

**EFFECTIVENESS OF INFORMATION, EDUCATION AND  
COMMUNICATION PACKAGE ON KNOWLEDGE REGARDING SEXUAL  
AWARENESS AMONG ADOLESCENT GIRLS AT SELECTED SCHOOLS IN  
KANNIYAKUMARI DISTRICT**



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

**OCTOBER 2019**

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**INTERNAL EXAMINER**

**EXTERNAL EXAMINER**

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**Approved by the Dissertation Committee on:.....**

**RESEARCH GUIDE:.....**

**Dr.Reeta Jebakumari Solomon M.Sc (N)., Ph.D.,  
Principal,  
Thasiah College of Nursing, Marthandam  
K.K. District, Tamilnadu– 629165**

**SUBJECT GUIDE:.....**

**Dr.Reeta Jebakumari Solomon M.Sc (N)., Ph.D.,  
Principal,  
Thasiah College of Nursing, Marthandam  
K.K. District, Tamilnadu – 629165**

**MEDICAL GUIDE:.....**

**Dr.Felsit Punitha M.B.B.S., DGO  
Head of obstetrics and gynaecology  
P.P.K. Hospital, Marthandam - 629165**

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**OCTOBER 2019**

## **CERTIFICATE**

This is to certify that this is a bonafide work of Mrs. C. Shyni, II Year MSc Nursing. Thasiah College of Nursing, Marthandam, submitted in partial fulfilment of the requirement for the degree of Master of science in Nursing.

**Dr.Reeta Jebakumari Solomon M.Sc (N), Ph.D.,**

**Principal,**

**Thasiah College of Nursing, Marthandam**

**K.K. District, Tamilnadu – 629165**

**Place :Marthandam**

**Date :**

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## ABSTRACT

Background of the Study: Adolescent is the period of transition between childhood and adulthood, a time of rapid physical, social, sexual and emotional maturation. Most adolescents deal with these changes without adequate knowledge and understanding which could cause issues such as, teenage pregnancy, sexual abuse, unhealthy sexual behaviour and HIV/AIDS. The nurses have an enabling role to help the adolescent to increase knowledge on sexual awareness by using IEC package. **The aim** of the study is to evaluate the effectiveness of information education and Communication package on knowledge regarding sexual awareness among adolescent girls at selected schools in Kanyakumari District. **Materials and method:** Quasi experimental pre-test post-test control group design was adopted. The sample size consisted of 100 adolescent girls, 50 in experimental group and 50 in control group. The conceptual frame work is based on Sister Callista Roy's Adaptation Model. Purposive sampling technique was adopted. Demographic data and structured questionnaire on sexual awareness was used data collection. IEC was given for 30 minutes, once a week for 4 weeks. **Result:** In experimental group 52% of adolescent girls had inadequate awareness. After providing IEC package, no one had inadequate awareness and 100% had adequate awareness. There was a significant improvement in mean post test awareness score 20.08 in experimental group (MD = 12.36, t value =18.76 p<.000). The mean post-test level of awareness score 20.08 among adolescent girls in experimental group was greater than the mean post test level of awareness score 8.56 among adolescent girls in Control group (MD =11.52 t, =21.77 p<.000). **Conclusion:** The study proved that IEC programme is an effective teaching strategy in improving the knowledge regarding sexual awareness among adolescent girls.

(Key words: IEC package, sexual awareness, adolescent girls.)

## CHAPTER I

“Today’s girl child will be the mother of tomorrow”.

- Unknown

### **Background of the study**

Human life completes its voyage through various stages and most indispensable is adolescence. Adolescence is the duration of transition from childhood to adulthood.(Fazia Navas, 2011)

Adolescents are the trend-setters, makers, builders and leaders of the future. But they may alter the forthcoming only if they have abilities, well-being, decision-making and best choices in life. Today’s world record 1-8 billion young people present an enormous opportunity to transform the future. (Babatunde Osotinmehim, 2014)

Lots of adolescents still doesn’t have the liberty to information and education on sexuality, reproduction and sexual health and rights, nor do they approach the preventive and corrective administration. Providing adolescents with access to search information education and services is thus the main task for future programmes. The status of the young and adult females in society and how they are dealt with or abused is a vital element of their reproductive health. Education open doors for girls and women effectively influence their status and the control they have over their own lives and their health and richness. In certain nations, complications of risky premature birth are the driving reason for death among teenage girls. An investigation in Nigeria established that 72 percentage of all deaths among females under the age of 19 years due to the outcomes of insecure abortions. Moreover, young women who survive unsafe abortion may endure complication leading to infertility.

National Council of Education Research and Training (NCERT) in India; 2005 says “The physiological changes that happen amid adolescents stage have ramifications in the psychological, mental and social aspects of an adolescents life. Most adolescents manage these progression without full learning and comprehension, which could make

them vulnerable to a risky situation like life skills and personal development changes due to the adolescent stage. Substance abuse, love affair, teenage pregnancy, early marriage, unhealthy sexual behavior are some problem the adolescents.

Menstrual cleanliness and management is an problem that is inadequately recognized and has not gotten adequate attention in their education. Most of the adolescents are being impacted by broad communication live TV programme, film and advertisement. Many of the wrong perceptions about sex-related issues may lead them into unwanted relationships with opposite sex and teen pregnancy. The studies that do exist demonstrate that among the adolescent school girls menstrual learning and discernments are poor and practices often are not ideal for appropriate hygiene.

Dr. AS Kundu has formulated the module such that instructors can serenely show it in schools. He has used simple yet intriguing portrayals that may help students comprehended the text. Sexual health education includes the push to forestall undesirable sexual acts, remarks or advances, including sex dealing to anyone in any situation regardless of the relationship between the victim and the offender. This effort consists of preventing sexual coercion, blackmail, social awareness or other forms of indulgences. It is critical to high light that sexual viciousness, rape, teen pregnancy, risky sexual behaviour awareness STD, HIV, AIDS in modifying the adolescent behaviour, which is characterized as the physically forced insertion of a person using a body part of an object. (Hakimi, 2001).

Adolescent girls in India are a largely hidden population, amounting to 113 million or 20% of the world's adolescent girls, and are caught in a society with social practices and differentiating phases of development that abandons them feeble to make essential life-decisions. Worldwide there are roughly 880 million adolescent and young females aged 15-24 years. In spite of making up 12% of the world's population, this population is left without a vocalize or control of their own bodies. (WHO, 2014)

Mahajan and Sharma (2004) conducted a study to assess the knowledge level of adolescents towards the reproductive system and reproductive organs. The study was conducted on 400 adolescent females (200 adolescent females were taken from rural zones and 200 adolescent) were taken from urban zones of Jammu. Urban adolescent

girls had relatively sound knowledge regarding these issues compared to rural adolescent girls. Bhan et al., (2004), in a study on awareness concerning sexual knowledge on adolescent girls (16 – 20 year) found that awareness regarding HIV / AIDS amongst adolescent girls is exceptionally low. Adolescent girls also have inadequate knowledge about sexual issues and contraception, resulting in early pregnancy, expanded risk of STD infections, maternal morbidity and mortality and unsafe abortion.

Reproductive well-being of adolescent girls is essential in determining the health of future generations. For guaranteeing educated choices by adolescents on their sexuality and reproductive health, national AIDS control association has presented life skills training in the school syllabus. However, there exist many roadblocks in implementation from theory to practice. A descriptive cross-sectional study was modulated among girls of classes VI-XII of a Government High school in an urban slum of Maharashtra. Two hundred and fifty girls participated. All girls were taught about reproductive health and life skills concerns after the study. The level of consciousness improved significantly with an increase in the class of respondent. Eighty percentages of them were uninformed of the form of secondary sexual characteristics in both the sots. Less than 30% of the girls were aware of contraceptives. Seventy percentages felt comfortable quarrelling or trusting about reproductive health issues with friends rather than parents, teachers, or medical professionals. Conclusion of the study exhibits that the knowledge and awareness about reproductive and sexual well-being concerns among adolescent girls were troubling.

STDs and HIV / AIDS this exertion as threats of an adolescent. Expressive cross-sectional type of study was held among 385 subjects. Awareness was measured in the high and low level with fusing knowledge, posture and behaviour pattern of adolescents on reproductive and sexual health (RSH). The maximum (57.9%) of them was in grade XII 73.2% had high-level knowledge and 70.9% possessed a good practice of reproductive and Sexual Health (RSH). Most of the survey (83.9%) had positive approach towards the importance of reproductive and Sexual Health (RSH) concerned consciousness with more than one means of communication; 98.63% were using radio / TV/ computers as foremost means of communication followed by books and newspaper (94.52%). Adolescence is both a period of occasion and threats. It is an episode of

exploring new options and concepts as an opportunity. Due to the absence of awareness and proper guidance on sexuality and reproductive health, adolescents are becoming more helpless to sexual exploitation; early accidental pregnancy and health hazards followed.

The nurses have an important enabling and facilitating role to help the adolescent girls to increase the knowledge of sexual awareness. Information education and communication is easy to perform without any risk and with minimal expenses. The noticeable substantiation that information education and communication increase the knowledge of sexual awareness and help to prevent the peer pressure, sexual abuse, forced marriage, teen pregnancy and depression.

### **Need for the Study**

Today 1.2 billion adolescents endure at the crisis between childhood and the adult world. Around a million of them reside in India. As they stand at these crossroads, so do societies at large the crossroad between losing out on the feasible of a generation on caring them to transformation of society. In India adolescents, between the age of 10 and 19 years account for nearly one-quarter of the entire population (UNICEF, 2011). Their educational attainment, their preparation to take on adult role and responsibilities and the assist they receive from families and communities are in question. There are many programs being conducted to improve adolescent's self-concept by different organizations. Individual-level interventions administered group-level intervention school-based programs, community-based programs.

Most parents do not debate subjects related to sexual problems. Consequently, many teens turn to peers and media for related information which leads to vague information with disordered and often provide contradictory messages regarding sex and other related issues. Sex education is necessary for an adolescent to offer them positive direction, right information which would stay away from superfluous stresses and strains. For instance, numerous adolescent girls without legitimate knowledge about menstruation are stunned to find themselves bleeding during that phase, parents and teachers have to be very tactful. So that girls do not obtain incorrect information which leads to teenage pregnancies outside marriage which are ascending in India.



Parents often accuse the unreasonable impact of film and counsellors blame ignorance.

According to WHO sexual health is considered to be the state of physical, passionate, mental and social prosperity in-relation to sexuality and not only the absence of illness or infirmity providing adolescent girls with sexual and reproductive health education I an important way of promoting healthy adolescent and sexual development and preventing unfavourable outcomes of sexual behaviours. Our study shows that the majority of the stake-holder were uneducated of the development of secondary sexual characters and use of condoms and oral contraceptive pills as a means of contraception. Teenage girls, particularly those living in an urban slum locality, are exposed to sexual intimidation by not only young boys in their immediate locality are but also to sexual maltreatment and brutality by men in their family or community. They are also more susceptible to RTIs. In such a scenario, a lack of awareness concerning safe sexual and reproductive health practices can have devastating results. The outcome by Shiela, et al., revealed that awareness about menstrual changes was 66.1% among the girls. These findings of two decades back show that in spite of modernization in society, the adolescent awareness about reproductive well-being issues has not improved.

Three siblings were exposed to sexual abuse for eight months by their van driver in New Delhi in September 2010. Three minor girls were raped and murdered in Mumbai in February 2011. Most people interpret about these incidents and move on to the next news item; believing that 'such incidents' happen to other children. The incidents listed above are not random occurrences, but depict the shocking reality of our country. Most of the cases of child sexual abuse by close kin , the suspect has taken advantage of a helpless and defenceless of a girl who did not even realize the solemnity of the crime.

Since 2006, Government of India had launched the Adolescent Reproductive and Sexual Health (ARSH) services to providing fair, accessible services such as counselling on nutrition and sexual problems, immunization awareness, on contraceptives. RTIS, HIV / AIDS behavioural risk factors, and services for pregnancy/ abortion. However, the tangible benefits of these services are yet to be realized by the beneficiaries.

The global preponderance of sexual abuse has been estimated at 19.7% for females and 7.9% for males, according to a 2009 study published in clinical psychology review that examined 65 studies from 22 countries. Using the available data the highest occurrence rate of sexual abuse geographically was found in Africa ( 34.4%) primarily because of high rates in South Africa; Europe revealed the lowest occurrence rate (9.2%); America and Asia had occurrence rates between 10.1% and 23.9% respectively. Most sexual abuse offenders are their victims; roughly 30% are relatives of the girl, most often brothers, fathers, uncles or cousins; around 60% are other associations such as friends of the family, babysitters, or neighbours; strangers are the offenders in nearly 10% of sexual abuse cases.

India has a past of many events of violence against girls which was well-publicized but it was the recent 2012 Delhi gang-rape case that intoxicated a large scale of public reaction that pressurized the government to take positive step India's Economy Outlook in January 2013. The police structure in India plays a major role in shielding the women and averting gender-based violence. However, there have also been reports in India on negligence and discrimination by authorities tasked with protecting the victim of sexual crime blocking investigation of the rape or discouraging the victim from registering a case based on the gender, class or caste. In India, both the state authorities and the society play a important role in relation to the girl's situation in the populous nation.

Gupta, et al., (2013) conducted a cross-sectional study amid students of 11th & 12th standard in Lucknow, India to evaluate the knowledge about HIV/AIDS. Data were accumulated from 215 students by using both open and close-ended questions related to HIV/AIDS. Data were analysed using SPSS 17.0 version. The result revealed modes of spreading of HIV/AIDS that it was conveyed through unprotected sex (92.0% students). However, knowledge of students about high-risk group and curability (39%) of HIV/AIDS was not reasonable. Therefore, the study concluded the school authorities and the others concerned should come forward to design awareness campaigns.

R. Umadevi, R. Rama, et al., (2013) conducted a study on adolescent health present status and its connected programs in Gurdaspur district, Punjab, India. Study

revealed that 2.7% boys and 8% girls reported sexual debut before the age of 15 and most of the sexual activity happens in the setting of marriage, this leads to early pregnancy due to social pressure.

Even though prophylactic awareness is 94% among girls aged 15 – 19, only 23% of the wedded and 18% if the sexually active unmarried girls in this set, utilized a contraceptive once at least. All the three shows practically equivalent pervasiveness (59.1%, 59.8% and 58.2%) of pregnant and mothered adolescent and there is a study increase in the percentage of first pregnancy among teenagers (11.7%, 12.4% and 14.4%). Early marriage and low prophylactic utilization are the explanations for this pattern.

Sexual awareness, if left unnoticed and unmanaged lead to peer pressure, sexual abuse, forced marriage, teen pregnancy, and depression. Having experience in teaching with adolescent girls, the researcher realized the importance of need for increased sexual awareness based on the studies related to the Information, Education and Communication. The researcher felt that it was a strong need to study the effect of Information, Education and Communication package on sexual awareness of adolescent girls.

### **Statement of the Problem**

“A study to assess the effectiveness of Information, education and communication package on knowledge regarding sexual awareness among adolescent girls at selected schools in Kanyakumari District.

### **Objectives**

- ⇒ To assess the level of knowledge regarding sexual awareness among adolescent girls
  
- ⇒ To find out the effectiveness of information, education and communication package on knowledge regarding sexual awareness among adolescent girls.

⇒ To determine the association between the pre-test level of sexual awareness and selected demographic variables such as age, education, occupation of parents, family monthly income, type of family, religion, area of residence, father's and mother's educational status previous source of information and relationship with peer group.

## **Hypothesis**

H1 - The mean post-test score of sexual awareness will be significantly higher than the mean pre-test score of sexual awareness in the experimental group who had information education and communication.

H2 - The mean post-test score of sexual awareness among adolescent girls in the experimental group will be higher than the mean post test score of sexual awareness in control group.

H3 – There will be a significant association between the pre-test score of sexual awareness among adolescent girls and selected variables such as age, education, occupation of parents, family monthly income, type of family, religion, area of residence, father's and mother's educational status previous source of information and relationship with peer group.

## **OPERATIONAL DEFINITION**

### **Effectiveness**

Effectiveness is the capability of producing the desired result. When something is esteemed effective it implies it has a planned or anticipated outcome. (Oxford Dictionary)

In this study, it refers to producing the desired or intended result of information education and communication package on sexual awareness as measured by the knowledge questionnaire.

## **INFORMATION, EDUCATION AND COMMUNICATION PACKAGE**

Information, education and communication (IEC) package is defined as a powerful and effective means of transmission of the messages and social interaction to the target groups (Heinz's, 2008).

In this study Information, Education and Communication package is defined as a means of transmission of messages regarding sexual awareness to the adolescents studying in selected schools at Marthandam.

- From now on information education and communication package will be denoted as IEC package.

Information is defined as knowledge communicated (or) concerning a particular fact.(Heinz's, 2008).

In this study, information refers to the way of providing facts regarding psychological changes during puberty and fertilization by giving power point presentation.

Education is defined as a procedure of receiving (or) giving systematic instruction. (Anne M. Barker, 2015)

In this study, education involves teaching the students regarding anatomy and physiology of the reproductive system with booklet.

Communication is defined as an trading of information by speaking, composing (or) utilizing some other medium. (Shirley Taylor's, 2008)

In this study, communication is the system and process that is used to communicate with the students regarding STD and HIV/AIDS and sexual safety by lecture cum discussion method.

## **KNOWLEDGE**

Knowledge is defined as information acquired through experience or education. (Anne M.Barker, 2015)

In this study, it refers to the study participants response and understanding

regarding sexual awareness as measured by sexual awareness questionnaire.

### **Awareness**

Awareness is the capacity to straight forwardly know and perceive, to feel or to be cognizant of events (Sylvester, 2007).

### **Sexual Awareness**

In this study sexual awareness refers to having knowledge or understanding of sexuality which is measured by sexual awareness questionnaires.

### **ADOLESCENTS**

Adolescence is the period of transition between childhood and adulthood. A time of fast physical, cognitive, social and emotional maturation as the girls prepare for womanhood (Marylin.J, 2001).

In this study the adolescent girls between 13 – 17 years of age studying at selected schools in Kanyakumari District.

### **ASSUMPTIONS**

- ⇒ Lack of sexual awareness is mostly seen among adolescent girls.
- ⇒ Risky sexual behaviour is common among adolescents girls
- ⇒ The information, education and communication, package training programme will provide adequate knowledge to the adolescent girls.

### **DELIMITATIONS**

The study will be limited to the

- ⇒ 100 samples only
- ⇒ Adolescent girls in selected schools at Kanyakumari district
- ⇒ The period of study is limited to 4 weeks

### **Projected outcome**

- ⇒ This study will reveal the existing level of sexual awareness among adolescent girls in selected schools at Kanyakumari district.
- ⇒ The adolescent girls will be able to prevent peer pressure, sexual abuse, forced marriage, teen pregnancy and depression.
- ⇒ They will be able to avoid risky sexual behaviour and prevent STD,HIV and AIDS

⇒ The study will aid the adolescent to have healthy sexual behaviour and prevent sexual violence in the society.

## **CONCEPTUAL FRAMEWORK**

A conceptual framework is a group of concepts or a set of prepositions that spell out the relationship between them. The overall aim of the conceptual framework is to make scientific finding meaningful and generalizable.

The conceptual framework for the study was based on Sister Callista Roy's Adaptation Model.

Sister Callista Roy, a member of sister of Saint Joseph Carondeler, was born October 14, 1939, in Los Angeles, California. She received a Bachelor of Arts in nursing in 1963 from Mount Saint Mary's college in Los Angeles in 1966. After that, her education in sociology, received both an M.A. in Sociology in 1973 and Ph.D in Sociology in 1977, from the University of California.

Roy's Adaptation Model for nursing was derived in 1964 Harry Helson's works in Psychophysics.

The major concept of Roy's adaptation Model is

### **Input**

The input includes their classes of stimuli (focal, contextual, and residual) that raise from inside the person and the external environment and the adaptation level. Input is mediated by the control process.

#### **1. Focal Stimuli**

Those stimuli that are the proximate causes of the situation.

#### **2. Contextual stimuli**

All the other stimuli in the internal and external environment, which may or may not affect the situation.

### **3. Residual Stimuli**

Those vast and unknowable motivation that also exist and may affect the situation.

In this study, input consists of focal stimuli, sexual awareness due to adolescent girls. The contextual stimuli are age, education, monthly income, occupation of parents, type of family. The residual stimuli include socio-cultural beliefs and hormonal level changes.

#### **Through put**

##### **a) Control process**

Input is mediated by the control process. By giving role play and audio-visual activity the awareness will be improved.

##### **b) Effector**

A system effector is the adaptive models. These modes are physiological mode, role performance mode and interpretation mode.

##### **Physiological mode**

It involves the body's essential needs and modes of relating to adaptation.

##### **Self-concept mode**

It is a composite of convictions and feeling that one hold on oneself at a particular time. It is framed from perceptions, particularly others' reactions and direct one's behaviour.

##### **Role Performance Mode**

Role function is the performance of duties based on given position in society. The way in performs the role depends on one's communication with others in the given situation.



### **Interpretation mode**

It involves one relationship with significant others and support system. In this mode on psychic integrity by meeting needs for nurturance and warmth. In this study throughout consist of the intervention of the study i.e., Information, education and the mechanism that assess how the IECP works on sexual awareness.

### **Output**

The output is a response that may adaptive or ineffective the adaptive response is those that contribute an adaptation goal. Versatile reactions add to the health and the way toward being and becoming integrated, ineffective responses do not. In my study, the outputs consist of the evaluation of the efficiency of the intervention i.e. sexual awareness.

