influence of media and changing moral norms have resulted in increasing in sexual activity among youngsters and a rising incidence of pregnancies in teenagers.

The practice of early marriage continues to be prevalent in the rural India.

**Sahayamary (2008)**

The susceptibility to reproductive health problems reflects both their biologic and behavioral stages of development. The adolescent cervix is more susceptible to infection compared with the adult cervix because of the presence of cervical ectopy. Most girls start sexual activity before acquiring adequate knowledge and skills. sexual intercourse is generally results in indulging in unprotected sex. They have lack of awareness and limited knowledge about transmission and prevention of reproductive problems.

**Bhave S. Y.,(2006)**

Young persons for a variety of reasons such as developmental issues , peer pressure, social influences etc are becoming sexually active at an early age more than even before , however these early sexually activity is often not accompanied by knowledge about its consequences.

**International association for maternal and neonatal health (2004)**

The absences or lack of sex education put the youth at risk for unplanned pregnancy and various STDs. It also resulting to a phenomenon of unwed which is quite common in Europe, Africa and America and also being reported in India. Unplanned when subjected to termination of pregnancy may cause maternal morbidity as well as mortality.

**Reich W., (2000)**



The concept about sexual health is an integration of physical, emotional, intellectual and social aspects of sexuality in a way that positively enriches and promotes personality communication and love.

Sexual health can be defined as

H - Happy healthy mind, healthy body.

E - Education

A - Avoid teenage pregnancy

L - Lactation

T -Test for pregnancy RTI, STD

H - Health screening

**Manivannan M., (2009)**

Young people are the future of every society and also a great resource for the nation. Reproductive health is a crucial part of general health and central feature of human development. One of the most distressing, disabling disease of this century is sexually transmitted diseases especially HIV/AIDS.

**Dhal A., (1995)**

Youngsters today are exposed to a good deal of information on sex and sexuality from media or from friends but they truth is that these are techniques who don't know or understand significant facts about human sexuality who are not been given opportunity to link whose information is incorrect because it comes from unreliable source who are unhappy, confused, guilty and anxiety about their sexual behavior and worried about own life to lead a healthy and normal life.

**Manivannan C., (2009)**

The meaningful explanation of selected aspects of sex education would prevent the needless suffering of thousands of girls who grow up in an environment of ignorance and superstitions. Nurses can help young adolescent to understand the normal and physical and psychosocial changes taking place during the puberty. So that they may learn to see it as positive change “young people need help in making healthy decision”.

“Investing Adolescent health and rights will yield large benefits for generations to come and healthy Adolescent wealthy nation”

**World health organization ( 2007)**

**NEED FOR STUDY:**

**“Youth is something very new; twenty years ago no one mentioned it”**

**Cochanel M.,(2007)**

It is the periods of intense psychological growth and development and often involves many crisis, much instability, inner turbulence and behavioral deviances. Adolescence is crossing the road in development of life. Young people go through a difficult phase of physical, emotional and psychological stress. Their inquisitive minds oscillate between pornography and peers to know more about sexuality studies have shown that the Adolescent lack adequate knowledge about sexuality during the period of puberty.

**Umadevi K.,(2009)**

Adolescence begins with the on set of puberty and divided into three phases. Early Adolescence refers to age 10 to 13 years, middle Adolescence to 14 to 16 years and late Adolescence 17 to 20 years. The

Indian academy of pediatrics (IAP) declared the year 2000 as IAP year of Adolescence and august 1st every year as teenage year. A remarkable feature of puberty is that as much as 50% of adult's weight and 25% of adult height are attained during this period.

**Manivannan C., (2009)**

Young people are at high risk of negative sexual and reproductive health consequences like unwanted pregnancies, sexually transmitted diseases and unsafe abortion. They start sexual activity with out adequate knowledge of sexual and reproductive issues and seldom practice safe sex.

**Dayal N., (2006)**

Adolescents like to experiment and experience new things, which they enjoy as adventures, this is called risk taking behavior. This applies to sex also. A large no of adolescents enter in to sexual activity that is either spontaneous or unplanned or under coercion without having any knowledge of risk of pregnancy and Sexually transmitted diseases. Due to lack of information and embracement adolescent have poor health seeking behaviour on issue of reproductive and sexual health.

**Bhare S., (2007)**

India today is a country of large population of young people with over 30% in the age group of 10-24. Based on the population projection by the registrar general of India (1996) there are an estimated 300 million young people in the age group of 10-24 whose need for sexual and reproductive health information and services remain high.

**Dayal N., (2006)**

In the world one in every five people is an adolescence. In India 22.8% of population constitute adolescence, out of 1.2 billion adolescence worldwide about 85% live in developing countries and the remaining live in the industrialized world. In India there are 15 million adolescence comprising 22.8% of India's total population. The healthy experiences, attitude behaviour of these youth are intimately linked with their social, educational and economic aspiration and options have a strong impact on the future of Indian society.

#### **World health organization (2007)**

In India 33% of women are married at the age of 15 and almost 2/3rd by the age of 18. only 7% of married adolescents in India use any one method of contraception. Adolescence lacks information about sexuality. The years of Adolescence and youth are marked by the psychodynamics of change, be it interpersonal, intrapersonal and extra personal. Sexual awakening among young girls is a time of confusion. Behavioral theorist and experts agrees that Adolescence must be thought generic and health specific skills necessary for adapting healthy behaviors.

#### **World health organization (2007)**

According to the WHO, Reproductive and sexual ill health accounts for 20% of the global burden of ill health for women and 14% for men.

As of 2001 India census, Tirupur had a population of 346,551. Males constitute 52% of the population and females 48%. The population rate of children, adolescent and adult age group 13%,47%and 40% of total population. Tirupur has an average literacy rate of 76%, higher than the national average of 59.5%: male literacy is

82%, and female literacy is 69%. In Tiruppur, 13% of the population is under 6 years of age

**Samayamoorthy M.,(2001)**

About one - fifth of world's population is adolescent. Despite this, their reproductive health needs are poorly understood and ill served. Adolescents often have poor information about reproduction and sexuality and little access to reproductive health services.

**Dhanalakshmi M .,(2009)**

In the Indian subcontinent, premarital sex is uncommon, but early marriage sometimes means adolescent pregnancy. The rate of early marriage is higher in rural regions than it is in urbanized areas. Fertility rates in South Asia range from 71 to 119 births per 1000 women aged 15-19. 30% of all Indian induced abortions are performed on women who are under 20.

Other parts of Asia have shown a trend towards increasing age at marriage for both sexes. In South Korea and Singapore, marriage before age 20 has all but disappeared, and, although the occurrence of sexual intercourse before marriage has risen, rates of adolescent childbearing are low at 4 to 8 per 1000. The rate of early marriage and pregnancy has decreased sharply in Indonesia and Malaysia; however, it remains high in comparison to the rest of Asia.

Surveys from Thailand have found that a significant minority of unmarried adolescents are sexually active. Although premarital sex is considered normal behavior for males, particularly with prostitutes, it is not always regarded as such for females. Most Thai youth reported that their first sexual experience, whether within or outside of marriage, was

without contraception. The adolescent fertility rate in Thailand is relatively high at 60 per 1000. 25% of women admitted to hospitals in Thailand for complications of induced abortion are students. The Thai government has undertaken measures to inform the nation's youth about the prevention of sexually transmitted diseases and unplanned pregnancy.

According to the World Health Organization, in several Asian countries including Bangladesh and Indonesia, a large proportion (26-37%) of deaths among female adolescents can be attributed to maternal causes

**World health organization(2007)**

“Prevention is better than cure”.12 million people are affected with sexually transmitted diseases every year, out of which 25% are adolescents. Most of the adolescents are deficient in knowledge related to the selected aspects of reproductive health, which is very important for a woman to contribute to safe motherhood.

**Lucita M., (2006)**

**Brabin, L., et.al (1995)** investigated reproductive tract infections or other indicators of sexual health among unmarried adolescent girls in rural areas. 86 females attended for interview and examination. In that 42.1% of sexually active adolescents had experienced either an abortion or sexually transmitted diseases. Health educations for adolescents in this community are needed and should include sex education, contraceptive provision an access to treatment for reproductive tract infections.

**Wong L.P., (2010)** conducted a study on menstrual related attitudes and symptoms among multi racial Asian adolescent females. In that, 1,092 females from 94 schools were participated. Self administered questionnaire was used in the data collection. The results showed that 80.7% of the participants experienced one or more affective and somatic symptoms in premenstrual and menstrual phases. The study calls for an education program related to PMS and menstrual related disorders to provide information and support to adolescents. This will help them to cope better with menstrual related problems, and encourage positive attitudes to menstruation.

Adolescence is inadequately informed about their own sexuality, physical well being and their health. The major source of information being the media and peers. Low rate of educational attainment, limited sex education activities and inhibited attitudes towards sex, attenuate this ignorance leading to unwanted pregnancy, illegal abortion, mortality and morbidity among young girls. Knowledge based on gender, education and place of residence with uneducated rural girls having the least information.

**Bhare S., (2007)** Adolescents have a higher risk of Sexually transmitted diseases and unwanted pregnancy because of many factors. Sex is generally impulsive unplanned hence protection is largely used. They have lack of knowledge on contraception and sexually transmitted infections, including HIV, more than 35-50% of AIDS cases are occurring in the 15-24 years of age group.

Under the RCH programme, the component of RTI/STD control is linked to HIV and AIDS control. It has been planned and implemented in close collaboration with National AIDS control

organization (NACO). NACO will provide assistance for setting up RTI/STD clinics upto the district level. Conducting education programmes and screening camp are some of the programmes initiated by the government to provide basic information and to impart the knowledge regarding their reproductive health.

Indian society is conservative with high moral standards but in reality many things are happening that are behind a garb of mortality. The TV serials, movies all depict and explicit Sexuality and extra marital and premarital affairs. Easy access to internet and CD's and DVD's exposes to pornography that distort the perception of human sexuality. Many adults suffer a great deal of anxiety because of lack of knowledge of sexuality and also from myths and misconception. This tracks from adolescents when information was not given at the right time

**Prasad D S., (2007)**

When researcher was posted in maternity ward, she noticed that many adolescent girls below the age of 19 years admitted in the ward with various reasons like teenage pregnancy, abortion, reproductive tract infections. Most of the girls are HIV positive. Recent studies revealed that adolescent girls were having less knowledge regarding their reproductive health. Hence, the researcher felt need to identify existing knowledge and to impart knowledge to adolescents on reproductive health which will help to develop a positive attitude towards reproductive health and sex education. It will help them to improve their self care, ability, refrain from health risk behaviour.



## **STATEMENT OF THE PROBLEM**

A study to assess the knowledge and attitude regarding reproductive Health among adolescent girls in selected schools at Dharapuram in view of preparing self instructional module.

## **OBJECTIVES**

1. To assess the level of knowledge regarding reproductive health among adolescent girls.
2. To assess the level of attitude regarding reproductive health among adolescent girls.
3. To correlate the knowledge and attitude regarding reproductive health among adolescent girls.
4. To find the association of knowledge score among adolescent girls regarding reproductive Health with their selected demographic variables.
5. To find the association of attitude score among adolescent girls regarding reproductive Health with their selected demographic variables.

## **OPERATIONAL DEFINITION**

### **KNOWLEDGE**

It is the information and understanding that is gained through education or experience.

**Elliott J.,(2002)**

In this study it refers to the level of understanding regarding reproductive health among adolescent girls which is measured by knowledge questionnaire and its scores.

## **ATTITUDE**

It refers to a way of thinking about someone or something

**Elliott J(2002)**

In this study it refers to their mental views and opinion regarding reproductive health among adolescent girls which is measured by five point likert scale and its scores.

## **REPRODUCTIVE HEALTH**

Reproductive health is defined as a state of physical, mental and social wellbeing and not merely the absence of diseases or infirmity, in all matters relating to the reproductive system and its function and processes. Therefore it implies that people are able to have a satisfying and safe sex and that they have the capability to reproduce and the freedom to decide if, when and how often to do so.

**World health organisation (2007)**

## **ADOLESCENT GIRLS**

Adolescence is a Latin word which means to grow in to adulthood. It is a period of moving from immaturity childhood to maturity of adulthood.

Adolescence is divided into

1. Early adolescence (12 to 13 yrs)
2. Middle adolescence (14 to 18yrs)
3. Late adolescence (17 to 19yrs)

**Marlow D. R.,(2006)**

In this study it refers to adolescent girls in the age group of 13 – 16 yrs.

## **SELF INSTRUCTIONAL MODULE**

A self instructional module is a learning package planned and prepared from the beginning till the end with an aim to facilitate self learning.

**Sankaranarayan B., (2003)**

In this study, self instructional module is on reproductive health in prevention of reproductive health problems which consists of meaning, anatomy and physiology of female reproductive system, sex education includes fertilization, embryo, physiological and psychological changes in puberty, diet, safe age for marriage and pregnancy, sexual pleasure, sexual orientation, dating, signs and symptoms of pregnancy, teenage pregnancy, reproductive health problems-HIV,AIDS,Candidiasis,RTI, contraception, pre menstrual syndrome, menstrual hygiene and care during dysmennorhoea.

## **HYPOTHESES**

- H<sub>1</sub>** - There will be a significant correlation between knowledge and attitude regarding reproductive health among adolescent girls.
- H<sub>2</sub>** - There will be a significant association between the knowledge scores among adolescent girls with their selected demographic variables.
- H<sub>3</sub>** - There will be a significant association between the attitude scores among adolescent girls with their selected demographic variables.

## **ASSUMPTION**

1. Adolescent girls may have some knowledge about reproductive health.
2. Learning module on reproductive health may help to improve the knowledge in adolescent girls.
3. Nurses have to conduct mass education camp for adolescent girls regarding reproductive health thus it reduce the morbidity and mortality rate.

## **DELIMITATION**

The study is delimited to

1. The period of data collection for five weeks.

## **PROJECTED OUTCOME**

At the end of the study the adolescent girls are have increased level of knowledge and develop positive attitude towards reproductive health. Self instructional module prepared and given by the nurse educator helps to improve the knowledge and attitude regarding reproductive health among adolescent girls and it helps to prevent major reproductive health problem

## **(ii). CONCEPTUAL FRAME WORK**

Conceptual frame work refers to concepts that offer a frame work of proposition for conducting research.

### **Nola J Pender's Health promotion model (2002 - Revised)**

The health promotion model (HPM) proposed by Nola J Pender (1982; revised, 2002) was designed to be a “ Complementary counterpart to models of health protection”. It defines health as a positive, dynamic state not merely the absence of disease. Health promotion is directed at increasing a client's level of well being. The health promotion model describes the multi dimensional nature of persons as they interact within their environment to pursue health.

#### **The model focuses on the following areas:**

- Individual characteristics & experience
- Behavior specific knowledge and effect
- Behavior outcome

### **INDIVIDUAL CHARACTERISTICS & EXPERIENCE**

#### **i) Prior related behavior:**

According to the theory, prior related behavior describes frequency of the similar behavior in the past. Direct and indirect effects on the likelihood of engaging in health promoting behaviors.

In this study, adolescent girls knowledge and attitude regarding reproductive health are assessed by using structured knowledge questionnaire and five point likert scale.

**ii) Personal factors:**

According to the theory, personal factors are categorized as biological, psychological and socio cultural. These factors are predictive of a given behavior being considered.

In this study, adolescent girls biological factors such as age and socio cultural factors such as religion, type of family, area of residence, educational status of the mother, family income and medium of instruction are assessed.

**BEHAVIOR SPECIFIC COGNITIONS AND AFFECT**

**a) Perceived benefit:**

According to the theory, anticipated positive outcomes that will occur from healthy behavior

In this study, adolescent girls will gain knowledge and develop favourable attitude regarding reproductive health in promoting healthy behavior after giving the self instructional module.

**b) Perceived barrier:**

According to the theory perceived barrier action is anticipated, imagined or real blocks and personal costs of understanding of a given behavior.

In this study, adolescent girls are having lack of knowledge and unfavorable attitude are acting as barriers.

**c) Perceived self efficacy:**

According to the theory judgment of personal capability to organize and executing a health promoting – behavior. Perceived self

efficacy influences barriers to action so higher efficacy result in lowered perceptions of barriers to the performance of the behavior.

In this study, adolescent girls realize the importance of reproductive health knowledge and reduce the unfavorable attitude which will prevent the occurrence of reproductive health problems in adolescent girls.

**d) Activity related affect:**

According to the theory, activity related affect describes subjective positive or negative feelings that occur before, during and following behavior based on the stimulus properties of the behavior itself. Activity related affect influences perceived self – efficacy, Which means the more positive the subjective feeling, the greater the feeling of efficacy. In turn, increased feelings of efficacy can generate further positive affect.

In this study, it is conceptualized that the adolescent girls existing level of knowledge and attitude regarding preventive measures of reproductive health problems.

**e) Inter personal influences:**

According to the theory, cognition concern behaviors, belief, or attitude of others. Inter personal influences include: norms (expectation of significant others), Social support (instrumental and emotional encouragement) and modeling (various learning through observing others engaged in a behavior). Primary sources of Inter personal influences are families, peers, and health care providers.

In this study, researcher influencing the adolescent girls by giving self instructional module on reproductive health which includes anatomy and physiology of reproductive system, fertilization and embryo, physiological and psychological changes in pregnancy, sex education, diet, reproductive health problems and contraception provides awareness and helps to protect the girls from reproductive health problems.

**f) Situational influences:**

According to the theory, Personal conceptions and cognitions of any given situation or context that can facilitate or impede behavior.

In this study, the adolescent girls age, educational status of the mother, medium of instruction influence the knowledge and attitude regarding reproductive health problems.

**BEHAVIORAL OUTCOME**

**i) Immediate change of practice low control to high control:**

According to the theory, Competing demands are those alternative behaviors over which individuals have low control, because there are environmental contingencies such works or family care responsibilities. Competing preferences are alternative behavior over which individual exert relatively high control, such as choice of ice cream or apple for a snack.

In this study, the adolescent girls had gained knowledge about the importance of reproductive health and became aware of the major reproductive health problems.



**ii) Commitment to plan action:**

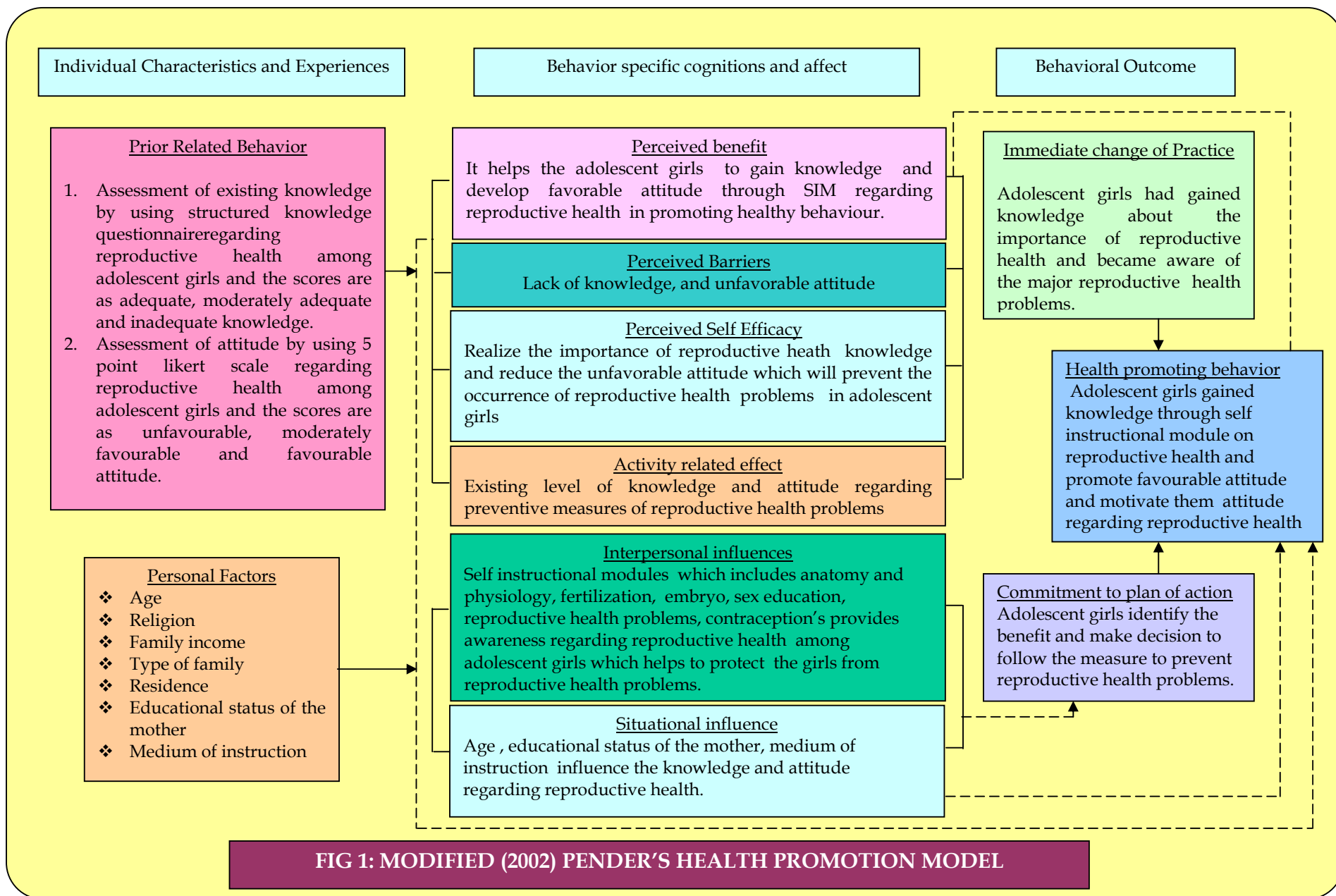
According to the theory, the concept of intention and identification of a planned strategy leads to implementation of Health behavior.

In this study, the adolescent girls identify the benefit and make decision to continue to follow the healthy measures to prevent reproductive health problems.

**iii). Health Promoting Behavior:**

According to the theory, Health Promoting Behavior is an endpoint or action outcome directed towards attaining positive health out comes such as optimal well-being, Personal fulfillment and Productive living.

In this study, the adolescent girls gained knowledge through self instructional module and promote favourable attitude and motivate them to follow safe reproductive health practices.



## CHAPTER-II

### REVIEW OF LITERATURE

Review of literature is a critical summary on topic of interest. Often prepared to put a research problem in context. A literature review helps to the foundation for a study and can also inspire new ideas. The investigator carried out an extensive review of literature on the research topic in order to collect maximum relevant information for building. The reviewed literature has been divided under the following heading

#### **PART - I:**

##### **Overview of reproductive health**

#### **PART - II:**

##### **Studies related to reproductive health**

**Section A:** Studies related knowledge on reproductive health

**Section B:** Studies related to reproductive health problems

**Section C:** Studies related to knowledge and attitude on sex education

**PART - I**  
**OVERVIEW OF REPRODUCTIVE HEALTH**

**INTRODUCTION**

Growing up is stressful and challenging in the best of times. For these young people living as refugees the stresses are much greater. Their transition to adulthood is often made more difficult by the absence of the usual role models and the break down of the social and cultural system in which they live.

**Umadevi A.K.,(2009)**

**DEFINITION**

Reproductive health is defined as a state of physical, mental and social wellbeing and not merely the absence of diseases or infirmity, in all matters relating to the reproductive system and its function and processes. Therefore it implies that people are able to have a satisfying and safe sex and that they have the capability to reproduce and the freedom to decide if, when and how often to do so.

**World health organization (2007)**

**ADOLESCENTS**

Adolescence is a latin word which means to grow in to adulthood. It is period of moving from immaturity childhood to maturity of adulthood.

Adolescence is divided into

1. Early adolescence (12 to 13 yrs)
2. Middle adolescence (14 to 18yrs)
3. Late adolescence (17 to 19yrs)

**Marlow D .R.,(2006)**

**Precocious puberty** occurs when the girl sexually matures and menstruates before ninth year, some define the age of 10 years. Delayed puberty is taken when sexual maturity and menstruation do not ensue before the age of 16 years. These abnormalities in puberty are described as adolescent gynaecology.

Dawn C.S.,(2000)

### **Physiological changes of puberty**

#### **A. Sexual maturation:**

This means development of ovary, secondary sex organs and secondary sex characteristics. Ovary and uterus on attaining growth maturity start functioning. Uterine function manifests as first onset of menstruation. This development occurs in stages.

Tanner (1969) described five stages of breast maturation in female.

- Stage I-** Childhood, Elevation of papilla
- Stage II-** Breast bud stage- a small mound at breast
- Stage III-** Further breast growth with increase of areolar size/
- Stage IV-** The areola and nipple form a second mound projecting above the contour of the breast.
- Stage V-** The mature breast. Areola recedes leaving only the projecting nipple.

#### **B. Physical growth:**

Skeletal growth spurt starts at pre pubertal stage, reaches its maximum prior to menarche. Before and after pre pubertal growth spurt average height gain comes to 5 cm/year. Arrest of growth occurs by attaining 18 years.

### **C. Psychosexual maturity:**

The puberal girl manifests psychological and behavioural changes. She becomes moody, develops personality and gets interests in her appearance. Her intelligence improves.

### **D. Menarche:**

This is the age of onset of first menstruation. This signals establishment of puberty which is not yet complete. The menarche occurs between 10 - 16 years. The mean age of menarche is 13 - 14 years in India. The age of menarche and also puberty depends on genetic factors and environmental experiences. Therefore, the factors influencing menarche are family tree, race, social class, diet and nutrition and environment.

**Dawn C.S.,(2000)**

## **MANAGEMENT OF PUBERTY**

### **Nutrition**

Adequate balanced diet is very important.

### **Environment**

This is equally important. Proper immunization in infancy, good housing and sanitation, open air play and exercises, rest and freedom from disease are to be emphasized.

### **Sex education**

The girl should be educated of the significance of menstruation and development of secondary sex characters as normal manifestations of womanhood so that she does not develop psychological upset. She should be educated about the implication of premarital sexuality which may result in illegitimate pregnancy and sexually transmitted disease.

She should be educated about the self- protection and moral code of the healthy society where marriage permits sexuality but premarital sexuality weakens the society. Throughout the period of puberty (from 8 to 16 years) the girl is to be gradually sex educated on the items as mentioned. Of all the instructors on sex education viz. Sociologist, educational television programme, school nurses, and curriculum of sex education in the school educational course, and parents, the knowledgeable parents and their behavior can impart the most useful sex education to a girl or a boy. The age of marriage should never be before 18 years when girl matures. From the point of population control, girl's minimum age of marriage should be 21 years.

Dawn C.S.,(2000)

## **NORMAL MENSTRUATION**

### **Clinical features**

Menstruation is normal body function. Most women get only vaginal bleeding for 3-5 days with no discomfort. However around one quarter women get menstrual discomforts. These discomforts do not interfere with usual day's activity. Only 5-10 % develops during some part in there about 30 years menstrual life painful menses interfering day's activities (Dysmenorrhoea).