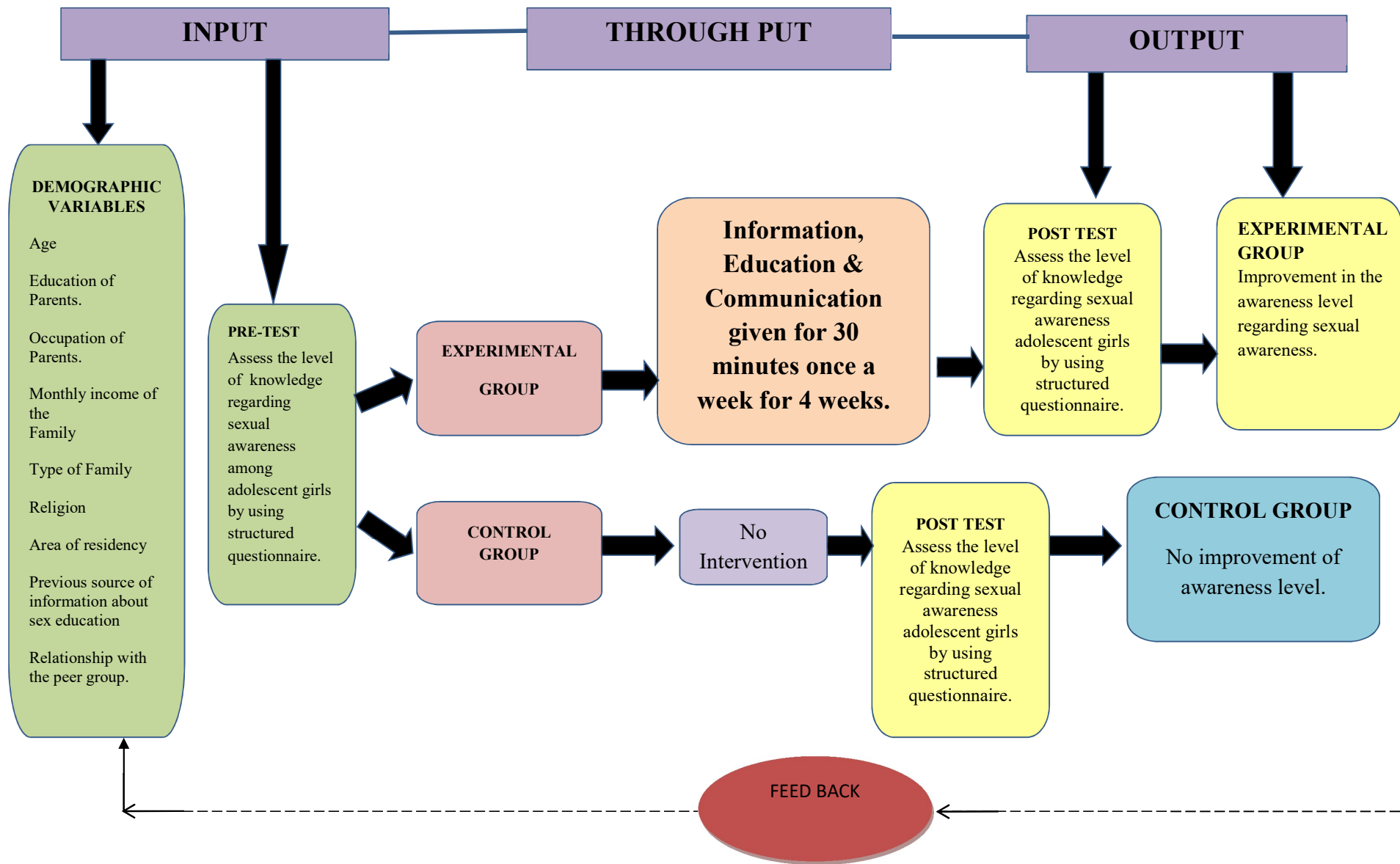


Figure 1: Based on Callista Roy's Adaptation Model

## CHAPTER II

### REVIEW OF LITERATURE

A literature review is a search and evaluation of the available literature in given subject or chosen topic area. It documents the state of the art with respect to the subject or topics are writing about. In writing the literature review, the purpose is to convey to the reader what knowledge & ideas have been confirmed on a topic, and what their strengths and weaknesses. The literature review must be defined by a guiding concept e.g. Research objective, the problem or issue are discussing, or argumentative thesis. In general, the literature review provide a context for the research, justify the research, ensure the research hasn't been done before or if it is repeated, that it is marked as a replication study, show where the research fits into the existing body of knowledge, enable the researcher to learn from previous theory on the subject, illustrate how the subject has been studied previously, highlight flaws in previous research, outline gaps in previous research, show that the work is adding to the understanding and knowledge of the field, help refine, refocus or even change the topic (Maheswari, 2017)

The review of literature is organized as follows:-

Section :I General information related to adolescents.

Section: II General information related to sexual awareness.

Section : III Studies related to sexual awareness among adolescent girls.

Section: IV General information related to information, education and communication.

Section : V Studies related to information and educational and communication.

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#### **Section :I General information related to adolescents.**

Adolescence is a transitional period in the human life span, linking childhood and adulthood. Adolescent become longer as the age of onset of puberty is falling and age at which person become economically autonomous is raising. In this stage of physical, spiritual, emotional, Social and psychological development that usually occurs during the period from puberty to legal adulthood.( Gupte 2010).

## Definition

Adolescence can be defined biologically as the physical transition marked by the strike of puberty and the cessation of physical growth cognitively, as changes in the ability to think abstractly and multi-dimensionally or socially as a period of preparation for adult roles. Major pubertal and biological change comprise changing to the private parts, height, weight, and muscle mass as well as substantial changes in brain structure and organization ( SurajGupte , 2011)

Developmental characteristics of adolescents

In this developmental characteristics include

- ✚ Physical Development
- ✚ Intellectual Development
- ✚ Moral Development
- ✚ Spiritual Development
- ✚ Psychological Development
- ✚ Social – Emotional Development

## Physical Development

Physical Development refers to bodily changes including growth, improved gross and fine motor skills, and biological maturity. In early adolescence the young adolescent body undergoes more developmental change than at any other time except from birth to two years old. Developmental growth includes significant expansion in height, weight and internal organ size as well as changes in skeletal and muscular systems with growth spurts occurring about two years prior in girls than boys.

## Sexual Concerns

The adolescent is often nervous about midnight discharge, penile size, shape and erection, growth of hair, menses, breasts and appearance to influence the opposite sex. The common barrier of communication with the parents magnifies adolescents worry.

## **Self-Gratification**

Most adolescents indulge in self-gratification (Masturbation) to quench their sexual desire and obtain pleasure out of this practice.

## **Promiscuous Sex**

As in the west is usual in the developing countries such as India understandably therefore, the promiscuity in adolescents is on an increase. This is not restricted to peer groups rather a proportion of adolescents mate with prostitutes.

In the adolescence there are 3 stages of sexual development

- 1) Auto – eroticism
- 2) Homo – Sexuality
- 3) Hetero – Sexuality

## **Auto-Eroticism**

Adolescent he/she the use of own body and imagination to get sexual pleasure.

## **Home-Sexuality**

Sooner or later, the adolescent may develop a very intimate closeness with an individual of the same sex.

## **Hetero-Sexuality**

Heterosexuality is romantic attraction, sexual attraction or sexual behaviour between of the opposite sex.

## **Intellectual Development**

Intellectual development refers to the increased aptitude of people to understand and reason in adolescents, intellectual development is not as visible as physical development, but it is just as extreme. During early adolescence, youth exhibit a wide scope of person intellectual development including meta cognition and independent thought. They tend to be curious and display wide-ranging interests.

## **Moral Development**

Moral development is defined as an individual's ability to make principled choices and how to treat one another. During early adolescence, many of the attitudes views and values that young adolescents develop remain with them for life. They move away from quilt consent of adult moral judgement to the development of their own personal values. They transition from a self-centred perspective ton considering the rights and feelings of others.

## **Spiritual Development**

Spiritual development is defined as a developmental process for making meaning of one's life. Acknowledged as a legitimate domain of human development, spiritual development is seldom referenced in education. Understandably, concerns about the separation of church and state and first amendment rights alerts educators to avoid this aspect of human development youth adolescents often want to explore spiritual matters, develop connections between self and others and gain a perception of themselves and the world.

## **Psychological Development**

During early adolescence, psychological development is characterized by identity formation and the hunt for independence. Young adolescents experience two stages of identity formation a) Industry against inferiority when 10 to 11 years olds identify themselves by the tasks and skills they perform well, and b) Identity against identity when 12 to 15 years old explore and experiences. Personality development depends on the degree of exploration and commitment to an identity.

## **Social – Emotional development**

Social emotional development concerns a person's capacity of mature inter-relationship with individuals and groups. In early adolescence, social emotional maturity often lags behind physical and intellectual development young adolescents have a strong need to belong to a group with peer approval becoming more important and adult endorsement decreasing in importance and mature socially and emotionally.

## **Section: II General information related to sexual awareness**

### **Definition**

Awareness is the ability to directly know and perceive, to feel or to be aware of events (Sylvester, 2007)

### **Sexual Health**

Sexual health is a tearful task, as each culture, sub-culture, and individual has different standards of sexual health. Sexual health includes far more than avoiding disease or unplanned pregnancies. It is an important part of our physical and emotional health.

### **Sexual Health awareness**

Understanding that sexuality is a natural part of life and comprises of more than sexual behaviour. Recognising and respecting sexual rights we all share. Making an endeavour to prevent unintended pregnancies and STDs and seek care and treatment when needed. Being able to experience sexual pleasure, satisfaction and intimacy within a healthy relationship.

### **Change in social and Sexual behaviour**

Adolescence is characterized by conflicts of values, emotional stress and readiness to intense attitudes, with invariably leads to several psycho-social problems of adolescents.

Puberty is the stage of the lifespan in which a child develops secondary sex characteristics. The average age of puberty for girls is 10-12 years. The average age of puberty for boys is 12-14 years. Adolescents have fundamental human right to receive precise and comprehensive reproductive and sexual health information.

Sexual and reproductive health awareness day is organized to raise awareness about sexual and reproductive health (SRH). SRH encompasses dimensions of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity (World Health Organisation).

To maintain one's sexual and reproductive health, people need access to accurate information and the safe, effective, affordable and acceptable contraception method of their choice. They must be informed and empowered to protect themselves from sexually transmitted infections, HIV/ AIDS, unintended pregnancies and unsafe abortions. And women must have access to services when they decide to have children and can help them have a healthy pregnancy, safe delivery and healthy baby.

**Awareness need to be created in following aspects:**

**Puberty:** Adolescence is an appropriate time to build healthy habits and lifestyles relating to SRH, as it is the conversion from childhood to adulthood and is associated with physical and psychological changes. They are also vulnerable to human rights abuses, in the sectors of sexuality, marriage and childbearing. Health services should be adolescent friendly.

**Pregnancy and unsafe abortion:** When girls and women do not have access to quality services and information they are at risk of an unintended pregnancy; almost half of all pregnancies are unintended and approximately half of unwanted pregnancies end in abortion. If abortion is unsafe it can put women's and girls' lives and well-being at risk. Unsafe abortion can be prevented through:

- comprehensive sexuality education
- access to affordable contraception
- safe abortion care

**Sexually transmitted infections (STIs) and HIV/AIDS:** STIs and HIV/AIDS have a deep impact on individual's and couple's sexual and reproductive health and well-being. It is therefore imperative that all people have access to sexual and reproductive information, education and communication to prevent STIs and HIV.

**Gender-based violence:** Violence is a violation of a person's rights and also puts women, girls and already vulnerable populations at magnified risk of HIV infection and unintended pregnancy, among other health and social affairs.



## **Influence of information and communication technologies (ICTs) on sexual behaviour:**

- **Information relating to sexual activity**-ICTs and social media has enormous information on sexuality and relationships, however, these technologies can also provide access to vague and inadequate information.
- **Cyber bullying**- Cyber harassment can lead to disorders.
- **Sexting**-The private exchange of self-produced sexual images via cell phone or the Internet is new high-risk behaviour among youth, which should be discussed in SRH.

**Poor mental/emotional health:** Emotional and mental health problems are also associated with increased rates of unsafe sex, sexually transmitted diseases and early sexual experiences.

**Alcohol, tobacco and drugs abuse:** A high prevalence of risky sexual behaviour is informed in association with substance misuse, as alcohol and drug consumption may impair decision-making.

**Access to modern contraception:** Women and young girls must have information and access to services that can help them to avoid unwanted pregnancy. Contraceptives prevent unintended pregnancies, diminish the number of abortions, and lower the incidence of death and impairment related to complications of pregnancy and childbirth.

School based sexuality educational programmes are most effective for creating positive effects, including increasing knowledge about different views of sexuality, behaviours and risks of pregnancy or HIV and other STIs. (Dr. Aruna Rastogi; 02/02/2018)

## **Section: III Studies related to sexual awareness among adolescent girls**

David J. Miller (2009) performed a study to assess the awareness of previous campaign in both rural and urban Kenya. A total number of 1195 respondents were interviewed; previous study was conducted in 1999. The findings show levels of

awareness and knowledge about sexual abuse increased in adults. Thus, 96% of adults and 80% of children interviewed had heard about child abuse and neglect. A large number of the respondents were able to identify forms of child abuse without any guidance as it was in the previous study i.e. reading a list of pre coded concepts. The respondents were also able to mention other forms of child abuse such as verbal abuse, early marriage, and female circumcision, and abortion and sex discrimination. These were some of the concepts used in the campaign. This is a clear demonstration that the campaign had yielded good results.

Maharaj P. and Cleland J (2006) in their study entitled “Condoms Become the Norm in the sexual culture of college students in Durban, South Africa” examined the factors contributing to the increase in condom use among college students in Durban, KwaZulu-Natal, South-Africa; and some of the barriers to consistent condom use. Condoms had become “part of sex” and highly acceptable to the great majority and were easily accessible. They were primarily being used for preventing pregnancy; many students liked not having to get to a health facility for supplies.

Diclemente RJ (2005) in “Prevention and control of STIs among adolescents: the importance of a socio-ecological perspective-A Commentary” studied the STI epidemic among adolescents in the USA is inextricably tied to individual, psychosocial and cultural phenomena. Reconceptualising the epidemic within an expanded socio-ecological framework may provide an opportunity to better confront its challenges. The authors use a socio-ecological framework to identify determinants of adolescents’ sexual risk and protective behaviours as well as antecedents of their STI acquisition.

Dhital A D, Badhu B P, Paudel RK, Uprety DK. (2005), conducted an experimental study with pre-test post-test control group design in Dharan town of Nepal. Structured-teaching program consisting of information on human reproductive system was used as a tool of investigation for the experimental group, whereas conventional teaching method was used for the control group. The result was like this, 200 Adolescent school students the mean ( $\pm$ SD) pre-test score of the experimental group on knowledge of reproductive health was 39.83 ( $\pm$  16.89) and of the control group was 39.47( $\pm$  0.08). After administration of the structured teaching program the experimental group got a score of (84.60 $\pm$ 10.60) and the control group with

conventional teaching method got a score of (43.93±10.08) was statistically significant ( $p < 0.001$ ). Similarly, the post-test scores of knowledge of the group 14 on responsible sexual behaviour and their attitude towards reproductive health were better in the experimental group than in the control group ( $p < 0.001$ ). This indicates that use of structured teaching program is effective in improving knowledge and attitude of the adolescents on reproductive health.

Sudharani (2018) Osmania medical college, Hyderabad, India, conducted a study to assess the awareness level of adolescent girls regarding various reproductive health issues and to impart health education about menstrual hygiene among the adolescent girls. A total of 760 adolescent girls (380 in each area) were interviewed. Result shows that in the present study only 37.4% in rural area and 48.7% in urban area had prior knowledge on menstruation (before attaining it), and 61.3% of the rural subjects and 59.5% of the urban subjects did not know from which organ the menstrual blood was coming during menstruation. Significant percentage of study subjects found to know that infection was one of the causes of leucorrhoea in urban and rural area with 42.1% and 30.1% respectively. In this study 47.7% in rural area and 54.5% in urban area knew correct legal age of marriage in girls. Hence there is urgent need to intervene in early adolescent period by imparting knowledge on reproductive health.

Rakhi Jain, Punneet Anand (2016) conducted study on awareness of pubertal changes and reproductive health in adolescent girls in Gwalior, Madhya Pradesh. The study population consisted of 200 adolescent girls between 10 – 19 years age 100 each, representing the urban and tribal setting. A predesigned questionnaire, which consisted of questions designed to evaluate the awareness about pubertal changes (like change in weight, height, breast, menstrual cycle, psychological and social functioning) and reproductive health was used for data collection. The data was analysed using SPSS, Chi square test. Conclude on IEC campaigns have to be strengthened to increase awareness on menstrual hygiene practices among tribal adolescent girls as these are a vulnerable group.

Tarhane S, Kasulkar A, et al (2015) conducted study on awareness of adolescent girls regarding menstruation and hygienic practice during menstrual period, Nagpur. A cross-sectional study was carried out in 100 adolescent girls of age group 12-18 years.

They were interviewed through pretested questionnaire. We found that 89% girls thought menstruation to be a normal process, 79% girls used sanitary napkins while 21% girls used clothes as absorbent during menses. Mother seemed to be the first source of information in 88% girls. It was suggested that the girls need to be educated about the menstruation and hygienic practices which can be achieved by educational television programs, school/nurses health personnel, compulsory sex education in school curriculum and knowledgeable parents.

Patanwar, Pratibha, et al., (2013) conducted a study on awareness of Reproductive Health in Raipur city, Chhattisgarh, India. The study revealed that majority of the girls scored well in the knowledge of safe sexual relation, right age of child bearing, mode of pregnancy preventions. The areas where girls scored low were meaning of Reproductive health, prior knowledge of menstruation, fertile period, contraception, symptoms and transmission of AIDS, RTIs and knowledge of STDs other than AIDs/HIV was poor. Attitude towards Sex education were positive and pre-marital sexual relation were disagreed by majority of the girls.

R.Shashi Kumar, RC Das, (2012) conducted a cross sectional study on factors associated with adolescent sexuality in two co-educational schools of Goa. Total study sample was 642. It comprised 357 (61.93%) girls and 229 (39.07%) boys. 30.08% girls had reported having sexual experience. Average age of first sexual contact for girls was 14.09 years. 41.09% girls and 53.04% boys have the knowledge regarding sex education.

Sudha B. Yadav, Naresh R. Makwana, Bhavin N. Vadera, Kishor M. Dhaduk, Kapil M. Gandha (2011), worked on, "Awareness of HIV/AIDS among rural youth in India: A community-based cross-sectional study was conducted among youths aged 15-24 years in rural areas of the Saurashtra region of Gujarat, India. A cluster sampling design was used, surveying 50 subjects from each of 30 clusters. Data were collected through house-to-house visits using a semi-structured questionnaire. Proportions and logistic regression were used for analysis. Out of a total of 1,237 subjects who participated in survey, 60% knew something about HIV. Of those who had heard of HIV, more than 90% subjects knew the modes of transmission and more than 80% were aware of modes of prevention of HIV/AIDS. One fifth of the subjects had

misconceptions in relation to HIV/AIDS. On applying multiple logistic regression, age, education, occupation, and mass media exposure were found to be the major determinants of their knowledge with regard to HIV/AIDS.

A Study conducted by Chakrapani, P. A Newman, M. Shunmugam, & R. Dubrow, (2010) Orissa and West Bengal. Awareness about sexual risk behaviour in Knowledge on HIV involves the correct identification of the modes of transmission and the methods needed to prevent further HIV infection. Studies show that the increase in HIV related knowledge is not a predictor of positive behaviour change but is a prerequisite in the behaviour change process. The degree of knowledge in the various areas regarding HIV/AIDS also varies among different populations. However, the increase in knowledge may or may not be the predictor of the less risky behaviour. It was found that although the awareness about sexual risk behaviour and level of knowledge about HIV/ AIDS was very high, condom use was very low; resulting in high risk behaviour related to HIV/ AIDS and STDs among males.

Anjali Singh and Shikha Jain (2009), did a study about, “Awareness of HIV/AIDS among School Adolescents”. The state of Gujarat has 25 districts and Banaskantha district was selected for the study under the Intensive Rural AIDS Awareness Programme. The study under the Intensive Rural AIDS Awareness Programme revealed that only 35% of the sample subjects had known the expanded form of the abbreviation HIV/AIDS. Very few of the respondents (20%) knew that females are more vulnerable to infect HIV/AIDS than males. Majority of them had the knowledge with regard to the mode of transmission. A fair number of adolescents (55-65%) were aware of the various methods for prevention and treatment of HIV/AIDS. The study findings reflect that though a considerable number of adolescents had correct knowledge about HIV/AIDS but they lacked details about the disease which advocates the need of properly formulated awareness campaigns on HIV/AIDS for schools.

R.S.P.Rao, A. Lena, N.S. Nair, V.Kamath, A.Kamath (2008) conducted study on Information, Education and communication on knowledge regarding reproductive health among adolescent girls in the age group of 16-19 years. The samples were randomly selected from coastal village in Udupi District Karnataka. Adolescent girls were educated regarding reproductive health and their awareness levels were evaluated

immediately following intervention. It was found that there is a significant increase in knowledge after the intervention ( $p < 0.01$ ). This study showed that an IEC Programme could bring about a desirable change in knowledge among adolescent girls regarding reproductive health.

Jayant Ramchandra Kalkute, (2007) performed study to assess the knowledge about sexual health among female students of schools of an urban area, India. All 245 female students of 8th to 11th standard of all three educational streams of two schools were included in the study. Most of the students in the age group of 15-16 years (56%). Science students had 'adequate' knowledge compared to arts and commerce students ( $P = 0.004$ ). Students whose parents were skilled by occupation ( $P > 0.05$ ). Education of parents 40% had positive effect on the knowledge about sexual health of students ( $P = 0.062$ ). In post test, the knowledge about sexual health of students was found to have increased significantly when compared to pre-test. The mean post-test score was 12.61 which was significantly higher than the mean pre-test score of 6.34 (SD 3.23) ( $P < 0.001$ ). Students from nuclear families had "adequate" knowledge about sexual health when compared to students from joint families.

Bini, M., (2004), in her dissertation entitled Attitude towards HIV/AIDS Patients, A Study among Nursing & Para-Medical Staff in Thiruvananthapuram District, Kerala explored that all of the respondents are aware about the causative organism of AIDS i.e. HIV and the level of awareness are high among nursing personnel than Para-medicals. Majority of the respondents aware about the screening tests like ELISA/ Western Blot tests. In the case of awareness, nursing staff are better than Para-medicals like that male respondents are generally kind than females.

B.Muneeswari (2013) performed a study to assess the effectiveness of planned health teaching programme using child-to-child approach on knowledge of selected first aid measures among school children in selected schools at Dharapuram in Erode District, Tamil Nadu, India. Quasi experimental design was adopted. The present study was conducted at Dharapuram in Erode district, Tamil Nadu India. The samples were 200 selected by simple random sampling method. The results showed that ('Z' value = 1.96) mean pre and post-tests value were 10.26 and 21.55. The study concluded that

about 68.5% of students gained adequate knowledge after teaching programme using child-to-child approach.

Liaquat Roopesh, Johnson,etal, (2014) conducted a cross sectional study to assess the sexual health awareness among school girls (10-19 years) in Kanyakumari District. Systematic random sampling was employed to select 100 study subjects. The study results showed that 52% of the study subjects had mother as the source of information. Nuclear family and higher grade students were significantly associated with the awareness of sexual health. the study concluded for sexual health awareness programme for adolescent.