### **Symptoms**

1. Feeling of heaviness and discomfort in the pelvis, lower abdomen and in the small of the back.
2. Feeling of pricking and fullness in the breasts
3. Frequency of urination and constipation
4. Feeling of lassitude, irritability, and headache

## **Signs**

1. Sudden drop of temperature of about 1 F but with individual variations.
2. Pulse rate and blood pressure tend to drop.
3. Gain in weight occurs during premenstrual fortnight upto about 1 kg. Due to retention of water and salt; it occurs in about half of women. There is loss of weight with the onset of flow
4. Menstrual loss: The Vaginal menstrual bleeding mainly arterial, partly venous is a dark reddish liquid (not clotted) blood with shed endometrial tissue bits. The discharge has disagreeable smell due to the secretion of vulvar sebaceous glands and decomposition of blood elements.

## **Interval and duration**

The menstrual cycle lasts on an average twenty eight days. A deviation of 2- 3 days can be frequently encountered. The extremes of 21 and 35 days interval may also be found. In any womens menstrual life, the interval can vary.

## **OBJECTIVES**

The main objectives of Reproductive Health is

- ❖ To improve the welfare of the girl especially in regard to Health, nutrition and education

## **CHARACTERISTICS OF ADOLESCENCE**

- Peek intelligence
- Good Stamina
- Emotional instability
- Confused about identity
- Lack of self control

**Manivannan C., (2009)**



## **REPRODUCTIVE DEVELOPMENT**

Physiologic readiness for child bearing begins during intrauterine life; full function is initiated at puberty when the hypothalamus synthesizes and releases Gonadotrophin releasing factor stimulator, which in turn triggers the anterior pituitary to release Follicle stimulating hormone and Luteinizing hormone. FSH and LSH initiate the production of androgen and estrogen, which in turn initiate visible signs of maturity or secondary sexual characteristics.

**Dawn C.S.,(2000)**

### **Pubertal development**

Puberty is the stage of life at which secondary sex changes begin. Girls are beginning dramatic development and maturation of reproductive organs at earlier ages than ever before (9 to 12 years; for boys, 12- 14 years)

### **Secondary sex characteristics**

Adolescent sexual development has been categorized into stages. There is wide variation in the time that adolescents move through these developmental stages; however, the sequential order is fairly constant. In girls, pubertal changes typically occur as follows:

1. Growth spurt
2. Increase in the transverse diameter of the pelvis
3. Breast development
4. Growth of pubic hair
5. Onset of Menstruation
6. Growth of axillary hairs
7. Vaginal secretions

The average age at which menarche (the first menstrual period) occurs is 12.5 years. It may occur as early as age 9 or as late as age 17, however, and still be within a normal age range.

### **Sexuality and Sexual Identity**

Sexuality is a multidimensional phenomenon that includes feelings, attitudes, and actions. It has both cultural and biologic components. It encompasses and gives direction to person's physical, emotional, social, and intellectual responses throughout life. Each person is born a sexual being, and his or her gender identity and gender role behavior evolve from and usually conform to the societal expectations within the person's culture. Nurses can play a major role in promoting sexual health through education and discussion.

### **Development of Gender Identity in adolescent**

Whether gender identity arises from primarily a biologic or psychosocial focus is controversial. The amount of Testosterone secreted in utero (a process termed sex typing) may affect this characteristic.

At puberty, as the adolescent begins the process of establishing a sense of identity, the problem of final gender role identification surfaces again. Most early adolescents maintain strong ties to their gender group; boys with boys, girls with girls. The advent of menstruation may provide a common bond for girls at this stage. Some adolescents choose a child of their own gender a few years older than themselves to use as their model of gender role behavior.

## **For promotion of reproductive and sexual health**

### **Assessment**

Problems of sexuality or reproductive health may not be evident on first meeting a client because it may be difficult for the person to bring up the topic until he or she feels more secure. Good follow-through and planning is important because a person may find the courage to discuss a problem once but then be unable to do so again. If the problem is ignored or forgotten through a change in caregivers, it may never be addressed again.

Any change in physical appearance (such as happens with puberty or with pregnancy) can intensify or create asexual or reproductive concern. The person with sexually transmitted disease (STD), excessive weight loss or gain, a disfiguring scar from surgery or an accident, hair loss such as occurs with chemotherapy, surgery, or inflammation or infection of reproductive organs, chronic fatigue or pain, Spinal cord injury, or the presence of a retention catheter needs to be assessed for problems regarding his or her sexual role as well as other important areas of reproductive functioning.

This may not be a routine part of every health assessment. However, it should be included when appropriate, such as when discussing adolescent development or before providing reproductive life planning information, during pregnancy or after child birth. At other times, it is wise to listen for verbal or nonverbal clues that suggest a person wants to discuss a sexual or reproductive concern.

**Dawn C.S.,(2000)**

## **REPRODUCTIVE HEALTH PROBLEMS**

The major reproductive health problems among adolescent girls are RTI and STIs

## **REPRODUCTIVE TRACT INFECTIONS**

### **Reproductive tract infections**

The most common reproductive health problems among girls are reproductive tract infections. The 11 common reproductive tract infections are bacterial, viral and sexually transmitted diseases.

### **Vaginal infections**

Some of the viral infections are as follows

- Bacterial vaginosis
- Trichomoniasis
- Candidiasis

Worldwide the most common vaginal infections are bacterial vaginosis, caused by anaerobic bacteria including *Gardnerella vaginalis*;

### **Signs and symptoms**

- ✓ Bad smelling vaginal discharge
- ✓ Foamy, yellowish vaginal discharge
- ✓ Itching
- ✓ Discomfort
- ✓ Sometimes thick, white discharge with itching and swelling

### **Treatment**

All are treatable with antibiotics or other drugs.

**Lampert R.,(2009)**

## **Bacterial STDs**

Some of the bacterial STDs are

- Chancroid
- Chlamydia
- Gonorrhoea
- Syphilis

These infections are mainly caused by the bacterial organisms.

## **Signs and symptoms**

- Sores develop that are painful and tender when touched.
- Genital or oral areas are the most common infection sites.
- A sparse, clear discharge from the urethra, painful urination and blood in the urine, may result.
- Symptoms include redness on the cervix, vaginal discharge and pelvic pain.

## **Treatment**

It can be cured with antibiotics. The presence of bacterial STD increases the risk of HIV transmission.

**Lampert R.,(2009)**

## **Viral STDs**

Some of the viral STDs are as follows

- AIDS
- Herpes simplex
- Human papilloma
- Hepatitis B

These infections are caused by viruses

## **Signs and symptoms**

- ✓ Fever
- ✓ Chills
- ✓ Sores or blisters in genitalia
- ✓ Burning and itching sensation with redness
- ✓ Nausea, stomach pain, loss of appetite and headache

## **Treatment**

According to the signs and symptoms the diseases are treated either by antibiotics or by the follow up guidelines by the physician.

**Lampert R.,(2009)**

## **CANDIDIASIS:**

Candidiasis is an infection caused by the species of the yeast candida, usually the candida albicans fungus. Candida is found on various parts of the bodies of almost all normal people but causes problem in only a few. Candidiasis can affect the skin, nail, and mucous membranes throughout the body including the mouth (thrush), esophagus, vagina (yeast infection), intestines and lungs.

**Sims J.,(2008)**

## **DESCRIPTION:**

Candida is a common cause of vaginal infections in adolescent girls, especially when the normal population of the bacteria Lactobacilli have been reduced due to antibiotic use, allowing the over growth of candida. A candidiasis infection in the vagina results in itching, burning, soreness, and thick and white vaginal discharge.

Other risk factors for candidiasis include obesity, heat and excessive sweating that result in the formation of moist skin areas where the yeast organism can grow.

## **DEMOGRAPHICS**

Over 1 million adult women and adolescent girls in the united states develop vaginal yeast infection each year. It is not life threatening, but the condition can be uncomfortable and frustrating.

**Lampert R., (2009)**

## **CAUSES AND SYMPTOMS**

Candidiasis is caused by the species of the yeast *Candida*, usually the the *Candida albicans* fungus. Most adolescent girls with candidiasis experience severe vaginal itching and have a discharge that often look like cottage cheese and has a sweet or bread- like odor. The vulva and vagina can be red, swollen, and painful. The infected skin in diaper rash that includes infection with *Candida* appears fiery red with areas that may have a raised red border.

## **DIAGNOSIS:**

Often clinical appearance and visual examination give a strong suggestion about the diagnosis. Generally, a doctor takes a sample of the vaginal discharge or swabs an area of oral or skin lesions, and then inspects this material under microscope, where it is possible to see characteristic forms of yeasts at various stages in the lifestyle.

## **TREATMENT:**

Treatment of candidiasis is primarily accomplished through the use of antifungal drugs. In the most cases, vaginal candidiasis can be treated successfully with a variety of over the counter antifungal creams

or suppositories, including Monistat Gyne-Lotrimin, and Mycelex. However, infections often recur. If an adolescent girl has frequent recurrences, she should consult her doctor about prescription drugs such as Vagistat-1, Diflucan and others.

### **ALTERNATIVE TREATMENT**

Home remedies for vaginal candidiasis include vinegar douches or insertion of a paste made from Lactobacillus acidophilus powder in to the vagina. In theory these remedies make the vagina more acidic and, therefore, less hospitable to the growth of candida. Fresh garlic (*Allium sativum*) is believed to have antifungal action, so incorporating it into the diet or inserting gauze- wrapped, peeled garlic clove in to the vagina may be helpful. The insert to be changed twice daily.

### **PREVENTION**

Often candidiasis can be prevented through good sanitation procedures, such as keeping the body cool and dry, wearing natural fabric underclothes, changing underclothes frequently, wiping from front to back after bowel movements, and washing hands often.

**Lampert R.,(2009)**

### **SEXUALLY TRANSMITTED DISEASES**

The sexually transmitted diseases are a group of communicable diseases that are transmitted predominantly by sexual contact and caused by a wide range of bacterial, viral, protozoal and fungal agents.

WHO estimate that at least 340 million new cases of STD other than HIV occurred in 1999. Minimal estimates of yearly incidence for four major bacterial STD are :



### **Bacterial STD -**

Gonorrhoea - 62 million

Syphilis - 92 million

Chancroid - 7 million

### **Viral STD -**

Genital herpes - 20 million

Genital human papilloma

Virus infection - 30 million

### **CONTROL OF STDs**

The aim of the control programme for STD is the prevention of ill health resulting through various interventions. These interventions may have a primary prevention focus. The control of STD may be considered under the following headings.

- Initial planning
- Intervention strategies
- Support components
- Monitoring and evaluation

#### **1. Initial planning**

The initial planning to control STD are as follows:

- Problem definition
- Establishing priorities
- Setting objectives
- Considering the strategies

## **2. Intervention Strategies**

- Case detection

Case detection is an essential part of any control programme.

- Case holding and treatment
- Epidemiological treatment
- Personal prophylaxis
- Health education

**Park K (2009)**

## **3. Support components**

The support components are as follows

- STD clinic
- Laboratory services
- Primary health care
- Social welfare measures

## **4. Monitoring and evaluation**

### **REPRODUCTIVE AND CHILD HEALTH PROGRAMME**

Reproductive and child health approach has been defined as “people have the ability to reproduce and regulate their fertility, women are able to go through pregnancy and child birth safely, the outcome of pregnancies is successful in terms of maternal and infant survival and well being, and couples are able to have sexual relations free of fear of pregnancy and of contracting diseases.

The RCH phase I programme incorporated the components relating child survival and safe motherhood and included two

additional components, one relating to reproductive tract infections, and other relating to sexually transmitted diseases.

Family planning	Child survival and safe motherhood component
Client approach to health care	Prevention / management of RTI / STD AIDS

### **RCH PACKAGE**

**Park K (2009)**

#### **HIGHLIGHTS OF RCH PROGRAMME**

The main highlights of the RCH programme are:

1. The programme integrates all interventions of fertility regulation, maternal and child health with reproductive health for both men and women.
2. The services to be provided are client oriented, demand driven, high quality and based on needs of community through decentralized participatory planning and target free approach.
3. The programme envisages upgradation of the level of facilities for providing various interventions and quality of care.
4. Facilities of obstetric care, MTP and IUD insertion in the PHCs level are improved.

**Park K (2009)**

#### **REPRODUCTIVE HEALTH PROGRAMME**

Reproductive health programme was launched in Indian on 15<sup>th</sup> October 1997 envisages provision of client centered, need based, good quality, integrated RCH services for improving the health of women and children.

## **PARADIGM SHIFT**

Under the RCH program all aspects of women's reproductive health across their reproductive cycle, from puberty to menopause are covered. RCH programme addresses the needs that have emerged over years of implementing Family Welfare programme. As opposed to the Family Welfare programme, the RCH programme aims to be more in tune with the ground realities concerning.

- Overall health needs of women and children
- Implementation needs of health workers
- Local demographic needs and conditions

Under the programme the emphasis shifted to decentralize planning at district level based on assessment of community needs and implementation of the programme at fulfillment of these need. New interventions such as control of reproductive tract infection, gender issues, male participation and adolescent health in addition to the services offered under the CSSM and the family Welfare programme are also taken up.

## **COMPONENTS**

1. Effective maternal and child health programme
2. Increased access to contraceptive care
3. Safe management of unwanted pregnancies
4. Nutritional services to vulnerable groups
5. Prevention and Treatment of RTI/STI
6. Reproductive health services for adolescents
7. Prevention and treatment of Gynecological problems
8. Screening and Treatment of cancers; especially uterine, Cervical and breast.

## **FACTORS AFFECTING REPRODUCTIVE HEALTH**

The factors affecting reproductive Health are as follows:

1. Economic circumstances
2. Education
3. Employment
4. Living condition
5. Family environment

## **PREVENTING REPRODUCTIVE TRACT INFECTIONS IN ADOLESCENT GIRLS**

1. Encourage a healthy reproductive tract by eating well and avoiding excessive sugar, which can contribute to bacterial vaginosis and candidiasis (Yeast over growth) in your body. Use antibiotics only when absolutely necessary and eat yogurt and garlic to encourage healthy bacteria and discourage opportunistic bacteria from growing in the vaginal tract. Eat uncooked fermented vegetables and home made sauerkraut to improve the quality and quantity of good bacteria in your body
2. Avoid unnecessary medical procedures or surgeries, including induced menstrual regulation, IUD insertions and induced abortion, which can introduce an infection into the uterus or vagina. These iatrogenic infections are caused by medical intervention that either disturbs bacteria already present, moving it further up the reproductive tract, or brings in harmful outside bacteria.
3. Have intercourse only with your spouse and avoid sexually transmitted diseases and infections by remaining sexually faithful to your one partner for life. Many, if not most, Serious reproductive

tract infections in women are sexually transmitted. Knowing this is critical to staying healthy.

4. Schedule regular gynecological exams to test for reproductive tract infections. Have them treated as promptly and prevented them from worsening.

### **National Health Goals**

A number of national Health goals speak directly to reproductive and sexual health. Here are some of them:

- Reduce the proportion of adolescents who have engaged in sexual intercourse to no more than 15% by age of 15 from a baseline of 27% of girls and 33% of boys
- Increase to at least 50% the proportion of sexually active, unmarried people who used a condom at last sexual intercourse from a baseline of 2.8 per 100,000
- Reduce deaths from the cancer of the uterine cervix to no more than 1.3 per 100,000 women from a baseline of 2.8 per 100,000
- Reduce breast cancer deaths to no more than 20.6 per 100,000 women from a baseline of 23 per 100,000

## **PART - II**

### **STUDIES RELATED TO REPRODUCTIVE HEALTH**

The reviewed literature studies related to reproductive health has been divided under the following heading

#### **STUDIES RELATED TO KNOWLEDGE ON REPRODUCTIVE HEALTH**

**Shiyue L.et.al.,(2010)** conducted a study to explore demographic correlates of sexual and reproductive health knowledge among Chinese female college students. The main aim of the study was to assess the knowledge and attitude of adolescent girls towards reproductive health problems in bilaspur. The sample consists of randomly selected adolescent girls in the age group of 15 - 19 years. The findings revealed that about two- third (75.6%) of the girls were aware about all the signs of adolescence and (88.8%) were about the need for healthy life. Majority (80%) had idea about various aspects of sex education.

**Lek S.A.C., (2010)** conducted a study to investigate knowledge, attitude and behaviour of adolescent about reproductive health in the population of Belgrade. The study comprised of 292 students from 3 secondary schools in Belgrade. The semi structured questionnaire about adolescent knowledge, attitudes and behaviour about reproductive health was filled in by themselves in presence of investigator. The findings revealed that 70.5% of adolescent showed the medium level of knowledge about reproductive health. The results of the study indicate the need for more intensive and comprehensive educational programmes in the area of reproductive health for adolescents.

**Pac A.J.,(2010)** conducted a study to correlates of sexual and reproductive health knowledge among female college students, China. The study participants were 4769 female students. By using random cluster sampling the samples were selected. To evaluate knowledge, the scores of 60 questions on reproduction, contraception and sexually transmitted infections were taken. The findings revealed that average mean score was 42.6. Female college students lack knowledge of sexual and reproductive health and their knowledge were influenced by numerous socio demographic factors.

**Nevins D .et.al.,(2009)** conducted a study on sources of sexual and reproductive health information among the adolescents in Jamaica. By using multi stage stratified cluster sampling techniques the samples are selected. The questions included 57 item questionnaires to assess adolescent awareness of sexual and reproductive health. The data were analyzed using the statistical package. The study findings showed that mean age of respondents was 12.8 for boys and girls. Television (76.9%), radio (55.4%) and guidance counsellors (55.2%) were the most common source of sexual and reproductive health. So the electronic media was the leading source of sexual and reproductive health messages.

**Ayalew T.et.al.,(2008)** conducted cross sectional study to assess the reproductive health knowledge, attitude among adolescent of age 15 to 19 years in Jimma town, southwest Ethiopia in 2004. A structured questionnaire was utilized to collect the data from the sampled population. Adolescent aged between 15 to 19 years old were interviewed about their knowledge and attitudes regarding health services for reproductive health. Descriptive and bivariate analyses using t-test were employed to depict results. The results showed that



majority of adolescent knew major health services for reproductive health and the main health services providers of reproductive health.

**Ghule M.,(2006)** conducted a study in order to assess the awareness and view about reproductive health as well as sexual behaviour of rural adolescent girls in Bihar. About 1500 student out of which 800 were males and 700 were female adolescent. The study revealed that the student lack scientific information and had misconception widespread as various reproductive health issues. The study conducted on various aspects such as conception, menstrual cycle, HIV transmission and about sexual life. The findings revealed that (83%) of boys and girls expressed the need to introduce sex education in schools and colleges. Girls were found less knowledgeable as compared to the boys on reproductive health issues.

**Tiwari H.et.at.,(2000)** conducted a study to assess the knowledge, attitude and belief about reproductive health among adolescent girls of 11 - 17 years in Gujarat. The knowledge of the adolescent girls was assessed by administering questionnaire. The study was mainly concentrating about menarche. The findings revealed that (38.5%) felt comfortable about menarche and only (31%) believed that menstruation was a normal physiological process. (37.2%) had not been informed about menarche before its onset and (48.2%) were not mentally prepared. Therefore adolescent girls were having inadequate knowledge on reproductive health.

**Verma M.et.al.,(2001)** conducted a study to assess the knowledge and attitude regarding sex, pregnancy and child rearing among adolescent girls in Ludhiana. Total number of samples was about 2500

college girls. The knowledge of the college girls were assessed with the help of pre - tested questionnaire .The study findings revealed that (35.5%) of girls known about the site of menstruation, (16.3%) of girls knew the normal route of delivery, (67.5%) girls were aware of ideal timing of abortion, but the safe method and legality were poorly known factors. An overwhelming of majority of adolescent girls stated that they would like to learn about them preferably in college education. It was recommended that education should be provided during adolescent age to ensure a safe motherhood and healthy child.

**Sivakumar. N et. al.,(2004)** conducted an experimental study on the effectiveness of structured teaching program in improving knowledge and attitude of school going adolescents on reproductive health in Dharan town of Nepal. The structured teaching programme consisting of information on human reproductive system was used as a tool of investigation for the experimental group whereas the conventional teaching method was used for the control group. A total of 200 adolescent school students were included, the study pretest score is less compound to post test score. Hence the study findings revealed that use of structured teaching program is effective in improving knowledge and attitude of the adolescents on reproductive health.

**Catholic Association .,(2000)** conducted a study to assess the knowledge, attitude and practices of adolescents about reproductive health in a secondary school .A sample of 1670 boys and 1675 girls were studied through a self administered questionnaire. The adolescents were asked about puberty, marriage, birth spacing, AIDS and sexually transmitted infections. The findings showed that only (50%) know the changes of puberty of their own sex. About 2/3<sup>rd</sup> of the adolescents had

a positive attitude toward modern contraceptive methods. Knowledge of fertility period and sexually transmitted infections were poor.

## **STUDIES RELATED TO REPRODUCTIVE HEALTH PROBLEMS IN ADOLESCENT GIRLS**

**Biol P. J.et.al., (2010)** conducted a study on attitude towards HIV/AIDS among high school students in Shiraz city. 600 students were selected as study participants. The samples were selected by using stratified random sampling method. The data was collected by giving self administered questionnaire on the dimensions of knowledge, emotion and tendency to action. The study findings revealed that the students did not have enough knowledge about HIV/AIDS. The results indicated that attitude for 69.8% of student has in middle level, 15.4% positive and 14.9% are negative attitude towards HIV/AIDS.

**Anwar M .et.al.,(2010)** conducted a cross sectional study on sexually transmitted infections and their sexual behaviour among school student in Pulau pinang, Malayasia. Students from form 4(aged between 15 to 16 years), form 5 (aged between 16to 17 years) and form 6 (aged between 18 to 20 years) in their classrooms were approached and asked to complete self administered questionnaires. The data was collected from 1139 students aged between 15 to 20 years. 10.6% of which claimed that they never heard about STIs. Mean knowledge score was 11.60, (S.D+8.781) and knowledge level was significantly associated with religion ( $p=0.005$ ), education level ( $p=0.000$ ). Interventions such as assessing the current status of sexuality education in schools and arranging public talks and seminars on STIs prevention are needed to improve their awareness.

**Joshi B.N.et.al., (2006)** conducted a survey to assess their reproductive health problems and help seeking behaviour among urban school going adolescents in Egypt. A sample of 300 urban school going adolescent between 11 - 14 years were chosen at randomly and assessed using four tools namely, self administered questionnaire, provision of adolescent friendly services, medical screening and focus group discussion. The study findings revealed that (72%) girls and (28%) boys reported health problems during the survey with an average only 23% of girls and 35% of boys reported to the clinic voluntarily to seek help which reflects a poor health seeking behaviour. Therefore medical checkup with emphasis on assessment of reproductive health problems as reported by them in survey.

**Sharma P. et.al., (2008)** conducted the survey to study the types and frequency of problems related to menstruation in adolescent girls. 198 adolescent girls were included in the study. Data was collected by personal interviews on a pre tested semi - structured questionnaire. The questions covered on menstrual problems, regularity of menses in last three cycles of menstruation and the effect of these problems. The findings revealed that mean age of study participants was calculated to be around 16 years. Dysmenorrhoeal (67.2%) was the commonest problem and (63.1%) had one or other symptoms of pre - menstrual syndrome. Mothers and friends were the most common source of information on the issues.

**Nayak J. et.al., (2002)** conducted a survey among adolescent of 12 -20 years of age in south Delhi. The main aim of this survey was to reduce the incidence of adolescent pregnancy, unsafe abortion and sexually transmitted diseases in India. The sample size was 236

adolescents. The findings of the study found that wide spread lack of knowledge about reproduction sexually transmitted diseases and lack of comfort in discussing sexuality among majority of the respondents.

**Chang P. J.et.al.,(2009)** conducted a study to explore the risk factors in reproductive health among nursing college students, Taiwan.1300 female nursing students were included as a study participants. Data was collected by providing structured questionnaire for each student. A total of 1095 healthy students were included in the analysis. The questionnaire was based on menarche; body mass index, psychiatric stress and physical exercise on menstrual cycle .The findings revealed that menarche at the age of 14 years or later may be an important risk factor for menstrual dysfunction. So early menarche might be related to menstrual dysfunction in addition to late menarche, obesity and psychological stress. Moreover obese students are at the highest risks for longer cycles and cycle irregularity.

**Sequeria J. S., (2008)** conducted to assess the knowledge and attitude towards AIDS, sexuality among college students in thiruvananthapuram district, kerala. A community based, cross sectional survey of 625 randomly selected understanding college students (164 boys, 461 girls age 18-22 years) was conducted. A pre tested structured questionnaire was used to assess the knowledge attitude of students towards AIDs, STDs and sexuality. Result showed that all the students in this sample had heard about AIDS. Only 45% knew that AIDS is not curable at present. 34% were aware of the symptoms of STD and 47% knew that STD is associated with an increased risk of AIDS. The study identified substantial lacunae in the

knowledge and attitude towards AIDS, STDs and sexuality, among college students in Kerala.

### **STUDIES RELATED TO KNOWLEDGE AND ATTITUDE ON SEX EDUCATION:**

**Tasnim S .et.al.,(2009)** conducted a quasi experimental study to assess talking about sexuality at secondary schools of periurban area of Dhaka city. The main objective of the study was to determine the effect of introducing an education booklet on reproductive health knowledge among the adolescents. Total numbers of respondents were 1,490. The findings showed that there is a greater proportion of adolescents could correctly narrate the physiological changes of adolescence, duration of menstrual cycle, fertile period, leucorrhoea and masturbation. About 95% stated that the education booklet was necessary.

**Julie W. H., (2008)** conducted a study to determine the knowledge of human sexuality, physiology of reproduction and contraception among first year college girls in Bangalore. It includes the sexual parental education and socioeconomic background on their level of awareness. Samples of 30 females from three girls' colleges were selected. The data was collected by providing the provided questionnaire. The findings showed that 59% possessed adequate knowledge regarding sexual matters and was positively related to educational status of their parents and residence in hostel. The investigator emphasized the significance of incorporating sex education in to school curricula so that girls acquire correct knowledge from reliable and socially acceptable success later than from pornography

**Philip J.,(2006)** conducted a study on knowledge and acceptance of sex education at Agbo-oba Nigwa among adolescents.178 females and 152 males were participated in the study. Knowledge and attitudes towards sex education was collected from adolescent girls and boys by administering questionnaire. 63.4% of the male respondent and 70.2% of female respondents knew about sex education.

**Pavlvn S. et .al., (2005)** conducted a study to assess the knowledge and attitude towards sex education among secondary school teachers in Enugu. A cross sectional study of 300 teachers drawn from nine randomly selected secondary schools in Enugu metropolis. Pre-tested self administered structured questionnaire was used as instrument for data collection. The findings showed that 23% had adequate knowledge on sex education & 94% approved the inclusion of sex education into the school curriculum. The commonest reason for disapproval of sex education was few that it would lead to promiscuity among the students .The most appropriate age to introduce sex education according to the teacher was 11-15 years. So the secondary school teachers are in support of provision of sex education to students. So that there is need to include sex education in the school curriculum.

**Sodhi S., (1998)** conducted a comparative study on level of awareness about AIDS in Chandigarh. The study participants were 110 females of 14 - 18 years of age in urban and rural areas in Chandigarh. The findings showed that 84.4% of urban and 90.3% of rural students agreed that sex education they received in school was inadequate.67.2% and 63.3% urban and rural students respectively, identified AIDS as an infected disease. It was indicate that students had acquired information

about AIDS was inaccurate and hence there was a need for school based education programme.

**Hand A., (2002)** conducted a study on sex education for adolescent girls in South Delhi. The study participants were 90 boys and 90 girls from 3 public high schools. The questionnaire was based on knowledge of male and female reproductive system, sexual growth, development during puberty, socio - cultural aspects of sex, sexual depression, sexual behaviour, sexual disorder and diseases. The findings showed that friends and mass media were students main sources of information on human sexuality. 53% of students have inadequate knowledge on sex education. All of the students argued that there is need to teach young children about human sexuality.



## **CHAPTER - III**

### **METHODOLOGY**

Methodology of study includes approach and design of the study, setting of the study, population, criteria for sampling, sample size, instrument and scoring procedure, developing and testing of the tool, method of data collection and plan for data analysis

#### **RESEARCH APPROACH**

The descriptive approach was used to conduct the study.

#### **RESEARCH DESIGN**

Non experimental descriptive survey design was adopted to assess the knowledge and attitude of adolescent girls regarding reproductive health.

#### **RESEARCH SETTING**

The study was conducted at higher secondary schools in Dharapuram like Government girls higher secondary school, C.S.I. girls higher secondary school, Aloysius higher secondary school, sindhu matriculation school, Vishnu lakshmi matriculation school and centwin higher secondary school. The sections and the total number of each sections of these higher secondary schools are as follows:

In Government girls higher secondary school there two sections in IX standard and three sections in XI standard. In IX standard 42 students in A section and 38 students in B section, in XI standard 40 students in A section, 37 students in B section and 14 students in C section.

In Aloysius girls higher secondary school there are five sections in IX standard and three sections in XI standard. In IX standard 68 students in A section, 53 students in B section, 35 students in C section, 35 students in D section and 28 students in E section, in XI standard 82 students in A section, 64 students in B section and 33 students in C section.

In C.S.I. girls higher secondary school there are four sections in IX standard and four sections in XI standard. In IX standard 38 students in A section, 30 students in B section, 20 students in C section, 25 students in D section, in XI standard 30 students in A section, 28 students in B section, 33 students in C section and 12 students in D section.

In Sindhu matriculation higher secondary school there are five sections in IX standard and three sections in XI standard. In IX standard excluding the boys the total girls in each section are explained 18 students in A section, 22 students in B section, 19 students in C section, 17 students in D section and 16 students in E section, in XI standard 22 students in A section, 28 students in B section, 15 students were in C section.

In Centwin matriculation higher secondary school there are four sections in IX standard and three sections in XI standard. In IX standard excluding the boys the total girls in each section are explained. 18 students in A section, 17 students in B section, 12 students in C section, 11 students in D section, in XI standard 13 students in A section, 12 students in B section, 15 students were in C section.

In Vishnulakshmi matriculation higher secondary school there are two sections in IX standard and two sections in XI standard. In IX

standard excluding the boys the total girls in each section are explained.13 students in A section and 18 students in B section, in XI standard 17 students in A section and 19 students in B section.

## **POPULATION**

The populations of the study are adolescent girls from higher secondary schools at Dharapuram.

## **SAMPLE**

Sample consists of adolescent girls of age group 13-16 years.

## **CRITERIA FOR SAMPLE SELECTION**

### **Inclusion criteria**

1. Adolescent girls studying in both English and Tamil medium.
2. Adolescent girls who are willing to participate in the study.
3. Adolescent girls who have attained menarche.

### **Exclusion criteria**

1. Adolescent girls who are absent during data collection period.

## **SAMPLE SIZE**

Sample size consists of 300 adolescent girls.

## **SAMPLING TECHNIQUE**

Stratified random sampling technique was used in this study to select the samples. According to the inclusion criteria the students are selected from each section for both IX and XI standard. Then the total number of students in all sections in IX standard are divided into five stratum. From the each stratum by using lottery method five samples are selected. The same method was continued for XI standard and for remaining schools.

## **INSTRUMENT AND SCORING PROCEDURE**

Instruments consist of three parts.

### **Part - I**

Structured questionnaire which contains demographic variables such as age, religion, family income, type of family, residence, educational status of the mother and medium of instruction.

### **Part - II**

A structured knowledge questionnaire consists of 30 multiple choice questions. Each question has got four options. It was prepared covering the various aspects regarding knowledge of reproductive health includes functions of reproductive system, fertilization and embryo, sex education, puberty and pubertal changes, physiological changes in puberty, menstrual cycle, menstrual hygiene, reproductive health problems, care during dysmenorrhoea and contraception.

### **Part - III**

Five point likert scales was used to assess the attitude of reproductive health among adolescent girls. It contains 10 positive statements and 5 negative statements.

## B). SCORING PROCEDURE

### PART - II

Structured knowledge questionnaire.

The multiple choice questions were used to assess the knowledge regarding reproductive health. A score of one (1) was given to each correct response. A score of zero (0) was given to wrong response. The total score was 30.

### Interpretation

Level of knowledge	Score	Percentage
Inadequate	0-10	<33%
Moderately adequate	11-20	34-66%
Adequate	21-30	67-100%

### Part - III

Five point likert scales consist of 15 statements to assess the attitude of adolescent girls regarding reproductive health. Total score is 75.

Response	Positive scoring	Negative scoring
Strongly agree	5	1
Agree	4	2
Uncertain	3	3
Disagree	2	4
Strongly disagree	1	5

<b>Level of attitude</b>	<b>Score</b>	<b>Percentage</b>
Favorable attitude	51-75	> 66%
Moderately favorable attitude	26-50	34 - 66%
Unfavorable attitude	0-25	< 33%

## **VALIDITY AND RELIABILITY OF THE TOOL**

### **Validity**

The validity of the tool was established in consultation with guide and minimum four experts in the field of gynecological nursing. The tool was modified according to the suggestion and recommendation of the experts.

### **Reliability**

#### **(i) Structured knowledge questionnaire**

The reliability of structured knowledge questionnaire was assessed by testing for stability and internal consistency. The Stability was assessed by test retest method using Karl Pearson co efficient formula. The value was found to be reliable ( $r = 0.9$ ) Internal consistency was assessed by using split half method where the spear man's brown prophecy formula was used. The value was found to be reliable ( $R=0.9$ ).

#### **(ii) Five point likert scale**

The reliability of structured attitude questionnaire was assessed by testing of the stability and internal consistency. The stability was assessed by test retest method using Karl Pearson co efficient formula. The value was found to be reliable ( $r=0.9$ ). Internal consistency was

assessed by using cronbach's alpha method was used .The value was found to be reliable ( $\alpha =0.8$ ).

## **PILOT STUDY**

The Pilot study was conducted for a period of 7 days after obtaining permission from the Chief educational officer, Tirupur and headmaster of the school in Thalavaipatinam higher secondary school.The oral consent was obtained from each sample. The purpose of the study was explained to the samples prior to the study. The study was conducted for 30 samples. Samples were selected by using stratified random sampling method.Total students are divided into stratum.15 students from IX standard and 15 students in XI standard are selected. First day the samples are selected. Second day questionnaire was given to the selected samples. Data was analyzed by using descriptive and inferential statistics. The findings of the study showed that mean and standard deviation of knowledge score was 12.6(S.D $\pm$ 2.64) and mean attitude score was 28.83(S.D $\pm$ 3.6).There was a positive correlation between knowledge and attitude(  $r=0.9$ ). The findings of pilot study showed that it was feasible to conduct the main study.

## **DATA COLLECTION PROCEDURE**

The data collection was done in six higher secondary schools in Dharapuram. The data was collected for a period of five weeks from 300 samples. Before conducting the study, permission was obtained from the chief educational officer, Tirupur and head of the schools.

The purpose of the study was explained to the subjects prior to the study. Oral consent was obtained from the samples. Purposive sampling techniques were used to select the schools and stratified

random sampling methods were used to select the samples. The data was obtained from Monday to Friday during the working hours. Each week one school was selected and in last week two schools were selected. From each school 50 samples were selected as study participants. In that 25 samples from IX standard and 25 samples from XI standard was selected. The population is divided into stratum by dividing equally into five stratum. From each stratum 5 samples were selected randomly by lottery method. 10 students were selected per day and the questionnaire was given. 45 minutes was spent for the samples each day for data collection. The same method was continued for remaining schools. The knowledge and attitude of the adolescent girls on reproductive health was assessed by self administered knowledge questionnaire and five point likert scale. After collecting the data from each school the Self instructional module on reproductive health was developed, validated and distributed to all the samples. Finally the data was analyzed using descriptive and inferential statistics to find the level of knowledge and attitude regarding reproductive health among adolescent girls.



## PLAN FOR DATA ANALYSIS

The data collected was analyzed by using descriptive and inferential statistics. The data analysis was done as follows:

S. No	Data analysis	Method	Purpose
1	Descriptive Statistics	Frequency percentage	To describe the demographic variables of adolescent girls
		Mean, standard deviation	To assess the knowledge and attitude of adolescent girls regarding reproductive health.
		Karl pearson Correlation	To determine the relationship between knowledge and attitude regarding reproductive health among adolescent girls.
2	Inferential statistics	Chi square test	To find association between knowledge scores among adolescent girls with selected demographic variables. To find association between attitude scores among adolescent girls with selected demographic variables

## **PROTECTION OF HUMAN SUBJECTS**

The proposed study was conducted after approval of dissertation committee. The permission was obtained from the chief educational officer, Tirupur and head of the schools at Dharapuram. Oral consent of samples was obtained before starting data collection. Confidentiality and privacy was maintained through out the study.

## CHAPTER – IV

### DATA ANALYSIS AND INTERPRETATION

This chapter deals with the analysis and interpretation of the data collected to assess the knowledge and attitude regarding reproductive health among adolescent girls.

Data were collected from 300 adolescent girls in selected schools, Dharapuram using self administered questionnaire. The data were obtained analyzed and presented under the following headings.

#### **ORGANIZATION OF DATA**

The data has been organized and tabulated as follows:

Section A: Distribution of demographic Variables.

Section B: Assessing the knowledge and attitude scores of adolescents girls regarding reproductive health.

Section C: Correlation of knowledge scores with attitude scores of adolescent girls.

Section D: Association of knowledge scores regarding reproductive health with their selected demographic Variables of adolescent girls.

Section E: Association of attitude scores regarding reproductive health with their selected demographic Variables of adolescent girls.

## Section A

### Distribution of demographic variables

Table: 1 Frequency and Percentage distribution of adolescent girls according to their demographic variable n = 300

SL. No	Demographic Variables	Frequency	Percentage (%)
1	<b>Age</b>		
1.1	13 - 14 years	158	53%
1.2	15 - 16 years	142	47%
2	<b>Religion</b>		
3.1	Hindu	168	56%
3.2	Christian	114	38%
3.3	Muslim	18	6%
3.4	Others	-	-
3	<b>Family Income</b>		
3.1	below Rs.3000	44	15%
3.2	Rs.3001 - 5000	156	52%
3.3	Rs.5001- 10,000	83	28%
3.4	above Rs.10,000	17	5%
4	<b>Type of Family</b>		
4.1	Nuclear family	239	77%
4.2	Joint family	61	23%
5	<b>Residence</b>		
5.1	Urban	214	71%
5.2	Rural	86	29%

<b>6</b>	<b>Educational Status of the Mother</b>		
6.1	Primary education	6	2%
6.2	Secondary education	172	57%
6.3	Higher secondary education	108	36%
6.4	Graduates	14	5%
<b>7</b>	<b>Medium of Instruction</b>		
7.1	English	200	67%
7.2	Tamil	100	33%

The table 1 shows that distribution of adolescent girls according to their demographic variables.

The majority of the adolescent girls 158 (53%) were belonged to group of 13 - 14 years, 142(47%) were belonged to 15 - 16 years of age.

The data showed that the highest number 168(56%) adolescent girls were Hindus, 114 (38%) adolescent girls were Christians and few 18 (6%) adolescent girls were Muslims.

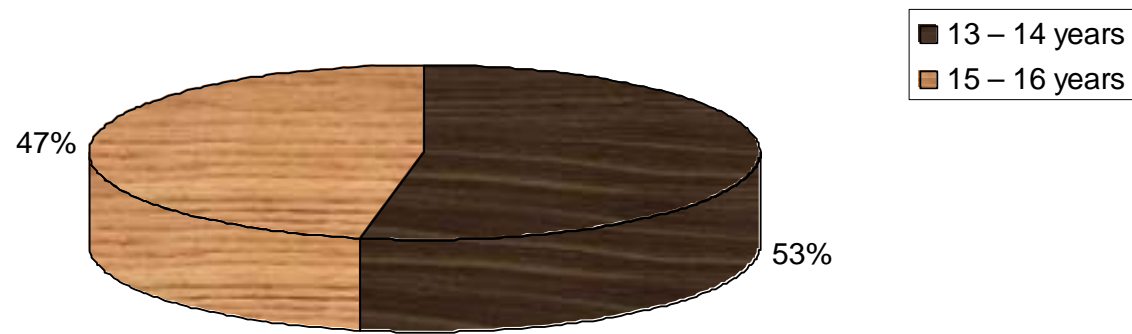
There were 44(15%) adolescent girls family income belongs to the group of below Rs.3000, 156 (52%) belongs to the income of Rs.3001-5000, 83(28%) belongs to the income of Rs.5001-10,000and very few of 17(5%) belongs to the income of above 10,000.

Majority of the adolescent girls 239(77%) belonged to nuclear family. Few 61(23%) of the adolescent girls belong to joint family.

Majority of the adolescent girls 214(71%) were residing in urban. Few 86(29%) of the adolescent girls were in rural areas.

There were 6(2%) adolescent girls mother who had primary education, 172(57%) adolescent girls mothers studied secondary education, 108(36%) adolescent girls mothers studied higher education, 14(5%) adolescent girls mothers were graduates.

Majority of the adolescent girls 200(67%) were studying in English medium and 100(33%) were studying in Tamil medium



**AGE**

Fig: 2 Percentage distribution of adolescent girls according to their age

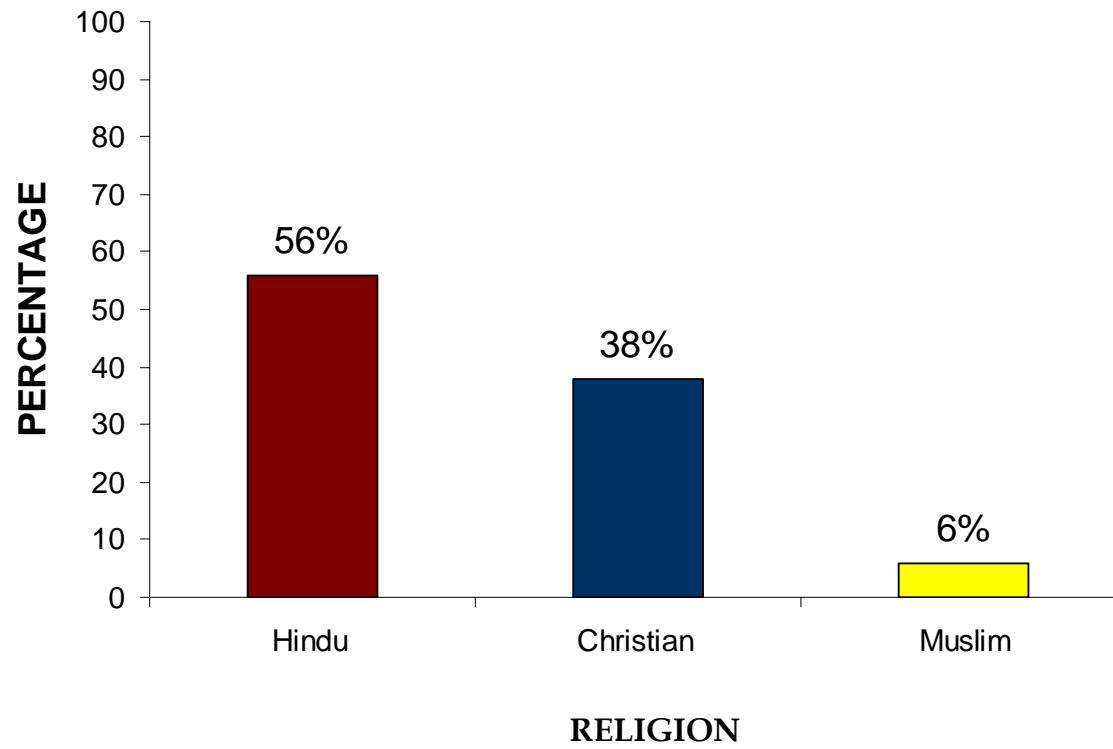


Fig: 3 Percentage distributions of adolescents girls according to their religion.



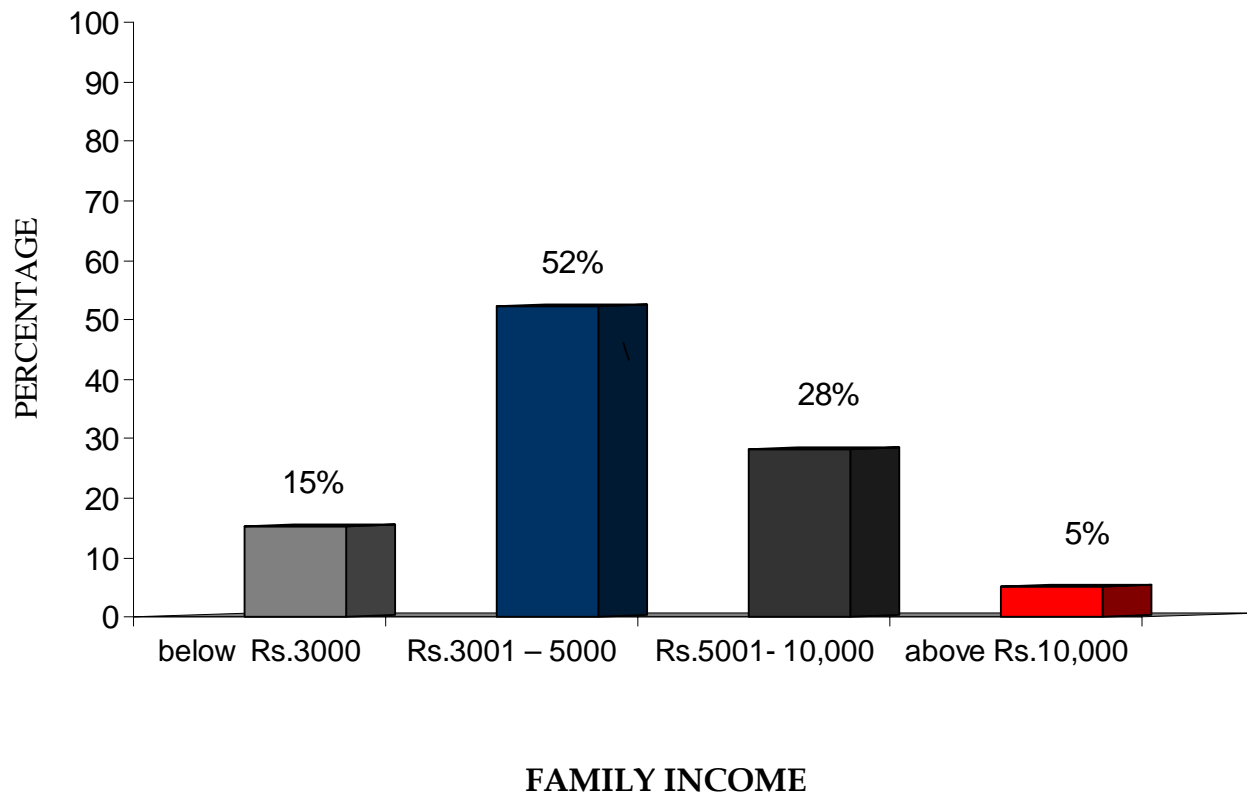
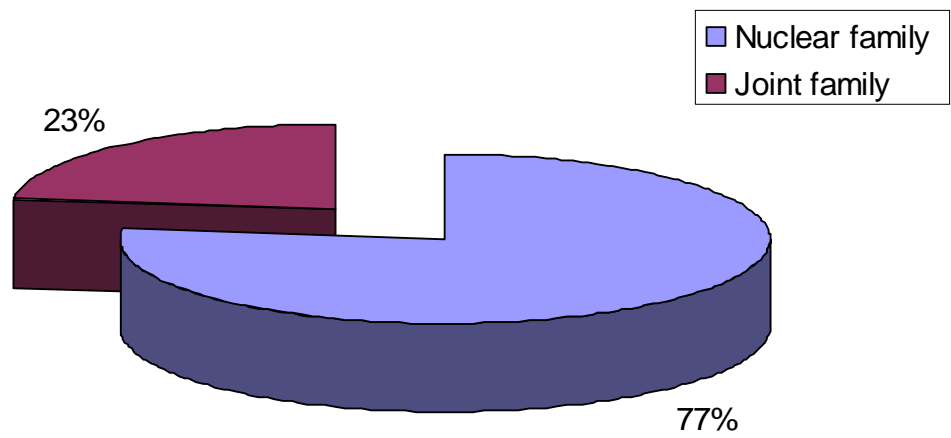
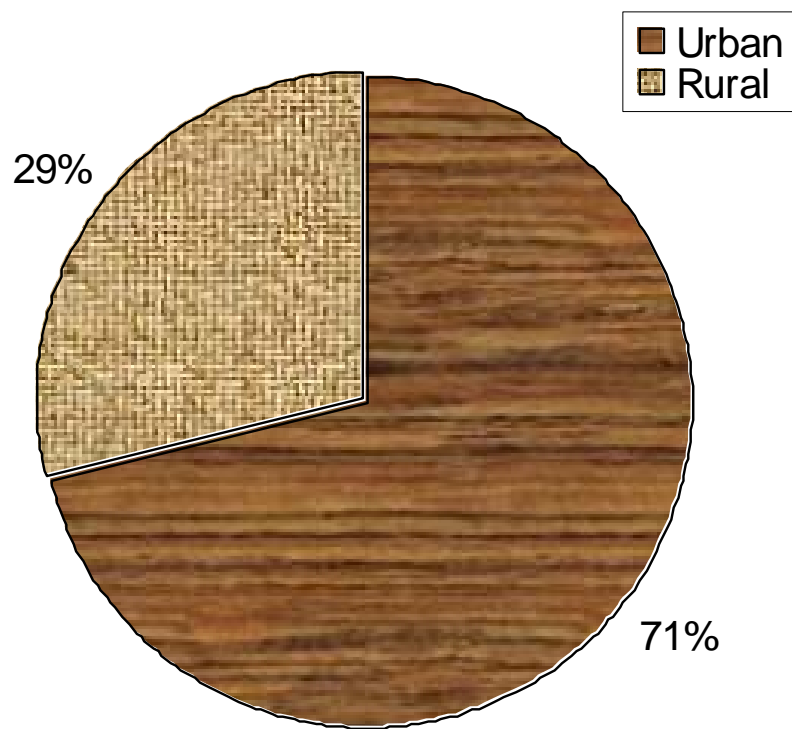


Fig: 4 Percentage distributions of adolescents girls according to their family income.