## **Section : IV General information related to information, education and communication.**

### **Definition**

IEC can be defined as an approach which attempts to change or reinforce a set of behaviours in a target audience regarding specific problem in predefined period of time. (Reproductive health and research WHO 2015).

- Information, education and communication in health programme aims to increase awareness, change attitudes and bring about a change in specific behaviour.
- IEC means sharing information and idea in a way that is culturally sensitive and acceptable to the community, using appropriate channels, messages and method.

### **Aims**

- To change the health behaviours of individuals, family and community.
- To prepare background or basis for change in health behaviour.
- To change the norms of the community
- To facilitate education for audience about public health and to create awareness in public opinion.
- To obtain social, political support for health activities.

- To encourage people to adopt and sustain health promoting life style and practices
- To arouse interest, provide new knowledge, improve skills, and change attitudes in making rational decisions to solved their own problems

### **Importance of IEC**

- IEC works, it creates awareness, increase knowledge.
- Mass media helps to create and agenda for public debate, it sis not expensive.
- IEC is an adequate blend of entertainment and social message.

### **Information**

This consists of proving scientific knowledge to the people about the health problems and how to prevent them and promote and maintain health. Information means, data or idea or observation that can be used or reworked into a finished form. The facts provide or learned about something or someone.

### **Education**

- The process of receiving or giving systematic instruction, especially at a school or university.
- Health education can be defined as a process aimed at encouraging people to want to be healthy, to know how to stay healthy to do what they can individually and collectively do to maintain health and to seek help when needed. – (The Declaration of Alma Ata (1987).
- Education is the most powerful weapon which you can use to change the world. – Nelson Mandela (1994).

### **Principle of health education**

1. Credibility
2. Interest
3. Participation
4. Motivation
5. Comprehension



## 6. Reinforcement

### **Process of health education**

- Giving information/questioning
- Demonstration and return demonstration
- Group norms
- System change

### **Communication**

Communication is defined as an exchanging of information by speaking, writing or using some other medium. (Shirley Taylor's, 2008)

### **Types of communication**

- Verbal Communication  
The tone of voice can communicate feelings and emotions that are as significant as the words being spoken
- Non-verbal communication  
Body position, facial expression, body language, movement or expression, body language, movement or expression that indicates fatigue, fear, frustration and anger.

### **Barriers of communication**

- Physiological barriers ( Ex. Hearing difficulties, Loss of Memory )
- Linguistic barriers ( Ex. Consider a word "face" )
- Psychological barriers ( Ex. Unhappy emotions, misperceptions )
- Organizational barriers ( Ex. Unclear planning, Timing )
- Environmental barriers ( Ex. Uncomfortable meeting place, Noise )
- Cultural barriers ( Ex. Norms, Values )

### **Functions of Health communication**

- Information
- Education
- Motivation

- Persuasion
- Counselling
- Raising morale
- Health development
- Health organization

### **Measures for successful communication**

- Clarity of thoughts with simple and understandable language
- Use to way communication
- Usefulness of health message
- Proper use of audio visual aids, gestures, words and pictures
- Credibility and geniuses of communication
- Topics for health education according to requirement, feelings, beliefs and experience of people.
- Latest and reliable information
- Correct medium or method of communication.
- Appropriate attention to verbal as well as non-verbal messages.

### **Planning an IEC Strategy**

- IEC strategy must have comprehensive intervention which emphasizes long term capacity building at the grass root level.
- There must be a true dialogue around a wide range of issue relevant to public health during the planning stage.
- Modelling is often the best way to teach complex behaviour.
- Sound programs also use audience segmentation behaviour analysis and anthropological research to create message that are salient, action oriented and attractive.
- Most effective campaigns combine mass media with community, small group and individual activates and are supported by an existing community structure.
- The timing of a campaign health determines its effectiveness.
- If more than one set of messages is being delivery via an umbrella campaign, phasing of message might be important to avoid information overload.

## **Implementing a Strategy**

- Actively involving the target audience in the design. Implementation and monitoring of a project is critical, listen to local language, custom and experience.
- Multimedia are most effective when mass media and population traditional channel are used in combination with person to person interaction.
- Take advantages of local holidays and festival.
- Observation of materials in use and trial periods can help to detect problems.
- Simple inexpensive print materials can be useful and more cost-effective and more expensive and elaborate product.

## **Resources for IEC**

### **1) Print Media**

- Print media have a useful role in health promotion in providing information on health issue.
- The effectiveness of print media depends on achieving a match between the readability of the material and the level of literacy and health literacy of the intended audience.
- Health promotion needs to adopt a systematic approach to the development of print materials including initial research to develop appropriate message, good quality, design using clear and attractive layouts ensure readability of the content and relevance of the content.

Ex: Newspaper, Magazines.

### **2. Mass Media:**

- Mass media are tools for the transfer of information, concepts and ideas to both general and specific audiences. They are important tools in advancing public health goals, communicating about health through mass media is complex.
- Mass media performs three key functions
- Educating
- Shaping public relations
- Advocating

- a) Television – TV is a powerful medium of appealing to mass audiences, its reaches people regardless of age, sex, and income educational level.
- b) Radio – Radio also reaches mass and diverse audiences. Radio health message campaigns have been effective in developing countries.
- c) Internet – The advent of the World Wide Web and the massive increase the internet users offers public health personnel enormous opportunities and challenges.

### **Nurses Responsibility in IEC**

- A friendly and cooperative feeling need to be kept while giving health education.
- The opportunities for health education need to be widely used.
- It is necessary to select the subject matter cautiously. The nurse needs to be in the art of incidental and timely health education.
- It is necessary to use appropriate audio visual aids to enhance the effect of health education.

### **Section: V Studies related to information education and communication**

Mohamed Osman Elamin Bushara et., al (2013) conducted a study to evaluate the effect of information, education and communication on risky behaviours among people living with HIV/AIDS conducted in Khartoun State, Sudan. A quasi-experimental study was conducted in Sudan targeted people living with the disease. Twenty five out of 250 registered members were selected randomly. An intensive intervention was carried out for six months, including; a series of lectures, home visiting, focus group discussions, distribution of pamphlets, posters and video show. The intervention has successfully changed risky behaviours that might lead to infection; there was a significant increase in using condoms, making relationship with uninfected persons, change in isolation from the community, decrease in blood donation to community and significant increase in the disclosing HIV status in health settings. The study concludes that the (IEC) has a strong effect in changing risky behaviours concerning people living with HIV/AIDS. The study recommended that Sudan National Acquired Immunodeficiency Syndrome Control Program and Federal Ministry of Health have to prepare intensified, comprehensive Information, Education and

Communication messages, materials for (PLWAIDS/HIV) concentrating on equipping life skills and practices.

Tesso, D.W., et al., (2012)parent - young people communication about sexual and reproductive health in West Ethiopia. It was stated that the reason for not discussing about sexual and reproductive health with their parent is fear of parents, embarrassment, taboo attached to sex, parent failure to give time to listen. Condom use during first intercourse was associated with having communication about sexual and reproductive health ( AOR = 1.9, 95% CI : 1.0 ) lack of communication skill were reasons that hinder communication between parent and adolescent about sexual matters.

Ebigbagha Zifegha Sylvester (2012) conducted a study to evaluate “the use condom” campaign and its implications for graphic communication in support of development programmes in Nigeria. In order to achieve this, a triangulation of in-depth interviews and content analysis were employed to assess the roles/activities of the media team in the media production process and the Information, Education and Communication (IEC) materials used for the campaign respectively. The paper introduces the reader to the use of graphic language/communication for development purposes and the use condom campaign. The paper ends with the need to adopt communication practices that would involve the graphic encoder at all levels of the media production process, which is indispensable to producing effective graphic messages that facilitate the rapid adoption and utilization of development ideas.

P.Latha and Dr. S. Indira (2016) conducted a study to evaluate the effectiveness of IEC (Information, Education & Communication) package on knowledge regarding minor ailments of pregnancy and its management among antenatal mothers at NMCH, Nellore, Andhra Pradesh. Pre-experimental one group pre-test and post-test with evaluative approach was adopted. Data was collected by using purposive sampling technique from 60 antenatal mothers at Narayana Medical College & Hospital at Nellore, A.P. Results shows that in pre-test, 60% of antenatal mothers had inadequate knowledge and 40% of them had moderate knowledge and nobody had adequate had inadequate knowledge and 40% of them had moderate knowledge and nobody had adequate knowledge on minor ailments. In post test, 70% antenatal mothers had moderate knowledge, 28% of them had adequate knowledge and 2% of them had

inadequate knowledge regarding minor ailments. Hence, the post-test is higher than the pre-test, it can be concluded that IEC package was effective in increasing the knowledge level of women regarding minor ailments of pregnancy.

Nidhikotwal et., al, (2014) conducted study to evaluate effectiveness of the IEC package on adolescent reproductive health in developing countries. These study was to improve the knowledge on sexual and reproductive health issues among the adolescent girls aged 10 – 19 years. The review assessed IEC programmes. Educational material was delivered using lectures, discussions and demonstration by posters, black board, booklet etc. Results showed that the knowledge regarding health aspects improved significantly after Information, Education and Communication. There was considerable increase in the level of girls with regard to knowledge of health problems, environment health, nutritional awareness and reproductive and child health.

The study was conducted to evaluate the effectiveness of an Information, Education and Communication (IEC) programme on knowledge of pregnant mothers regarding prevention and management of warning signs during pregnancy in a selected health care setting at New Delhi by Takoo S , Chhugani M , Sharma V (2013) . An evaluative research approach with one group pre-test and post-test design was adopted for the present study. A structured interview schedule was prepared. Purposive non-probability sampling technique was employed to interview 30 pregnant mothers who attended antenatal clinic. Data gathered was analysed and interpreted using both descriptive and inferential statistics. The study revealed that there was maximum knowledge deficit regarding warning signs of pregnancy. IEC programme was effective in enhancing the knowledge of pregnant mothers on prevention and management of warning signs during pregnancy.

Reshma Sudhir Patil et., al (2010) conducted a study to assess the impact of IEC activity on women's knowledge through health exhibition arranged on women's day. In bharti vidyapeeth deemed university medical college, Kothrud, Pune. The study was planned to impart nutrition education to women who (n=100) attended health exhibition arranged on women's day 2008. The effectiveness of the activity was evaluated by taking feedback. Maximum women (98) were satisfied with knowledge gained and it was beneficial for them in increasing their awareness regarding health and nutrition.

Awareness of women regarding food adulteration has no significant relation with their age ( $p > 0.05$ ). Also women have shown a positive response for making changes in their attitude towards nutrition and food adulteration.

Tushar Rai, Pradeep Aggarwal and Kandpal S.D., (Oct 2013), conducted a cross sectional study to assess the knowledge awareness and practice among adolescents regarding sexually transmitted diseases in an urban slum in Dehradun. Sample size 166 Adolescents i.e. Males-88 and Females-78 were selected using convenient sampling technique. The results show that 51.2% of the adolescents were having knowledge about STD. Their attitude cum practice towards prevention of STD was found to be 72.9% by use of condoms. The study concluded that appropriate health care seeking behaviour and Information Education and Communication (IEC) activities should be promoted.

Mini KV, et al (2012) Knowledge of HIV/AIDS is a prerequisite for individuals to potentially adopt safe sex behaviours to prevent HIV infection 36, 37. Since 1992, a major component of India's NACO program has been an "Information, Education, Communication" (IEC) campaign to promote HIV/AIDS awareness and knowledge. While HIV/AIDS studies globally demonstrate that knowledge is not enough to prevent transmission of HIV, a basic level of awareness and knowledge is the first step towards prevention. Knowledge about HIV/AIDS facilitates individuals' abilities to protect themselves from the virus and reduces stigma and discrimination, also crucial in preventing disease spread.

Joslin Jose, (2015), conducted a quantitative study to evaluate the effectiveness of IEC on knowledge regarding assertive behaviour for child abuse among 60 children in Thrissur. The study revealed that the pre-test knowledge lower than the post-test knowledge. The study concluded that IEC was effective in improving the knowledge of children regarding assertive behaviour for child abuse.

Rao, R.S.P., (2008), Effectiveness of Reproductive Health Education among Rural Adolescent Girls: A School Based Intervention Study in Udipi Taluk, Karnataka: Knowledge regarding ovulation, first sign of pregnancy and fertilization improved by 37.2% (95% CI = (35.2, 39.2),  $P < 0.001$ ). Knowledge regarding the importance of diet during pregnancy improved from 66 to 95% following the intervention. This study

clearly showed that an educational intervention 121 program can bring about a desirable change in knowledge among adolescent girls regarding reproductive health.

Ganga Devi T , M Ramya Rathi Devi (2016) The study was conducted to assess the effectiveness of IEC package on knowledge regarding impact of watching television among children at selected school, Vellore, India. Quantitative approach and Quasi- experimental (One group pre and post-test) research design was adopted for the present study. The sample size for the present study was 100. Proportionate stratified sampling technique was adopted to select the samples for the study. Structured self-administered questionnaire which consists of 30 multiple choice questions was used to collect the data. The results in pre-test revealed that majority 85% of the children had inadequate knowledge and 15% of the children had moderately adequate knowledge and in post-test 61% of children had adequate knowledge, 39% of the children had moderately adequate knowledge and none of the children had inadequate knowledge after IEC package.

Hepsiba Beula Rajam. T (2016) , conducted a quantitative study to evaluate effectiveness of Information Education and Communication on knowledge regarding management of dialysis among 60 patients with chronic renal failure at Theni. The study revealed that 25 had inadequate knowledge and 5 had moderately adequate in pre-test. In post-test 28 had adequate knowledge and 2 had moderately adequate knowledge. The study concluded that information education and communication was effective in improving knowledge.

Mr. P. Arul Valan (2016) conducted study to assess the effectiveness of information education communication (IEC) package on knowledge and attitude regarding testicular cancer (TC) and testicular Self-examination (TSE) among students in a selected college at Nagercoil, Tamilnadu, India. Hundred male students studying final year engineering in a selected college at Nagercoil were chosen by using convenience sampling. In order to collect data a tool was prepared with three parts namely demographic variable, self-administered multiple choice questionnaire to assess the knowledge level, and a 5point Likert scale to assess the attitude. The findings of the study showed that none of the samples had adequate level of knowledge and favourable attitude towards TC and TSE prior to the IEC package. After the IEC package, majority of them had adequate level of knowledge and favourable attitude. Hence, the teaching



programme was effective in imparting knowledge and attitude to college students towards TC and TSE.

Benila G.T. (2014) conducted a pre experimental study to evaluate the effectiveness of information education and communication on knowledge regarding vasectomy among 60 young adults in Coimbatore. The study revealed that, in pre-test 34 of young adults had inadequate knowledge and 16 had moderately adequate knowledge 10 had adequate knowledge. In post-test 9 had moderately adequate kind 51 had adequate knowledge. In post test score level of knowledge score was 16.4, standard deviation was 2.2, mean difference was 7.7. The obtained 't' value is 18.4. It was significant that  $p < 0.05$  level. The study concluded that IEC was effective in improving knowledge regarding vasectomy.

Jenila, P (2013) conducted a quantitative pre experimental study to evaluate the effectiveness of IEC on awareness regarding child abuse among 60 mothers in Coimbatore. The study revealed that the post-test awareness higher than the pre-test. In post-test mean score were 32, standard deviation 2.76. The calculated mean difference was 21.2. The paired 't' value was 37.45, which was statistically significant at  $p < 0.01$  level. The study concluded that IEC was effective in improving the mother's awareness regarding child abuse.

## **SECTION VI: Study related to effect of Information, Education And Communication on sexual awareness**

Hall, Rebecca Glass, (2014), did a study, "An investigation of adult comprehension of HIV/AIDS health information presented with a variety of educational interventions in America". This study was designed to investigate whether the comprehension of HIV/AIDS information could be improved by the method of intervention. One hundred, sixty-two patients, waiting for appointments in primary health clinics, were randomly assigned to one of four interventions. Results showed that participants in Group III, reading the information written on the 5th grade level, had a greater net gain in comprehension scores than those in the other groups. Secondly, using the REALM, a reading test designed to be administered in medical settings to measure reading levels, it was determined that as participants' reading levels increased,

so did their comprehension scores. Additionally, it was determined that gender had no significant effect in the comprehension scores of the groups.

Forhad Akhta Zaman (2013) conducted study to assess the impact of Information, Education, and Communication (IEC) on Knowledge, Attitude, and Practice on HIV/AIDS among the slum dwellers of Dhubri town of Assam. A total of 492 slum dwellers aged 15-60 years were selected from all the slums of Dhubri by probability proportional to size (PPS) sampling method. Result shows Eighty-seven percentage of the study subjects were found to have heard about HIV/AIDS. The above findings, it can be suggested that, intervention programs were useful in enhancing the awareness regarding HIV/AIDS among the underprivileged population.

Anupama Arya et al., (2013) Effectiveness of IEC activities and awareness about selected reproductive child health components in urban slums of Delhi. Data was collected through in-depth interview using semi structured interview schedule, focus group discussion (FGD) and observation of IEC activities conducted in the slums. Effectiveness of IEC activities for family planning, child care and maternal care were graded very well by more than 60% respondents but for reproductive tract infection/sexually transmitted infection (RTI/STI) and Adolescent Health majority of respondents graded as poor and average for HIV/AIDS activities. Communication skills of health worker were graded very well by majority of respondents (41.8%). Conclude on communication by field health worker and televisions are the most effective media for IEC activities in slums.

Kaur Daljit, Shukla Bhavnesh (2011) did a quasi-experimental study to assess the effectiveness of Information, education and communication programme on knowledge regarding prevention of STDs among women in the selected rural areas. Hoshiarpur, Punjab – India total sample consists of 60 subjects - 30 experimental and 30 in control group. Purposive sampling was done for selection of samples. The difference between mean pre and post test knowledge score of experimental group was statistically significant at  $p < 0.001$  level. Thus IEC package is an effective tool in improving the knowledge of women regarding prevention of STDs among women.

Prianaka Mukhopadhyay, Bhaskat Paul (2009) conducted a school-based study on adolescent girls to assess their awareness on reproductive health issues and measure the effectiveness of Information, Education and Communications material in improving their awareness in Mysore. It was found that mean knowledge score increased from  $6.8 \pm 2.4$  to  $11.1 \pm 4.3$ -post intervention. There was a remarkable increase in knowledge regarding minimum age at marriage, early sign of pregnancy, and antenatal care in pregnancy etc. after intervention. Awareness on availability of legal abortion in unmarried pregnant women increased from 7.3% to 44.6%, adverse effect of teenage pregnancy ranged from 3.3percentage to 52.9% in the pre-test and increased to 9.9% to 82.6% in the post- test. A significant increase in knowledge regarding different contraceptive measures was also observed.

Nirojini Bhat Bhan, et al., (2004) “The conducted study aim to know the level of sex knowledge among adolescent girls in Punjab. The age group of 16-20 years. The sample consisted of 75 adolescent girls from three different educational institutes of Pathankot city (Punjab) purposive sampling technique was used to select the sample interview schedule was used for the collection of the data. The information was collected from the respondents related to menarche, masturbation, home sexuality, hetero sexuality and source of information. The result of this study revealed that the girls had poor level of sex knowledge. Though girls knew about certain topics but were hesitating to talk about them.

Shanmuga Sundarams (2005) conducted a study on effectiveness of Information, Education and Communication on sex awareness among adolescent girls in a selected rural area, Chennai, India. Experimental design was selected for this study. Data were collected from 80 randomly selected samples by using the structured interview schedule. 40 samples were allocated for experimental group and remaining 40 samples for the control group. The findings of the study revealed that over all knowledge mean value in experimental design was 48.69 where as in the control group the mean value was only 5.36.after Information, Education and Communication programme the paired 't' value was 17.69 with the  $p < 0.001$  which is highly significant. Therefore, there is improvement knowledge on sex awareness among adolescent girls<sup>12</sup>.

Raizada N, Somasundaram C Mehta JP, Pandya VP (2004), did a study on, “Effectiveness of Various IEC in Improving Awareness and Reducing Stigma Related to HIV/AIDS among School Going Teenagers”. A simple random sampling technique was used to select 7 High schools and therein 1000 students, including 620 boys and 380 girls from class XI & XII were randomly selected and equally divided into 4 groups according to intervention methods – interpersonal communication, distribution of pamphlets, AIDS educational movie and combination of all three methods. A questionnaire was developed to assess knowledge and stigmatising attitudes of the respondents before intervention (pre-test). After intervention, awareness level rose upto 81 to 100 per cent in all the four groups. The high awareness level was sustained till the time of follow-up in all four groups which ranged from 70-90 per cent in Group-1, 60-76 per cent in Group-2, 62-96 per cent in Group-3 and 72-96 per cent in Group-4.

## **CHAPTER III**

### **RESEARCH METHODOLOGY**

Research methodology includes the deliberate procedure by which the researcher begins from the initial identification of the issue to its final conclusion. It involves steps, procedure and strategies for gathering and analysing data in a research investigation. (Denise F. Polit, 2011)

The research methodology includes the research design, setting of the investigation, population, sampling technique, criteria for sample selection, sample size, research tools and technique, the validity of the tool, reliability of the tool, scoring procedure, pilot study, data collection procedure, plan for data analysis.

#### **Research approach**

A research approach tells the researcher what data to collect and how to analyse it. It also suggests possible conclusion to be drawn from the data, in view of the nature of the problem under study and to accomplish the objectives of the study. (Denise F. Polit, 2011)

The investigator used a quantitative approach for the study to assess the effectiveness of information, education and communication package training program on sexual awareness among adolescent girls.

#### **Research Design**

Research design is the researcher's overall plan for answering the research question. (Denise F. Polit, 2011)

The research design used in this study was a quasi-experimental pre-test, post-test and control group research design.

<b>Study subject</b>	<b>Pre-test</b>	<b>Intervention</b>	<b>Post-Test</b>
Experimental group	O <sub>1</sub>	X <sub>1</sub>	O <sub>2</sub>
Control group	O <sub>1</sub>	-	O <sub>2</sub>

### **Key**

O<sub>1</sub> - Pre-test level of sexual awareness

X<sub>1</sub> -Information education and communication package on sexual awareness

O<sub>2</sub> - Post-test level of sexual awareness

### **Variables**

Variables are defined as ‘an attribute that varies, that takes different values’.  
(Denise F. Polit, 2011)

#### **Independent variable**

Independent variables are defined as the variable which believed to cause or influence. (Denise F. Polit, 2011)

In this study, the dependent variable is information, education and communication package.