**TYPE OF FAMILY**

Fig: 5 Percentage distributions of adolescents girls according to their type of family



**RESIDENCE**

Fig: 6 Percentage distributions of adolescents girls according to their residence

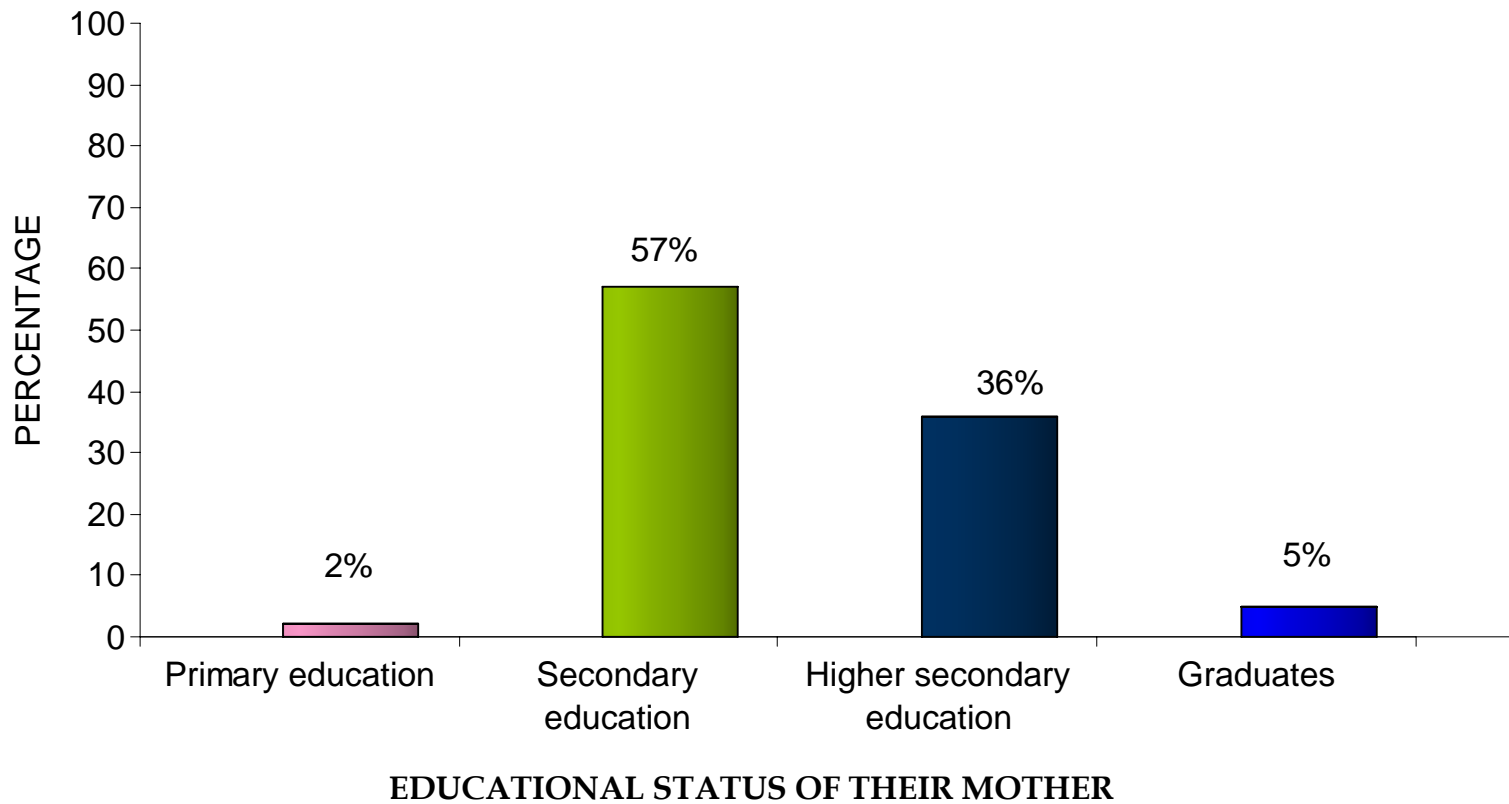
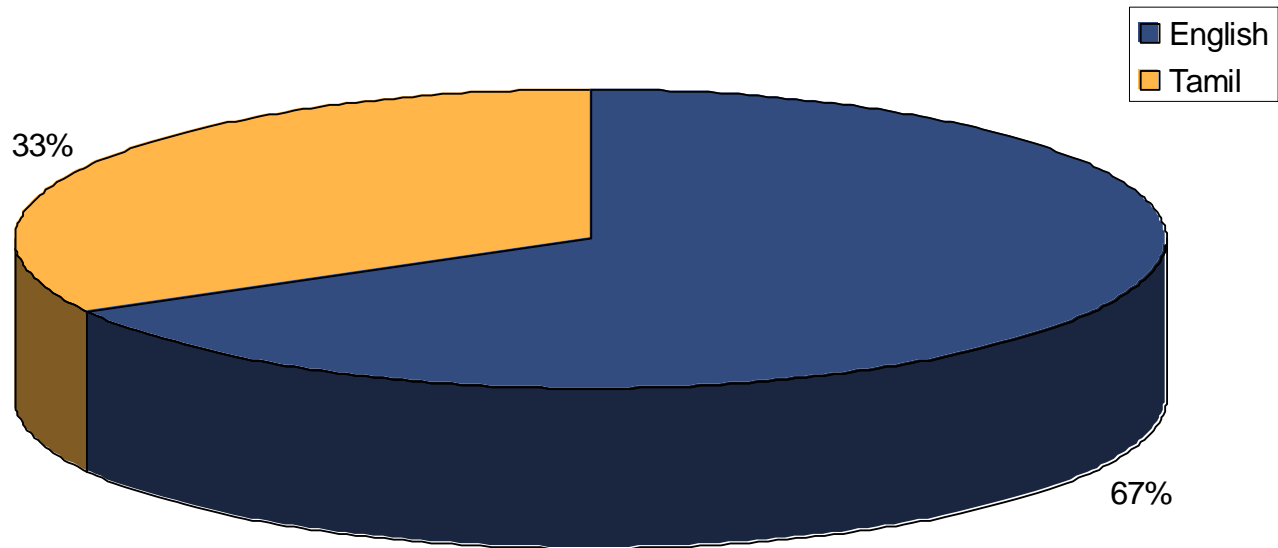


Fig: 7 Percentage distributions of adolescents girls according to their educational status of their mother



**MEDIUM OF INSTRUCTION**

Fig: 8 Percentage distributions of adolescent girls according to their medium of instruction

## Section - B

**Assessing the knowledge scores of adolescent girls regarding reproductive health.**

**Table 2:** Frequency and percentage of knowledge scores regarding reproductive health among adolescent girls

<b>Level of knowledge</b>	<b>F</b>	<b>%</b>
Adequate Knowledge	-	-
Moderately Adequate Knowledge	263	88%
Inadequate Knowledge	37	12%
Total	300	100%

Table: 2 showed that 37 (12%) had inadequate knowledge and 263(88%) had moderately adequate knowledge regarding reproductive health.



Fig: 9 Percentage distributions of knowledge scores regarding reproductive health

**Table: 3** Area wise analysis scores for knowledge regarding reproductive health

Sl. No	Areas in knowledge questions	Score	Mean	Standard deviation	Mean percentage
1.	Definition	2	1	0.73	50
2.	Anatomy and physiology of female reproductive system	9	4.036	1.571	44.8
3.	Fertilization and embryo	2	0.87	0.75	43.5
4.	Puberty and pubertal changes	2	0.59	0.76	29.5
5.	Menstrual cycle	4	1.85	0.81	46.25
6.	Menstrual hygiene and practice	3	1.29	0.88	43
7.	Reproductive health problems	3	1.40	0.84	43.3
8.	Contraception	5	2.41	1.277	42.2
	Total	30	13.116		

Table: 3 Showed that the area wise analysis of mean, SD, mean percentage of knowledge score of reproductive health that out of total score 30, the highest mean score in the area of anatomy and physiology of female reproductive system was 4.036 (SD±1.5) which is of 44.8%, where as in the area of puberty and pubertal changes showed the lowest mean score was 0.59 (SD±0.76) which is of 29.5% and the other area revealed in the definition is 1(SD±0.73) which is of 50%,fertilization and embryo 0.87(SD±0.7) which is of 43.5%, menstrual cycle 1.85(SD±0.85) which is of 46.25%, in menstrual hygiene and practice 1.29(SD±0.88) which is of 43%,in reproductive health problems



1.40 (SD±0.84) which is of 43.3%, in contraception 2.41(SD±1.277) which is of 42.2%. The findings revealed that the students had the highest mean percentage knowledge score (46.25%) in the area of menstrual cycle and had lowest mean percentage knowledge score (29.5%) in the area of puberty and pubertal changes.

**Table: 4** Frequency and percentage of attitude scores regarding reproductive health among adolescent girls

<b>Level of Attitude</b>	<b>F</b>	<b>%</b>
Favorable attitude	-	-
Moderately favorable attitude	281	94%
Unfavorable attitude	19	6%
Total	300	100

Table 3 showed that 19 (6%) had Unfavorable attitude, 281(94%) had moderately favorable attitude regarding reproductive health among adolescent girls.

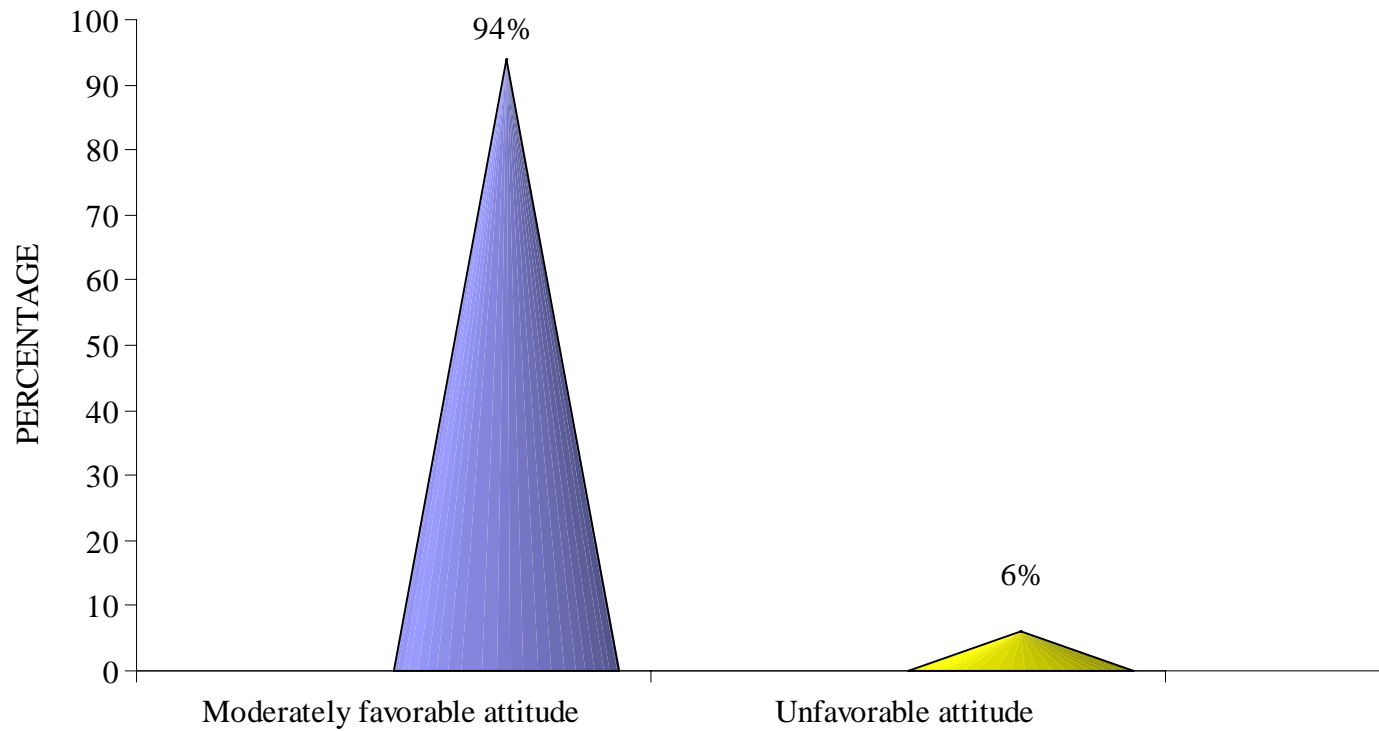


Fig: 10 Percentage distributions of attitude scores regarding reproductive health

### SECTION- C:

**Correlation of knowledge scores with attitude scores regarding reproductive health among adolescents girls.**

**Table: 5.** Correlation of knowledge and attitude scores regarding reproductive health among adolescents girls.

n = 300

S.No	Variable	Mean scores	Standard deviation	Co Efficient of co - relation	Table Value
1	Knowledge	13.17	4.54	0.60	0.113
2	Attitude	31.25	5.65		

df = 299

(p< 0.05)

**Table 5** Showed that mean and standard deviation score of knowledge and attitude regarding reproductive health were 13.17 (SD  $\pm$  4.54) and 31.25(SD $\pm$ 5.65) and there was positive correlation (r = 0.60) of knowledge and attitude regarding reproductive health among adolescent girls at p< 0.05

## Section - D

### Association of knowledge scores regarding reproductive health with their selected demographic variables.

**Table 5:** Association of knowledge scores regarding reproductive health among adolescent girls with their selected demographic variables

n=300

Demographic Variables		Level of knowledge						$\chi^2$	Table Value	Inference
		Adequate		Moderately adequate		Inadequate				
		No	%	No	%	No	%			
1	<b>Age</b>									
1.1	13 -14 yrs	-	-	134	45%	24	8%	2.49 df=1	3.84	(N.S)
1.2	15 - 16yrs	-	-	129	43%	13	4%			
2	<b>Religion</b>									
2.1	Hindu	-	-	149	50%	19	6%	7.7 df=3	7.81	(N.S)
2.2	Christian	-	-	102	34%	12	4%			
2.3	Muslim	-	-	12	4%	6	2%			
2.4	Others	-	-	-	-	-	-			
3	<b>Family Income</b>									
3.1	Below Rs.3000	-	-	39	13%	5	2%	9.54 df=3	7.81	(S)
3.2	Rs.3001 - 5000	-	-	137	46%	19	6%			
3.3	Rs.5001-10,000	-	-	76	25%	7	2%			
3.4	Above Rs.10,000	-	-	11	4%	6	2%			
4	<b>Family Type</b>									
4.1	Nuclear family	-	-	210	69%	29	10%	0.04 df=1	3.84	(N.S)
4.2	Joint family	-	-	53	18%	8	3%			

Demographic Variables		Level of knowledge						$\chi^2$	Table Value	Inference
		Adequate		Moderately adequate		Inadequate				
		No	%	No	%	No	%			
5	<b>Residence</b>									
5.1	Urban	-	-	200	67%	14	4%	23.02	3.84	(S)
5.2	Rural	-	-	63	21%	23	8%	df=1		
6	<b>Educational Status of the Mother</b>									
6.1	Primary education	-	-	3	1%	3	1%	8.173 df=3	7.81	(S)
6.2	Secondary education	-	-	153	51%	19	7%			
6.3	Higher secondary education	-	-	95	32%	13	3%			
6.4	Graduates	-	-	12	4%	2	1%			
7	<b>Medium of Instruction</b>									
7.1	English	-	-	186	62%	14	4%	15.73	3.84	(S)
7.2	Tamil	-	-	77	26%	23	8%	df=1		

NS = Not Significant, S - Significant

P < 0.05

Table 5 shows the Chi - square values of association between knowledge among adolescents girls with their demographic variables like Age, Religion, Family income, Type of family, residence, Educational status of the mother and medium of instructions regarding reproductive health.

The findings revealed that there was significant association between knowledge scores of adolescents with their demographic variables regarding such as family income( $\chi^2=9.54$ ), educational status of the mother( $\chi^2=8.173$ ), medium of instruction ( $\chi^2=15.73$ ) and residence( $\chi^2=23.02$ ) and there is no significant association was found between knowledge scores when compared to age, religion, and type of family regarding reproductive health.

## Section - E

**Association of attitude scores regarding reproductive health among adolescents girls with their selected demographic variables.**

**Table: 6**

Association of attitude scores regarding reproductive health with their selected demographic variables.

n=300

Demographic Variables		Level of Attitude						$\chi^2$	Table Value	Inference
		Unfavourable		Moderately favourable		Favourable				
		No	%	No	%	No	%			
1	<b>Age</b>									
1.1	13 -14 yrs	6	2%	152	51%	-	-	3.66	3.84	(N.S)
1.2	15 - 16yrs	13	4%	129	43%	-	-	df=1		
2	<b>Religion</b>									
2.1	Hindu	8	2%	160	54%	-	-	23.5 df=3	7.81	(S)
2.2	Christian	5	2%	109	37%	-	-			
2.3	Muslim	6	2%	12	3%	-	-			
2.4	Others	-	-	-	-	-	-			
3	<b>Family Income</b>									
3.1	Below Rs.3000	6	2%	38	13%	-	-	6.975 df=3	7.81	(N.S)
3.2	Rs.3001 - 5000	9	3%	147	49%	-	-			
3.3	Rs.5001-10,000	2	1%	81	27%	-	-			
3.4	Above Rs.10,000	2	1%	15	5%	-	-			
4	<b>Family Type</b>									
4.1	Nuclear family	14	5%	225	75%	-	-	0.43 df=1	3.84	(N.S)
4.2	Joint family	5	1%	56	19%	-	-			



Demographic Variables		Level of Attitude						$\chi^2$	Table Value	Inference
		Unfavourable		Moderately favourable		Favourable				
		No	%	No	%	No	%			
5	<b>Residence</b>									
5.1	Urban	13	4%	201	66%	-	-	0.06	3.84	(N.S)
5.2	Rural	6	2%	80	26%	-	-	df=1		
6	<b>Educational Status of the Mother</b>									
6.1	Primary education	2	1%	4	1%	-	-	15.27 df=3	7.81	(S)
6.2	Secondary education	6	2%	166	55%	-	-			
6.3	Higher secondary education	8	2%	100	34%	-	-			
6.4	Graduates	3	1%	11	3%	-	-			
7	<b>Medium of Instruction</b>									
7.1	English	7	2%	193	65%	-	-	7.84	3.84	(S)
7.2	Tamil	12	4%	88	29%	-	-	df=1		

NS = Not Significant, S - Significant

P < 0.05

Table 6 shows the Chi - square values of association between knowledge among adolescents girls with their demographic variables like Age, Religion, Family income, Type of family, residence, Educational status of the mother and medium of instructions regarding reproductive health.

The findings revealed that there was significant association between attitude scores of adolescents with their demographic variables such as religion ( $\chi^2=23.5$ ), educational status of the mother ( $\chi^2=15.27$ ), medium of instruction ( $\chi^2=7.84$ ) and there is no-association between attitude scores when compared to age, family income, residence and, family type regarding reproductive health.

## **CHAPTER - V**

### **DISCUSSION**

The discussion chapter deals with description of sample characteristics and objectives of the study. The aim of this present study was to assess the knowledge and attitude regarding reproductive health among adolescent girls in selected schools at Dharapuram.

#### **Description of demographic variables of adolescent girls**

Percentage distribution of adolescent girls according to their age Majority of the adolescent girls 158 (53%) were belonged to group of 13 - 14 years, 15- 16 years adolescent girls were 142 (47%).

Percentage distribution of adolescent girls according to their religion the highest 168 (56%) were Hindus, 114 (38%) of adolescent girls were Christian and 18 (6%) of adolescent girls were Muslims.

Percentage distribution of adolescent girls according to their family income there were 44 (15%) of their income earning below Rs.3000, 156 (52%) of them were earning Rs.3001 - 5000, 83 (28%) had income Rs.5001 - 10,000 and 17(5%) of them belongs Rs.10, 000 and above income group.

Percentage distribution of adolescent girls according to their family type Majority of the adolescent girls 239 (77%) were belonged to nuclear family, 61 (23%) of adolescent girls belonged to joint family.

Percentage distribution of adolescent girls according to their residence Majority of the adolescent girls 214 (71%) were belonged to urban area , 86 (29%) of the adolescent girls belongs to rural area.

Percentage distribution of adolescent girls according to their educational status of the mother were 6 (2%) of their mother had primary education, 172 (57%) of the adolescent girls mother studied secondary education, 108 (36%) of the adolescent girls mother studied higher secondary education and 14 (5%) of their mother were graduates.

Percentage distribution of adolescent girls according to their medium of instruction Majority of the adolescent girl 200 (67%) were belonged to English medium, 100 (33%) of the adolescent girls belongs to Tamil medium.

The findings of the study were discussed according to the objectives as follows,

1. To assess the level of knowledge regarding reproductive health among adolescent girls.
2. To assess the level of attitude regarding reproductive health among adolescent girls.
3. To correlate the knowledge and attitude regarding reproductive health among adolescent girls.
4. To find the association of knowledge score among adolescent girls regarding reproductive Health with their selected demographic variables.
5. To find the association of attitude score among adolescent girls regarding reproductive Health with their selected demographic variables.

## **1. Assess the level of knowledge of adolescent girls on reproductive Health**

The data analysis showed that, the assessment of knowledge regarding reproductive health among 300 adolescents revealed 37 (12%) had inadequate knowledge, 263(88%) had moderately adequate knowledge regarding reproductive health. The area wise analysis knowledge score of anatomy and physiology of female reproductive system is 4.036 (SD±1.5) which is of 44.8%,where as in the area of puberty and pibertal changes showed the lowest mean score 0.59(SD±0.76) which is of 29.5% and the other areas revealed in the definition is 1(SD±0.73)which is of 50%,fertilization and embryo 0.87(SD±0.7) which is of 43.5%, menstrual cycle 1.85(SD±0.85) which is of 46.25%, in menstrual hygiene and practice 1.29(SD±0.88) which is of 43%,in reproductive health problems 1.40(SD±0.84) which is of 43.3%, in contraception 2.41(SD±1.277) which is of 42.2%. The findings revealed that the students had the highest mean percentage knowledge score (46.25%) in the area of menstrual cycle and had lowest mean percentage knowledge score (29.5%) in the area of puberty and pubertal changes.

It revealed that there was a need for creating awareness regarding reproductive health problems. This findings are consistent with the study findings **Lek S A (2010)** where (70.5%) had medium knowledge about reproductive health.

## **2) Assess the attitude regarding reproductive health among adolescent girls**

The data analysis showed that in assessing the attitude regarding reproductive health among 300 adolescents 281 (94%) had moderately favorable attitude, 19 (6%) had Unfavorable attitude regarding reproductive health.

This findings was supported by the study conducted by **Biol Sci B J (2010)** attitudes regarding the reproductive health and HIV/AIDS. The study results revealed 69.8% had moderately favorable attitude regarding reproductive health,(15.4%) had favorable attitude and (14.9%) had unfavorable attitude

**3) Correlate the knowledge and attitude regarding reproductive health among adolescent girls.**

The data analysis revealed that the relationship between knowledge and attitude score of reproductive health among adolescent girls showed that there is a positive correlation ( $r=0.60$ ) between knowledge score and attitude score of adolescent girls regarding reproductive health.

This findings was supported by the study conducted by **Syed S J (2006)** to find the correlation of knowledge and attitude regarding the reproductive health and HIV/AIDS. The study results revealed that there was a correlation between knowledge and attitude among adolescent girls.

Hence the research  $H_1$ =There will be a significant relationship between knowledge score and attitude score regarding reproductive health among adolescent girls was accepted.

**4) Find the association between the level of knowledge regarding reproductive health with their selected demographic variables.**

The study showed that there was statistically significant association between the level of knowledge when compared to family income( $\chi^2=9.54$ ),educational status of the mother ( $\chi^2=8.173$ ), residence( $\chi^2=23.02$ ),medium of instruction( $\chi^2=15.73$ ),demographic

variables such as age, religion and family type had no significant association with knowledge score.

The study findings was consistent with study of **Anwar M. et.al.(2010)** who had conducted a study to assess the knowledge regarding sexual and reproductive health among 1139 female college students . The study findings showed a significant association between the knowledge scores regarding reproductive health, with their selected demographic variables. Sexual experience was found to be significantly associated only with gender ( $p=0.030$ ). Mean knowledge score was 11.60 (S.D $\pm$  8.781) respectively. Therefore the research H<sub>2</sub>= There will be a significant association between knowledge score regarding reproductive health among adolescents girls with their selected demographic variables, was accepted except for age, religion, family type.

**5) Find the association between the level of attitude regarding reproductive health with their selected demographic variables.**

The study showed that there was statistically significant association between the level of Attitude with religion ( $\chi^2=23.5$ ), educational status of the mother ( $\chi^2=15.27$ ), medium of instruction ( $\chi^2=7.84$ ) other demographic variables such as age, family type, family income and residence had no significant association with attitude score.

This finding was supported by the study conducted by **Syed S J (2006)** to find the knowledge and attitude regarding the reproductive health and HIV/AIDS. The study results revealed that there is a significant association in relation to their education ( $p=0.000$ ), while there was not significant association in relation to their age ( $p= 0.410$ )

Therefore the research H<sub>3</sub>= There will be a significant association between attitude score regarding reproductive health among adolescents girls with their selected demographic variables, was accepted except age, residence, family income, family type.



## **CHAPTER – VI**

### **SUMMARY, CONCLUSION, IMPLICATIONS, RECOMMENDATIONS AND LIMITATIONS**

#### **Summary of the study**

The focus of the study was to assess the knowledge and attitude regarding reproductive health among adolescent girls in selected schools, Dharapuram.

The design used for the present study was Non experimental descriptive design. The conceptual framework was based on Nola J Pender's Health promotion model. The samples were selected by stratified random sampling technique and were assessed for level of knowledge and attitude regarding reproductive health using self administered questionnaire and five point likert scale.

The data were analyzed using descriptive statistics and inferential statistics. The study findings revealed that there was moderately adequate knowledge and moderately favourable attitude regarding reproductive health.

#### **Major findings of the study**

- Out of 300 samples 158 (53%) were in the age group of 13 -14 years.
- Majority 168(56%) of the adolescent girls were Hindus.
- Most of them 239(77%) belonged to nuclear family.

- Majority 172(57%) of the adolescent girls mothers had secondary education.
- Majority 156 (52%) of them belonged to the monthly income of Rs.3001 - 5000
- Most of them 214 (71%) belonged to urban area.
- Majority 200(67%) of the adolescent girls had their medium of instruction as English.
- Majority 263(88%) of the adolescent girls had moderately adequate knowledge regarding reproductive health.
- The area wise analysis knowledge score of anatomy and physiology of female reproductive system is 4.036 (SD±1.5) which is of 44.8% showed the highest mean score, where as in the area of puberty and pubertal changes showed the lowest mean score 0.59(SD±0.76) which is of 29.5%.
- Majority 281(94%) of the adolescent girls had moderately favourable attitude regarding reproductive health.
- Positive correlation (0.60) was found between knowledge and attitude level( $p=0.05$ ) regarding reproductive health
- There was significant association found with knowledge and selected demographic variables such as residence, family income, educational status of the mother and medium of instruction.
- There was significant association found with attitude and selected demographic variables such as religion, educational status of the mother and medium of instruction

## CONCLUSION

The present study was conducted to assess the knowledge and attitude regarding reproductive health among adolescent girls in view of preparing self instructional module. The results showed that 263

(88%) had moderately adequate knowledge and 37(12%) had inadequate knowledge. In attitude 281 (94%) had moderately favourable attitude and 19(6%) had Unfavourable attitude. The mean and standard deviation for knowledge are 13.17(S.D± 4.54) and mean and standard deviation for attitude are 31.25 (S.D±5.65). Positive correlation (0.60) was found between knowledge and attitude level (p=0.05) regarding reproductive health respectively.

## **IMPLICATION OF NURSING**

The findings of the study have certain important implication for nursing service, nursing education, nursing administration and nursing research.

### **Nursing service**

- Nurses should be equipped with updated knowledge as care of adolescents with reproductive tract infection.
- In gynae OPD, the nurses have to give health education, counselling for adolescent girls regarding reproductive health

### **Nursing education**

- The nurse should be prepared to function in institutions as well as in the community for promoting optimal well being of the adolescent girls.
- The nurse educator should educate the nursing students to conduct the camps and create awareness among the adolescent girls regarding reproductive health problems.

### **Nursing administration**

- Today there is an increasing demand for quality care. Nursing administrators are in a key position to prepare policies and its execution of promoting reproductive health among adolescent girls.
- The nurse administrator should organize and conduct school health programme, medical camps in schools regarding reproductive health among adolescent girls.

### **Nursing research**

- The study findings can be utilized by the emerging researchers.
- The study findings can be a baseline for further studies to build upon.

### **RECOMMENDATIONS**

Based on the findings the following recommendations are stated.

1. Similar study can be replicated in a larger samples there by findings can be generalized to a large population.
2. Comparative study can be done among adolescent girls and boys in rural and urban settings.

### **LIMITATIONS**

Since the sample were selected through stratified random sampling other students were also eager to participate in the study

## **BIBLIOGRAPHY**

### **BOOK REFERENCE**

1. Barman,R.E.et.al.(1999).Nelsons **Essential of pediatrics**.(3<sup>rd</sup>ed).  
New delhi :E.B sunders company publication.pp.320-340
2. Bhave, S. Y.(2007). **Handbook of adolescent gynecology and ARSH**.(1<sup>st</sup>ed). Newdelhi: jaypee publishers.pp. 1 - 27
3. Best John, W. (1999). **Research in education**. (7<sup>th</sup> ed). New Delhi:  
Prentice hall of India. pp. 43-47
4. Burns, N. and Grons , S. K. (1997). **The practice of nursing research**. (2<sup>nd</sup> ed).Tokyo: Saunder's company pp. 35-40
5. 5.Donovan, P. (1993). **Sexually transmitted disease and the public health response**. (1<sup>st</sup> ed). New York: Alan Guttmacher  
Institute .pp.24-30
6. Fawcet, J. (1988). **Research and professionalism of nursing forum**. (1<sup>st</sup>ed). NewDelhi: Sterling Publishers.pp.10-18
7. George , J. B. (1995). **Nursing theory the base of professional nursing practice** .(4<sup>th</sup> ed). United States: Appleton and Lange  
publishers.pp.14-19.
8. Gupte ,S. (1998). **The short text book of pediatric**.( 9<sup>th</sup>ed). New  
Delhi: Jaypee brother. pp. 21-22
9. Gupta, P.(2002).**Essential paeditric nursing**.(2<sup>nd</sup> ed). New delhi :  
CBS publishers.pp.168 -170
10. Kerlinger , M. and Freed , N. (1983). **Foundations of behavioral research**. (1<sup>st</sup>ed). NewDelhi: Surjitpublication. pp.10-15
11. Kothari, C. R.(1996). **Research methodology, methods and techniques**. (2<sup>nd</sup> ed).NewDelhi: Wishwa Prakasham. pp. 49-53

12. Marlow, D.R. (2006). **Textbook of pediatric nursing** .(6<sup>th</sup> ed). New Delhi: Elsevier publication. pp.156-163
13. Park, K. (2009). **Preventive and social medicine**. (20<sup>th</sup> ed). Jabalpur: Bhanot publications. pp.274-80
14. Parthasarathi, M. (1999). **Textbook of pediatrics**. (3<sup>rd</sup> ed). New Delhi: Jaypee brothers publications .p.250.
15. Prabhu, V. (1998). **A text book on sex education to adolescents**. (1<sup>st</sup> ed). Bangalore: Prakasham. pp.35-43
16. Polit, D .F. and Hungler, B. P. (1999). **Essentials of nursing research**. Philadelphia: lippincott Company .pp.40-45
17. Potter, A.P. et.al. (1995). **Basic nursing theory and practice**. (8<sup>th</sup> ed). New delhi :Mosby publication. pp.255-257
18. Singh, K. (1990). **Methodology of research in education**. (1<sup>st</sup> ed.). New Delhi: Sterling Publishers. pp.32-37
19. Treece, E. W and Treece, T. T. (1982). **Elements of research in nursing**. (1<sup>st</sup> ed). New delhi :Louis CV Mosby Company. pp.20-30
20. Vincent, M. L. (1990). **Hand book of adolescent sexuality and pregnancy** (1<sup>st</sup> ed). California: Sage Publications .pp.10-21

#### JOURNALS REFERENCE

21. Aggarwal, C. et.al. (2000). Impact of rural training on physician work Force. **Journal of rural health** 1(9): 25-26
22. Bhasin, M. et.al. (1999). Perception of teachers regarding sex education in national capital territory. **Indian journal of pediatrics**. 5 : 527-531.
23. Bragg, N. et.al. (1997). Pregnant Adolescent With Addiction. **Journal of obstetric, gynecologic and neonatal nurses**. 1:57-59.

24. Fawset,C.et.al.(1988). Research and Professionalism Forum.**The practice of nursing research.** 3: 10-18.
25. Fitzgerald, B.et.al.(1999). Use of western based HIV risk reduction inter- vention targetting adolescents in an african setting. **Journal of adolescents.** 5: 52-61.
26. Herek ,M.et.al.(2002). HIV Related Stigma And Knowledge In Us Prevalence And Trend. **American journal of public .** 9: 371-376.
27. Khalid, B.et.al.(1994). Evolving Self Image, Pubertal Manifestation And Pubertal Hormones, Preliminary Findings In Young Adolescents Girls **Journal of adolescents health.**15: 327-335
28. Kirb ,Y.et.al.(2001). Research Findings On Programmes To Reduce Teenage Pregnancy. **National campaign to prevent teenage pregnancy .**3: 78-80.
29. Kumar, S. et.al.(2000). Impact Assessment Of School Based Sex Education Programme Amongst Adolescents. **Indian journal of pediatrics.**18: 551-558.
30. Lucita, M.(2009).Knowledge On Reproductive Healt. **Official Journal of trained nurses association of India.**1:49 - 50
31. Murphy,P.A.(2006).Reproductive health in 21<sup>st</sup>century.**Journal of midwifery and women's health.**51: 395-396
32. Manivannan, C.(2009).sex education among adolescent girls. **Nightingale nursing times,**4:48-5.
33. Oben, M.et.al.(1996).Youth And HIV. **An American agenda .**13:44-47.
34. Olds, P.et.al.(1986).Preventing Child Abuse And Neglect. **American Journal of public health.** 9:65-78.

- 35 Rosengard, E.et.al.(2004).Adolescents Pregnancy Intentions And Pregnancy Outcomes. **Journal of adolescents health**.16: 453-461.
36. Sharma, M.et.al.(1996). Sexual Knowledge And Practices Of College Girls In Rural Gujarat. **Journal of family welfare**. 17:19-26.
37. Thakor,L. et.al.(2000). Impact Assessment Of School Based Sex Education Programme among Adolescents. **Indian journal of pediatrics**.2: 52-60
38. Umadevi ,A.k.(2009).Young and their reproductive health. **Nightingale nursing times**.5:57 – 58
39. Velhel, C.et.al.(1955). AIDS.**Journal of India**. 12: 65-78
40. Vimil, H.et.al.(2002).Sexual health and practices in rural school. **Journal of family welfare**.2: 49-52

#### NET REFERENCE

41. <http://www.ncbi.nlm.nih.gov/pubmed>
42. <http://www.ajog.org/search/quick>
43. <http://journals/ww.com/jnr-twna/abstract/>
44. <http://www.everydayhealth.com/adolescentgirl/s>
45. <http://road.www.edu/road/glossers/345fallo4/girls>
46. <http://www.update.com/issues>
47. <http://www.issuesinmedical.org/163co/17.html>
49. <http://www.nic.in/nrbm.htm>
50. <http://www.ijcm.org.in/article.asp>
51. <http://www.sex education.org>
52. <http://www.contraception/associates.com/research>
53. <http://www.reproductive health./co>
54. <http://www.medscape.com>



55. <http://www.ncbi.nlm.nih.gov/pubmed>

56. [http://www.grannymed.com/adolescentgirls/reproductive health](http://www.grannymed.com/adolescentgirls/reproductivehealth)

**APPENDIX - A**



**BISHOP'S COLLEGE OF NURSING**

(C.S.I. Trichy - Tanjore Diocese)  
C.S.I. Mission Compound, **DHARAPURAM** - 638 656,  
Tirupur District.

☎ Off: **04258 - 221224**  
**223962**

Fax : **04258 221224**

E - Mail; principalbcn@sify.com

Ref: *BW/133/1/A/2009-2010*

Date: *07.04.2010*

To,

Chief Educational Officer,  
Tirupur.

*Handwritten signature and stamp in Tamil: மருத்துவக் கல்வித் துறை - திருச்சி - 641 604.*

Respected Sir,

This is to certify that Ms.S.Sophiya Rajakumari is a bonafide student of our college doing her M.Sc.,(N) programme II year. As part of her requirement under, The Tamil Nadu Dr.MGR. Medical University, Chennai, she has to do a project on "A descriptive study to assess the knowledge and attitude regarding reproductive Health among adolescent girls of Higher Secondary School in Dharapuram, with a view to develop an information booklet on reproductive Health".

Kindly permit her to carryout a study in the Dharapuram.

Thanking you,

Yours faithfully,

*Handwritten signature of the Principal.*

**PRINCIPAL,**  
**BISHOP'S COLLEGE OF NURSING,**  
**C.S.I.MISSION COMPOUND,**  
**DHARAPURAM-638 656,**  
**TIRUPUR DISTRICT**

## **APPENDIX – B**

### **LETTER REQUESTING EXPERTS OPINION FOR CONTENT VALIDITY**

**FROM:**

**MS.SOPHIYA RAJA KUMARI.S  
M.SC.NURSING II YEAR  
BISHOP'S COLLEGE OF NURSING  
DHARAPURAM.**

**TO:**

**SUB:** Requesting expert's opinion on content validity of the study to assess the knowledge and attitude regarding reproductive health among adolescent girls in selected schools, dharapuram in a view of preparing self instructional module

A tool has been developed to **assess the knowledge and attitude regarding reproductive health among adolescent girls in selected schools, Dharapuram in a view of preparing self instructional module.** This has been developed as a part of research work. Kindly evaluate my tool and give your opinion and suggestion will enable the investigator to modify the tool. I will be thankful and grateful for your kind consideration.

Thanking you

Yours Sincerely,

**(Ms. S.Sophiya Raja Kumari)**

**Encl:**

1. Certificate for content validity
2. Statement of Problem, Objectives, hypothesis
3. Description of the tool and tool for data collection
4. Self addressed envelope

**Principal**

## **APPENDIX – C**

### **OBSTETRICS AND GYNECOLOGICAL NURSING**

#### **LIST OF EXPERTS FOR VALIDATION**

- 1) **Mrs. Vijayalakshmi, M.sc (N),**  
Reader,  
Department of obstetrics and gynecological nursing,  
Vinayaga mission annapoorna college of nursing,  
Salem
  
- 2) **Ms.S.Padma , M.sc (N),**  
Associate professor  
Department of obstetrics and gynecological nursing  
Dhanvanthri college of nursing,  
Erode.
  
- 3) **Mrs. Annapoorna M.sc (N),**  
Reader,  
Department of obstetrics and gynecological nursing,  
R.V.S. College of nursing,  
Sulur.
  
- 4) **Ms. Sagayamary, M.sc (N),**  
Reader,  
Department of obstetrics and gynecological nursing,  
Annai meenakshi college of nursing,  
Madukarai  
Coimbatore.
  
- 5) **Dr.Deivamathi, M.B.B.S., D.G.O**  
Obstetrician and gynecologist  
Nevathetha hospital,  
Dharapuram.

## APPENDIX – D

### CERTIFICATE FOR VALIDITY

This is to certify that “A Descriptive study to assess the knowledge and attitude regarding Reproductive Health among adolescent girls of higher secondary school, Dharapuram and to develop an information booklet on reproductive Health” has been validated by me and found appropriate with mentioned suggestions.

Signature : K. Vijayalaxmi  
10/6/10

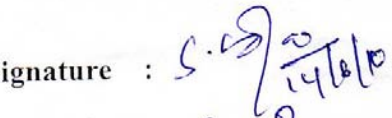
Name : K. VIJAYALAKSHMI.

Designation : ASST. PROFESSOR.

College : VINAYARA MISSIONS ANNAPOORAM  
COLLEGE OF NURSING,  
SACEM.


## CERTIFICATE FOR VALIDITY

This is to certify that "A Descriptive study to assess the knowledge and attitude regarding Reproductive Health among adolescent girls of higher secondary school, Dharapuram and to develop an information booklet on reproductive Health" has been validated by me and found appropriate with mentioned suggestions.

Signature :   
Name : S. Padmavathi M.Sc.(H).  
Designation : Associate Professor.  
College : Dharmasri college of  
Nexing,  
27, Panlandam street,  
Kanniyakulam,  
Erode.


## **CERTIFICATE FOR VALIDITY**

This is to certify that "A Descriptive study to assess the knowledge and attitude regarding Reproductive Health among adolescent girls of higher secondary school, Dharapuram and to develop an information booklet on reproductive Health" has been validated by me and found appropriate with mentioned suggestions.

Signature :   
Name : Mrs. ANNAPPOORANI.  
Designation : Assoc. Prof.  
College : R.V.S. COLLEGE.

## CERTIFICATE FOR VALIDITY

This is to certify that "A Study to assess the knowledge and attitude regarding reproductive health among adolescent girls in selected schools, dharapuram in a view of preparing self instructional module" has been validated by me and found appropriate with metioned suggestions.

Signature :   
Name : A. SAHAYAMARY.  
Designation : READER.  
College : ANNAI NEENAKSHI COLLEGE OF  
NURSING.  
COIMBATORE.



**APPENDIX – D**

**CERTIFICATE FOR VALIDITY**

This is to certify that “A Study to assess the knowledge and attitude regarding reproductive health among adolescent girls in selected schools, Dharapuram in a view of preparing self instructional module” has been validated by me and found appropriate with mentioned suggestions.

Signature:



Name:

Designation:

College

**Dr.L.DEIVAMATHI, M.B.B.S., D.D.O.,  
Regd.No. : 54780  
NIVETHA HOSPITAL  
DHARAPURAM-638656.**

**APPENDIX – E**

**CERTIFICATE FOR ENGLISH EDITING**

**TO WHOM SO EVER OT MAY CONCERN**

This is to certify that the dissertation “A Study to assess the knowledge and attitude regarding reproductive health among adolescent girls in selected schools, dharapuram in a view of preparing self instructional module” done by Ms. Sophiya Raja Kumari II Year M.Sc (Nursing) student of Bishop’s college of nursing, Dharapuram is edited for English language appropriateness by P. Sampath, M.A., M.Phil., M.Ed.,

Date :

Address :

  
Signature  
P.SAMPATH

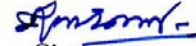
**P.SAMPATH M.A.,M.PHI.,M.Ed.,**  
**LECTURER IN ENGLISH**  
**MAHARANI TEACHER TRAINING INSTITUTE**  
**NANJIAMPALAYAM, DHARAPURAM.**

## APPENDIX – F

### CERTIFICATE FOR TAMIL EDITING

#### TO WHOM SO EVER OT MAY CONCERN

This is to certify that the dissertation “A Study to assess the knowledge and attitude regarding reproductive health among adolescent girls in selected schools, dharapuram in a view of preparing self instructional module” done by Ms. Sophiya Raja Kumari II Year M.Sc (Nursing) student of Bishop’s college of nursing, Dharapuram is edited for Tamil language appropriateness by D. Siranjeevi Mary, M.A., M.Ed.,

  
Signature

Date : 13.01.11

Address : NO, 9 ,  
C.S.I NAGAR,  
DHARAPURAM,  
TIRUPUR DIST.

த. சிரஞ்சீவிமேரி. எம்.எ.எம்.எட்.  
முதுகலை தமிழாசிரியை,  
சி.எஸ்.ஐ. பெண்கள் மேல்நிலைப்பள்ளி,  
தாராபுரம் - 638 656.

## **APPENDIX – G**

### **PART -I**

#### **DEMOGRAPHIC VARIABLES**

1. Age

- a) 13 – 14 yrs
- b) 15 – 16 yrs

2. Religion

- a) Hindu
- b) Christian
- c) Muslim
- d) Others

3. Family Income

- a) below Rs. 3000
- b) Rs. 3001-5000
- c) Rs. 5001-10,000
- d) Above Rs. 10,000

4. Type of family

- a) Nuclear family
- b) Joint family

5. Residence

- a) Urban
- b) Rural

6. Educational status of mother

- a) Primary
- b) Secondary
- c) Higher secondary
- d) Graduates

7. Medium of instruction

- a) English
- b) Tamil

## Part - II

### Structured self Administered Questionnaire

1. What is reproductive health?
  - a) Health which includes physical, mental, social, spiritual well being.
  - b) Absence of reproductive diseases
  - c) Having healthy life and reproductive life
  - d) It includes physical, mental, social, and spiritual well being   
free from disease and address the reproductive processes.
2. Which one is the mother event for adolescent girls?
  - a) menopause
  - b) Marriage
  - c) Menarche
  - d) Child bearing

#### **Knowledge on Anatomy and physiology of female reproductive System:**

3. Where is the reproductive system situated?
  - a) Outside the bony Pelvis
  - b) Behind the intestine
  - c) With in the bony pelvis
  - d) With in the abdomen
4. What are the parts present in the internal female reproductive system?
  - a) Uterus, fallopian tubes, ovaries, vagina
  - b) Uterus, fallopian tubes, vestibules
  - c) Fallopian tubes, ovaries, vagina
  - d) Ovaries, uterus, vestibule

5. How do the external female genitalia collectively called as?
- a) Uterus
  - b) Vagina
  - c) Ovaries
  - d) Vulva
- 6) Which is the organ of menstruation?
- a) Uterus
  - b) Breast
  - c) Fallopian tube
  - d) Cervix
- 7) What is other name for uterus?
- a) Uterine tubes
  - b) Ovaries
  - c) Womb
  - d) Vulva
8. How many ovaries are there in female reproductive system?
- a) One pair of ovaries
  - b) Two pair of ovaries
  - c) An ovary
  - d) Three ovaries
9. What does the ovary produce?
- a) Sperm
  - b) Ovum
  - c) Cyst
  - d) Zygote
10. What is the other name for Breast?
- a) Chest
  - b) Nipple
  - c) Fatty tissue
  - d) Mammary gland

11. Where does the menstrual flow is drawn from the uterus?

- a) fallopian tube
- b) Vagina
- c) Ovaries
- d) Endometrium

## SEX EDUCATION

### Knowledge on fertilization and embryo:

12. What is meant by fertilization?

- a) Fusion of two sperms
- b) Fusion of two ova's
- c) Fusion of Sperm and Ova
- d) Fusion of two or more sperms

13. Where does the oogenesis process occur?

- a) Uterus
- b) Ovaries
- c) Uterine tubes
- d) Vagina

### Knowledge on Puberty and Pubertal changes:

14. What is the age for the Girls attain puberty?

- a) 7-9 yrs
- b) 10-15 yrs
- c) 16-18 yrs
- d) 19-22 yrs

15. What is the first sign of pubertal charges in girls?

- a) Development of breast
- b) Axillary hair growth
- c) Public hair growth
- d) Enlargement of pelvic bone blood supply



**Knowledge on menstrual cycle:**

16. What is the normal interval of menstrual cycle?

- a) 5-8 days
- b) 10-15 days
- c) 25-28 days
- d) > 28days

17. What is the normal duration of menstrual bleeding?

- a) One day
- b) 3 - 5 days
- c) 6 - 8 days
- d) > 8 days

18. When does the matured ovum is released into the uterine cavity?

- a) Fertilization
- b) Menstrual cycle
- c) Ovulation
- d) Fermentation

19. What is the pre - menstrual symptom does a girl can experience?

- a) Headache
- b) Weight loss
- c) Increased thirst
- d) Heart burn

**Knowledge on Menstrual hygiene practice:**

20. How long once the napkin should be changed during menstruation ?

- a) Once in 4 to 6 hrs
- b) Once in 6 to 8 hrs
- c) Once in 8 to 10 hrs
- d) Once in 10 to 12 hrs

21. Which is the best one to be used during menstruation?

- a) Cotton clothes
- b) Sanitary napkin
- c) Tampons
- d) Cotton pads

22. What is the important purpose of maintaining hygiene during menstruation?

- a) To free from infection
- b) To keep clean
- c) To reduce odour
- d) To reduce irritation

**Knowledge on reproductive health problems:**

23. Which one is the major reproductive health problems among female?

- a) Urinary tract infections
- b) Sexually transmitted diseases
- c) Fibroid uterus
- d) Excessive bleeding during menstruation

24. What is the cause of AIDS?

- a) Bacteria
- b) Fungi
- c) HIV
- d) Other infections

25. How HIV infection is transmitted to a person?

- a) Indiscriminate sex
- b) Coughing or sneezing
- c) Using Public latrines
- d) Donating blood

**Knowledge on Contraception:**

26. What do you mean by Contraception?

- a) Any family planning method used to prevent unwanted pregnancy
- b) Fusion of ovum and sperm
- c) Implantation of fertilized ovum
- d) Explosion of ovum

27. What is meant by Abstinence?

- a) Expulsion of embryo before 28 weeks of gestation
- b) Not having sexual intercourse
- c) Absence of menstruation
- d) Sexual intercourse

28. What do you mean by condom?

- a) A device inserted into the uterus
- b) Jelly or foams inserted into vagina
- c) Rubber sheath used to cover the penis during intercourse
- d) Oral pills

29. Which contraception method is used inside the uterine cavity?

- a) Vaginal diaphragm
- b) Copper - T
- c) Foams or jelly
- d) Female condom

30. Which one is the permanent method of contraception in females?

- a) Tubectomy
- b) Hysrectomy
- c) Vasectomy
- d) Laprotomy

### Part - III

#### Attitude Questionnaire - Five point likert scale with scoring

S. No	Questionnaire	Strongly disagree	Dis agree	Uncertain	Agree	Strongly Agree
		0	1	2	3	4
1.	Reproductive health should be taught when girls attain maturity					
2.*	Knowledge regarding reproductive health is essential for adolescent girls.					
3.	Reproductive education should be included in high school curriculum					
4.	It is necessary to know the reproductive organs and its function					
5.*	Adolescent girls should not play during menstruation					
6.*	Menstruation will restrict all the regular activities					
7.*	During menstruation the girls are isolated from the family members.					
8.	Going dating with the opposite sex is wrong					
9.	Taking well balanced diet rich in iron and calcium for adolescent girls is necessary					

10.	Illegal social relationship will not affect the family status					
11.	Counseling and HIV test is important before marriages					
12.*	Talking and touching the HIV infected person will transmit the AIDS					
13.	Adopting family planning methods helps to lead a healthy and safe life.					
14.	Using contraceptive method is necessary to prevent pregnancy.					
15.	Family planning method is effective in population control.					

\* - It indicates negative scoring

## gFjp - m

### RaFwpg;Gfs;

1. taJ

m) 13 -- 14 taJ

M) 15 - 16 taJ

2. kjk;

m) ,e;J

M) K];yPk;

,) fpwp];jtk;

<) gpw

3. FLk;gj;jpd; khj tUkhdk;

m) Rs. 3000 f;F fPo;

M) Rs. 3001 - Rs. 5000

,) Rs. 5001 - Rs. 10000

<) Rs. 10001 f;F Nky;

4. FLk;gj;jpd; tif

m) jdpf;FLk;gk;

M) \$l;Lf;FLk;gk;

5. trpg;gplk;

m)efh;Gwk;

M)fpuhkg;Gwk;

6. jhapd; fy;tp epiy

m) gbg;gwptpd;ik

M) Muk;gepiy

,) ,ilepiy

<) KJepiy

7.; fy;tpg; gapYk; Kiw

m) jkpo;

M) Mq;fpyk;

**gFjp-M**  
**tiuaWf;fg;gl;l mwpTj;jpwd; gw;wpa Neh;fhzy;**  
**,dg;ngUf;f cWg;gpd; MNuhf;fpak;**

1. ,dg;ngUf;f cWg;gpd; MNuhf;fpak; vd;why; vd;d?  
m. kdhPjpahf> cly;hPjpahf rKjha uPjpahf cly;eyk;  
ngWtJ  
M. ,dg;ngUf;f cWg;gpdhy; Neha; vJTk; guthjjhy;  
,. cly; MNuhfpakhf ,Uj;jy;  
<. cly; hPjpahf> kdhPjpahf > rKjha hPjpahf ve;j  
Nehapy;yhky; ,dg;ngUf;f cWg;gpd; MNuhfpaj;Jld;  
,Uj;jy;
2. ,sk;ngz;fSf;F jhAzh;T Vw;gLk; epiy vg;NghJ?  
m. khjtplha; KbtIlAk; NghJ  
M. jpUkzj;jpd; NghJ  
,. G+g;giljydpd; NghJ  
<. Foe;ijngWk; NghJ

**ngz; ,dg;ngUf;f kz;lyj;jpd; cWg;GfSk; kw;Wk; mid; nray;ghLfisAk;**  
**gw;wpaJ.**

3. ngz;zpd; ,dg;ngUf;f kz;lyk; mike;jpUg;gJ?  
m. ,Lg;ngYk;gpd; ntspGwj;jpy;  
M. rpWq;Flypd; gpd;Gwj;jpy;  
,. ,Lg;ngYk;gpd; cl;Gwj;jpy;  
<. tpyh vYk;gpd; cl;Gwj;jpy;
4. cl;Gw ngz; ,dg;ngUf;f cWg;Gfs; fPNo nfhLf;fg;gl;;;Ls;s ve;nje;j  
cWg;Gfis nfhz;Ls;sJ?  
m. fUg;ig >ngNyhg;gpd; Foy;fs;> mz;lfk;  
M. fUg;ig >ngNyhg;gpd; Foy;fs;> nt];l;bg;GS];

,. mz;lfk; >ngNyhg;gpd; Foy;fs;> Nahdp  
<. mz;lfk; >fUg;ig> nt];l;bg;GS];.

5. ntspg;Gw ngz; ,dg;ngUf;f cWg;Gfs; \$l;lhf vt;thW  
miof;fg;gLfpwJ?

m. fUg;ig

M. mz;lfq;fs;

,. Nahdp

<. ty;th

6. khjtplhapd; cWg;G vJ?

m. fUg;ig

M. khh;gfq;fs;

,. ngNyhg;gpad; Foy;fs;

<. fUg;ghij

7. fUg;igapd; kw;nwhU ngah;?

m. ngNyhg;gpad; Foha;fs;

M. mz;lfq;fs;

,. fUtiw

<. ty;th

8. fUg;ig vj;jid mz;lfq;fisf; nfhz;lJ?

m. ,U mz;lfq;fs;

M. xU mz;lfq;fk;

,. ehd;F mz;lfq;fs;

<. %d;W mz;lfq;fs;

9mz;lfq;fs; vjid cw;gj;jp nra;fpwJ?

m. tpe;jDf;fs;

M. mz;lk;

,. fl;G

<. fUj;jhpe;j mz;lk;

10. khh;gfq;fspd; kw;nwhU ngah; ?

m. khh;G

M. fhk;G



- ,. nfhOg;Gj;jirfs;  
 <. ghy;Rug;gpfs;
11. khjtphapd; ,uj;jNghf;F fUg;igapypUe;J vjd; topahf tbfpwJ.  
 m.ngNyhg;gpad; Foy;fs;  
 M. Nahdp
- ,. mz;lfq;fs;  
 <. nt];bg;GS];



**ghydpf; fy;tp**

**rpIdKI;ilAk;> Kjpuhj fUTapUk; gw;wpaJ:**

12. fUj;jhpj;jy; vd;why; vd;d?  
 ; m. ,uz;L tpe;jZf;fs; Nrh;tJ  
 M. ,uz;L mz;lfq;fs; Nrh;tJ  
 ,. tpe;jZTk; mz;lfKk; Nrh;tJ  
 <. ,uz;L my;yJ %d;W tpe;jZf;fs; Nrh;tJ
13. mz;lngUf;fk; vq;Nf eilngWfpwJ?  
 m. fUg;ig  
 M. mz;lfq;fs;  
 ,. fUg;ig Foha;fs;  
 <. Nahdp



**G+g;giljyPd; cUtk; kw;Wk; kdkhw;wk; gw;wpaJ**

14. ngz; G+g;giltJ?  
 m. 7 Kjy; 9 tajpy;  
 M. 10 Kjy; 15 tajpy;  
 ,. 16 Kjy; 18 tajpy;  
 <. 19 Kjy; 22 tajpy;
15. xU ngz; G+g;giltjd; Kjy; mwpFwp vd;d?  
 m. khh;gf tpUj;jp  
 M. cNuhk tsh;r;rp  
 ,. ,dg;ngUf;f cWg;Gfspd; cNuhk tsh;r;rp  
 <. vOk;gpd; tsh;r;rp

**khjtplha; Row;rp gw;wpaJ:**

16. ruhrhp khjtplha; vj;jid ehl;fSf;F xU Kiw eilngWk;?

m. 5-8 ehl;fs;

M. 10-15 ehl;fs;

,. 25-28 ehl;fs;

<. 28 ehl;fSf;F Nky;

17. ruhrhp khjtplha; ,uj;jNghf;F vj;jid ehl;fSf;F ,Uf;Fk;

m. xU ehs;

M. 3-5 ehl;fs;

,. 6-8 ehl;fs;

< 8 ehl;fSf;F Nky;

18. khjtplha; Row;rp vjd; ntspgLj;jyhy; Vw;gLfpwJ?

m. mz;lk;

M. fl;b

,. tpe;jDf;fs;

<. ,uj;jg;Nghf;F

19. khjtplha; tUKd; ngz;fs; mjpfkhf ghjpf;fgLtJ vjpdhy;?

m. jiytyp

M. vilFiwjy;

,. jhfk; mjpfhpj;jy;

<. neQ;nrhpr;ry;

**khjtplhapd; ,ad;G:**

20. khjtplhapd; NghJ ngz;fs; vj;jid Kiw gQ;Rfis khw;w Ntz;Lk;?

m. 4 kzpKjy; 6 kzp tiu

M. 6 kzpKjy; 8 kzp tiu

,. 8 kzpKjy; 10 kzp tiu

< 10 kzpKjy; 12 kzp tiu

21. khjtphapd; NghJ ngz;fs; vt;tifahd gQ;Rfis cgNahfpf;fyhk;?

m. fhI;ld; JzpfS;

M. nkd;ikahd gQ;Rfs;

., Nlk;G+z;

<. nky;ypaJzpfS;

22. khjtphapd; NghJ J}a;ikahy; ,Ug;gjpd; Nehf;fk; vd;d?

m. njhw;WNeHa; tuhky; ,Ug;gjw;F

M. Rj;jkhf ,Ug;gjw;F

., Jh;ehw;wk; tuhky; ,Ug;gjw;F

<. vhpR;ry; Fiwa

23. ngz;fSf;F mjpf mstpy; Vw;gLk; ,dg;ngUf;f cWg;gpd;

MNuhfpaj;jpd; gpur;rid vJ?

m.rpWePh; ghijapy; njhw;W

M. clYwtpdhy; Vw;gLk; njhw;W

., fh;g;gg;igf;fl;bfs;

<. mjpf ,uj;j Nghf;F

24. va;l;]; tu fhuzk; vd;d?

m. ghf;Bhpah

M.!!G+Q;ir

., `r;.l.tp.