#### **Dependent variable**

The dependent variable is defined as “the variable hypothesized to depend on or be caused by another variable of interest. (Denise F. Polit, 2011)

In this study, the dependent variable is sexual awareness.

### **Extraneous variable**

A variable that mix-up the health relationship between the independent and development variable and that need to be controlled either statically or in the research design. (Denise F. Polit, 2011)

In this research study, it refers to demographic profile which consists variables such as age, education, occupation of parent, family monthly income, type of family, religion ,area of residence, father's and mother's educational status, previous source of information and relationship with the peer group.

### **Research Settings**

Settings refer to the physical location and condition in which data collection takes place. (Denise F. Polit, 1999)

The settings adopted for this study was Infant Jesus Matriculation Higher Secondary school at Mamootukadai and Vidhya Jothi Matriculation Higher secondary school, Marthandam, Kanyakumari District. The experimental group of this study selected from Infant Jesus Matriculation Higher Secondary school which consists of 1500 students. Out of 1500 students 65 students are studying in 9<sup>th</sup>standard. This school comprises of L.K.G to 12<sup>th</sup>standard. This school has only English medium. This is a co-education school. It is located in 5 Kilometers away from Thasiah College of Nursing, Marthandam. The adolescents for the control group of this study where selected from Vidhya Jothi Matriculation Higher secondary school, Marthandam. It is located 2 Kilometres away from Thasiah College of Nursing, which consists of 800 students. Out of 800 students 70 students are studying in 9<sup>th</sup>standard. This school also has an English medium. This is a co-education school. The investigator selected these schools because of the proximity to the college and adequate availability of the samples.

### **Population**

A population is characterized as “the entire set of individuals or objects having some common characteristics. (Denise F. Polit, 2011)

## **Target Population**

The entire population in which the researchers are interested and to which they would like to generalize the research findings. (Suresh K Sharma 2008).

In this study, the target population will be the adolescent girls in selected schools at Kanyakumari district.

## **Accessible Population**

The accessible population is characterized as the list of the population that the researcher finds in the study. (Polit and Beck, 2011).

In this study accessible population is adolescent girls with lack of sexual awareness.

## **Sample**

The sample is defined as “the sub-set of a population comprising those choose to take part in the study”. (Denise F. Polit, 2011)

In this study sample, the sample was the adolescent girls who fulfilled the inclusion criteria.

## **Sample size**

The sample size is defined as “The number of people participates in the study”. (Denise F. Polit, 2011)

In this study, the sample size is 100 adolescent girls with sexual awareness who satisfied the inclusion criteria among those 50 adolescent girls were for allocated in the experimental group and 50 adolescent girls were allocated for the control group.

## **Sampling Technique**

Sampling is the process of selecting a representative part of the population. Thus a carefully carried out sampling process helps to draw a sample that represents the



characteristics of the population from which the sample is drawn. (Suresh K Sharma 2008)

Purposive sampling technique was adopted to find out the adolescent girls who are studying in 9<sup>th</sup> standard Infant Jesus matriculation higher secondary school, Mamootukadai and Vidhya Jothi Matriculation Higher Secondary School Marthandam. The investigator selected the samples based on the inclusion criteria.

### **Sampling Criteria**

In this study, the investigator selected 100 adolescents from selected schools at Kanyakumari district, by using purposive sampling technique.

Sampling criteria involve the cases that meet some predetermined criterion importance. The criteria for sample selection are mainly depicted under two heading which includes the inclusion criteria and exclusion criteria.

#### **1. Inclusion Criteria**

1. Adolescents who are studying in 9<sup>th</sup> standard were selected for the study.
2. Those who are studying in selected schools of Kanyakumari district.
3. Adolescents who are willing to participate in the study.

#### **2. Exclusion criteria**

1. Those who are long absent during the data collection period
2. Who have minor ailments such as eye infection, fever, cold

### **Research Tool**

In this research study a self-administered knowledge questionnaire were utilized to evaluate the knowledge of adolescents regarding sexual awareness in selected school at Kanyakumari District.

## **Description of Tool**

The tool was developed after an excessive review of literature, internet search and expert opinion. It helped the investigator to choose the most suitable questions.

The tool consists of two sections

### **Section A**

A demographic variable consists of age, education, occupation of parents, family monthly income, type of family, religion, area of residence, father's and mother's educational status, previous source of information and relationship with the peer group.

### **Section B : Questionnaire to assess the level of knowledge**

This consists of sexual awareness questionnaire to assess the knowledge of adolescent girls regarding sexual awareness. Each item was close-ended question with a single correct option. Each correct answer was given a score of one mark and the wrong answer was given a zero mark. The questionnaire consisted of 25 questions under five components such as

1. Secondary sexual characters
2. Fertilization
3. Risky sexual behaviour and HIV/ AIDS
4. Contraception
5. Sexual Safety

### **SCORE INTERPRETATION**

The scores are ranging between 0 - 25.

Grade	Score
Poor awareness	0 - 8
Moderate awareness	9 - 16
Adequate awareness	17 - 25

## **TESTING OF INSTRUMENTS**

### **VALIDITY**

Validity is a degree to which an instrument measures what it is intended to measure. (Polit , 2008)

The tool was validated by five experts. Two experts from departments of obstetrical and gynaecology, two professors in obstetrics and gynaecological nursing and one higher secondary school teachers. The experts were requested to give their opinion about the content and its relevance, appropriate of the items to improve the clarity and content of the items. Hence the tool was considered as valid for proceeding with the study.

### **RELIABILITY**

Reliability is the degree of consisting of dependability with an instrument measure the attribute it is aimed to measure. (Polit , 2008)

Reliability of the tool was established using the split-half method. The reliability of the score ' r ' value is 0.85. Hence the tool was considered reliable for proceeding with the study.

## **DEVELOPMENT OF INTERVENTION**

The intervention package was expanded by the investigator after reviewing the literature and by obtaining the expert's opinion. Information, Education and Communication include the following steps.

- General instruction
- Preparation
- Sequences of procedure
- Aftercare

### **STEP 1: General Information**

- Establish good rapport and maintain a trust-worthy relationship.

- Explain about information, education and communication package on knowledge regarding the importance of sexual awareness.

#### STEP 2: Preparation

- Select calm and quiet classroom.
- Make the students feel free and comfortable.

#### STEP 3: Information, Education and Communication (IEC)

- The investigator introduced her-self to the students.
- The objective of the study explained to the students.
- Information, Education and Communication package on sexual awareness was explained effectively. Interaction with students was encouraged. This teaching was given for 30 minutes, once a week for 4 weeks.

#### STEP 4: Aftercare

Assess the awareness levels of the students after the Information, Education and Communication.

### **Pilot Study**

A pilot study is a small scale version or trial run designed to test the method to be used in the large, more vigorous study which is sometimes referred to as the parent study. (Polit, 2008)

A pilot study was conducted in White Memorial Matriculation Higher Secondary School, Marthandam in the month of February for the period of one week (03/01/2019 to 06/02/2019). 10 samples were selected for the study by purposive sampling technique (5 in experimental group & 5 in the control group). Pre-test was conducted by using a structured questionnaire and Information, Education and Communication were done on the same day. After the intervention got completed post-test was conducted on using the same questionnaire. The study showed the feasibility to conduct the proposed study as planned. There was no modification made in the tool after the pilot study.

## **Method of Data Collection**

### **Step 1 Selection of Adolescent girls**

Formal permission was obtained for the Infant Jesus Matriculation Higher Secondary School, Mamootukadai and Vidhya Jothi Matriculation Higher Secondary School, Marthandam. The researcher introduced herself to the teachers and students explain about the need for the study without disturbing the routine. An entire sample of the main study will be 100 adolescents (50 adolescents in the experimental group, 50 adolescents in the control group) in this study.

### **Step 2: Pre testing adolescent girls**

Data were gathered from adolescent girls' demographic data and needed data using sexual awareness questionnaire.

## **Intervention**

After the pre-test assessment, the IEC package regarding sexual awareness was given to the adolescent girls those who had inadequate awareness in the experimental group. This teaching was given for 30 minutes, once a week for 4 weeks.

## **Post Assessment of Adolescent Girls**

Among adolescent girls in the experimental group, the awareness level was assessed by the same structured questionnaire after administering Information, Education and Communication. The same was done in the control group without giving the intervention.

## **Plan For Data Analysis**

The data collected was analysed by using descriptive and inferential statistical calculation such as mean, standard deviation, chi-square and unpaired 't' test.

## **Descriptive Statistics**

- Frequency and percentage distribution were used for the analysis of the demographic variables and to assess the level of sexual awareness.

- Mean and the standard deviation were used to assess the effectiveness of information education and communication package on sexual awareness among adolescent girls.

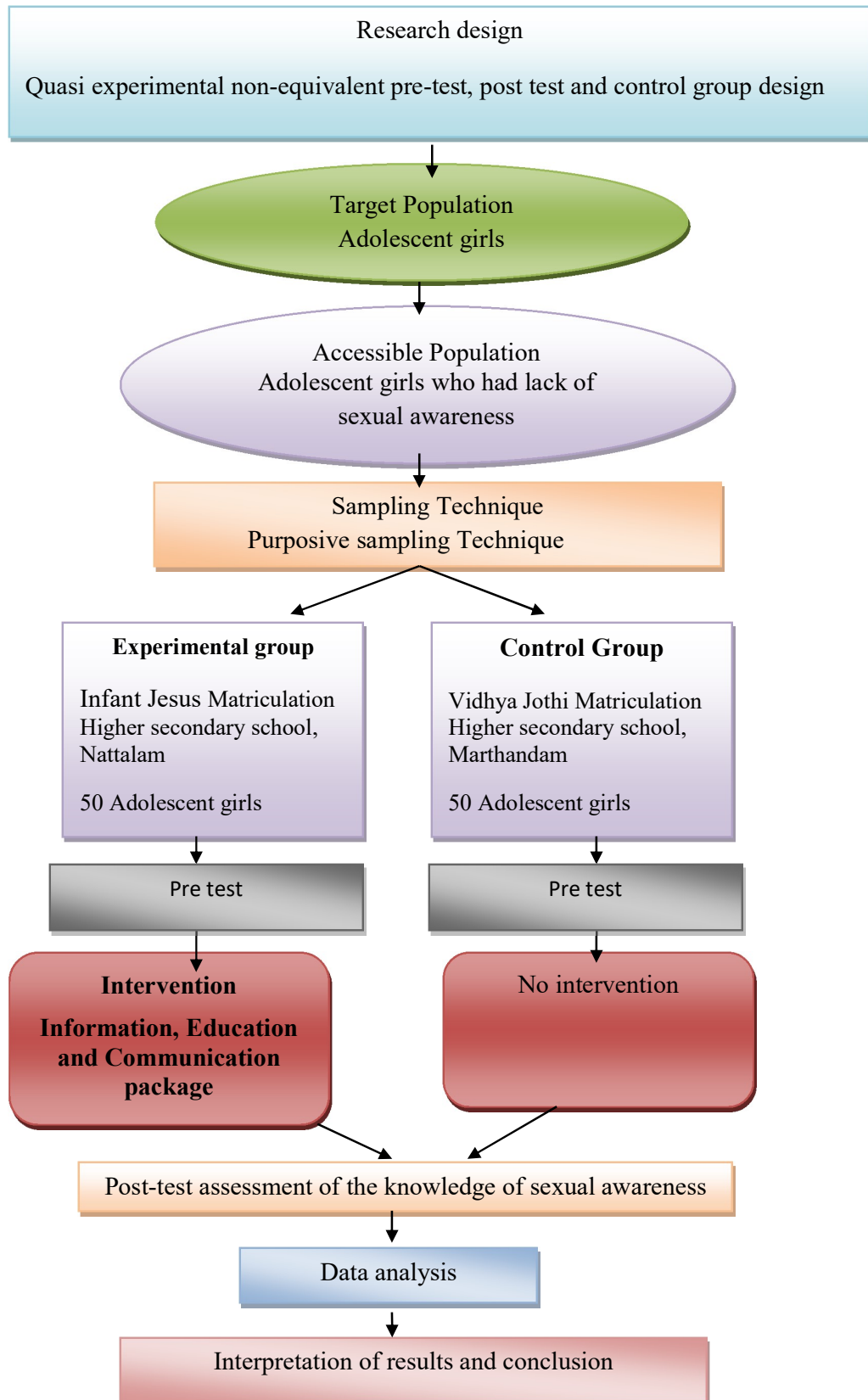
### **Inferential statistics**

- Unpaired 't' test was used to compare the post-test level of sexual awareness on the control group and experimental group
- A Paired t-test was used to compare pre-test and post-test level of sexual awareness among adolescent girls in experimental group.
- Chi-square test was used to find out the association between the pre-test level of sexual awareness in the experimental group and control group with their selected demographic variables.

### **Ethical Consideration**

The proposed study was conducted after the approval of the Dissertation Committee of Thasiah College of Nursing, Vellivilagam. Permission was obtained from Infant Jesus Matriculation School, Mamootukadai & Vidhya Jothi Higher Secondary School, Marthandam written consent of each subject will be obtained before the data collection.

**Figure 2: SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY**



## CHAPTER – IV

### DATA ANALYSIS AND INTERPRETATION

The analysis is defined as the method of organizing data in such a way that the research question can be answered. ( Polit and Beck 2004)

This chapter deals with the analysis and interpretation of data collected to assess the effect on IEC package on level of knowledge regarding Sexual awareness among adolescent girls. This interpretation of tabulated data can bring to light the real meaning of findings of the study. In this study data was analysed based on the objectives and hypothesis of the study using descriptive and inferential statistics.

### PRESENTATION OF DATA

This chapter is divided into 4 sections.

Section I : Frequency and percentage distribution of adolescent girls according to their selected demographic variables in experimental group and control group.

Section II : Distribution of pre-test and post-test level of knowledge regarding sexual awareness among adolescent girls in experimental group.

Distribution of pre-test and post-test level of knowledge regarding sexual awareness among adolescent girls in control group.

Section III : Comparison of pre-test and post-test levels of knowledge regarding sexual awareness among adolescent girls in experimental group.

Comparison of post-test level of knowledge regarding sexual awareness in experimental group and control group.

Section IV : Association between pre-test level of knowledge regarding sexual awareness among adolescent girls in experimental group with their selected demographic variables.

Association between pre-test level of knowledge regarding sexual awareness among adolescent girls in control group with their selected demographic variables.



## SECTION I

Table 1

Frequency and percentage distribution of adolescent girls according to their selected demographic variables in experimental group and control group

Sl. No	Demographic variables	(N = 100)			
		Experimental group (n=50)		Control Group (n=100)	
		f	%	f	%
1	Age in Years				
	a) 13-14 years	21	42.00	23	46.00
	b) 14-15 years	29	58.00	27	54.00
	c) 15-16 years	00	00.00	00	00.00
	d) 16-17 years	00	00.00	00	00.00
2	Education of mother				
	a) No formal Education	0	0	0	0
	b) Primary School	21	42	18	36
	c) Higher Education	24	48	26	52
	d) Graduate	5	10	6	12
3	Education of father				
	a) No formal Education	0	0	0	0
	b) Primary School	22	44	21	42
	c) Higher Education	23	46	25	50
	d) Graduate	5	10	4	8
4	Occupation of father				
	a) Government Job	3	6	4	8
	b) Private	9	18	10	20
	c) Own Business	7	14	8	16
	d) Coolie worker	31	62	28	56
5	Occupation of mother				
	a) Government Job	3	6	4	8
	b) Private	12	24	14	28
	c) House Wife	35	70	32	64
	d) Coolie worker	0	0	0	0
6	Monthly income of the family				
	a) Less than Rs. 5000/-	6	12	5	10
	b) Rs 5,000 – 10,000	16	32	15	30
	c) Rs. 10,001- 15,000/-	17	34	16	32
	d) Above Rs – 15,000/-	11	22	14	28
7	Type of family				
	a) Joint Family	12	24	11	22
	b) Nuclear family	38	76	39	78
8	Religion				
	a) Hindu	16	32	17	34
	b) Christian	30	60	30	60
	c) Muslim	4	8	3	6

9	Area of residency				
	a) Urban	24	48	26	52
	b) Rural	26	52	24	48
10	Previous source of information				
	a) Health professional	5	10	6	12
	b) TV, Radio	16	32	17	34
	c) Friends	7	14	6	12
	d) News paper	22	44	21	42
11	Relationship with peer group				
	a) Healthy relationship	23	46	22	44
	b) Not having good relationship	4	8	5	10
	c) None	23	46	23	46

Table : 1 Predicted that majority of the adolescent girls, that is 58% belonged to age group between 14-15 years and 42% belonged to age group between 13-14 years is (42%). In control group it is predicted that majority of the adolescent girls that is 54% belonged to age group between 14-15 years and 46% belonged to age group between 13-14 years, no one was in the age group between 15 – 16 years and 16 – 17 years. Considering the educational status adolescent girls in both groups were doing 9<sup>th</sup> standard.

From the experimental group it is predicted that the mothers who completed graduation were only 10%, who completed higher education was 48%, who completed primary school was 42%. In control group it is predicted that the mothers who completed graduation was 12%, who completed higher education is 52%, who completed primary school was 36%, and no one was uneducated.

From the experimental group it is predicted that the fathers who completed graduation were only 10%, who completed higher education was 46%, who completed primary school was 44%. In control group it is predicted that the fathers who completed graduation was 8%, who completed higher education was 50%, who completed primary school was 42%.

In the experimental group it is observed that the fathers who have Government job was 6%, private job 18%, as their occupation. Most of their fathers were coolie workers i.e. 62%, and some were own business i.e. 14%. In control group it is observed that the fathers who have Government Job was 8%, private job 20%, coolie workers 56% as their occupation and 16% were having own business.

In the experimental group it is observed that the mothers who have Government Job was 6%, private 24%, as their occupation most of them were House wives i.e. 70% and no one is were as coolie worker. In control group it is observed that the mothers who have Government Job was 8%, private 28% as their occupation most of them were House Wives 64% and no one is there as coolie worker.

Regarding, monthly income of the family, nearly 1/3<sup>rd</sup> of them were having monthly income of Rs. 5,000 to 15,000 in both groups.

In the experimental group, it is observed that 24% of adolescent girls were from Joint family and 76% from Nuclear family. In control group it is observed that 22% adolescent girls were from Joint family, and 78% from nuclear family.

In the experimental group, it is observed that most of the adolescent girls gathered information on sexual awareness by means of newspaper (44%), and TV Radio (32%) and it is almost same in the Control group also.

N = 100

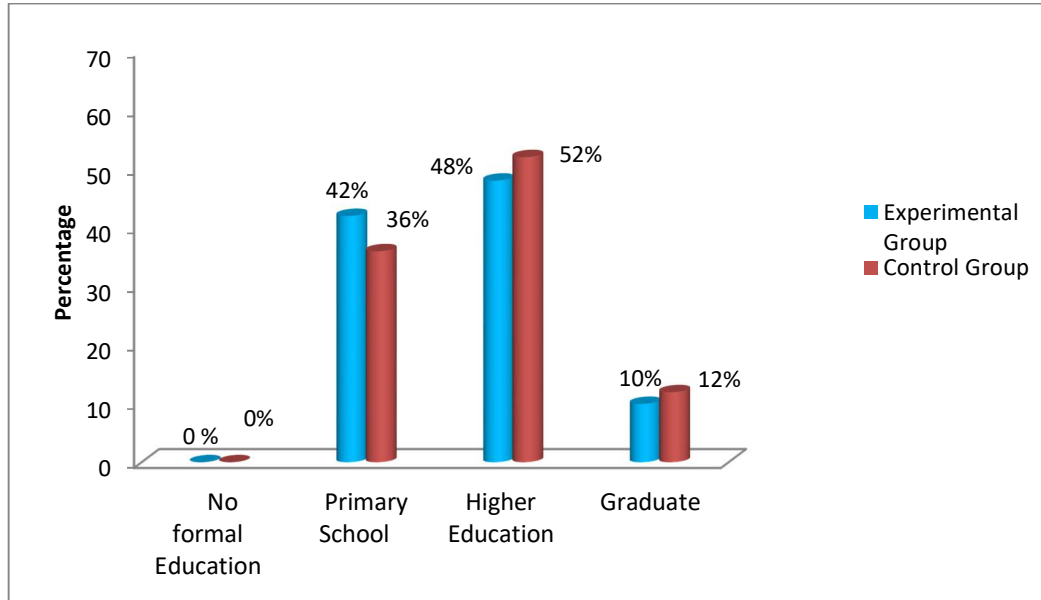


Figure: 3(a) Frequency and percentage distribution of adolescent girl's mothers according to their educational status

N = 100

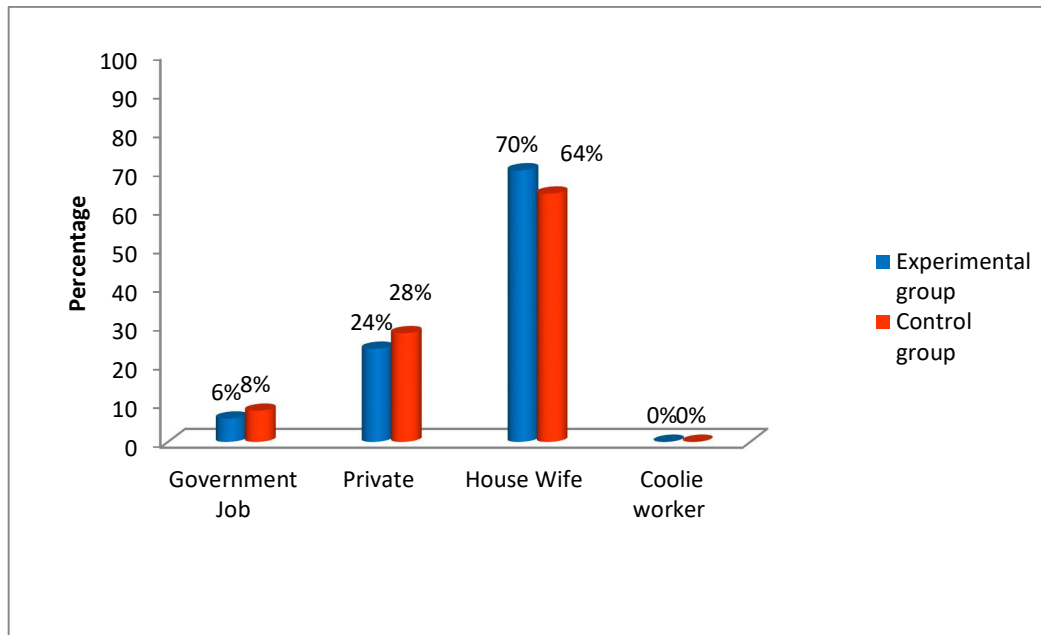


Figure: 3(b) Frequency and percentage distribution of adolescent girl's Mothers according to their occupational status