<. kw;w fpUkpfs;

25. `r;.l.tp. fpUkpfs; vt;thW guTfpwJ

m. tiuaWf;fg;gl Kbahj ghypdj;jhy;

M. Jk;ky; kw;Wk;

., nghJ fopg;gplq;fis cgNahfpj;jy;

<. ,uj;jk; jhdk; %yk;

26. fUj;jil vd;why; vd;d?

m. FLk;gf; fl;LghL Kiw

M. mz;lK; kw;Wk; tpe;jD Nrh;tJ

., fUj;jhpf;fg;gl;l mz;lK;

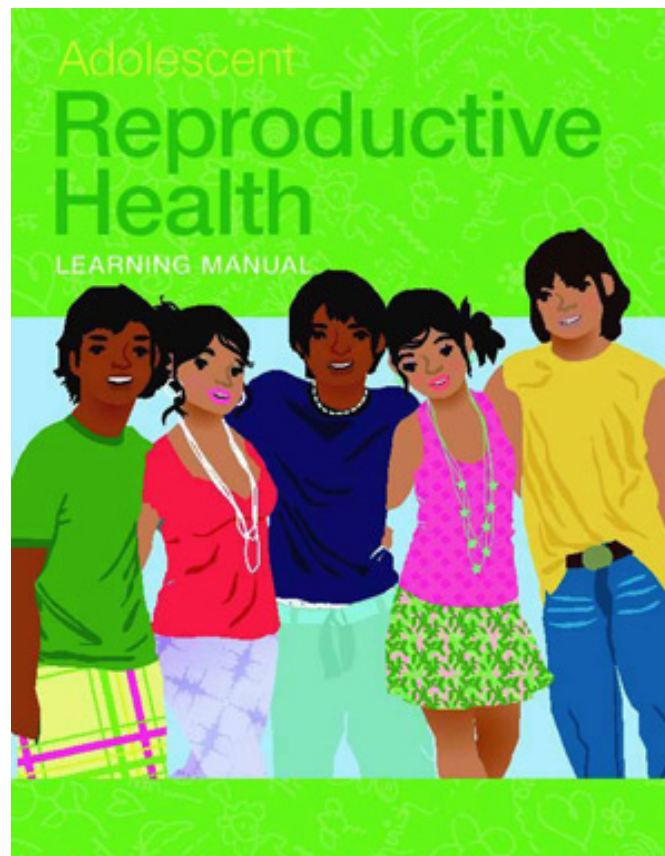
- <. mz;lk; ntspNaWjy;
27. tpyfpapUj;jy; vd;why; vd;d?  
 m. fUntspNaWjy;  
 M. clYwT nfhs;shjpUj;jy;  
 ,. khjtplha; epd;WNghjy;   
 <. clYwT nfhs;Sjy;
28. fUj;jil ciw vd;why; vd;d?  
 m. fUg;igapy; itf;Fk; fUtp  
 M. girfs; kw;Wk; Efh; khj;jpiufs;  
 ,. nky;ypa ,ug;ghpdhy; Md rhjdk;   
 <. tha;top cl;nfhs;Sk; khj;jpiufs;
29. ve;j fUj;jil rhjdk; fUg;igapDs; nghUj;jg;gLk;?  
 m. tpjhdk;  
 M. fhg;gh;-b  
 ,. girfs;  
 <. fUj;jilciw
30. ngz;fs; cgNahfpf;Fk; epue;jukhd fUj;jilKiw vJ?  
 m. l;A+ngf;lkp  
 M. `];l;nuf;lkp  
 ,. thnrf;lkp   
 <. Nyg;gNuhlkp

fPNo nfhLf;fg;gl;Ls;s fUj;Jfis gw;wpa cq;fs; kdg;ghq;fpid mjw;F chpa  
 ,lj;jpy; ( ) nra;tjd; %yk; njhptpf;fTk;.fPNo jpfPNo

t. vz;	tpguk;	KOikahf xg;Gf; nfhs;fpNwd;	xg;Gf; nfhs;fpNwd;	rhpahf njhpa tpy;iy	KOikahf kWf;fpNwd;	kWf;fpNwd;
1	,dg;ngUf;f cWg;gpd; MNuhf;fpak; gUt epiy milAk; ngz;fSf;Fj; njhpe;jpUf;f Ntz;Lk;					
2.	,dg;ngUf;f cWg;Gfspd; MNuhf;fpak; gw;wpa nra;jp NghJkhd mwpTj;jpwid nfhLf;fpwJ.					
3.	ghlj;jpl;l;jjpy; gUtepiy kw;Wk; gUtkhw;wq;fs; gw;wpa ghlq;fs; ,Uf;f Ntz;Lk;.					
4.	,dg;ngUf;f cWg;G kw;Wk; mjd; nray;ghLfs; Fwpj;J mwptJ mtrpak;.					
5.*	khjtphapd; fhyj;jpy; tpisahlf;\$lhJ.					
6.*	khjtplha; jpdhrp Ntiya ghjpf;Fk;					
7.	khjtplha; fhyj;jpy; ngz;fs; kw;w FLk;gj;jpdhplk; ,Ue;J jdpahf itg;ghh;fs;					
8.	vjph; ghypdj;jhUld; ntspNa nry;Yjy; jtwhd xd;whFk;.					
9.	,Uk;Gr;rj;J cs;s czT tiffis cz;gjhy; khjtplha; fhyj;jpy; ,uj;jj;jpy; rptg;G mZf;fs; rPuhd epiyapy; ,U;Fk;.					

10.*	jtwhd cYwT gof;f tof;fq;fshy; FLk;gjuk; rPh; Fiye;J tplhJ					
11.	jpUkzj;jpw;F Kd; `r;.l.tp. nlj;l; nra;J nfhs;tJ ey;yJ					
12. *	NgRtjd; kw;Wk; njhLtjd; %yk; `r;.l.tp. guTk;.					
13.	FLk;g fl;Lg;ghL Kiw ey;y FLk;g MNuhfpaj;ij cUthf;Fk;					
14.	FLk;gf;fl;Lg;ghL Kiw Foe;ij cUthfky; jLg;gjw;F mtrpakhd xd;W.					
15. *	FLk;gf;fl;Lg;ghL Kiw kf;fs; njhif ngUf;fj;ij fl;Lg;gLj;jhJ.					

# SELF LEARNING MODULE ON REPRODUCTIVE HEALTH



**By**

**S. SOPHIYA RAJA KUMARI**

**M.sc (N) II year**

**INTRODUCTION :**

Growing up is stressful and challenging in the best of times. For these young people living as refugees the stresses are much greater. Their transition to adulthood is often made more difficult.

### **DEFINITION:**

Reproductive Health is defined as the state of complete physical, mental and social well being and of merely the absence of disease and it address the reproductive process function and system at all stages of life.

- World Health organization

### **ADOLESCENTS:**

Adolescence is a latin word which means to grow in to adult hood. It is period of moving from immaturity childhood to maturity of adulthood.

Adolescence is divided into

4. Early adolescence (12 to 13 yrs)
5. Middle adolescence (14 to 18yrs)
6. Late adolescence (17 to 19yrs)

### **CHARACTERISTICS OF ADOLESCENCE :**

- Peek intelligence
- Good Stamina
- Emotional instability
- Confused about identity
- Lack of self control



### **OBJECTIVES :**

The main objectives of Reproductive Health is

- ❖ To improve the welfare of the girl especially in regard to Health, nutrition and education

### **FACTORS AFFECTING REPRODUCTIVE HEALTH:**

The factors affecting reproductive Health one as follows:

6. Economic circumstances



7. Education
8. Employment
9. Living condition
10. family environment

### COMPONENTS IN THIS LEARNING MODULE:

The components in this learning module are as follows:

- Anatomy and Physiology of female reproductive system
- Physiological changes & Puberty
- Psychological changes
- Menstrual cycle
- Menstrual Hygiene
- Care during dysmenorrhoea
- Sex education

### Anatomy And Physiology of Female Reproductive System:

The Female reproductive system consists of external and Internal Structures. The external genitalia structure is collectively called as vulva. The internal reproductive organ consists of uterus, ovaries, fallopian tube and vagina. The Internal reproductive organs are situated in Pelvic region.

#### Uterus:

The uterus is a hollow about the size and shape of pear. It serves two important functions.

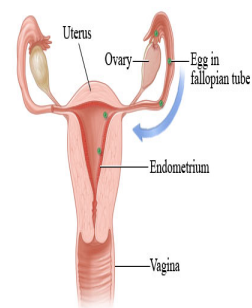
1. It is the organ of menstruation
2. It receives the fertilized ovum.

#### Location:

The uterus is located between the urinary bladder and the rectum.

#### Division:

It consists of the body or corpus, fundus, cervix and the isthmus. The major portion of the uterus is called the body (or) corpus.



© HealthWise, Incorporated

The fundus is the Superior, rounded region located on above the fallopian tube. The cervix is the narrow, inferior, outlet that protrudes into the vagina.

### **Walls of the uterus:**

The walls are thick and are composed of three layers.

1. The endometrium
2. The Myometrium
3. The perimetrium

### **Vagina:**

#### **Location:**

The vagina is the thin in walled muscular tube about of inches long leading from the uterus to the external genitalia.

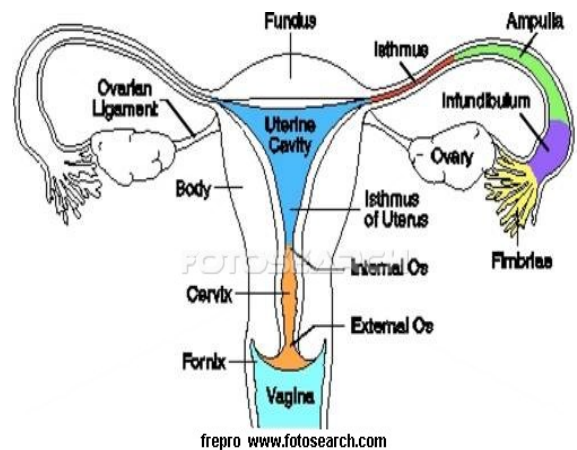
#### **Function:**

The vagina provides the passage way for child birth and menstrual flow, it receives the penis and semen during sexual intercourse.

### **Fallopian Tube:**

#### **Location :**

Each tube is about 4 inches long extends medially from each ovary to empty into the superior region of the uterus.



#### **Function :**

The fallopian tubes transport ovum from the ovaries to the uterus.

#### **Description:**

The distal end of each fallopian tube is expanded and has finger like projection called fimbriae which partially surround each ovary.

**Ovaries :****Function :**

The ovaries are for oogenesis – the production of eggs and for hormone production (estrogen and progesterone)

**Location :** The ovaries are about the size and shape of almonds. They lie against the lateral walls of the pelvis, one on each side. The uterus consists of pair of ovaries which are connected to both the sides of uterus.

**Vagina**

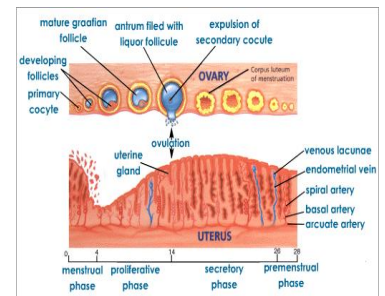
It is the opening extending from cervix to external genital tract. It is partially occluded by membrane called hymen. It is opened in the centre to allow menstrual blood to drain away.

**Puberty :**

It is the period during which the menstruation of reproductive organ occurs and it is ready for reproductive function. It occurs between 10 to 13yrs of age.

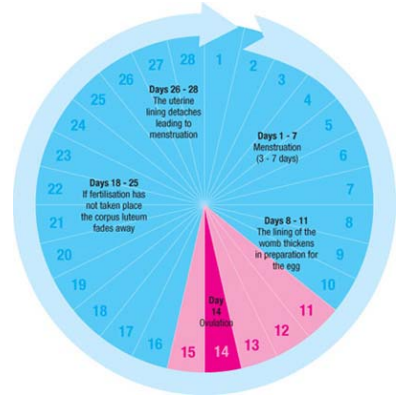
**PHYSIOLOGY OF MENSTRUAL CYCLE:**

Although the reproductive organs are present in the female body from birth they don't function until reproductive maturity is attained during pubertal period when the female reaches maturity. Certain rhythmically will causing menstrual cycle. It is influenced by some Hormones. At puberty the anterior pituitary gland secretes follicle- Stimulating Hormone (FSH) which stimulates a small number of follicles to mature each month.



Usually the mature ovum is released from one ovary into the uterine cavity. This process is called as ovulation which is influenced by Lueitenzing Hormone.

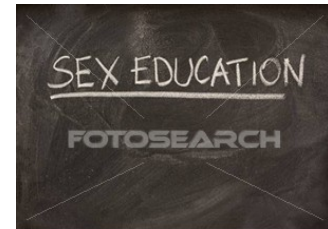
The Ova is then drawn into the fallopian tube. Then uterine wall breaks leading to bleeding which is released along with the unfertilized ova as menstrual blood through the vagina. It is called as menstrual cycle. It lasts for 3 - 5 days and average length of each cycle is 28-35 day.



Estrogen and Progesterone which is responsible for secondary sex characteristics. Onset of menses and progesterone works with estrogen to produce a normal menstrual cycle.

### SEX EDUCATION :

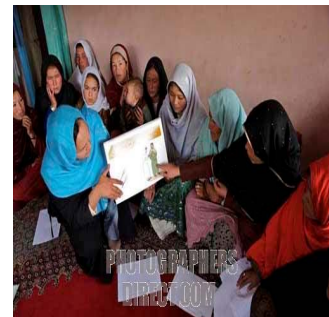
Sex education is a process of giving information and forming belief on sex .



Sex education may also be described as "sexuality education," which means that it encompasses education about all aspects of sexuality, including information about family planning, reproduction (fertilization, conception and development of the embryo and fetus, through to childbirth), plus information about all aspects of one's sexuality including: body image, sexual orientation, sexual pleasure, values, decision making, communication, dating, relationships, sexually transmitted infections (STIs) and how to avoid them,

### AIMS OF SEX EDUCATION

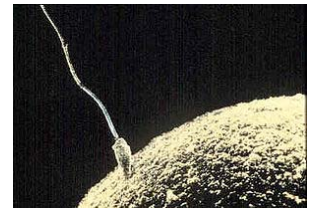
1. To reduce the risk of unwanted or unplanned pregnancies.
2. To enhance the quality of relationship.
3. To ensure that a mature individual has first hand correct knowledge about sex and sexuality.
4. To develop young peoples ability to make



- It is given mostly by school teachers, parents and relatives. But formal sex educator is school Teachers.
- Movies, Magazines, are also other sources of getting sex education
- It is given to reduce the risk of unwanted pregnancy, to prevent HIV infection and to maintain healthy life.
- While giving sex education the group should be homogeneous in age.

### **FERTILIZATION:**

Fertilization (also known as conception, fecundation and syngamy), is the fusion of gametes to produce a new organism. In human, the process involves a sperm fusing with an ovum, which eventually leads to the development of an embryo. Depending on the species, the process can occur within the body of the female in internal fertilisation, or outside in the case of external fertilisation



### **EMBRYO:**

An embryo is a multicellular diploid eukaryote in its earliest stage of development, from the time of first cell division until birth, hatching, or germination. In humans, it is called an embryo until about eight weeks .

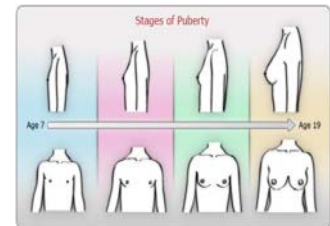


The development of the embryo is called embryogenesis. In organisms that reproduce sexually, once a sperm fertilizes an egg cell, the result is a cell called the zygote that has half of the DNA of each of two parents. In plants, animals, and some protists, the zygote will begin to divide by mitosis to produce a multicellular organism. The result of this process is an embryo.

**BODY IMAGE:** Body image is a term which may refer to a person's perception of his/her own physical appearance, or the interpretation of the body by the brain.

Essentially, body image describes how one perceives one's appearance to be in relation to others, which in many cases may be dramatically different from one's objective physical condition or how one is actually perceived by others.

1. The enlargement of breast is the first high of puberty. It is also called as Mammary gland. Its development during puberty is mainly due to the hormones, estrogen, secreted by the ovaries.



Pubic Hair is Second noticeable changes in puberty. The pubic Hair Usually seen along the sides of Labia. The growth is mainly over the monsvenires. (ie) The upper part of the vulva.

2. In Vagina the mucosal Surface changes in response to estrogen. It becomes thicker Whitish secretion are normal effect of Estrogen.
3. Growth of axilliary hair
4. The body grows and taken a female body shape.
5. Onset of first Menstrual called as Menarche.

### **Psychological Changes:**

1. Need for helping from peer group
2. Feeling of fatigue tiredness and irritability
3. Attachment to parents and parents of the opposite sex must be freed
4. Being upset, feeling ill lacking confidence can make them feel vulnerable.
5. Adolescents complaints about their parents behaviour.



c0037101 www.fotosearch.com





## DIET FOR ADOLESCENTS GIRLS

The physical changes of adolescence have a direct influence on a person's nutritional needs. Teenagers need additional calories, protein , calcium, and iron .

### Calories.

Adolescents need additional calories to provide **energy** for growth and activity. Boys ages 11 to 18 need between 2,500 and 2,800 calories each day. Adolescent girls need approximately 2,200 calories each day. This is a significant increase from childhood requirements. To meet these calorie needs, teens should choose a variety of healthful foods, such as lean protein sources, low-fat dairy products, whole grains, fruits, and vegetables.



### Protein.

Protein is important for growth and maintenance of muscle. Adolescents need between 45 and 60 grams of protein each day. Most teens easily meet this requirement with their intake of beef, pork, chicken, eggs, and dairy products. Protein is also available from certain vegetable sources, including **tofu** and other soy foods, beans, and nuts.



### Calcium.

Adequate calcium intake is essential for development of strong and dense bones during the adolescent growth spurt. Inadequate calcium intake during adolescence and young adulthood puts individuals at risk for developing **osteoporosis** later in life. In order to get the required 1,200



milligrams of calcium, teens are encouraged to consume three to four servings of calcium-rich foods each day. Good sources include milk, yogurt, cheese, calcium-fortified juices, and calcium-fortified cereals.

### **Iron.**

As adolescents gain muscle mass, more iron is needed to help their new muscle cells obtain oxygen for energy. A deficiency of iron causes anemia , which leads to fatigue , confusion, and weakness. Adolescent boys need 12 milligrams of iron each day, while girls need 15 milligrams. Good sources of iron include beef, chicken, pork, legumes (including beans and peanuts), enriched or whole grains, and leafy green vegetables such as spinach.



### **SAFE AGE FOR MARRIAGE AND PREGNANCY:**

According to WHO, the legal safe age for marriage for girls is 18 yrs and appropriate age for pregnancy is from 18 – 30 years

### **SEXUAL ORIENTATION:**

It describes a pattern of emotional, romantic, and/or sexual attractions to men, women, both genders, neither gender, or another gender.

### **SEXUAL PLEASURE:**

Human sexual behavior or human sexual practices or human sexual activities refers to the manner in which humans experience and express their sexuality. It encompasses a wide range of activities, such as strategies to find or attract partners (mating and display behavior), interactions between individuals, physical or emotional intimacy, and sexual contact.



The term **sexual activity** can refer both to acts involving two or more people, as in sexual intercourse, oral sex, or mutual masturbation, and to the one person activity of masturbation. In some cultures sexual activity is considered acceptable only within marriage, although premarital and extramarital sex are universal. Some sexual activities are illegal either universally or in some countries, and some are considered against the norms of a society. For example, sexual activity with a minor and sexual assault in general are criminal offenses in many jurisdiction

### **DATING:**

Dating is a form of courtship, and may include any social activity undertaken by, typically, two persons with the aim of each assessing the other's suitability as a partner in an intimate relationship or as a spouse. The word refers to the act of meeting and engaging in some mutually agreed upon social activity. Traditional dating activities include entertainment or a meal.



Courtship is the traditional dating period before engagement and marriage. During a courtship, a couple dates to get to know each other and decide if there will be an engagement. Usually courtship is a public affair, done in public and with family approval.

It includes activities such as dating where couples go out together for a meal, a movie, dance parties, a picnic, shopping or general "hanging out", along with other forms of activity. Acts such as meeting on the Internet or virtual dating, chatting on-line via instant messaging or e-mail, sending text messages, conversing over the telephone, writing each other letters, and sending each other flowers, songs, and gifts.



## SIGNS OF PREGNANCY:

- Missed period
- Nausea and vomiting
- Soreness in the breast
- Enlargement in the breast
- Frequent urination
- Fatigue
- Skin changes
- Stretch marks
- Enlargement of uterus
- Palpation of fetal parts



## SYMPTOMS OF PREGNANCY:

- Nasal stuffiness
- Swelling
- Weight gain
- Insomnia
- Backache
- Heart burn
- Leg cramps
- Morning sickness



## TEENAGE PREGNANCY:

Teenage pregnancy - the girls during the age of 10 - 19 years has a fetus in the body after joining of sperm and ovum



### **CAUSES OF TEENAGE PREGNANCY:**

- ❖ Poverty
- ❖ Low self esteem
- ❖ Substance abuse
- ❖ Sexual abuse
- ❖ Curiosity of sexual abuse

### **PROBLEMS OF TEENAGE PREGNANCY:**

- ❖ Maternal problems
- ❖ Anemia
- ❖ Cervical trauma
- ❖ Infections
- ❖ Obstructed labor
- ❖ Repeated pregnancy



### **REPRODUCTIVE HEALTH PROBLEMS:**

One of the major reproductive health problem among adolescent girls are RTI and STI

**AIDS:** Stands for Acquired Immune Deficiency Syndrome and refers to the most advanced stage of HIV infection. AIDS is a serious group of illnesses and opportunistic infections that develop after being infected with HIV for a long period of time.

### **DIFFERENCE BETWEEN HIV, HIV INFECTION AND AIDS:**

**HIV** : HIV is the virus that causes immunodeficiency **HIV infection**: When a person gets infected with HIV causing germs, then we can call him as a HIV infected person or HIV positive person.

**AIDS**: As the HIV infection progresses, the person will get different infections and diseases and it takes a long period of time to reach the stage of AIDS. So AIDS is the advanced stage of HIV infection where the person has serious group illness and opportunistic infections.

**“DECEMBER 1 is declared as World AIDS DAY”**

**ROUTES OF HIV TRANSMISSION:**

HIV can be transmitted through

- Infected blood
- Sexual contact
- Unsterilized needles and syringes
- From HIV infected mother to child.



**Blood to blood transmission:**



- Transfusion with infected blood
- Direct contact with infected blood through cuts and wounds

**Sexual contact**

- Unprotected sexual intercourse

(Vaginal, oral or anal)(Man to woman ,woman to man , man to man )

- Direct contact with infected body fluids like semen, cervical and vaginal secretions.



**BODY FLUIDS THAT CAN TRANSMIT THE HIV**  
**BLOOD, SEMEN, VAGINAL SECRETION, BREAST MILK**  
**HIV DOES NOT SPREAD BY:**

- Coughing or sneezing
- Drinking water or eating food from the same utensils used by an infected person.
- Swimming in the pools used by people with HIV/AIDS
- Getting bitten by a mosquito that has already bitten an infected person.
- Touching, hugging or shaking hands.
- Kissing.
- Socializing or casually living with people infected with HIV/AIDS
- Caring and looking after people with HIV/AIDS
- Using public toilets or bathroom.
- Working with a HIV infected person.
- Using same telephones
- Donating blood
- Bed bugs, flies, lice, mosquitoes and other insects and pests do not spread HIV



**TREATMENT**

There are treatments for AIDS but there is NO CURE. Some drugs are developed to delay the onset of AIDS in people already infected with HIV. This can prolong and improve the quality of life. So **prevention is the best solution.**

**PREVENTION AND CONTROL MEASURES**

**General prevention**



### **a) Prevention of sexual transmission of HIV**

Avoid multiple sexual partners

Avoid insertive type of intercourse with unknown partners.

Always use condom during sexual contact, it will protect from HIV as well as STDs

Be faithful to your partner

Sexually transmitted disease should be treated promptly & completely.

**b) Prevention of blood to blood transmission** □ Donate blood in advance of surgery if a blood transfusion may be needed (auto transfusion).

### **c) Prevention of HIV transmission through drug use**

- Do not share needles or syringes
- Use disposable syringes.



### **d) Prevention of parental transmission**

HIV testing should be done for all antenatal mothers with pre & post counseling. If mother is HIV positive Early MTP when safe and acceptable to mother. Anti retro viral therapy and Elective caesarean section where safe and feasible

### **Reproductive tract infections**

The most common reproductive health problems among girls are reproductive tract infections. The 11 common reproductive tract infections are bacterial, viral and sexually transmitted diseases.

### **Vaginal infections**

Some of the viral infections are as follows

Bacterial vaginosis

Trichomoniasis

## Candidiasis

Worldwide the most common vaginal infections are bacterial vaginosis, caused by anaerobic bacteria including *Gardnerella vaginalis*;

### **Signs and symptoms**

Bad smelling vaginal discharge

Foamy, yellowish vaginal discharge

Itching

Discomfort

Sometimes thick, white discharge with itching and swelling

### **Treatment**

All are treatable with antibiotics or other drugs.

### **Bacterial STDs**

Some of the bacterial STDs are

Chancroid

Chlamydia

Gonorrhoea

Syphilis

These infections are mainly caused by the bacterial organisms.

### **Signs and symptoms**

Sores develop that are painful and tender when touched. Genital or oral areas are the most common infection sites.

A sparse, clear discharge from the urethra, painful urination and blood in the urine, may result. Symptoms include redness on the cervix, vaginal discharge and pelvic pain.

### **Treatment**

It can be cured with antibiotics. The presence of bacterial STD increase the risk of HIV transmission.

## **Viral STDs**

Some of the viral STDs are as follows

AIDS

Herpes simplex

Human papilloma

Hepatitis B

These infections are caused by viruses.

## **Signs and symptoms**

Fever

Chills

Sores or blisters in genitalia

Burning and itching sensation with redness

Nausea, stomach pain, loss of appetite and headache

## **Treatment**

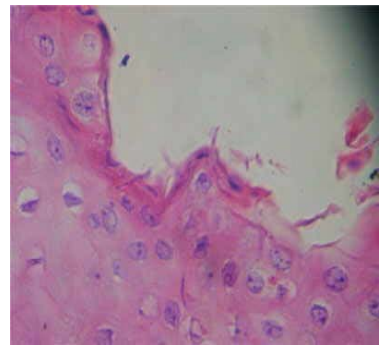
According to the signs and symptoms the diseases are treated either by antibiotics or by the follow up guidelines by the physician.

## **CANDIDIASIS:**

Candidiasis is an infection caused by the species of the yeast candida, usually the candida albicans fungus. Candida is found on various parts of the bodies of almost all normal people but causes problem in only a few. Candidiasis can affect the skin, nail, and mucous membranes throughout the body including the mouth (thrush), esophagus, vagina (yeast infection), intestines and lungs.

## **DESCRIPTION:**

Candida is a common cause of vaginal infections in adolescent girls, especially when the normal





population of the bacteria Lactobacilli have been reduced due to antibiotic use, allowing the over growth of candida. A candidiasis infection in the vagina results in itching, burning, soreness, and thick and white vaginal discharge.

Other risk factors for candidiasis include obesity, heat and excessive sweating that result in the formation of moist skin areas where the yeast organism can grow.

#### **DEMOGRAPHICS:**

Over 1 million adult women and adolescent girls in the United States develop vaginal yeast infection each year. It is not life threatening, but the condition can be uncomfortable and frustrating.

#### **CAUSES AND SYMPTOMS:**

Candidiasis is caused by the species of the yeast candida, usually the candida albicans fungus. Most adolescent girls with candidiasis experience severe vaginal itching and have a discharge that often looks like cottage cheese and has a sweet or bread-like odor. The vulva and vagina can be red, swollen, and painful. The infected skin in diaper rash that includes infection with candida appears fiery red with areas that may have a raised red border.

#### **DIAGNOSIS:**

Often clinical appearance and visual examination give a strong suggestion about the diagnosis. Generally, a doctor takes a sample of the vaginal discharge or swabs an area of oral or skin lesions, and then inspects this material under microscope, where it is possible to see characteristic forms of yeasts at various stages in the lifecycle.

#### **TREATMENT:**

In the most cases, vaginal candidiasis can be treated successfully with a variety of over the counter antifungal creams or suppositories, including Monistat Gyne-Lotrimin, and Mycelex.

However, infections often recur. If an adolescent girl has frequent recurrences, she should consult her doctor about prescription drugs such as Vagistat-1, Diflucan and others.

#### **ALTERNATIVE TREATMENT:**

Home remedies for vaginal candidiasis include vinegar douches or insertion of a paste made from Lactobacillus acidophilus powder in to the vagina. In theory these remedies make the vagina more acidic and, therefore, less hospitable to the growth of candida. Fresh garlic (Allium sativum) is believed to have antifungal action, so incorporating it into the diet or inserting a gauze- wrapped, peeled garlic clove in to the vagina may be helpful. The insert to be changed twice daily.

#### **PREVENTION:**

Often candidiasis can be prevented through good sanitation procedures, such as keeping the body cool and dry, wearing natural fabric underclothes, changing underclothes frequently, wiping from front to back after bowel movements, and washing hands often.

#### **CONTRACEPTION:**

Any method used to prevent unwanted pregnancy.

#### **Classification:-**

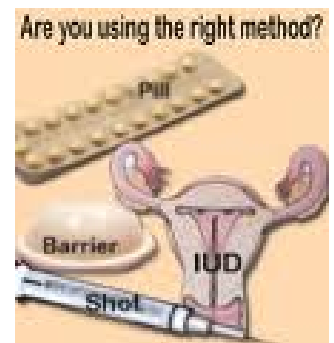
##### **1. Conventional method.**

- a. Natural method
- b. Condom
- c. Barrier method

##### **2. Spacing method.**

- a. Oral pills
- b. IUD
- c. Injectables
- d. Implants

##### **3. Post conventional method.**



- a. Menstrual regulation
- b. Medical termination of pregnancy (MTP)

#### **4. Permanent methods of contraception.**

- a. Tubectomy.
- b. Vasectomy

### **1. CONVENTIONAL METHOD:-**

#### **A.NATURAL METHODS**

##### **1. Withdrawal:**

Process of pulling out of the penis before ejaculation.

**2. Mucus method** -Cervix secretes mucus 4-5 days before and 3-4 day after ovulation. - Amount increases around ovulation -Regulation of sexual intercourse as per the amount of mucus secretion is called Mucus method..

##### **3. The sympto thermal method.**

- Basal body temperature increasing during ovulation.

Controlling sexual intercourse after the body temperature raised is known as sympto thermal method.

##### **4. Calendar method.**

Checks menstrual cycle for 6 months. Calculate estimated time of ovulation.

Avoid sexual intercourse 3 days before and 3 days after ovulation is called Calendar method.

### **B.CONDOM:-**

-Rubber sheath used to cover penis during sexual intercourse to prevent unwanted pregnancy and STIs. In India condom is known as NIROODH. -Supplied free of cost by government.



### **C.BARRIER METHOD:-**

#### **INCLUDES**

Vaginal diaphragm, Dutch cap, Cervical cap

#### **a. Vaginal diaphragm:**

Dome shaped rubber/plastic material, inserted into uterus to prevent pregnancy.

b. Foam tabs and jelly Spermicidal tablets and jellies which inserted inside vagina before sexual intercourse.

Jelly: e.g.: dolphin

Form tab: e.g.: Today

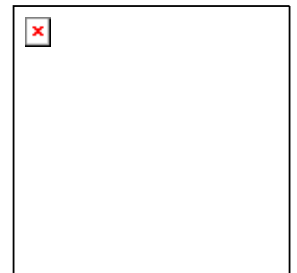
### **SPACING METHOD:-**

#### **a. Oral pills**

Intake of hormonal pills to prevent pregnancy.

e.g.: Mala - N and Mala - D

#### **b. IUD.**



### **PERMANANT METHOD OF CONTRACEPTION**

- a. Tubectomy/ Female sterilization (Operation). Permanent method of female sterilization. Tying and cutting of fallopian tube and prevent fertilization fusion

### **PREMENSTRUAL SYNDROME :**

Premenstrual Syndrome (PMS) is a common disorder in which a group of physical and psychologic



Symptom occur during the last few days of the Menstrual cycle and before the onset of Menstruation.

The Physical Symptom includes breast discomfort ,Peripheral edema, abdominal bloating, sensation of weight gain, headache, irritation and tiredness.

The emotional symptoms include Anxiety, depression, Mental irritability and mood swings.



Collaborative care is important to alleviate pre menstrual syndrome(ie) avoid using caffeine, taking vitamin B<sub>6</sub> and calcium Supplementations.



The drug should be given when the symptoms became very severe. For reducing cramping pain, backache and headache - Ibuprofen should be given along with calcium and vitamin Supplementations.

Antispasmodic drugs relieve cramps or spasms of the stomach, intestine and abdominal pain the drug of choice is dicyclomine 20 mg



#### **MENSTRUAL HYGIENE :**

1. Daily bathing is essential because to reduce body temperature but girls should be consider as normal
2. Washing the genital region daily with soap and water to prevent bad odour.

3. Diet should consists of vegetables and fruits which gives nourishments and normal diet.
4. Sanitary napkins can be used to absorb the menstrual flow
5. Sanitary napkin should be changed atleast once in every 4 to 6hrs
6. When the blood stained napkin rub against the thigh the skiof thigh get sore, so it should always kept dry.
7. From the onset of 1<sup>st</sup> menstruation it is advisable to carry a spare napkin in your hand
8. Moderate exercise yoga and sufficient rest are important during menstruations.

#### **CARE DURING DYSMENNORRHOEA:**

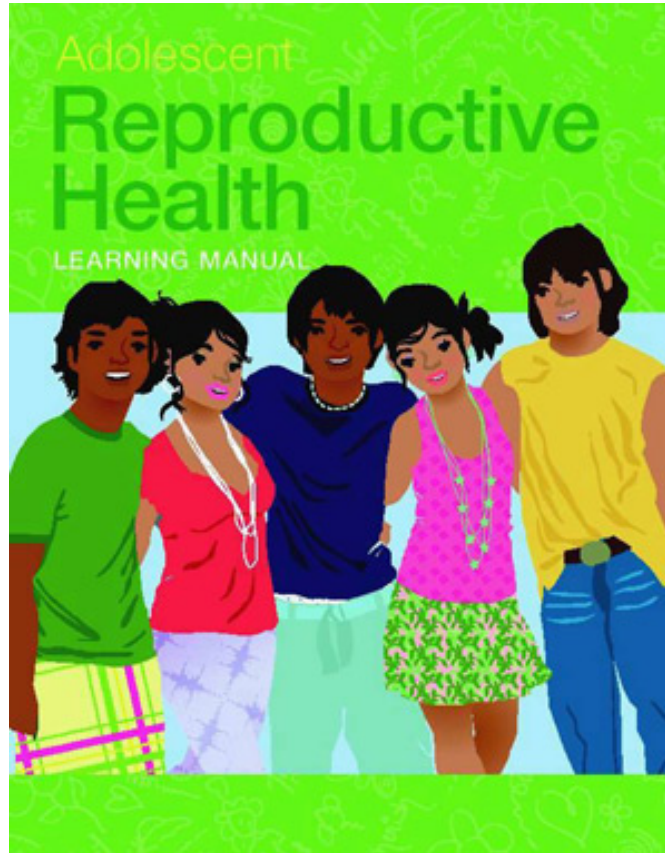
1. During the time of dysmenorhoea it is necessary to do exercise like deep breathing
2. Mild abdominal pain is normal during menstruation and hot fomentation over the abdomen and back will soothen the pain.
3. Severe abdominal pain during menstruation should be consulted with the doctor.
4. Mild pain are treated by taking some mediations like Tab Ibuprofen will reduce the pain.



#### **Conclusion :**

Reproductive Health for young adolescent girls is more effective and acceptable when they are linked to other activities (or) settings. Reproductive Health Programmes should be monitored to ensure young people.

**,dg;ngUf;fj;jpd;;  
MNuhf;fpaj;ij gw;wpa  
RaFwpg;G gbt;**



**By**  
**S. Nrhgpah uh[Fkhhp**

**Kd;Diu**

,sikg; gUtk; vd;gJ ngz;fSf;F xU kdmOj;jKk; rthyhd tp\ak; MFk;.  
,g;gUtj;jpy; ngz;fSf;F mjpf mstpy; kd cisr;ry;fs; NehpLfpd;wd. ,g;gUtj;ij  
fle;J nry;tJ kpfTk; fbdkhd xd;whFk;.

**tiuaiu**

,dg;ngUf;f cWg;gpd; MNUhf;fpak; vd;why; KOikahd cly; hPjpahd  
kw;Wk; rKjha hPjpahd epiy kw;Wk; ve;j NehAkpy;yhky; ,dg;ngUf;f  
cWg;gpd; MNUhf;fpaj;ij gw;wpAk; mjd; nray;ghLfisAk; kdpjdpd;  
vy;yhf;fl;lq;fisAk; Fwfp;fpwJ



### **,sk;gUtk;**

,sk;gUtk; vd;gJ yj;jPd; thHj;ijahFk;. ,jdpd; nghUs; tsHfpdw gUtk;. ehk; mDgtkw;w tajpy; ,Ue;J mDgtk; kw;Wk; KjpH taJs;stHfshfpNwhk;.

,g;gUtj;ij %d;whf gphpf;fyhk;

1. ,sk;gUtk; (12 Kjy; 13 taJ tiu)
2. eLepiy gUtk; (14 - 18 taJ tiu)
3. filg;gUtk; (17 - 19 taJ tiu)



### **,sikg;gUtj;jpd; tpNr\ Fzq;fs; :**

- o mjpgkhd mwpT
- o mjpf Mw;wy;
- o czHr;rptrg;gLjy;
- o jd;idg; gw;wp mwpjypy; Fog;gk;
- o Ra fl;Lg;ghl;bid ,oj;jy;

### **Fwpf;Nfhs; :**

Kf;fpakhd Fwpf;Nfhs; vd;dntd;why;> ngz;fspd; cly; Nkk;ghl;il tsHg;gJk; Kf;fpkhf cly;eyk;> fy;tp kw;Wk; czTKiw.

### **,dg;ngUf;f cWg;gpd; MNuhf;fpaj;ij ghjpf;Fk; fhuzpfs;**

1. nghUshjhu #o;epiy
2. fy;tp
3. Ntiyapd;ik
4. FLk;g #o;epiy
5. tho;ifapd; epiy

### **,r;Ra Fwpg;Ngl;by; Fwpg;gpl;Ls;s tp\laq;fs; :**

- ngz; ,dg;ngUf;f kz;lyj;jpd; cWg;GfSk; mjd; nray;ghLfSk;
- G+g;giljydpd; cUtk; kw;Wk; kdkhw;wk;

- khjtplha; Row;rp
- khjtplha; NghJ Rfhjhuj;ij NgZjy;
- typkpFe;j khjtpyf;fpd; NghJ Njitg;gLk; guhkhpg;G
- ghypdf;fy;tp
- ,dg;ngUf;fpdhy; Vw;gLk; cly;eyf;FiwTfs;
- FLk;gf;fl;Lg;ghL

**ngz; ,dg;ngUf;f kz;lyk;**

ngz; ,dg;ngUf;f kz;ly cWg;Gfis ,U gphpTfshf gphpf;fyhk;

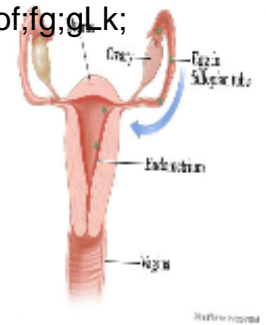
1. ntspg;Gw ngz; ,dg;ngUf;f cWg;Gfis; ,it \$l;lhf ty;th vd;W miof;fg;gLk;
2. cl;Gw ngz; ,dg;ngWf;f cWg;Gfis;

m) Xhpid mz;lfq;fs; (Ovaries)

M) Xhpid ngNyhgpap; Foy;fs; (Fallopian tube)

,) fUg;ig (Uterus)

<) Nahdp (Vagina)

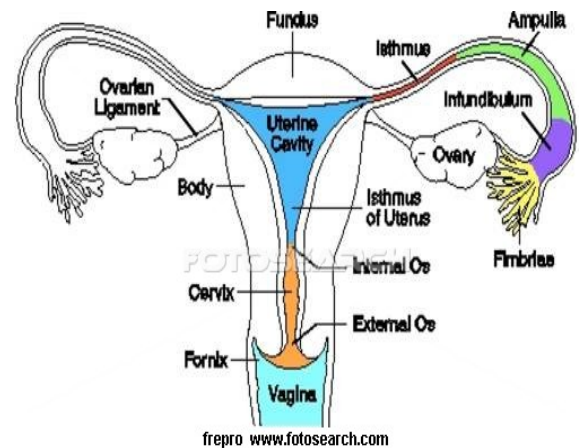


**fUg;ig**

,J cl;;Fopthd> jbj;j jirahyhd cWg;ghFk;. ,J ngy;tp]; gFjpapy; kyf;FIYf;Fk; rpWePHigf;Fk; ,ilapy; mike;Js;sJ. mjd; RtH %d;W mLf;Ffis cilaJ. mit>

1. Gwfpuy;
2. kj;jpa jbj;j jir
3. vz;Nlh nkl;hpak;

fUg;igapy; fPo;Gwk; FWfpAk; Nky;Gwk; mfd;Wk; ,Uf;Fk;. ,f;FWfpa gFjp fUg;ig Kfg;G (Cervix) vdg;gLk;. ,J Nahdpapd; Nky; gFjpapy; ePl;bf; nfhz;bUf;Fk;.



**Xhpid mz;lfq;fs; (Ovaries)**

xUkp;j Xhpid mz;lfq;fs; tapw;wiwapy; KJFg;Gw RtUld; nghpNIhdpay; rt;Tld; ,izf;fg;gl;Ls;sJ. Xhpid mz;lfq;fs; rpwpajhf> Kl;il tbtpy; ,Uf;Fk;.

**gad;fs;**

- mz;lfq;fs; cUthf;fk; kw;Wk; tsHr;rp
- v];l;Nuh[d; g;Nuhn[h];l;Nuhd; `hHNkhd;fs; Ruf;fg;gLfpd;wd.

**ngNyhgpad; Foha;fs;**

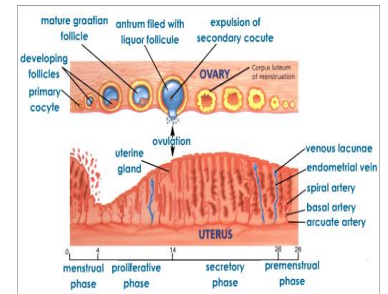
Xhpid mz;lfq;fSk; (Ovaries) fUg;igapd; ePz;l Gdy; tbt mikg;Gfshy; ,izf;fg;gLfpd;wd. ,itfNs ngNyhgpad; Foha;fs; vdg;gLk;. ,it 10 mbePsk; nfhz;ljh f,Uf;Fk;.

**Nahdp (Vagina)**

Nahdp Nkw;Gwk; cs;s fUg;ig Kfg;igAk; (Cervix) fPo;gFjpapy; cs;s gpwg;GWg;igAk; ,izf;fpwJ. ,jpy; rw;Nw nky;ypa Rtnuhd;W mike;jpUf;Fk;. mij `nkd; vd;W miof;fg;gLfpwJ. ,jd; eLtpy; cs;s topNa khjtplha; fhy;j;ppd; NghJ ,uj;jg; Nghf;F epfo;fpwJ.

**G+g;giljy;**

G+g;giljy; ,dg;ngUf;f cWg;Gfspd; ,dg;ngUf;f;jpw;fhd tsHr;rpapd; fhy;j;ij Fwp;g;jhFk;. 10 - 13 tajpw;F cs;s;jhf G+g;giljy; milfpd;wdH.

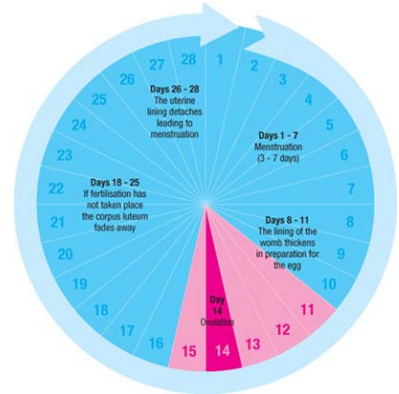


**khjtplha; Row;rp (Menscal Cycle)**

ngz;zpd; clypy; ,dg;ngUf;f cWg;Gfs; gpwg;gpypUe;Nj ,Ug;gpDk; mit G+g;giljy; fhyk; tiu nray;glhky; ,Uf;Fk;. G+g;giljy; fhy;j;pw;F gpwF fUg;igapd; cl;Gw RtHfspy; Vw;gLk; rPuhd khw;wq;fshy; khjtplha; Row;rp Vw;gLfpd;wJ. KO tsHr;rp mile;j fpuhgpad; ghypf;fpd; mz;lfj;jpd;

Nkw;gug;gpy; rw;W Gilf;fpwJ. ,jdhy; fpuhgpad; ghypf;fpd; ntbj;J tapw;wiwf;Fs; KjpHe;j mz;lk; tpLgLjy; (Ovulation) vd \$wg;gLfpwJ.

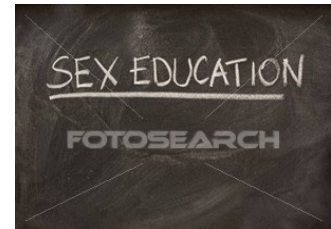
tpLgl;l mz;lk;> ngNyhgpad; Fohapd; topahf nrd;;W fUg;igapd; cl;Gw Rtw;wpy; xl;bf; nfhs;Sk;. ,jw;Fs; fUg;igapd; cl;Gw RtH fLikahfTk; nkd;ikahfTk; tsHr;rpailfpd;wJ. ,ej RtH Nahdpapd; topahf fUj;jhpf;fhj mz;lj;NjhL NrHe;J cjpui;NjhL ntspNaWk;. ,Jnt khjtplha; Row;rp my;yJ khjtplha; vd;wiof;fg;gLfpwJ.



**ghypdf;fy;tp**

ghypdf;fy;tp vd;gJ ghypdj;jpd; Nky; ek;gpf;ifAk; mijg;gw;wpa tpopg;GzHT gw;wpa njhFg;ghFk;.

,J FLk;gf;fl;Lg;ghL> ,dg;ngUf;fk;> clypy; Vw;gLfpd;w khw;wq;fs;> ghypdj;ijg; gw;wpa tpopg;GzHT> kw;wtHfSld; cld; cwTfs; goFk; Kiw> Mz;fSk; ngz;fSk; goFk; Kiw kw;Wk; ,dg;ngUf;fj;jpdhy; Vw;gLk; gpur;rpids; gw;wpd fy;tpahFk;.



**ghypdf;fy;tpapd; Nehf;fk;**

1. Njitapy;yhj fHg;gj;ij jtpHf;f
2. cwTfis tYg;gLj;j
3. ,sk; ngz;fs; ghypdj;ijg; gw;wpa fhHPaq;fis njhpe;J nfhs;tjw;F



,f;fy;tp gs;spapy; cs;s MrphpaHfs;> ngw;NwhHfs; kw;Wk; cwtpdHfs; %yk; nfhLf;fg;gLk;. jpiug;glq;fs;> ehspjo;fs; %ykhfTk; ghypdf;fy;tpia gw;wpa jfty;fs; mwpayhk;.

,f;fy;tpia nfhLf;Fk; NghJ mij xNu rPuhd ghypdf;FOf;fshf ,Uf;f Ntz;Lk;.

## fUTWjy;

fUTWjy; vd;gJ fUKl;ilAk; tpe;jZf;fspy; xd;Wk; NrHtjhFk;.

vy;yh caHepiy tpyq;Ffisg; NghyNt kdpjhpYk; Gjpa xUtH ghy; cwT  
Kiwapy; Njhw;Wtpf;fg;gLfpwhH.

ngz; Kl;il vd;gLk; Kl;il nry;fisAk;> Mz; tpe;jZ vd;gLtijAk; cw;gj;jp  
nra;fpd;wd. ,e;j Mzpd; nry;Yk;> ngz;zpd; nry;Yk; xU Gjpa XH capH  
Njhd;w Ntz;Lkhdhy;> xd;W glNtz;Lk;.

fUTWjy; mjdd; fUNtw;wgb cl;GwkhfTk;  
ntspg;GwkhfTk;> fUTWjy; Vw;gLfpd;wJ

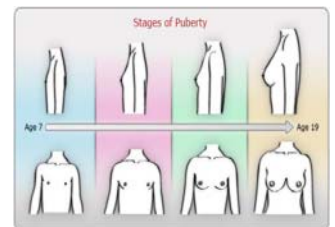
## Kjpuhj fUTapUk;

fHg;gj;jpd;NghJ %d;whk; thuk; Kjy; vl;lhk;  
thuk; tiu tsHe;Js;s xU cWg;gikTf;F fUTapH  
(Embryo) vd;W ngaH. ehd;F thuq;fspy; ,e;j  
fUTapH 1 nr.kP ePsj;Jld;> jiy cUthfp> fz;fSk;  
if fhy;fSk; cUthfj; njhlq;fpapUf;Fk;. vl;L thuq;fspy; ,J 3 nr.kP ePsKk; iffSk;  
fhy;fSk; ngw;W kdpj KjpH fUthfj; njhpAk;.



## G+g;giljyhy; tUk; cUt khw;wq;fs;

1. G+g;giljyhy; Kjypy; Vw;gLk; khw;wk; khHgf tsHr;rp. ,J ghy;Rug;gp  
vd;Wk; miof;fg;gLfpd;wJ. ,e;j tsHr;rp;F fhuzk;> Xhpiz mz;lq;fshy;  
Ruf;fg;gLk; ,];l;Nuh[d; `hHNkhd; MFk;.
2. Nuhkq;fspd; tsHr;rp - Fwpg;ghf ntspGw ngz;  
,dg;ngUf;f cWg;gpy; Nky;Gwj;jpy; tsUk;
3. clypy; kw;w cWg;Gfspy; Nuhk tsHr;rp
4. xU ngz;zpd; cly;thF tsHr;rp nfhz;l cly;  
tsHr;rp ,Uf;Fk;
5. Kjy; khjtplha; Vw;gLk;



## G+g;giljyhy; tUk; kdkhw;wk;

1. rf FOTId; NrHtjw;fhd Vf;fk;
2. NrhHT> vhpr;ry;> kaf;fk;

**,sk;ngz;fs; cl;nfhs;Sk; czT tiffs;:**

,sk; ngz;fs; mjpg fNyhhp> Gujr;rj;J>  
fhy;rpak; kw;Wk; ,Uk;Gr;rj;J mlq;fpa czT  
tiffis Nrh;j;Jf; nfhs;s Ntz;Lk;.



**fNyhhp];**

tsUk; ,sk;ngz;fs; mjpg mstpy; fNyhhp epiwe;j cztpid vLj;Jf; nfhs;s  
Ntz;Lk;. ,J mth;fspd; tsh;r;rp;F cJTfpwJ ,sk;ngz;fs; ruhrhp  
2>200 fNyhhpifis xh; ehisf;F vLj;Jf; nfhs;s Ntz;Lk; ,ij rhp nra;a  
,sk;ngz;fs; rj;jpAs;s czT tiffis vLj;Jf;nfhs;s Ntz;Lk; Fiwe;j  
nfhOg;G epiwe;j czTfs;> KO jhdpaq;fs; kw;Wk; fha;fwpfis  
vLj;jf;f Ntz;Lk;.