N = 100

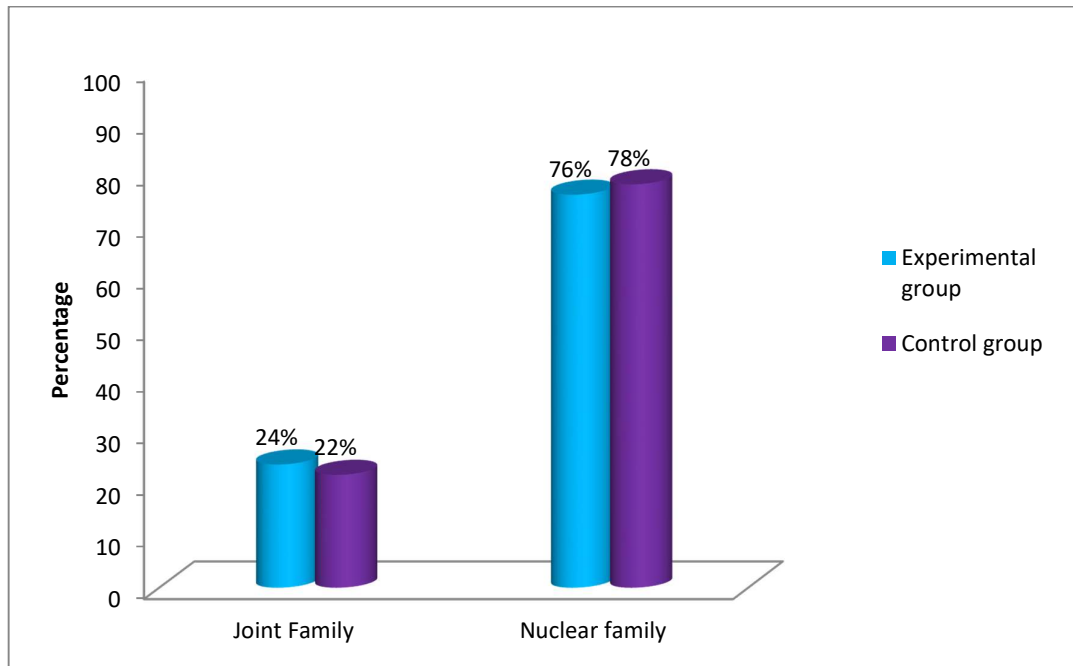


Figure: 3(c) Frequency and percentage distribution of adolescent girl's according to their type of family

N = 100

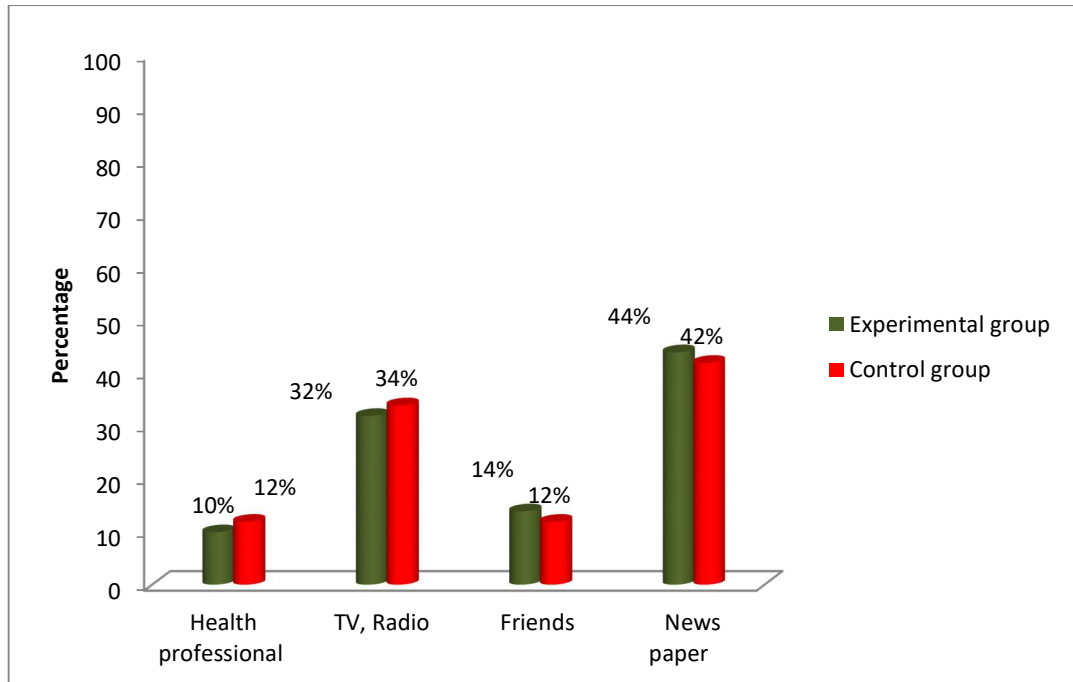


Fig: 03(d) Frequency and percentage distribution of adolescent girls who had previous source of information regarding sexual awareness

## SECTION II

Table: 2

Distribution of pre-test and post-test level of knowledge regarding sexual awareness among adolescent girls in the experimental group.

(N = 100)

Level of Knowledge	Experimental Group			
	Pre-test		Post-test	
	f	%	f	%
Adequate	0	0.00	50	100.00
Moderate	24	48.00	0	0.00
Inadequate	26	52.00	0	0.00

Table No: 2 predicts that majority of them that is 52% had inadequate level of knowledge and 48% had moderate level of knowledge before the administration of Information Education and Communication package in experimental group but after the intervention all of them (100%) had adequate level of knowledge and none of them had inadequate and moderate level of knowledge in experimental group regarding sexual awareness.

Table: 3

Distribution of pre-test and post-test level of knowledge regarding sexual awareness among adolescent girls in control group

N =100

Level of knowledge	Control Group			
	Pre-test		Post-test	
	f	%	f	%
Adequate	0	0.00	0	0.00
Moderate	26	52.00	28	56.00
Inadequate	24	48.00	22	44.00

Table :3 summarizes that equal distribution of level of knowledge regarding sexual awareness among adolescent girls. i.e., nearly half of them had moderate level of knowledge and other half of them had inadequate level of knowledge in pre-test. Whereas in post-test there was not much changes. Majority, 56 % of adolescent girls had moderate level of knowledge and 44% of them had inadequate level of knowledge regarding sexual awareness.

### SECTION III

Table : 4

Comparison of pre-test and post-test levels of knowledge regarding sexual awareness among adolescent girls in experimental group

N = 100

Groups	Test	Mean	SD	Mean Difference	Paired 't' test	Level of significant
Experimental group	Pre – test	7.72	3.27			
	Post – test	20.08	2.21	12.36	18.76*	.000 *

\* Significance at .000 level

To compare the mean pre-test and post-test level of knowledge score among adolescent girls in experimental group and control group, the null hypothesis was stated as follows:

H<sub>01</sub> - There will be no significant difference between pre-test and post test scores among adolescent girls in experimental group.

The hypothesis was tested using paired 't'- test method.

The table 4 summarizes that the mean pre-test mean level of knowledge in experimental group was 7.72 which was more than the post-test mean level of knowledge scores 20.08. The obtained 't' value for the level of knowledge score on 18.76 in experimental group were statistically highly significant  $p < .000$ . This indicate that the mean differences is 12.36 is true difference and has not occurred by chance.

The above findings fail to support null hypothesis. Hence the researcher rejects the null hypothesis and accept the research hypothesis. This proves that the Information, Education, and Communication packages were effective and improving knowledge regarding sexual awareness among adolescent girls in experimental group.



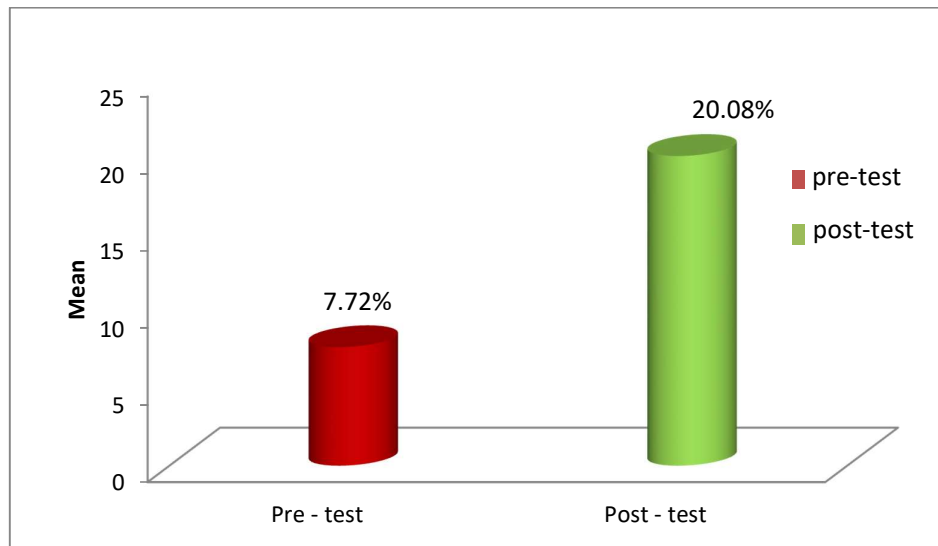


Fig 04: Comparison of pre-test and post test levels of knowledge regarding sexual awareness among adolescent girls in experimental group

Table 5:

Comparison of post-test level of knowledge regarding sexual awareness among adolescent girls in experimental group and control group.

N = 100

Group	Test	Mean	SD	Mean difference	't' test	Level of Significant
Experimental group	Post test	20.08	2.21			
				11.52	21.77	.000*
Control group	post test	8.56	3.08			

\*Significant at 0.001 level

To compare the mean post-test level of knowledge scores regarding sexual awareness among adolescent girls in experimental group and control group the null hypothesis was stated as follows:

HO<sub>2</sub> There will be no significant difference in the post test score of knowledge regarding sexual awareness among adolescent girls in the experimental group and control group.

The hypothesis was tested by using unpaired 't' test .

Table : 5 summarizes that in the post test mean level of knowledge score in the experimental group was 20.08 and in the control group was 8.56. The obtained 't' value, 21.77 were statistically high significant at p<.000 level. This indicates that the mean difference of 11.52 level of knowledge score the true difference has not occur by chance. The above findings fail to support the null hypothesis. Hence the researcher rejects the null hypothesis and accept the research hypothesis.

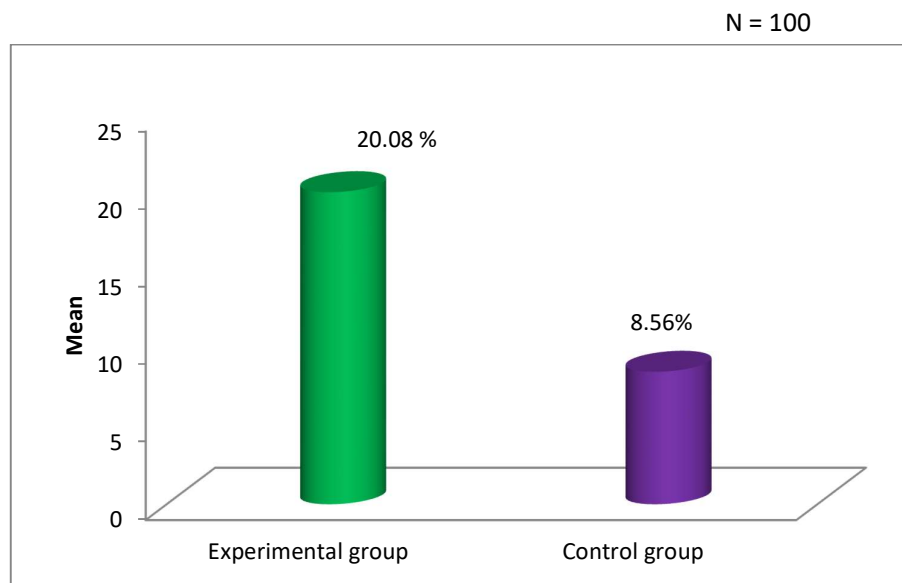


Figure 5: Comparison of post-test level of knowledge regarding sexual awareness among adolescent girls in experimental group and control group.

## SECTION IV

Table: 6  
Association between of pre-test level of knowledge regarding sexual awareness among adolescent girls in experimental group with their selected demographic variables.

N = 100

Sl. No	Demographic variables	Experimental group			$\chi^2$	df	level of significant
		Level of knowledge					
		Inadequate	Mode rate	Total (50)			
		(26)	(24)				
1	Age in Years						
	13-14 years	15	6	21			
	14-15 years	11	18	29	5.47	1	.02*
	15-16 years	0	0	0			
	16-17 years	0	0	0			
2	Education of mother						
	No formal Education	0	0	0			
	Primary School	14	7	21	4.17	2	0.19#
	Higher Education	11	13	24			
	Graduate	1	4	5			
3	Education of father						
	No formal Education	0	0	0			
	Primary School	14	8	22	3.42	2	0.28#
	Higher Education	11	12	23			
	Graduate	1	4	5			
4	Occupation of father						
	Government Job	1	2	3			
	Private	3	6	9	5.35	3	0.32#
	Own Business	2	5	7			
	Coolie worker	20	11	31			
5	Occupation of mother						
	Government Job	1	2	3			
	Private	8	4	12	1.68	2	0.48#
	House Wife	17	18	35			

	Coolie worker	20	0	0			
6	Monthly income						
	Less than Rs. 5000/-	4	2	6	7.93	3	0.048*
	Rs 5,000 – 10,000	12	4	16			
	Rs. 10,001- 15,000/-	7	10	17			
	Above Rs – 15,000/-	3	8	11			
7	Type of family						
	Joint Family	4	8	12	2.20	1	0.26#
	Nuclear family	22	16	38			
8	Religion						
	Hindu	6	10	16	2.36	2	0.38#
	Christian	18	12	30			
	Muslim	2	2	4			
9	Area of residency						
	Urban	9	15	24	3.90	1	0.048*
	Rural	17	9	26			
10	Previous source of information						
	Health professional	1	4	5			
	TV, Radio	5	11	16	8.66	3	0.042*
	Friends	5	2	7			
	News paper	15	7	22			
11	Relationship with peer group				9.42	2	0.04*
	Healthy relationship	8	15	23			
	Not having good relationship	1	3	4			
	None	17	6	23			

\* Significant at 0.005 level

# Not significant

To find out if there was any association between the pre-test level of knowledge regarding sexual awareness among adolescent girls and their selected demographic variables such as age, education, occupation of parents, type of family, fathers and mothers educational status, monthly income, area of residence, previous source of information and relationship with peer group in the experimental group, the null hypothesis was stated as follows:

HO<sub>3</sub> there will be no significant association between pre-test score of knowledge and their selected demographic variables such as age, education, occupation of parents, type of family, fathers and mothers educational status, monthly income, area of residence, previous source of information and relationship with peer group in the experimental group.

The above table predicts that the demographic variables such as age ( $\chi^2$  value 5.47 df1  $p < 0.005$ ) monthly income ( $\chi^2$  value 7.93 df3  $p < 0.005$ ), Area of residency ( $\chi^2$  value 3.90 df1  $p < 0.005$ ) previous source of information ( $\chi^2$  value 8.66 df3  $p < 0.005$ ), relationship with peer group ( $\chi^2$  value 9.42 df2  $p < 0.005$ ) has significant association with the level of knowledge whereas the other demographic variables have statistically no significant association with level of knowledge regarding sexual awareness .

The above findings partially accept the null hypothesis. So, the researcher partially rejects the null hypothesis and accepts the research hypothesis for age monthly income area of residency, previous source of information and relationship with peer group.

Table 7:

Association between of pre-test level of knowledge regarding sexual awareness among adolescent girls in control group with their selected demographic variables.

N=100

Sl. No	Demographic variables	Control group			$\chi^2$	df	level of significant
		Level of knowledge					
		Inadequate (24)	Moderate (26)	Total (50)			
1	Age in Years						
	13-14 years	16	7	23			
	14-15 years	8	19	27	7.93	1	.009*
	15-16 years	0	0	0			
	16-17 years	0	0	0			
2	Education of mother						
	No formal Education	0	0	0			
	Primary School	11	7	18	4.36	2	0.12#
	Higher Education	12	14	26			
	Graduate	1	5	6			
3	Education of father						
	No formal Education	0	0	0			
	Primary School	13	8	21	3.15	2	0.30#
	Higher Education	10	15	25			
	Graduate	1	3	4			
4	Occupation of father						
	Government Job	1	3	4			
	Private	3	7	10	6.32	3	0.26#
	Own Business	3	5	8			
	Coolie worker	17	11	28			
5	Occupation of mother						
	Government Job	1	3	4	6.32	3	0.26#

	Private	3	7	10			
	House Wife	3	5	8			
	Coolie worker	17	11	28			
6	Monthly income						
	Less than Rs. 5000/-		3	5			
	Rs 5,000 – 10,000	10	5	15			0.046*
					8.06	3	
	Rs. 10,001- 15,000/-	8	8	16			
	Above Rs – 15,000/-	4	10	14			
7	Type of family						
	Joint Family	3	8	11	2.43	1	0.20
	Nuclear family	18	18	39			
8	Religion						
	Hindu	7	10	17	1.08	2	0.66
	Christian	15	15	30			
	Muslim	2	1	3			
9	Area of residency						
	Urban	8	18	26	6.44	1	0.018*
	Rural	16	8	24			
10	Previous source of information						
	Health professional	1	5	6			
	TV, Radio	8	9	17	8.32	3	0.040*
	Friends	2	4	6			
	News paper	13	8	21			
11	Relationship with peer group				8.68	2	0.009*
	Healthy relationship	7	15	22			
	Not having good relationship	1	4	5			
	None	7	7	23			

\*Significant 0.001 level

# Not significant



The above table predicts that the demographic variables such as age ( $\chi^2$  value 7.93 df1  $p < 0.005$ ) monthly income ( $\chi^2$  value 8.06 df3  $p < 0.005$ ), area of residency ( $\chi^2$  value 6.44 df1  $p < 0.005$ ), previous source of information ( $\chi^2$  value 8.32 df3  $p < 0.005$ ), relationship with peer group ( $\chi^2$  value 8.68 df2  $p < 0.005$ ) has significant association with the level of knowledge whereas the other demographic variables have statistically no significant association with level of knowledge. So the researcher partially rejects the null hypothesis and accepts the research hypothesis for age, monthly income, area of residency, previous source of information, and relationship with peer group.

## CHAPTER V

### RESULTS AND DISCUSSION

The main aim of the study was to evaluate the effectiveness of Information, Education and Communication package on knowledge regarding sexual awareness among adolescent girls in Infant Jesus Matriculation Higher Secondary School and Vidhya Jyoti Matriculation Higher Secondary School, Marthandam at Kanyakumari District. The study was conducted by using quasi experimental research design. The purposive sampling technique was used for this study. The total sample size was 100, among them 50 were in experimental group and 50 were in the control group. The discussion of the study is based on the findings obtained from the statistical analysis.

#### **Frequency and percentage distribution of adolescent girls according to their selected demographic variables in experimental group and control group.**

Distribution of adolescents according to the age, states in experimental group, majority of the adolescent girls, that is 58% belonged to age group between 14-15 years and 42% belonged to age group between 13-14 years is (42%). In control group it is predicted that majority of the adolescent girls that is 54% belonged to age group between 14-15 years and 46% belonged to age group between 13-14 years, no one was in the age group between 15 – 16 years and 16 – 17 years. Considering the educational status adolescent girls in both groups were doing 9th standard.

From the experimental group it is predicted that the mothers who completed graduation was only 10%, who completed higher education was 48%, who completed primary school was 42%. In control group it is predicted that the mothers who completed graduation was 12%, who completed higher education is 52%, who completed primary school was 36%, and no one was uneducated.

From the experimental group it is predicted that the fathers who completed graduation were only 10%, who completed higher education was 46%, who completed primary school was 44%. In control group it is predicted that the fathers who completed graduation was 8%, who completed higher education was 50%, who completed primary school was 42%.

In the experimental group it is observed that the fathers who have Government job was 6%, private job 18%, as their occupation. Most of their fathers were coolie workers i.e. 62%, and some were own business i.e. 14%. In control group it is observed that the fathers who have Government Job was 8%, private job 20%, coolie workers 56% as their occupation and 16% were having own business.

In the experimental group it is observed that the mothers who have Government Job was 6%, private 24%, as their occupation most of them were House wives i.e. 70% and no one is were as coolie worker. In control group it is observed that the mothers who have Government Job was 8%, private 28% as their occupation most of them were House Wives 64% and no one is there as coolie worker.

Regarding, monthly income of the family, nearly 1/3rd of them were having monthly income of Rs. 5,000 to 15,000 in both groups.

In the experimental group it is observed that 24% of adolescent girls were from Joint family and 76% from Nuclear family. In control group it is observed that 22% adolescent girls were from Joint family, and 78% from nuclear family.

In the experimental group it is observed that most of the adolescent girls gathered information on sexual awareness by means of newspaper (44%), and TV Radio (32%) and it is almost same in the Control group also.

**The first objective of the study was to assess the pre-test and post-test level of knowledge regarding sexual awareness among adolescent girls in experimental group and control group.**

**Distribution of pre-test and post-test level of knowledge regarding sexual awareness among adolescent girls in experimental group.**

The study reveals that 52% of adolescent girls had inadequate level of knowledge and 48% had moderate level of knowledge before the administration of Information Education and Communication package in experimental group but after the intervention all of them (100%) had adequate level of knowledge and none of them had inadequate and moderate level of knowledge in experimental group regarding sexual awareness.

The following findings are supported by the findings of the study conducted by Reeta Jebakumari Solomon (2018). She conducted a study to assess the effectiveness of sexual assertiveness training program on sexual awareness among adolescents attending selected schools in Madurai. The setting of the study was selected using simple random sampling technique. A total of 250 school going adolescents. Tools used were questionnaire on sexual awareness. In the experimental group 38 (30%) school going adolescents had low sexual awareness and 81 (65%) school going adolescents moderate sexual awareness in the pre-test. However after sexual awareness training programme the number of school going adolescents who had low sexual awareness had been decreased to 16(13%) and those who had moderate sexual awareness was 95 (76%). There were only 6(5%) school going adolescents in experimental group who had high sexual awareness. Whereas it was increased to 14 (11%) school going adolescents after sexual awareness training programme.

**Distribution of pre-test and post-test level of knowledge regarding sexual awareness among adolescent girls in control group.**

The results revealed that equal distribution of level of knowledge regarding sexual awareness among adolescent girls. i.e., nearly half of them had moderate level of knowledge and other half of them had inadequate level of knowledge in pre-test. Whereas in post-test there was not much changes. Majority, 56 % of adolescent girls had moderate level of knowledge and 44% of them had inadequate level of knowledge regarding sexual awareness.

**The second objective of the study was to find out the effectiveness of Information, Education and Communication package on knowledge regarding sexual awareness among adolescent girls.**

**Comparison of pre-test and post-test levels of knowledge regarding sexual awareness among adolescent girls in experimental group**

The study summarizes that the mean pre-test mean level of knowledge in experimental group was 7.72 which was more than the post-test mean level of knowledge scores 20.08. The obtained 't' value for the level of knowledge score on 18.76 in experimental group were statistically highly significant  $p < .000$ . This indicates that the mean differences is 12.36 is true difference and has not occurred by chance.

The above findings fail to support null hypothesis. Hence the researcher rejects the null hypothesis and accept the research hypothesis. This proves that the Information, Education, and Communication packages was effective and improving knowledge regarding sexual awareness among adolescent girls in experimental group.

The above findings are supported by the findings of TusharRai, Pradeep Aggarwal and Kandpal.S.D, (Oct 2013).who conducted a cross sectional study to assess the knowledge awareness and practice among adolescents regarding sexually transmitted diseases in an urban slum in Dehradun. The result shows that 166 adolescent school students the mean ( $\pm$  SD) pre-test score of the experimental group on knowledge about Sexually Transmitted Diseases was 36.82 ( $\pm$  15.89) and of the control group was 39.42 ( $\pm$  0.07). After administration of the IEC program the ex-group got a score of (83.62  $\pm$  10.59) and the control group with conventional teaching method got a score of (42.51  $\pm$  09.08) was statically significant ( $p < 0.001$ ). The study concluded that appropriate health care seeking behaviour and Information Education and Communication (IEC) activities should be promoted.

#### **Comparison of post-test level of knowledge regarding sexual awareness among adolescent girls in experimental group and control group.**

The post-test mean level of knowledge score in the experimental group was 20.08 and in the control group was 8.56. The obtained 't' value, 21.77 were statistically high significant at  $p < .000$  level. This indicates that the mean difference of 11.52 level of knowledge score the true difference has not occur by chance. The above findings fail to support the null hypothesis. Hence the researcher rejects the null hypothesis and accepts the research hypothesis.

**The third objective of the study was to determine the association between the pre-test level of sexual awareness with their selected demographic variables such as age, education, occupation of parents, family monthly income, type of family, religion, area of residence, fathers and mothers educational status, previous source of information and relationship with peer group in experimental .**

The demographic variables such as age ( $\chi^2$  value 5.47 df1  $p < 0.005$ ) monthly income ( $\chi^2$  value 7.93 df3  $p < 0.005$ ), Area of residency ( $\chi^2$  value 3.90 df1  $p < 0.005$ ) previous source of information ( $\chi^2$  value 8.66 df3  $p < 0.005$ ), relationship with peer

group (  $\chi^2$  value 9.42 df2  $p < 0.005$ ) has significant association with the level of knowledge whereas the other demographic variables have statistically no significant association with level of knowledge regarding sexual awareness. The above findings partially accept the null hypothesis. So, the researcher partially rejects the null hypothesis and accepts the research hypothesis for age monthly income area of residency, previous source of information and relationship with peer group.

The above are supported by the findings of Prianaka Mukhopadhyay, Bhaskat Paul (2009) conducted a school-based study on adolescent girls to assess their awareness on reproductive health issues and measure the effectiveness of Information, Education and Communications material in improving their awareness in Mysore. The demographic variables age, education, type of family, fathers and mothers educational status, has significant, with the level of knowledge whereas the other demographic variables have statistically no association with level of knowledge regarding reproductive health awareness.

### **Summary**

This chapter dealt with the achievement of objective and testing of hypothesis formulated for the study. By using selected intervention strategies on adolescent girls who had lack of sexual awareness, it helps to improve the knowledge. So the selected intervention (Information, Education and Communication) was effective nursing intervention for adolescent girls who had lack of sexual awareness.

## **CHAPTER VI**

### **SUMMARY, FINDINGS, CONCLUSION AND RECOMMENDATION**

This chapter includes a brief review of the research process, summary of the study, conclusion, nursing implications, suggestions and recommendations for the further research.

This study was a quasi-experimental study to evaluate the effectiveness of information, education and communication package on knowledge regarding sexual awareness among adolescent girls at selected school in Kanyakumari district.

**The following objectives were set for the study.**

- ⇒ To assess the level of knowledge regarding sexual awareness among adolescent girls
- ⇒ To find out the effectiveness of information, education and communication package on knowledge regarding sexual awareness among adolescent girls.
- ⇒ To determine the association between the pre-test level of sexual awareness and selected demographic variables such as age, education, occupation of parents, father's and mother's educational status, family monthly income, type of family, religion, area of residence, previous source of information and relationship with the peer group.

**The following hypotheses were set to the study:**

H<sub>1</sub> - The mean post-test score of sexual awareness will be significantly higher than the mean pre-test score of sexual awareness in experimental group who had information education and communication.

H<sub>2</sub> - The mean post-test score of sexual awareness among adolescent girls in experimental group will be higher than the mean post-test score of sexual awareness in control group.

H<sub>3</sub> - There will be a significant association between the pre-test score of sexual awareness among adolescent girls and selected variables such as age, education, occupation of parents, father's and mother's educational status, family monthly income,

type of family, religion, area of residence, previous source of information and relationship with the peer group.

### Summary:

The quasi experimental research design was selected for this study. The study was conducted in Infant Jesus School and Vidhya Jothi Matriculation Higher Secondary School.

The population of the study were adolescent girls who met the inclusion criteria. The total number of samples were 100 adolescent girls. 50 in experimental group and 50 in control group. Purposive sampling method was used to select the sample for the study. Structured questionnaire tool was used to conduct the study. The tool was given to the expert for content validity and was validated by five experts. Reliability was tested by split half method.

Pilot study was conducted on 10 samples to find out the feasibility of conducting the study. In the main study, to assess the level of knowledge regarding sexual awareness among adolescent girls pre-test was done. After the pre-test, selected intervention IEC package was given post test assessment and was done by using structured questionnaire, after administering IEC package. The data were collected and analysed using descriptive and inferential statistics.

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

The findings of the study are described here

### **Frequency and percentage distribution of adolescent girls according to their selected demographic variables in experimental group and control group.**

Distribution of adolescents according to the age, states in experimental group, majority of the adolescent girls, that is 58% belonged to age group between 14-15 years and 42% belonged to age group between 13-14 years is (42%). In control group it is predicted that majority of the adolescent girls that is 54% belonged to age group between 14-15 years and 46% belonged to age group between 13-14 years, no one was in the age group



between 15 – 16 years and 16 – 17 years. Considering the educational status adolescent girls in both groups were doing 9th standard.

From the experimental group it is predicted that the mothers who completed graduation was only 10%, who completed higher education was 48%, who completed primary school was 42%. In control group it is predicted that the mothers who completed graduation was 12%, who completed higher education is 52%, who completed primary school was 36%, and no one was uneducated.

From the experimental group it is predicted that the fathers who completed graduation were only 10%, who completed higher education was 46%, who completed primary school was 44%. In control group it is predicted that the fathers who completed graduation was 8%, who completed higher education was 50%, who completed primary school was 42%.

In the experimental group it is observed that the fathers who have Government job was 6%, private job 18%, as their occupation. Most of their fathers were coolie workers i.e. 62%, and some were own business i.e. 14%. In control group it is observed that the fathers who have Government Job was 8%, private job 20%, coolie workers 56% as their occupation and 16% were having own business.

In the experimental group it is observed that the mothers who have Government Job was 6%, private 24%, as their occupation most of them were House wives i.e. 70% and no one is were as coolie worker. In control group it is observed that the mothers who have Government Job was 8%, private 28% as their occupation most of them were House Wives 64% and no one is there as coolie worker.

Regarding, monthly income of the family, nearly 1/3rd of them were having monthly income of Rs. 5,000 to 15,000 in both groups.

In the experimental group it is observed that 24% of adolescent girls were from Joint family and 76% from Nuclear family. In control group it is observed that 22% adolescent girls were from Joint family, and 78% from nuclear family.

In the experimental group it is observed that most of the adolescent girls gathered information on sexual awareness by means of newspaper (44%), and TV Radio (32%) and it is almost same in the Control group also.

### **Distribution of pre-test and post-test level of knowledge regarding sexual awareness among adolescent girls in experimental group.**

The study reveals that 52% of adolescent girls had inadequate level of knowledge and 48% had moderate level of knowledge before the administration of Information Education and Communication package in experimental group but after the intervention all of them (100%) had adequate level of knowledge and none of them had inadequate and moderate level of knowledge in experimental group regarding sexual awareness.

### **Distribution of pre-test and post-test level of knowledge regarding sexual awareness among adolescent girls in control group.**

The study summarizes that equal distribution of level of knowledge regarding sexual awareness among adolescent girls. i.e., nearly half of them had moderate level of knowledge and other half of them had inadequate level of knowledge in pre-test. Whereas in post-test there was not much changes. Majority, 56 % of adolescent girls had moderate level of knowledge and 44% of them had inadequate level of knowledge regarding sexual awareness.

### **Comparison of pre-test and post test levels of knowledge regarding sexual awareness among adolescent girls in experimental group**

The study summarizes that the mean pre-test mean level of knowledge in experimental group was 7.72 which was more than the post-test mean level of knowledge scores 20.08. The obtained 't' value for the level of knowledge score on 18.76 in experimental group were statistically highly significant  $p < .000$ . This indicate that the mean differences is 12.36 is true difference and has not occurred by chance. The above findings fail to support null hypothesis. Hence the researcher rejects the null hypothesis and accepts the research hypothesis. This proves that the Information, Education, and Communication packages were effective and improving knowledge regarding sexual awareness among adolescent girls in experimental group.

### **Comparison of post-test level of knowledge regarding sexual awareness among adolescent girls in experimental group and control group.**

The post-test mean level of knowledge score in the experimental group was 20.08 and in the control group was 8.56. The obtained 't' value, 21.77 were statistically high significant at  $p < 0.000$  level. This indicates that the mean difference of 11.52 level of knowledge score the true difference has not occur by chance. The above findings fail to support the null hypothesis. Hence the researcher rejects the null hypothesis and accept the research hypothesis.

**Association between the pre-test level of sexual awareness with their selected demographic variables such as age, education, occupation of parents, family monthly income, type of family, religion, area of residence, fathers and mothers educational status, previous source of information and relationship with peer group in experimental.**

The demographic variables such as age ( $\chi^2$  value 5.47 df1  $p < 0.005$ ) monthly income ( $\chi^2$  value 7.93 df3  $p < 0.005$ ), Area of residency ( $\chi^2$  value 3.90 df1  $p < 0.005$ ) previous source of information ( $\chi^2$  value 8.66 df3  $p < 0.005$ ), relationship with peer group ( $\chi^2$  value 9.42 df2  $p < 0.005$ ) has significant association with the level of knowledge whereas the other demographic variables have statistically no significant association with level of knowledge regarding sexual awareness.

The above finding partially accepts the null hypothesis. So, the researcher partially rejects the null hypothesis and accepts the research hypothesis for age monthly income area of residency, previous source of information and relationship with peer group.

## **Conclusion:**

The following conclusion were drawn from the study

- The level of knowledge score among adolescent girls were improved after administering the Information, Education and Communication.
- The study proved that Information, Education and Communication was very effective.
- There was association between pre-test level of knowledge score among adolescent girls and selected demographic variables such as age, education, occupation of parents, family monthly income, type of family, religion, area of

residence, fathers and mothers educational status, previous source of information and relationship with peer group.

### **Nursing implication**

The researcher has derived the following implications from the study result which add greater value to the field of nursing service, nursing administration, nursing education and nursing research.

### **Nursing service**

- The gynaecological nurse can combine and work with other health team members in improving knowledge regarding sexual awareness among adolescent girls in schools and colleges.
- The nurse need to conduct health camp periodically and conduct health assessment and identify the problems that are caused mainly due to secondary sexual character, teen pregnancy, contraception, fertilization, menstruation and can provide health talk about sexual awareness.
- Nurse need to be sensitive to observe the physical and psychological problems and clear the doubts regarding problems related to sexual awareness.
- Mass awareness program can be conducted in the school and colleges.
- Nurse has a great responsibility in educating the people regarding sexual awareness.
- Nurse can improve communication and rapport with the adolescents.
- Nurse need to be knowledgeable regarding the benefits of Information, Education and Communication program to improve the level of knowledge.
- Continuous nursing education program should be arranged for nurse educators on importance of educating adolescent girls on sexual awareness.

### **Nursing education**

- Nurse educator need to arrange for Information, Education and Communication for nursing students.

- Nurse educator can communicate with school teachers and college staff and instruct them to provide education periodically and motivate the adolescent girls for betterment in their living.
- Nurse educator can prepare the nursing students in order to give IEC program on sexual awareness by using different educational and teaching aids.

### **Nursing administration**

- Nurse administrator need to take interest in motivating the nursing personnel to improve their professional knowledge and skill by attending the workshops, conferences, seminars on educating adolescent girls on sexual awareness.
- Nurse administrator need to arrange regular in service program for the health care workers on educating adolescent girls on sexual awareness.

### **Nursing research**

- The findings of the present study are helpful for the nursing professionals and nursing teachers to conduct further studies to find out the effectiveness of various methods of providing IEC on improving the knowledge regarding sexual awareness.
- Nursing research can be focused on parents knowledge regarding sexual awareness and related problems.

### **Limitations**

- The study was limited to the age group of 13-18 years.
- The period of the study was be limited for 1 month.
- The sample size was be limited to 100 only.
- Long term follow up was not feasible.

### **Recommendation**

The following steps can be undertaken to strengthen the study, following recommendations are offered for further research.

- A similar study can be conducted with large sample size to generalize the finding.

- Counselling for adolescents should be included in the curriculum which will provide and awareness towards the disorder and lifestyle modification.
- A study can be carried out for a longer period of time.
- A study can be conducted in different setting such as rural and urban area.

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## ANNEXURE I



### Plagiarism Checker X Originality Report

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**\*A STUDY TO ASSESS THE EFFECTIVENESS OF INFORMATION, EDUCATION AND COMMUNICATION PACKAGE ON KNOWLEDGE REGARDING SEXUAL AWARENESS AMONG ADOLESCENT GIRLS AT SELECTED SCHOOL IN KANNIYAKUMARI DISTRICT \***

Thesis submitted in fulfilment of the requirements for the degree of

**MASTER OF SCIENCE IN NURSING**

By Mrs. C. Shyni

Reg. No. 301722803 / Department of Obstetrics and Gynaecological Nursing,

Thasiah College of Nursing, Marthandam, Kanyakumari District, Tamil Nadu

August 2019

## ANNEXURE II

### THASIAH COLLEGE OF NURISNING

#### CERTIFICATE – FOR PLAGIRISM

This is to certify that this dissertation work titled “**A study to assess the effectiveness of information, education and communication package on knowledge regarding sexual awareness among adolescent girls at selected schools in Kanniyakumari District**” of the candidate **Mrs. C. Shyni** with registration number 301722803 for the award of **Master of Science in Nursing** in the branch of Obstetrics and Gynaecological Nursing. I found that the uploaded thesis file contains from introduction to conclusion pages and result shows 16 percentage of plagiarism in the dissertation.

Signature of the Research Guide

Signature of the Principal

# PLAGIARISAM MARKED

## CHAPTER I

“Today’s girl child will be the mother of tomorrow”.

- Unknown

### Background of the study

Human life completes its **journey** through various stages and **one of the** most **vital stages** is adolescence. Adolescence is the **period** of transition from childhood to adulthood. (FaziaNavas, 2011)

Adolescents are the **innovators, creators**, builders and leaders of the future. But they **can transform the future** only if they have **skills, health**, decision-making and real choices in life. Today’s world record 1-8 billion young people present an enormous opportunity to transform the future. (BabatundeOsotinmehim, 2014)

**Majority** of adolescents still **does not have access** to information and education on sexuality, reproduction and **sexual and reproductive health** and rights, nor do they **have access** to preventive and **curative service**. Providing adolescents with access to **seek** information education and services is thus the main challenge for future programmers. The status of **girls and women** in society and how they are **treated or mistreated** is a **crucial determinant** of their reproductive health. Educational **opportunities** for girls and women **powerfully affect** their status and the control they have over their own lives and their health and **fertility**. In **some countries**, complications of **unsafe abortion** are the **leading cause of** death among teenage girls. **A study** in Nigeria **found that** 72 percentage of all deaths among **women** under age 19 years due to the **consequences** of **unsafe abortion**. Moreover, young women who survive unsafe abortion may **suffer** complication leading to infertility.

National Council of Education Research and Training (NCERT) in India; 2005 says “The physiological changes that **occur during** adolescents stage have ramifications in the psychological and social aspects of an adolescents life. Most adolescents deal with these changes without full **knowledge and understanding**, which could make them vulnerable to a risky situation like life skills and personal development changes due to the adolescent stage.

## ANNEXURE III

### LETTER SEEKING PERMISSION TO CONDUCT THE PILOT STUDY



#### THASIAH COLLEGE OF NURSING

(Approved by Govt. of Tamilnadu, TN-Nurses & Midwives Council  
Indian Nursing Council & Affiliated to Dr. M.G.R. Medical University)

Marthandam, Vellivilagam, Vircode - 629 165  
Kanyakumari District, Tamil Nadu, India.

Phone : 04651 - 270996, 9487251600

web : www.tcnursing.net, email : info@tcnursing.net

#### LETTER SEEKING PERMISSION TO CONDUCT THE PILOT STUDY

From

The Principal,  
Thasiah College of Nursing,  
Marthandam,  
Kanyakumari District.

To

The Principal,  
White memorial Higher secondary school,  
Marthandam.

Respected Sir / Madam

Sub : Seeking permission to conduct a study

I wish to state that Mrs. C. Shyni, IInd year M.Sc. (Nursing) student of our college has to conduct a research project, which is to be submitted to The Tamilnadu Dr. MGR Medical University, Chennai in the partial fulfillment of the requirement for award of Master of Science in Nursing. The topic of research project is topic "A study to assess the effectiveness of Information, education and communication package on knowledge regarding sexual awareness among adolescent girls at selected schools in Kanyakumari district".

I therefore request you to kindly permit her to do the research work in your organization under your valuable guidance and suggestions.

Thanking you,

Place : Marthandam



Permission granted

Yours faithfully

*[Signature]*

PRINCIPAL

Thasiah College of Nursing  
Marthandam - 629 165

## ANNEXURE IV

### LETTER GRANTING PERMISSION TO CONDUCT STUDY



#### THASIAH COLLEGE OF NURSING

(Approved by Govt. of Tamilnadu, TN-Nurses & Midwives Council  
Indian Nursing Council & Affiliated to Dr. M.G.R. Medical University)

Marthandam, Vellivilagam, Pincode - 629 165

Kanyakumari District, Tamil Nadu, India

Phone : 04651 - 270996, 9487251600

web : www.tcnursing.net, email : info@tcnursing.net

#### LETTER SEEKING PERMISSION TO CONDUCT THE STUDY

**From**

The Principal,  
Thasiah College of Nursing,  
Marthandam,  
Kanyakumari District.

**To**

The Principal,  
Infant Jesus Matriculation Higher-Sec. School,  
Mamoottukadai,  
Pincode - K.K. Dist.  
Respected Sir / Madam

Sub : Seeking permission to conduct a study

I wish to state that Mrs. C. Shyni, IInd year M.Sc. (Nursing) student of our college has to conduct a research project, which is to be submitted to The Tamilnadu Dr. MGR Medical University, Chennai in the partial fulfilment of the requirement for award of Master of Science in Nursing. The topic of research project is topic "A study to assess the effectiveness of Information, education and communication package on knowledge regarding sexual awareness among adolescent girls at selected schools in Kanyakumari district".

I therefore request you to kindly permit her to do the research work in your organization under your valuable guidance and suggestions.

Thanking you,



*S. S. S. S.*  
*S. S. S. S.*  
PRINCIPAL  
INFANT JESUS MATRIC  
HIGHER SECONDARY SCHOOL  
MAMOOTTUKADAI  
KANYAKUMARI DISTRICT - 629 165

Yours faithfully

*S. S. S. S.*  
PRINCIPAL  
Thasiah College of Nursing  
Marthandam - 629 165

## ANNEXURE V

### LETTER SEEKING EXPERT'S OPINION FOR VALIDATING THE TOOL

From

C. Shyni  
M.Sc., Nursing II year,  
Thasiah College of Nursing,  
Marthandam

To

Respected Sir/Madam,

Sub: Requisition to expert opinion and suggestion for the content validity.

I C.Shyni, Msc., Nursing II Year students, Thasiah College of Nursing, Marthandam, have selected the following topic “ **A study to assess the effectiveness of Information, Education and Communication package on knowledge regarding sexual awareness among adolescent girls at selected schools in Kanyakumari district**” for my dissertation to be submitted to Tamil Nadu Dr. M.G.R. Medical University in the partial fulfilment of the requirement for award of Master of Science in Nursing.

I request you to go through the items and give your valuable suggestions and opinions to develop the content validity of the tool. Kindly, suggest modification, addition and deletions if any in the remarks column.

Thanking you,

Yours sincerely,

Mrs. C. Shyni

Place :

Date :

ENCLOSURE :

1. Problem statement, objectives and hypothesis of the study.
2. Demographic profile.
3. Information, Education and Communication package regarding sexual awareness.
4. Evaluation performa.



## ANNEXURE VI

### EVALUATION CRITERIA CHECK LIST FOR VALIDATION

#### Introduction

The expert is requested to go through the following criteria for evaluation. Three columns are given for responses and a column for remarks. Kindly, place tick mark in the appropriate column and give remarks.