**Gujr;rj;J**

Gujk; epiwe;j cztpid vLj;Jf;nfhs;tjpdhy; clypy; cs;s  
jirfs; ed;F tsh;r;rp milfpd;wd. ,sk;ngz;fs; xU ehisf;F 45 Kjy;  
60 fpuhk; Gujj;ij cztpy; vLj;Jf;nfhs;s Ntz;Lk; mjpdhy; ,iwr;rp>  
Kl;il> ghy;> kw;Wk; mjpd; tiffis mjpg mstpy; rhg;gpl Ntz;Lk;  
.Gujk; mjpg mstpy; fha;fwpfisAk; fpilf;Fk;.



**fhy;rpak;**

NghJkhd fhy;rpak; vLj;Jf;nfhs;Sjy; clypy; cs;s vYk;Gfs;  
ahitAk; rf;jpahfTk; cWj pahfTk; itf;fpwJ fhy;rpak; Fiwe;j mstpy;  
vLj;Jf;nfhz;lhy; mJ gpd; tUq;fhy;jjpy; mth;fSf;F vYk;G rk;ge;j  
Neha;fs; tu tha;g;G ,Uf;f ,ij jth;f;f 1>200 kp.fpuhk;. fhy;rpak;  
epiwe;j cztpid vLj;jf;f Ntz;Lk;> ghy;>ntz;nza;> fhy;rpak; epiwe;j  
gor;rhW fhy;rpak; epiwe;j jhdpaq;fs; vLj;Jf;nfhs;s Ntz;Lk;.



x28418027 fotosearch.com



## **,Uk;Gr;rj;J**

,sk;ngz;fs; mjpg mstpy; ,Uk;Gr; rj;J epiwe;j cztpid rhg;gpl Ntz;Lk; ,Uk;Gr;rj;J Fiwthd ,Ue;jhy; mJ ngz;fSf;F ,uj;jNrhifapy; KbAk;. ngz;fs; 15.kp fpuhk; ,Uk;Gr;rj;Js;s czit vLj;Jf;nfhs;s Ntz;Lk; mjpg fPiu tiffs;> fha;fwpfs;> ,iwr;;rp> gl;lhzp tiffs; vLj;Jf; nfhs;s Ntz;Lk;.



rl;lg;gb ngz;fs; jpUkzk; nra;a mtHfs; 18 taJ epuk;gpAs;stHfshf ,Uf;f Ntz;Lk;. mNj Nghy; mtHfs; fHg;gk; jhpf;f 18 Kjy; 30 taJ epuk;gpAs;stHfshf ,Uf;f Ntz;Lk;.

## **ghypdj;ij gw;wpa mwpTiufs;**

ghypdj;ij gw;wpa jfty;fs; kpf mtrpak; ,J mth;fSf;F czh;;r;rptrg;glTk; fw;gidahd tajhFk;. ,t;tajpy; ghypd <h;g;Gfs; Vw;gLk; mJ ngz;fs; Mz;fs; NkYk;> xNu ghypdj;jpd; NkYk; tUk;.

## **ghypdj;jhy; Vw;gLk; kdkfpo;r;rp**

ghypd gof;fk; vd;gJ kdpjd; jd;Dila ghypdj;ij ntspfhl;Ljy;. vjph; ghypdj;ij <h;g;gjw;F mth;fSld; NgRtjw;Fk; mth;fs; Kaw;rp nra;thh;fs;. ,J rpy Neuq;fspy; clYwT nfhs;Sk; mstp;w;F nry;Yk;.

rpy ehLfspy; clYwT fy;ahzj;jpw;F gpd;dH jhd; eilngWk;. Mjyhy; jpUkzj;jpw;F Kd;G clYwT nfhs;tJ jtwhd fhhpakhFk;.



c0033340 www.fotosearch.com

## **ntspNa nry;Yjy;**

,J thypgh;;fs; vjph; vjph; ghypdq;fSld; ntspNa Rw;WjyhFk;. mth;fs; xUtiu xUth; ghj;j;J Ngrp ey;y xU Ghpe;Jnfhs;Sjiy tsh;j;J nfhs;SjyhFk; ,J ngw;Nwhh;fspd; rk;kj;Jld; elf;f Ntz;Lk;.

## **fUTw;wpUg;gjpd; mwpFwpfSk; milahsq;fSk;**

- khjtpyf;F epd;W Nghjy;



- Fkl;ly; kw;Wk; the;jp
- khHgfj;jpy; fhk;igr; Rw;wp ,d;Dk; fUik mjpfkhjy;
- khHgfq;fs; ngUj;J tsHjy;
- mbf;fb rpWePH tUjy;
- NrhHT
- Njhypy; fUg;gilfs; Njhd;wyhk;
- fU mirtij jhahy; czu KbAk;
- vil mjpfhpj;jy;
- J}f;fkpd;ik
- KJF typ
- neQ;R vhpr;ry;
- Gilj;J nfhz;bUf;Fk; rpiufs;



**,stajpy; fh;g;gk;jhpj;jy;**

,sk;ngz;fs; 10 Kjy; 19 tajpw;F fh;g;gk; MjyhFk;.

**fhuzpfs;**

- ❖ tWik
- ❖ jd; nfsuk; Fiwjy;
- ❖ Nghij nghUl;fSf;F mbikahFjy;
- ❖ ghypdj;ij jtwhd Kiwapy; gad;gLj;Jjy;
- ❖ ghypdj;jpy; Mh;tk;.



**,stajpy; fh;g;gk; miltjpdhy; Vw;gLk; gpur;ridfs;:**

- ❖ ,uj;jNrhif
- ❖ NgWfhyj;jpd; gpur;ridfs;
- ❖ fUg;ig fOj;jpy; fpopj;jpUj;jy;
- ❖ mbf;fb fUTWjy;
- ❖ fpUkpfs;



**,dg;ngUf;f cWg;gpd; MNuhf;fpaj;jpdhy; Vw;gLk; gpur;ridfs;**



,dg;ngUf;f cWg;gpdhy; Vw;gLk; gpur;ridfs; ngz;fSf;F mjpfk;. ,jpy;  
Kf;fpakhdJ ,dg;ngUf;fj;jpd; ghijapy; njhw;WNeHa; kw;Wk; vI: b I\_ nihw;W  
NehahFk;.

**`r;.[.tp fpUkpfs; guTk; topfs;**

- ❖ ghpNrhjpf;fglhj ,uj;jj;jpdhy;
- ❖ jtwhd cIYwT nfhs;Sjy;
- ❖ Rj;jpfhpf;f glhj Crpfs;
- ❖ `r;.[.tp Nehapdhy; ghjpf;fg;gl;l jhapd; %yk; Foe;ijf;F.



**,uj;jk; ghpkhw;wk;**

fpUkpfs; cs;s ,uj;jj;ij nrYj;Jtjd; %yk; `r;.[.tp.  
fpUkpfs; cs;s eghplk;; ,Ue;J ntl;Lf; fhaq;fs; %yk; guTjy;.



**cIYwT nfhs;Sjy;**

ghJfhg;gpy;yhj cIYwT nfhs;tjd; %yk; `r;.[.tp. fpUkpdhy;  
ghjpf;fg;gl;lthpd; tpe;J kw;Wk; fUg;ghijapypUe;J tUk;  
frptpdhy; guTjy;.



**`r;.[.tp. guthj Kiw;fs;**

- ❖ Jk;ky; kw;Wk; ,Uk;gy; %yk;
- ❖ fpUkpfs; cs;sthpd; ghj;jpuq;fis gad;gLj;jy;
- ❖ NehahspfSld; Nrh;e;J ePuhLjy;
- ❖ njhw;WNeHahspfis njhLtjd; %yk;> fl;Lgpbj;jy;> Kj;jkpLjy;.
- ❖ nghJfopg;gplq;fis cgNahfpj;jy;
- ❖ mth;fSld; Ntiy nra;jy;
- ❖ ,uj;jk; nfhLj;jy;

**rpfpr;ir Kiwfs;:**



va;l;]; Neha;f;F rpfpr;ir cz;L Mdhy;; Fzg;gLjy; KbahJ. kUe;Jfs;  
fz;Lgpbj;jthNw cs;sdh; Mdhy; ,d;Dk; ,y;iy. Mjyhy; jLg;gNj rhpahd  
jPh;thFk;.

### **ghJfhg;G kw;Wk; jLg;G Kiwfs;**

1. `r;.[.tpdhy; ghjpf;fg;gl;ltUld; cLYwT nfhs;shjpUj;jy;
2. njhw;WNeHapdhy; ghjpf;fg;gl;l ,uj;jj;ij nrYj;jhjy;
3. Rj;jpuf;fglhj Crpia cgNahf;F \$lhJ.
4. jhaplk; ,Ue;J Foe;ijf;F guhthky; jLj;jy;.

### **,dg;ngUf;f ghij njhw;Wfs;**

nghJthf ngz;fspd; ,dg;ngUf;f kz;lyj;jpy; Vw;gLk;  
cghghijfs; kpf Kf;fpakhdit ,dg;ngUf;f kz;ly njhw;W. 11  
nghJthd ,dg;ngUf;f njhw;Wfs; cs;sd. mitfshtd  
ghf;Bhpah> itu];> ghy;tpid Neha;fs;.



### **gpwg;Gwg;G njhw;W**

rpy itu]; njhw;Wfshtd>

- gf;Bhpay; ti[Ndrp];>
- biuNfh Nkhdpahrp];
- Nfh;bbahrp];

cyfshtp fhzg;gLk; gpwg;Gwg;Gj; njhw;Wfs; ngUk;ghyhdit  
ghf;Bhpahf;fs;. ti[Ndhrp];> fhHLney;yh ti[dhrp]; vd;Dk; gf;Bhpahthy;  
Vw;gLfpd;wJ.

### **Neha; mwpFwpfs;**

- ❖ fUg;ig Kfg;Gfspd; Rug;Gfs; JHehw;wk; Vw;gLk;.
- ❖ Eiu;j kQ;rs; epwk; Rug;Gfs;
- ❖ mwp;G nrsfHakpd;ik

rpy Neuq;fs; fbdkhd> ntz;ik epw Rug;GfSld; mwp;G kw;Wk;  
tPf;fk; Vw;glyhk;.

### **rpfpr;ir Kiw**

,e;NehahdJ ghf;Bhpay; capHf;nfhy;yp %yk; Fzg;gLj;jf; \$baJ.

### **ghf;Bhpay; ghy;tpidj; njhw;W**

mitfspy; rpy

1. Nfd;f;uha;L
2. fpsikbah
3. nfhdphpah
4. rpg;gps];

,e;jj; njhw;Wfs; ghf;Bhpahtpdhy; Vw;gLfpwJ.

### **Neha; mwpFwp**

njhw;W Vw;g;gl;l gFjpfspy; (fUg;ig Kfg;G) Gz;fs; kw;Wk;  
njhLk;NGhJ typ Vw;glyhk;.

rpWePH Gw topapy; Rwg;Gfs; Vw;gLk;> typAld; \$ba rpWePH  
fopj;jy;> ,uj;jj;Jld; \$ba rpWePH ntspNaWjy;> ,Lg;ngOk;Gfs; typ.

### **rpfpr;ir Kiw**

,tw;iw ghf;Bhpay; capHf;nfhy;yp %yk; Fzg;gLj;jyhk;. ghf;Bhpay;  
ghy;tpidj; njhw;W HIV njhw;Wf;F Kf;fpa fhuzpahf cs;sJ.

### **itu]; ghy;tpidj; njhw;W**

mtw;Ws; rpy

- va;l;];
- n`Hg;]; rpk;g;sf;];
- `pA+kd; ghg;gpNyhkh
- n`g;gilb]; B.

,tw;why; itu]; guTfpwJ.

### **Neha; mwpFwpfs;**

- fha;r;ry;
- FspH
- gpwg;GWg;Gfspy; fhak;
- vhpr;ry; kw;Wk; mhpG;G> rpte;J fhzg;gLjy;
- the;jpAzHT> tapw;W typ> grpapd;ik> jiytyp

**rpfr;ir Kiw**

mwpFwps; mbg;gilapy; rpfr;ir Nkw;nfhs;sg;gLfpwJ. ,it ghf;Bhpa capHf;nfhy;ypahfNth my;yJ kUj;Jthpd; MNyhidahfTk; ,Uf;fyhk;.

**Nfz;bbahrp];**

Nfz;bbahrp]; njhw;W vd;gJ <];l;Nfd;bbah My;gpfd;];rhy; Vw;gLfpwJ. ,it G+Q;ir ,dj;ijr; rhHe;J Nfd;bbah kdpjHfspy; ,J clypd; gy gFjpfspy; fhzg;gLfpwJ. Mdhy; xU rpyUf;F kl;Lk; Nehia Vw;gLj;JfpwJ. ,it Njhy;> efk; Nfhiog;glyk;> (cly; KOtJk;> tha;> czTf;Foy;> Fly; kw;Wk; Eiuapuy; Nghd;wtw;wpy; cs;s Nfhiog;glyj;ij ghjpf;Fk; Kf;fpakhf ti[dh [gpwg;GWg;G]).

**tpsf;fk;**

Nfd;bbah vd;Dk; gpwg;GWg;Gj; njhw;W ,sk;ngz;fspy; fhzg;gLk; gnhJthd xd;W ghf;Bhpa capHf;nfhy;yp gad;gLj;Jk; NghJ Nyf;Nlh Ngrpy;y]; mjd; tsHr;rp mjpfhpf;fpd;wJ. mg;NghJ Nfd;bbah njhw;W gpwg;GWg;GWg;Gfspy; gw;WfpwJ. mhpG;G> vhpr;ry;> Gz; kw;Wk; fbd nts;is jputk; ntspg;gLfpwJ.

**fhuzpfs;**

cly; gUkd;> cly; ntg;gk;> mjpf tpaHit ntspNaWjy; ,tw;why; <ug;gjkhd Njhy; Vw;gLfpwJ. ,jdhy; <];l; tsHfpwJ.

xt;nthU tUIKk; 1 kpy;ypad; ,sk; ngz;fSk; Mz;fSf;Fk; gpwg;GWg;G <];l; njhw;Wf;F Mshfpd;wdH.

,J KOikahf tho;ifia khw;whJ. Mdhy; nrsfhpakhf  
mikahJ.

**mwpFwpfs;**

Nfd;bbahrp]; <];l; Nfd;bbah jhd; fhuzk; nghJthf  
Nfd;bbah My;gpf;fd; G+Q;irjhd; fhuzk;.



### **khw;W rpfpr;ir Kiw**

- tPl;Lg; nghUl;fis itj;Jj; jLf;Fk; Kiw : tpdpfH my;yJ Nyf;NIh Ngrpy;y];> mrpl;NIhgpy;y]; gTliug; gad;gLj;jpa giria nfhz;L gpwg;GWg;Gfspy; flTjy;.  
(,g;gir Nfz;bahtpd; tsh;r;rpia jilnra;fpwJ)
- G+z;Lf;F (mypak;rl;iltk;) G+Q;ir jLg;G kUe;J Fzk; ,tw;wpw;F cz;L.
- ,f;fhuzj;jhd; G+z;L cztpy; Nrh;j;Jf;nfhs;s Ntz;Lk; my;yJ Gz;zpd; Njihy chpj;J mtw;iw ,se;Jzpahy; Rw;wp gpwg;GcWg;Gfspy; itf;fNtz;Lk;.
- ,tw;iw 2jpdq;fSf;F xUKiw khw;w Ntz;Lk;.

### **jLf;Fk; Kiw**

- Nfd;bbahit J}a;ikahd Rw;Wg;Gwj;jpd; %yk; jLf;fyhk;.
- clit FspHr;rpahf kw;Wk; twl;rpahf itj;Jf; nfhs;s Ntz;Lk;.
- ,aw;ifahd Kiwapy; jahhpj;j cilia mzpe;J nfhs;s Ntz;Lk;.
- cs;shilia mdjpdKk; khw;w Ntz;Lk;.
- kyk; fopj;j gpd; J}a;ikahf fOt Ntz;Lk;.

ngUk;ghyhd G+Q;irj; njhw;Ws;s tsUk; gUt ngz;fSf;F gpwg;GWg;G gFjpapy; mhpg;G kw;Wk; nts;isg;gLjy; fhzggLfpwJ. ,J ghyhlf;fl;b Nghd;w Njhw;wKilaJ. ,jDila kzk; ,dpg;G kw;Wk; nuhl;bia Nghd;Ws;sJ. gpwg;GWg;Gg; gFjpahdJ rptg;ghfTk; jbkdile;Jk; kw;Wk; typapid cilajhfTk; cs;sJ. gQ;R cgNahfpg;gjhy; tUk; nrhwpahdJ ,e;j G+Q;irahy; Vw;gLk; njhw;W NehahFk;. ,J neUg;G Nghd;w rptg;G epwKilaJ.

**fz;lwpAk; Kiw**

ngUk;ghyhd kUj;jt Ma;tpd; %ykhfTk;> fz;fspy; ghHg;gjd; %ykhfTk; ,jid cWjpahf fz;lwpE;J tplyhk;. nghJthf kUjJtH gpwg;GWg;gpypUe;J tUk; nts;isg; gLjij Ez;Nzhf;fpapy; Ma;T nra;tjd; %yk; Ez;Zaphpapd; KO tho;f;if KiwapidAk; fz;lwpayhk;.

**rpfpr;ir Kiwfs;**

G+Q;ir njhw;W Nehia Fzg;gLj;j G+Q;ir vjpHg;G kUe;Jfis gad;gLj;j Ntz;Lk;. ngUk;ghyhd gpwg;GWg;G njhw;W Neha; cilatHfs; G+Q;ir vjpHg;G fspk;Gfis cgNahfpg;gjd; %yk; Fzkhf;fg;gLfpd;wdH. ,e;j njhw;W NehahdJ kPz;Lk; Vw;gl tha;g;Gs;sJ. tsUk; gUt ngz;fSf;F ,e;j njhw;W Neha; mbf;fb Vw;gl;lhy; mtHfs; kUj;Jthplk; mtHfs; cNahfPf;Fk; kUe;jpid gad;gLj;Jk; tpjpKiwfisg; gw;wp fye;jha;T nra;a Ntz;Lk;.

**fUj;jil Kiwfs;**

fUj;jil vd;gJ fUTWjypd; vy;yh KiwfsAk; jLg;gjhFk;.

**fUj;jilAk;> FLk;gf;fl;Lg;ghl;L Kiwfsk;**

1. ,aw;if Kiwfs;

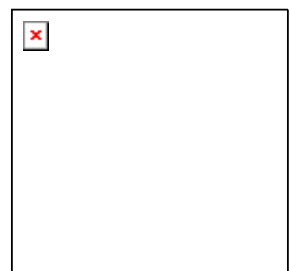
**(i) tpe;ij ntsptpLjy;**

,e;j Kiwapy; tpe;J ntspg;gLk; Kd;G Mzpd; cWg;ig fUg;ghijapypUe;J ntspNa ,Oj;Jf; nfhs;tj

(ii) **rspr;rt;T** (Cervical mucus method) kw;Wk; fUg;ghijapd; ntg;gepiy Kiwfs; ntw;wpasPf;f Ntz;Lkhdhy;> mJ gw;wpr; nrhy;ypj;jUgtH ftdj;Jld; \$w Ntz;Lk;. mjpf tOf;Fk; jd;ikAilajha; ,Ug;gijr; Nrhhpj;Jg; ghHj;jhy; njhpAk; kw;w Neuq;fspy; mJ gir Nghy xl;Lk; jd;ikAilajha; ,Uf;Fk;.

**(ii) fUKI;il ntspg;ghl;L Kiwfs;**

clypy; ntg;gepiy mjpfhpf;Fk; rakj;jpy; fUKI;ilapd; ntspg;ghL eilngWfpwJ. me;Neuj;jpy; clYwit fl;Lg;gLj;jy; Ntz;Lk;.



**(iii) ghJfhg;ghd fhyKiw**

mjd; Fwpcf;FNfhs;> khjtpyf;Fr; Rw;wpd; ehs; fzf;fPl;L mbg;gilapy;  
clYwT nfhs;Stijj; jtpHg;gJ.

**2. ciw (epNuhj;)**

,e;j fUj;jilr;rhjdk; Mzhy; gad;gLj;jg;gLfpwJ. ,J Mzpd; cWg;ig  
%Lk; nky;ypa ,ug;ghpdhy; Md rhjdk;. clYwTf;Fr; rw;W Kd;G ,J  
gphpf;fg;gl;L tpiug;ghd Mz;Fwpapd; Nky; ciwahfg;  
Nghlg;gLfpwJ.

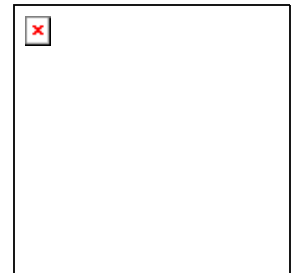


**3. tpjhdk; (Diaphragm)**

eLNt cl;Fopthf cs;s ,ug;ghpdhy; Md rhjdk; mij clYwTf;F Kd; me;jg;  
ngz;Nz Eioj;Jf; nfhs;syhk;.

**EfH khj;jpiufs;> girfs; kw;Wk; \$o;fs;**

,it tpe;jZf; nfhy;ypfs;> ,itahTk; clYwT nfhs;tjw;F Kd;  
fUg;ghijapy; jltpf; nfhs;s Ntz;Lk;.



**,ae;jputpayhd fUj;jilfs;**

**1. tha;top cl;nfhs;Sk; fUj;jil khj;jpiufs;**

,it fU Kl;il ntspg;gLjiy jLg;git khjtpyf;fpypUe;J 5k; ehs; Kjy; ngz;  
jpdKk; xU khj;jpiu cl;nfhs;Sjy;.

**2. fUj;jilr;rhjdk; (IUD)**

**epue;jukhd Kiwfs;**

**1. bA+ngf;lkp (Tubectomy)**

,J kpfTk; rpwpa mWit. ngNyhg;gpapd; Fohapy; xU rpW Jz;L> ,U  
gf;fq;fspypUe;Jk; ntl;bnaLf;fg;gLfpwJ.

**2. thnrf;lkp (Vasectomy)**



,J \$l vspa ghJfhg;ghd mWit rpfpr;ir jhd; tpijg;igapd; Nky; Gwj;jpy;  
kpfr;rpwpa ntl;L Vw;gLj;jp> tpe;J mZf;fis ,UGwj;jpYk; vLj;Jr; nry;Yk;  
Foha;fspy; rpW Jz;L ntl;b vLf;fg;gLfpwJ. ,ijr; nra;a 15epkplq;fNs MFk;.

**khjtplha; tUk; Kd; Vw;gLk; khw;wq;fs;**

,J rhjhuzkhf tUk; gpur;rpidahFk;. ,J kd  
hPjpahfTk; cly; hPjpahfTk; Vw;gLk; rpy khw;wq;fshy;



eilngWk; tp\akhFk;. khjtplha; tUk; rpy ehl;fSf;F Kd;G eilngWk;  
epfo;T MFk;.



cly; hPjpahf Vw;gLk; khHgf gFjp typ Vw;gLjy;> fhy;fspy;  
tPf;fk;> mb tapW cg;gpdhwN;ghy; Njhd;Wjy;> vil mjpfhpj;jy;>  
jiytyp> vhpr;ry;> kw;Wk; NrhHT.

kdhPjpahf Nfhgk; nfhs;Sjy;> kd mOj;jk; nfhs;Sjy;> vhpr;ry; miljy;.

mjdhy; ngz;fs; mjpf mstpy; fhg;gp rhg;gpLtij jtpHf;f  
Ntz;Lk;. itl;lkpd; kw;Wk; fhy;rpak; khj;jpiufis cl;nfhs;s Ntz;Lk;.



,Nj gpur;rpida mjpfkhdhy; kUj;Jthpd; MNyhridd;gb  
khj;jpiufis mUe;jyhk;

**khjtplha; JJa;ik**

1. khjtplha; fhy;jpd; NghJ> cly; ntg;gepiyia rPuhf itj;jpUf;f jpdKk;  
Fspay; mtrpak.
2. gpwg;GWg;gpypUe;J tUk; JHehw;wj;ij jtpHf;f Nrhg;G kw;Wk;  
jz;zPuhy; fOt Ntz;Lk;.
3. rkr;rPuhd czit cl;nfhs;Sjy; (fha;fwp> goq;fs;  
Nghd;wit) kpf mtrpak;



4. Rj;jkhd nkd;idahd gQ;rhilia khjtplha; fhy;jpd; NghJ gad;gLj;j Ntz;Lk;.
5. gQ;rhilia ehd;F my;yJ MW kzpNeuj;jpw;F xU Kiw khw;w khw;w Ntz;Lk;
6. cjpuk; ciwe;J njhilfNshL cuRk;NghJ elg;gJ fbdkhf ,Uf;Fk;. Mjyhy; njhilg;gFjpia cyHthf itj;jpUf;f Ntz;Lk;.
7. Kjy; khjtplha;f;F gpd;dH vg;ngHOJk; gQ;rhilia itj;jpUg;gJ ey;yJ.
8. khjtplhapd; NghJ kpjkhd clw;gapw;rpAk; kw;Wk; Njitahd Xa;Tk; mtrpak;.

**b];nkhdhpahtpd; NghJ ftdkhf nray;gl Ntz;bait**

1. Mokhd Rthrk; nfhs;s Ntz;Lk;.
2. khjtplhapd; NghJ tapw;Wg;gFjpapy; nte;ePuhy; xj;jlk; nfhLj;jhy; typ njhpahJ mjdhy; ngz;fs; mjpf mstpy; fhg;gp rhg;gpLtij jtpHf;f Ntz;Lk;. itl;lkpd; kw;Wk; fhy;rpak; khj;jpiufis cl;nfhs;s Ntz;Lk;.



,Nj gpur;rpaid mjpfkhdhy; kUj;Jthpd; MNyhriddg;gb khj;jpiufis mUe;jyhk;.



**KbTiu**

,dg;ngUf;fpd; cWg;gpd; MNUhf;fpaj;jpd; %yk; ngz;fs; mjpf msThd fUj;Jfis ngw;Wf;nfhs;fpd;wdh;. mjdhy; mth;fSf;F ,dg;ngUf;f cWg;gpd; MNUhf;fpaj;ij gw;wp epfo;r;rpfs; elj;j Ntz;Lk;.

### ANSWER KEY

S.NO	Answer	S.NO	Answer
1	D	16	c
2	C	17	b
3	C	18	c
4	A	19	a
5	D	20	a
6	A	21	b
7	C	22	a
8	A	23	b
9	B	24	c
10	D	25	a
11	D	26	a
12	C	27	b
13	B	28	c

14	B	29	b
15	A	30	a