Interpretation of column

Column I : Meets the criteria

Column II : Partially meets the criteria

Column III : Does not meet the criteria

S.No.	Criteria	1	2	3	Remarks
1	<b>Scoring</b> <ul style="list-style-type: none"><li>• Adequacy</li><li>• Clarity</li><li>• Simplicity</li></ul>				
2	<b>Content</b> <ul style="list-style-type: none"><li>• Logical sequence</li><li>• Adequacy</li><li>• Relevance</li></ul>				
3	<b>Language</b> <ul style="list-style-type: none"><li>• Appropriate</li><li>• Clarity</li><li>• Simplicity</li></ul>				
4	<b>Practicability</b> <ul style="list-style-type: none"><li>• Easy to score</li><li>• Precisely</li></ul>				

Signature :

Name :

Any other suggestion:

Designation :

Address :

## ANNEXURE VII

### LIST OF EXPERTS FOR TOOL VALIDATION

1. Dr. Felsit Punitha M.B.B.S, DGO  
Head of Obstetrics and Gyneology,  
P.P.K. Hospital, Marthandam  
Kanniyakumari District
  
2. Dr. M. Santhi, MD, DGO, ART, MRM  
Head of obstetrics and Gynecology,  
Rethna Hospital,  
Swamiyar Madam  
Kanniyakumari District
  
3. Dr. S.Reeta Jeba Kumari Solomon MSC (N) Ph.D,  
Principal,  
Thasiah College of Nursing, Marthandam,  
Kanniyakumari District
  
4. Mrs. Arzta Sophia Msc. (N)  
Professor,  
C.S.I.College of nursing, Neyyoor  
Kanniyakumari District.
  
5. Mrs. S.T. Jeba Nesa mahiba  
Asst. Professor Msc. (N)  
C.S.I.College of nursing, Neyyoor  
Kanniyakumari District.
  
6. Mr. C.Jeganath M.A., M.Phil  
Principal,  
Infant Jesus Matriculation Higher Secondary School  
Mamoottukadai, Viricode  
Kanniyakumari District.

**ANNEXURE VIII**  
**INFORMED CONSENT FOR PROJECT**

**Name:** .....

**Age:**.....**Sex:**.....

I hereby give informed consent to answer the questionnaire for the evaluating the effectiveness of Information, Education and Communication package on knowledge regarding sexual awareness.

I have been informed about the Information, Education and Communication package that Mrs. C. Shyni is going to teach regarding sexual awareness I hereby willingly give my consent to participate in this project. I am also aware that, I can withdraw my participation if I want during anytime of the study.

Signature of the parent

Date/Time

## ANNEXURE IX

### CERTIFICATE FOR PROJECT COMPLETION



#### **INFANT JESUS MATRICULATION HIGHER SECONDARY SCHOOL**

(INFANT JESUS CHARITABLE TRUST)

☎: 04651 - 274328

Recognised by the Director of School Education

K. Dis. No. 027-M-0103-0514

MAMOOTTUKADAI, VIRICODE - 629 165, Kanyakumari Dist.

*Date: 8-2-19 to 8-3-19*

#### **PROJECT COMPLETION CERTIFICATE**

This is to certify that Mrs. C. Shyni M.Sc(N) student to Thasiah College of Nursing, Marthandam, Kanyakumari District. She has successfully Completed the data collection in our school, for the project work on “ A study to assess the effectiveness of Information, Education and Communication packages on knowledge regarding sexual awareness among adolescent girls at selected schools in Kanyakumari District”.



*[Handwritten Signature]*  
**PRINCIPAL**  
INFANT JESUS MATRIC  
HIGHER SECONDARY SCHOOL  
MAMOOTTUKADAI  
VIRICODE, K.K. DIST. - 629 165

## ANNEXURE - X

### CERTIFICATE FOR ENGLISH EDITING

#### TO WHOM SO EVER IT MAY CONCERN

This is to certify that the tool developed by Mrs. C.Shyni, II Year Msc., Nursing student of Thasaiah College of Nursing, Marthandam for dissertation. "A study to assess the effectiveness of Information, Education and Communication package on knowledge regarding sexual awareness among adolescent girls at selected schools in Kanniyakumari District.", is edited for English language and its appropriateness.

Signature



M. Alex Martin, M.A ( Eng), M.Ed., M.Sc ( Psy)  
English Proof Reader & English Language Trainer  
22/9, Post Office Junction  
Kuzhithurai-629163

# ANNEXURE XI

## TOOL FOR DATA COLLECTION

### SECTION –A

#### DEMOGRAPHIC VARIABLES

Instructions: Kindly place a tick mark  against the option which you feel as appropriate.

- 1 Age in years
  - a) 13-14 years
  - b) 14-15 years
  - c) 15-16 years
  - d) 16-17 years
2. Education of mother
  - a) No formal Education
  - b) Higher education
  - c) Graduate
  - d) Primary School
- 3 Education of father
  - a) No Formal Education
  - b) Higher Education
  - c) Graduate
  - d) Primary School
- 4 Occupation of Father
  - a) Government Job
  - b) Private Job
  - c) Own Business
  - d) Coolie Worker
- 5 Occupation of Mother
  - a) Government Job
  - b) Private Job
  - c) House Wife
  - d) Coolie Worker

- 6 Monthly income of the family
- a) Less than Rs. 5000/-
  - b) Rs. 5000 – 10,000/-
  - c) Rs. 10,0001 – 15,000/-
  - d) Above Rs. 15,001/-
- 7 Type of family
- a) Joint Family
  - b) Nuclear Family
- 8 Religion
- a) Hindhu
  - b) Chrisitan
  - c) Muslim
- 9 Area residency
- a) Urban
  - b) Rural
- 10 Previous source of information about sex education
- a) Health professional
  - b) TV, Radio
  - c) Friends
  - d) Newspaper
- 11 Relationship with the peer group
- a) Healthy relationship
  - b) Not having good friendship
  - c) None

**SECTION – B**

**QUESTIONNAIRE ON SEXUAL AWARENESS**

- 1 What are the internal reproductive organs in female?
- a) Uterus, fallopian tube, Ovaries, Vagina
  - b) Liver and spleen, uterus
  - c) Uterus and tests
  - d) Bladder, uterus, rectum
2. Which of the following are the female reproductive hormones?
- e) Testosterone
  - f) Prolactin
  - g) Oxytocin
  - h) Oestrogen and progesterone
- 3 Which one is the male reproductive hormone?
- e) Oestrogen
  - f) Adrenaline
  - g) Progesterone
  - h) Testosterone
- 4 What is menstruation?
- e) Bleeding occurring in females through vagina
  - f) Bleeding occurring in females through rectum
  - g) Bleeding occurring in females through umbilicus
  - h) Bleeding occurring in females cut wounds
- 5 When do the girls attain first period?
- e) 6-8 years
  - f) 10-14 years
  - g) 18-24 years
  - h) 24-26 years
- 6 At what age does puberty usually begin in males?
- c) 9-12 years
  - d) 10 -14 years
  - e) 12 -16 years
  - f) 14-18 years



- 7 At what age the breast starts developing?
- d) 4-7 years
  - e) 8-13 years
  - f) 14-25 years
  - g) 26-30 years
- 8 At which point in the menstrual cycle a women is most fertile?
- c) Between 1<sup>st</sup> – 5<sup>th</sup> day
  - d) Between 9<sup>th</sup> – 16<sup>th</sup> day
  - e) Between 17<sup>th</sup> -21<sup>st</sup> day
  - f) Between 22<sup>nd</sup> – 28<sup>th</sup> day
- 9 What is good touch?
- e) Touching the good articles only
  - f) Parents hug and brief kissing on cheeks/ forehead
  - g) Kissing on the lips
  - h) Touching after hand washing
- 10 What is bad touch?
- d) Touching the chest and region between leg
  - e) Shaking hands
  - f) Grandparents love
  - g) Patting on head and shoulders
- 11 What is meant by one arm distance?
- a) Physical distance between two people in social, family or work environment
  - b) Physical distance between three people in family
  - c) Physical distance between tow or more people
  - d) Physical distance between two or more people
- 12 With whom a girl needs to maintain one arm distance?
- a) Cousin Brothers
  - b) Unknown person and classmates
  - c) Own brothers
  - d) All the above
- 13 What are the contacts to be avoided even among gilrs?
- a) Holding the hands and walking
  - b) Putting the hands over the shoulders and the hip while walking

- c) Kissing on the cheeks and lips
- d) All the above
- 14 What are the important methods of stopping a stranger?
- a) Push him away, run away and call for help
- b) Pinching
- c) Hitting on his hand
- d) Standing on the strangers back side
- 15 What is meant by abstinence?
- a) Not engaging sexual intercourse
- b) Birth control pills
- c) Engaging in sexual intercourse
- d) Permanent method of family planning
- 16 What is effective form of birth control?
- a) Abstinence
- b) The pills
- c) Calendar method
- d) Condoms
- 17 What are the advantages of abstinence?
- a) More self-respect and respect for others
- b) Focus on the sexual of romance
- c) Prepared to protect themselves against pregnancy
- d) Encouraging sexual intercourse
- 18 What is meant by homo sex?
- a) Having sexual relationship with an individual of the same sex
- b) Having sexual relationship with an individual of the opposite sex
- c) Having sexual relationship with children
- d) Having sexual relationship with animals
- 19 What is the full form of STD?
- a) Sense transmitted dysfunction
- b) Semen transmitted disorders
- c) Social training for disinfection
- d) Sexually transmitted disease
- 20 What are the most common symptoms of sexually transmitted disease?
- a) Bad smelling or colored vaginal discharge

- b) Light bleeding between periods
  - c) Pain during inter course
  - d) All the above
- 21 What is the full form of AIDS?
- e) Active immune deficiency syndrome
  - f) Average immune deficiency syndrome
  - g) Acute immune deficiency syndrome
  - h) Acquired immune deficiency syndrome
- 22 How is HIV transmitted?
- a) Blood, urine, semen, breast milk
  - b) Sharing food
  - c) Speaking to infected person
  - d) Touch of the infected person
- 23 What is the full form of HIV?
- a) Human immune virus
  - b) Health integrated villages
  - c) Highly infective virus
  - d) Human immune deficiency virus
- 24 Which one of the following prevents human immune deficiency virus?
- a) Use of condoms
  - b) Inject the medicines
  - c) Decreasing numbers of sexual partners
  - d) Frequent washing
- 25 What are the aims of sex education?
- a) Improve the health
  - b) Reduce body weight
  - c) Develop communications skills
  - d) To reduce the risks of potentially negative outcomes from sexually behaviour and create awareness

## ANSWER KEY

### SECTION-B

SL NO	ANSWER KEY	SCORE
1	a	1
2	d	1
3	d	1
4	a	1
5	b	1
6	c	1
7	b	1
8	b	1
9	b	1
10	a	1
11	a	1
12	d	1
13	d	1
14	a	1
15	a	1
16	a	1
17	c	1
18	a	1
19	d	1
20	d	1
21	d	1
22	a	1
23	d	1
24	a	1
25	d	1

**ANNEXURE XII**  
**INFORMATION, EDUCATION AND COMMUNICATION PACKAGE ON**  
**SEXUAL AWARENESS**

**INFORMATION**

**ANATOMY OF REPRODUCTIVE ORGANS**

**Introduction**

The ability to reproduce is one of the properties distinguishing living from non-living matter. The male and female organisms differ anatomically and physiologically and the new individual develops from the fusion of two different sex cells (gametes). The male gametes are called spermatozoa and the female gametes are called ova.

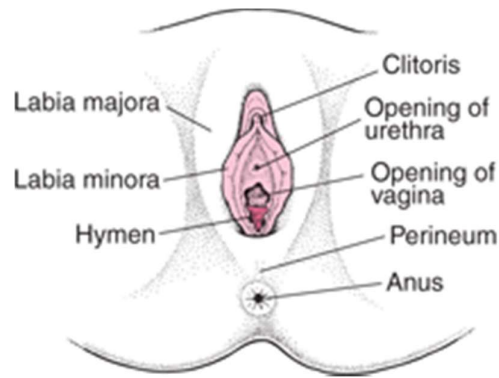
**Female Reproductive Organs**

The reproductive organism female are those which are concerned with copulation, fertilization, growth and development of the fetus and its subsequent exit to the outer world. The organs are broadly divided in to two.

- 1) External Reproductive Organs
- 2) Internal Reproductive Organs
- 3) Accessory Reproductive Organs

**1. External Reproductive Organs**

As a whole external female genital organs are known as vulva. Vulva is the composite name for the external genitalia comprising the mons pubis the labia majora, the labia minora. The clitoris, the vaginal orifice, urethral orifice, fourchette and the vestibule.



### ***Mons Pubis***

It contains many sebaceous glands and develops coarse dark, curly hair at puberty, about 1 – 2 years before the onset of menses.

Protects the symphysis pubis during sexual intercourse

### ***Labia Majora***

The medial surface of the labia majora are smooth, thick and hairless

### ***Labia Minora***

The labia minora, located between the labia majora are narrow, lengthwise folds of hairless skin.

### **Clitoris**

The clitoris is a short, cylindrical, erectile organ located just beneath the arch of the pubis, the visible portion is about 6 x 6 mm or less in the unaroused state

Whenever a woman is sexually aroused, the glands and shaft increase in size.

### **Vestibule**

It is a triangular space bounded anteriorly by the clitoris posteriorly by the fourchette and on either side by labia minora. There are four openings into the vestibule.

### ***Urethral Opening***

The opening is situated in the midline just in front of the vaginal orifice about 1-1.5cm below the public arch. The Para urethral ducts open either on the posterior wall

### ***Vaginal orifice and hymen:***

The vaginal orifice lies in the posterior end of the vestibule and is of varying size and shape. The hymen is a thin fold of mucus membrane closed to the circumference of the vaginal orifice which tears during coitus. During child birth the hymen is extremely lacerated and later represented by cicatrized nodules of varying size, called the carunulae myrifomes.

### **Opening of Bartholins ducts**

There are two bartholin glands one on each side. It lies posterior to vestibular bulb in the superficial perineal pouch. They are pea sized and yellow with white colour. During sexual excitement, it secretes abundant alkaline mucus which helps in lubricating. The duct is about 2cm long opens at the vaginal orifice external to hymen.

### **Fourchette**

This is a thin fold of skin which is formed by the fusion of the labia minora posteriorly and the anterior edge of the perineum.

### **The Perineum**

The perineum is the skin-covered muscular area between the vaginal introitus and the anus. The perineum forms the base of the perineal body.

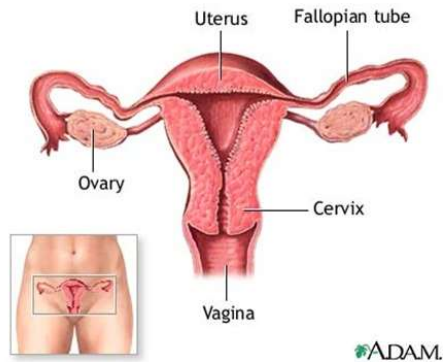
## **2. Internal Reproductive Organs**

The internal female reproductive organs lie in the pelvic cavity which require special instrument for inspection. It consists of

- \* The vagina - 1
- \* The uterus - 1

- \* The uterine (fallopian) tube - 2
- \* The ovaries - 2

The cervix



## VAGINA

The vagina is a fibro musculo membranous sheath communicating the uterine cavity with the exterior at the vulva. It constitutes the excretory channel for the uterine secretion and menstrual blood. It is the organ of copulation and forms the birth canal of parturition.

### Functions of the Vagina

- It is a passage for the escape of menstrual blood flow
- It receives penis during intercourse
- It provides way for the fetus during delivery to exit the fetus and placenta

### Position of the Uterus

#### Position :

Its normal position is one of the anterversion and anteflexion. The uterus usually inclines to the right so that the cervix is directed to the left (levorotation) and comes in close relation with the left ureter.

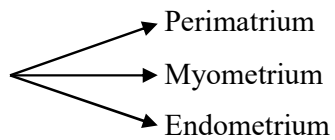


## Measurements and parts :

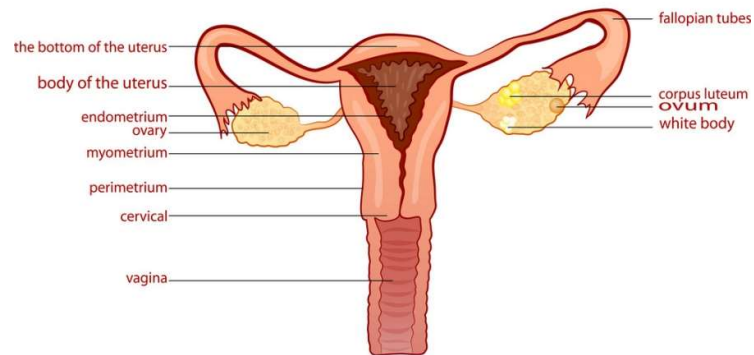
The uterus measures about 8cm long, 5cm wide at the fundus and its wall are about 1.25cm thick. Its weight varies from 50gm to 80gm.

## Structure of the Uterus

The body of the uterus is composed of three layers of tissue.



## THE STRUCTURE OF THE UTERUS



## Parts of the uterus

- Fundus
- Body
- Isthmus
- Cervix

## **Functions of the uterus**

- \* Menstruation: The thick endometrial is shed every month except pregnancy during menstruation which flow through the vagina.
- \* Pregnancy : The uterus receives the fertilized ovum and helps to nourish the fetus throughout pregnancy
- \* Labour : The muscles of the uterus contracts to help the expulsion of uterine content
- \* Involution: The uterus returns to its normal size after child birth.

## **The Uterine (Fallopian) Tubes**

- \* These are two muscular tubes which are about 10cm long
- \* The lumen of the tube communicates with the uterine cavity and opens into the free peritoneal cavity.

## **Functions of the uterine tube**

1. It receives spermatozoa for fertilization
2. It supplies nutrition to the fertilized ovum during as travel to the uterus.

## **Ovaries**

The ovaries are paired sex glands in female. It is an almond shaped organs situated on each side of the uterus. It measures approximately 4cm long, 3cm wide and 3cm thick in size and weight 5-10g during reproductive period.

At birth each ovary contains 2,00,000 to 7,00,000 primordial follicles which consists of primitive ovum and only 400 primordial follicles will mature at the age of puberty. After puberty one ovarian follicle matures each month. The mature follicles is also known as graffian follicle and each follicle contains an ovum.

## **Functions of the ovary**

- \* During reproductive period the ovary discharges mature ovum at each menstrual cycle called as an ovulation. This is the main function of the ovaries.

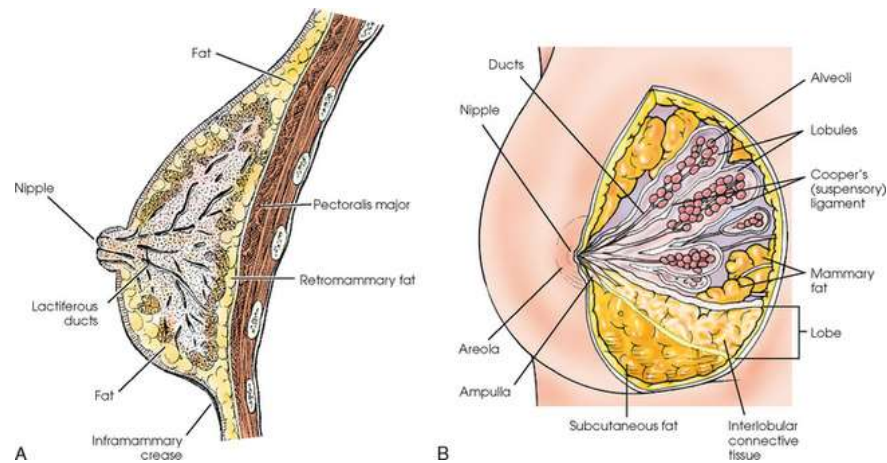
- \* Produces sex hormones oestrogen and progesterone to prepare uterine endometrium for embedding of fertilized ovum.

## Accessory Reproductive organs

### Breast

Generally the breast changes starts at between 7 and 19 years of age for most girls, the first evidence of puberty is breast development. As breast start to grow a girl will have small, firm, sometimes tender lumps (called breast buds) under her nipples.

Breast are dome shaped and weighs about 100 to 200g each breast there are 15 – 20 lobes. The breast consists of two mammary glands located on each side of the chest wall, attached by connective tissue and covered with and given shape by fatty tissue.



## Male Reproductive organs

It consists of a number of sex organs that are a part of the human reproductive process. It produces stores and releases the male gametes or sperms.

The male reproductive organs are divided into

1. Internal genital organs
2. External genital organs

### 1. Internal genital organs

## **Testicles / testes**

They produce the sperm cells necessary for reproduction

## **Vas deferens**

Sperm travels through this passage to the outside of the body.

Seminal vesicles and prostate gland

They produce a liquid to feed and transport sperm

## **2) External Genital organs**

### **Scrotum**

The scrotum is a pouch of deeply pigmented skin, fibrous and connective tissue and smooth muscle..

### **Penis**

The erectile tissue and smooth muscle is supported by fibrous tissue and covered with skin and has a rich blood supply.

## **PELVIC FLOOR**

Soft tissues which fill the outlet of the pelvis is called pelvic floor. Through it passes the urethra, vagina and anal canal.

### **Muscles of pelvic floor consists of**

- \* Superficial muscles
- \* Deep muscles

### **Functions of Pelvic Floor**

1. The pelvic floor supports the weight of abdominal and pelvic organs
2. Its muscles are responsible for voluntary control of micturition and defecation
3. Play an important part in sexual intercourse

4. During child birth it influences the passive movements of the foetus through the birth canal and relaxes to allow its exit from the pelvis.

## **PHYSIOLOGY OF THE UTERINE CYCLE OR MENSTRUAL CYCLE**

Menstruation is the cyclical discharge of blood, mucous and cellular debris from the uterine lining. The time of onset of the first period is termed as menarche. This cyclical (28-30 days) monthly process is by and large regular and predictable right from menarche until menopause except during pregnancy, lactation, an ovulation or interference with medication.

Although each woman has an individual cycle which varies in length, the average cycle is taken to be 28 days.

### **Phase of menstrual cycle**

1. Menstrual phase - days 1 to 5
2. Proliferative phase - days 5 to 14
3. Secretary phase - days 14 to 28.

#### **1. Menstrual phase – days 1 to 5**

The beginning of the cycle is marked by menstruation or the menstrual period. With low levels of progesterone being produced by the ovaries, the blood vessels supplying the thickened wall of the endometrium constrict; deprived of its blood supply the walls starts to fragment.

The menstrual flow that passes out of the vagina from the uterus consists of tissue fragments and blood.

#### **2. Proliferative phase – days 5 to 14**

Oestrogen released by the ovaries stimulates the repair and growth of the endometrium, so that it proliferates and becomes thicker and more spongy. On 14<sup>th</sup> day, ovulation occurs under the influences of luteinising Hormone (LH)

### **3. Secretary phase – days 14 to 28**

After ovulation on day 14, release of progesterone and estrogen from the ovaries corpus luteum stimulates the endometrium to develop further

- \* The lining thickness still more, and its blood supply increases considerably
- \* This provides a fertilized egg with a receptive, nutrient- rich environment in which to grow and develop

## **EDUCATION**

### **Secondary Sexual Characteristics**

The sexual characteristics controlled by hormones which distinguish between sexually mature males & females but are not directly involved in reproduction are called secondary sexual characters.

In secondary sexual characteristics, the body parts develop special features which make it easier to distinguish a boy and a girl.

#### **Puberty (Adolescence)**

Puberty or Adolescence is defined as the period during which sexual maturation occurs & the body assumes final adult shape.

Contrary to the time honoured belief, onset of puberty occurs late in extremes of climate. On an average , adolescent growth spurt occurs at 10-14 years in girls and 12-15 years in boys. Growth in sature generally extends upto 16-17 years in girls & 18 years in boys. - Gupte -2014

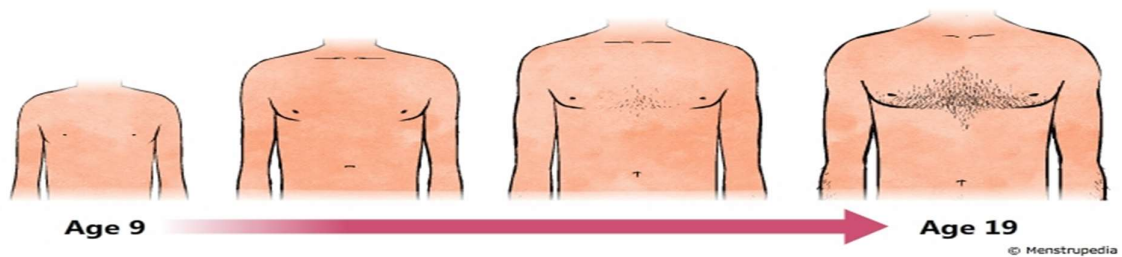
#### **MALE PUBERTY CHANGES**

In boys the formation of male gametes (sperm) - in the Testes: Testosterone stimulates the development of a reproductive organs & Secondary sexual characteristics.

- Growth of the testis & penis

The first outward evidence of male sexual maturation is growth of the testes between about 9.5 -17 years. Growth in circumference & lengthening of the penis follow about a year after testicular growth begins. The skin of the scrotum thins & darkens.

- Hairs grow on face in the form of beard and moustache.
- Shoulders and chest broadens.
- A deeper voice / low pitched voice.
- Get taller & heavier.
- Nose & Jaw get bigger.
- Face gets longer.
- Get more muscles.
- Oily skin & hair, pimples.
- May have mood swings, sexual thoughts & feelings

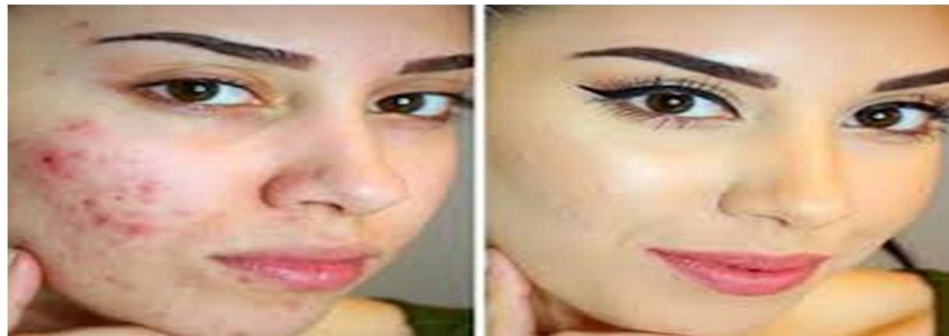


## **FEMALE PUBERTY CHANGES**

As a girl matures, the anterior pituitary gland secretes increasing amounts of FSH & LH in response to the hypothalamic secretion of GNRH. These pituitary hormones stimulate secretion of oestrogen & progesterone by the ovary, resulting in maturation by the reproductive organs & breasts & in development of secondary sex characteristics such as auxiliary & pubic hair.

The first noticeable changes of puberty begin at about 8-13 years in girls with the development of breast buds. The first menstrual period occurs 2-2.5 years later, with an average range from 9-16 years.

- Development of Breast.
- Hips broaden & become more curved and prominent in girls.
- A shrill / high pitched voice.
- Auxillary hair growth & pimples.



- Oily skin & hair, Shape of face get change.
- Get taller & heavier
- Breasts & Nipples get larger.
- Body sweats more.
- Internal & External sex hormone
- May have mood swings, sexual thoughts & feelings.



- When we talk about these changes it is normal to feel...



### What Happens When these changes Occurs

- Hormones - Chemical messengers that travel the blood stream from the place where they are made to the place where they do their work.
- Each hormone has a specific Job.
- Both Girls & Boys make the same sex hormones. The Main are Testosterone & Estrogen.
- Boys make lot of Testosterone & not so much of Estrogen.
- Girls make lot of Estrogen& not so much of Testosterone.

### Psychological Problems

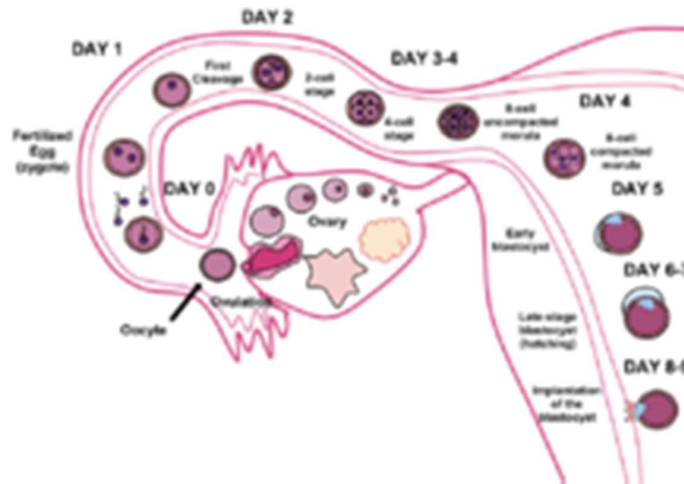
Adolescent psychological problems may fall in one of the following three categories.

- **Emotional:** Which include anxiety hypersensitivity, impulsiveness, moodiness, immaturity, withdrawal, etc.
- **Multivational:** Which include lack of ambition, low aspirational level, feelings of frustration, negative attitudes, lack of interests, etc.
- **Moral:** which include feelings of guilt, sense of being lost confused ideas of right and wrong, delinquencies such as lying, stealing, unruly behaviour etc.

### FERTILIZATION AND CONCEPTION

Pregnancy is achieved by woman having sexual intercourse during 11 – 18<sup>th</sup> day of menstruation. Semen on intercourse gets deposited deep in the vagina at external of

cervix. Three hundred million sperms swim up the uterine cavity and hundred or more reach outer third of fallopian tube within 5 - 10 minutes. Ovum remain fertilizable in tubal ampulla for 24 hours after ovulation while sperm retain its fertility for 24 – 28 hours after ejaculation in the vagina.



## Fertilization

### Definition

1. The process by which two gametes (reproductive cells having a single, haploid set of chromosomes) fuse to become a zygote, which develops into a new organism
2. The process of fusion of male and female gamete in the ampullary part of fallopian tube to form zygote.

### Process of fertilization

1. Transportation of gametes
2. Approximation of gametes
3. Fusion of the gametes

#### 1. Transportation of Gametes

After the ovulation limbriated end of fallopian tube sweeps over the ovary, the movement produce into cilia, the ovum is sucked into the fallopian tube with cilliary movement and reaches the ampulla of the fallopian tube.

At single ejaculation around 200 million sperm deposited into the vagina in that only 400 – 500 reaches the uterine tube by contraction of the uterus wall and the muscular contraction from the fallopian tube forms negative pressure and sucking the sperm or aspiration into the tube. It occurs 6-7 hours to transfer into the ampullary part of the uterine tube.

## **2. Approximation of gametes**

### **a. Capacitation**

After the ejaculation the sperm cells go through several essential physiological changes during their time in the female genital tract before they at the end are able to penetrate the oocyte membrane. The first change in this cascade is capacitation. Capacitation is a functional maturation of the spermatozoon.

### **b. Acrosomal Reaction**

Activation of acrosomal membrane cause release of hylurodinase, hydrolytic enzymes, helps in removing the corona radiata, then zona pellucid.

## **3. Fusion of Nucleus**

### **Egg activation and the Cortical reaction**

Prior to fertilization, the egg is in a quiescent state, arrested in metaphase of the second meiotic division. Upon binding of a sperm, the egg rapidly undergoes a number of metabolic and physical changes that collectively are called egg activation. Prominent effects include a rise in the intracellular concentration of calcium, completion of the second meiotic division and the so-called cortical reaction.

The cortical reaction refers to a massive exocytosis of cortical granules seen shortly after sperm-oocyte fusion. Cortical granules contain a mixture of enzymes, including several proteases, which diffuse into the zona pellucid following exocytosis from the egg. These proteases alter the structure of the zona pellucid, inducing what is known as the zona reaction. Components of cortical granules may also interact with the oocyte plasma membrane.

# **COMMUNICATION**

## **RISKY SEXUAL BEHAVIOUR**

Sexual risk behaviors are defined as sexual activities that may expose an individual to the risk of sexually transmitted infections including HIV and unplanned pregnancies. Some of these behaviours include unprotected sexual intercourse, multiple sexual partners, forced or coerced sexual intercourse and sexual intercourse for reward. However, lack of knowledge about consequences of these negative behaviours and poverty has been identified as factors that increase the chances of adolescence engaging in risky sexual behaviours.

## **SEXUALLY TRANSMITTED DISEASES**

Sexually transmitted diseases and sexually transmitted infections (STI) spread from person to person through sexual contact.

### **Method of Transmission**

#### **Sexual Contact**

- Through infected fluids such blood, semen, vaginal secretions, breast milk, puss from infected sore, rectal secretions.
- It is possible to get an Sexually transmitted Diseases even without intercourse. (ie, IF an infected penis comes into contact with the vagina, mouth or anus) or through the skin to skin contact)
- Sharing needles (drug users, tattoos)
- Mother to infant transmission
- Transfusion of blood products transfusion before 1985.

#### **Signs and Symptoms**

- Itching / Burning (genitals / anus)
- Blisters (genitals / anus)
- abnormal bleeding
- burning urination
- abdominal pain
- rash (body palms, sores)

- discharge (genitals / anus)
- open sores (with / without pain)
- painful inter course
- swelling of around genitals
- warts (around genitals / anus)

### **Respect your self- protect your self**

- Get vaccinated – Getting vaccinated early, before sexual exposure (HPV and Hepatitis A, B)
- Wait and verify – avoid vaginal and anal intercourse with new partners until you have both been tested for Sexually transmitted diseases
- Use condoms (highly effective)
- Avoid causal sex
- Avoid alcohol and drugs.

### **Complication**

- cervical cancer
- pelvic inflammatory disease (uterus infection)
- tubal pregnancy
- permanent pelvic pain
- infertility (Inability to have babies)
- Liver disease or cancer
- Anal cancer
- Eye inflammation, Heart disease, arthritis, AIDS, Death
- Eye infections resulting in blindness
- Lung infections
- Brain infections
- Birth defects
- Being still born (born dead)

## **HIV / AIDS**

### **HIV**

The human immune deficiency virus is a retrovirus that attacks the cells of the immune system. HIV is transmitted through an exchange of bodily fluids. It can also

pass from an infected mother to her child. HIV is the virus that eventually causes AIDS. (eg. exposure to infected individual, by sharing needles)

### **AIDS :**

If the end stage of HIV infection, a number of opportunist infections commonly occur at this stage and cancers that occur in people with otherwise unexplained defects in immunity death is due to uncontrolled or untreatable infection. Suraj Gupta.

**Acquired :** Not genetically inherited but contacted from somebody

### **Immune deficiency :**

In adequacy of the bodys main defence mechanism to right external disease producing organisms.

### **Syndrome :**

Not one disease or symptom, group of disease present in the body.

### **Why do adolescent have HIV/ AIDS**

- Lack of sex education
- Lack of medical resources
- Commercial sexual exploitation
- Early marriages,
- Curiosity about sex,

### **Signs and symptoms of HIV / AIDS**

- \* Weight loss in previous body weight
- \* Severe fatigue, sore throat
- \* Infections, ulceration in the genitals
- \* Prolonged fever
- \* Diarrhoea, severe headache, high sweats
- \* Enlarged lymph nodes

### **Prevention of HIV / AIDS**

- 1) Learn about the facts of HIV / AIDS
- 2) To reduce peer pressure in sexual activities
- 3) Don't inject and drugs and avoid alcohol

- 4) Limit your number of sexual partners
- 5) Use condoms.

### **Difference between the HIV / AIDS**

- HIV positive means the person has been affected with HIV
- HIV positive person can do day to day activities
- AIDS is the advanced stage of HIV infection
- AIDS when the immune system is completely destroyed and potentially opportunistic infections enter the body

### **Contraceptive Methods**

Contraceptive methods are, by definition, preventive methods to help women avoid unwanted pregnancies. They include all temporary and permanent measures to prevent pregnancy resulting from coitus.

### **Barrier Methods**

Condoms makes barrier method worthwhile, because they protect those adolescents, with occasional different sexual partners, against STD and AIDS. However, condoms must be properly used, and it depends on the man's behavior. Young men seem to be increasingly aware of the importance of safeguarding their own health and that of their partners. Cervical caps and diaphragms, on the other hand, are inappropriate for adolescents since they require foreseeing of intercourse and complicated manipulation, which young people are loath.

### **HORMONAL CONTRACEPTION:**

Hormonal methods are perfectly suitable for adolescents, who generally do not suffer from such problems as cardiovascular contraindications. In fact, these are completely reversible, and in no way modify the future fertility of these young women. In developed countries pills are usually preferred but trimestrial or monthly injections are also appropriate. Implants with their five year term, cover too long a period for certain adolescents.

## **IUD(Intra-Uterine Devices)**

IUD are theoretically contraindicated, because of the risk of pelvic infection and of secondary However, an adolescent is better protected by an IUD than by illegal repeated abortions.

## **ABSTINENCE**

Teen abstinence consists of not engaging in sexual intercourse or sex play beyond hugging or light kissing. Abstinence is the only guaranteed way for a teen to avoid pregnancy, and many teens find that abstinence has other social, emotional, and health benefits.

### **Achieving the goal of abstinence**

- 1) Make good habits
- 2) Identify ways to show caring
- 3) Avoid bad situations
- 4) Set your goal early
- 5) Recognize any problems you are having early and fix them.

### **Advantages to abstinence**

1. More self-respect and respect for others
2. Greater chance of faithfulness in marriage.
3. Better relationships
4. Freedom from memories or regrets
5. Don't have to worry about
  - STD's
  - Pregnancy
  - Getting hurt
  - Feeling used
  - Loosing self esteem



## **ADOLESCENT PSYCHOLOGY**

### **Psychological Problems**

Adolescent psychological problems may fall in one of the following three categories.

- **Emotional** : Which include anxiety hypersensitivity, impulsiveness, moodiness, immaturity, withdrawal, etc.
- **Multivational:** Which include lack of ambition, low aspirational level, feelings of frustration, negative attitudes, lack of interests, etc.
- **Moral:** which include feelings of guilt, sense of being lost confused ideas of right and wrong, delinquencies such as lying, stealing, unruly behaviour etc.

### **Adolescent Sexuality**

Though an adolescent is still a child, he is almost an adult as far as physiological and sexual maturation is concerned as a result of hormonal changes.

### **Sexual Concerns**

The adolescent is often anxious about nocturnal discharge, penile size, shape and erection, growth of hair, menses, breasts and appearance to influence the opposite sex. The usual barrier of communication with the parents enhances adolescents worry.

### **Self-Gratification**

Most adolescents indulge in self-gratification (masturbation) to quench their sexual desire and obtain pleasure out of this practice.

### **Homosexuality**

Sooner or later, the adolescent may develop a very intimate closeness with an individual of the same sex.

### **Promiscuous Sex**

As in the West is usual in the developing countries such as India. Understandably, therefore, the promiscuity in adolescents is on an increase. This is not restricted to peer groups. Quite a proportion of adolescents mate with prostitutes.

### **Teenage Pregnancy**

A sexually active adolescent needs appropriate contraceptive advice. Introduction of sex education in schools may well help in safeguarding against early marriage, premarital sex and adolescent pregnancy.

## SEXUAL PROTECTION

### ONE-ARM DISTANCE

The term “One-arm Distance” generally refers to the physical distance between two people in a social, family, or work environment. Think of the distance as the air between the body and an invisible shield, or bubble, that have formed around for any relationship.

### Good Touch & Bad Touch

**Good Touch** - Makes smile & feel Safe

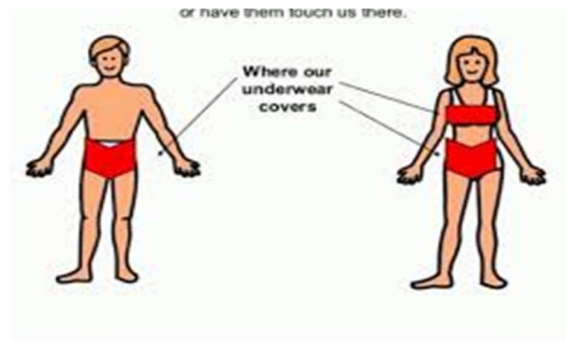
- Parents hug & kiss.
- Grandparent's love.
- Teacher pats on head & shoulders.
- Brief kiss on cheeks / forehead.
- Shaking hands.

**Bad Touch** - Makes to feel nervous, scared & ashamed.

- Forced or hurts.
- Touching / patting areas covered by undergarments.
- Kissing on the lips.
- Touching the buttocks , chest & region between legs.
- Feels uncomfortable & unwanted.



## "Our body is our private property"



### Three ways to tell a boy to stop touching

Method 1 Stopping a Stranger, Acquaintance, or Friend

#### Tell him to stop immediately



- If someone with whom you are not in a relationship touches you inappropriately, that is completely unacceptable.
- Confront the offender immediately. Don't worry about being polite. Loudly say, "Stop touching me!" so that other people around you will hear.

#### Show your emotion



- If you feel disgusted or angry, don't be afraid to express that.

### **Push him away**



- If the person keeps his hand on you, push him away and loudly say, “Get off me!”

### **Run away**



- Get as far away from the creep as possible.
- If you aren’t able to go very far, for example if you are on public transit, then move to a crowded area.

### **Call for help**



- If the person continues to harass you, call out for help. Simply yell, “Somebody help me!” and repeat it until someone hears.

## Involve the police



- If someone has been harassing you and inappropriately touching you, as soon as you get to safety, call 911.

## "ALWAYS SAY NO TO GIFTS & NO TO SECRETS"



- Always Say No , if a stranger provides a gift.

## Strangers As Close People

### Teachers

- When teachers act as an agent for sexual abuse.
- A teacher / professor named Nirmaladevi, a staff in Madurai Kamaraj university asked the students to involve in sexual practice to reach the better way of life in the future.
- The girls filed a petition on the staff in the Police & finally the staff was accused for the misguiding of students.

### Religious Leaders / Priest

1. Misusing of girls in the name of rituals & beliefs.

2. Four priests attached to the Malankara Syrian Orthodox Church accused of sexually abusing a 34-year old married woman by using her confessional statement.
3. The Crime Branch wing of the Kerala Police had on July 2 registered a case against
4. Father Varghese & three other Priests on the basis of a statement given by the woman belonging to the same church accusing them of sexually assaulting her on many occasions.

**Political leaders / leaders**

- Misusing of powers in the name of service.
- A women reportedly, lodged an FIR against RohitTilak (National Youth Congress), alleging that he had raped her on multiple occasions.
- According to the FIR, Tilak had promised to marry her & go on to physically abuse her. She said the leader had also forced her to perform unnatural sexual acts against her will.

**Right time:**

- Whenever going outing after 6 Pm go with parents
- Be there in the home by 6 pm if it is not possible try to have a good accompanied
- If else, these situations may occur
  - chain snatching
  - robbing of things
  - Rape (Sexually abusement)

**Right place:**

- Avoid going places like pubb, staying individually in restaurant at night, long travel with unknown person
- Try to spend more time in library which will provide more knowledge
- Have a good walk in natural sites(garden, park)

**Right person:**

- Avoid having contact with unknown person, untrusted friend
- Have contact with trusted friends

**General case****Nirbhaya - delhi rape case**

Don't show attitude, behave properly when feel Guilty She was out after 10 pm she went theater with her boy friend Both took a bus and the conductor asked the girl that where you went in this time. the girl shown her attitude and replied whom you are the person to ask me so the conductor accompanied with his gang raped the girl and thrown away her from the bus.

**Solutions**

- Educate the women & children about their rights.
- Be open & honest when sexual assault allegations surface.
- Do not react defensively when this sin is publicly exposed.
- Make the clergy accountable.

**PREVENTION OF SEXUAL ABUSE**

Sexual abuse is a widespread health problem in our society. Abuse crosses all gender socio-economic conditions, age, ethnic groups.

Sexual abuse has far ranging effects on physical & psychological functioning.

**Personal and emotional health**

Ideally sex is a natural, spontaneous act that passes easily through a number of recognizable physiological changes. Nurses encounter clients who have problem with one or more stages of sexual activity.

**NEED FOR SEX EDUCATION**

Sex education is a broad term used to describe education about human sexual anatomy, sexual reproduction, sexual intercourse, reproductive health, emotional

relations, reproductive rights & responsibilities, abstinence, contraception & other aspects of human sexual behaviour.

It also may be described as "Sexuality Education", which means that it encompasses education about all aspects of sexuality.

**Definition** - It is the process of acquiring information & forming attitudes & beliefs about sex, sexual identity, relationships and intimacy.

### **Aims of sex education**

- To reduce the risks of potentially negative outcomes from sexual behaviour.
- To young people's positive experience of their sexuality by enhancing the quality of their relationships & their ability to make informed decisions over their lifetime.

### **Sex Education at School**

- Sex education in the school has the best extension, than it is provided at home.
- Teaching should be scientifically correct.
- It should be a two way dialogue.
- The group of students should be homogenous in age & cultural background.
- Groups should be over two members. Otherwise two way communication is difficult.
- Talks should be supported by AV aids.
- At least one trained teacher.
- Support of administration.
- Support of parents & teachers. A talk should be arranged for them to give the content for them to give the contents of the program.



## ANNEXURE XII

### PHOTOGRAPHS OF INFORMATION, EDUCATION AND COMMUNICATION

#### IEC Package Given By The Researcher

