"A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PREVENTION OF "TORCH" INFECTIONS DURING PREGNANCY AMONG ANTENATAL MOTHERS IN A SELECTED HOSPITAL AT ERODE DISTRICT"

By

301321551

Dissertation submitted to

THE TAMILNADU DR M.G.R. MEDICAL UNIVERSITY

Chennai, Tamil Nadu

In partial fulfillment

of the requirements for the degree of

MASTER OF SCIENCE

IN

OBSTETRICAL AND GYNAECOLOGICAL NURSING

Sri Adichunchanagiri Shakshana Trust

Dharmarathnakara Dr.Mahalingam Institute of

Paramedical Sciences and Research,

Sakthi Nagar, Bhavani (T.k), Erode (Dist).

APRIL 2015

"A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PREVENTION OF TORCH INFECTIONS DURING PREGNANCY AMONG ANTENATAL MOTHERS IN A SELECTED HOSPITAL AT ERODE DISTRICT."

Approved by DMIPSR college research committee

Principal: ……

PROF.MRS.K.KALAIVANI, M.SC., (NURSING),
PROFESSOR IN COMMUNITY HEALTH NURSING,
PRINCIPAL DMIPSR COLLEGE OF NURSING,
SAKTHI NAGAR, BHAVANI, ERODE-638315.

Research guide: ……..

MRS.JANAKI, M.SC., (NURSING),
VICE PRINCIPAL
HOD IN OBSTETRIC AND GYNECOLOGICAL NURSING,
DMIPSR COLLEGE OF NURSING,
SAKTHI NAGAR, BHAVANI, ERODE-638315.

Medical guide: ……..

DR.P.SELVAN MS (GEN.SURGEON),
REG.NO:72323,
RAGHAV HOSPITAL,
APPAKKUDAL, BHAVANI, ERODE-638315.

A dissertation submitted to
The Tamilnadu DR.M.G.R. medical university, Chennai
In partial fulfillment of the requirement for
Degree of Master of Science in nursing

VIVA VOCE:

1. INTERNAL EXAMINER: ……
2. EXTERNAL EXAMINER: ……

ENDORSEMENT HEAD OF THE INSTITUTION

This is to certify that the dissertation entitled **"A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PREVENTION OF TORCH INFECTIONS DURING PREGNANCY AMONG ANTENATAL MOTHERS IN A SELECTED HOSPITAL AT ERODE DISTRICT."** is a bonafide research work done by **Mrs. DRAUBATHAI M**., under the guidance of **Mrs. JANAKI, M.sc., (N)**, **Reader Cum HOD of** Obstetric and Gynecological Nursing Department, Dharmarathnakara Dr.Mahalingam Institute of Paramedical Sciences and Research, Sakthinagar, Bhavani Taluk, Erode..

Signature of the Principal

Prof.Mrs.K.Kalaivani, M.Sc (Nursing),

Professor in Community Health Nursing,

Principal, DMIPSR College of Nursing,

Sakthi Nagar, Bhavani, Erode – 6383153

Date:

Place: Sakthi Nagar

ENDORSEMENT BY THE RESEARCH GUIDE

This is to certify that the dissertation entitled **"A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PREVENTION OF TORCH INFECTIONS DURING PREGNANCY AMONG ANTENATAL MOTHERS IN A SELECTED HOSPITAL AT ERODE DISTRICT."** is a bonafide research work done by **Mrs. DRAUBATHAI M**., in partial fulfillment of the requirement for the Degree of Master of Science in Obstetrical and Gynaecological Nursing.

Signature of the Research Guide
MRS.JANAKI, M.SC., (NURSING),
VICE PRINCIPAL
HOD IN OBSTETRIC AND GYNECOLOGICAL NURSING,
DMIPSR COLLEGE OF NURSING,
SAKTHI NAGAR, BHAVANI, ERODE-638315.

Date :

Place :

ACKNOWLEDGEMENT

ACKNOWLEDGEMENT

First and foremost, I thank and praise the “Lord almighty.” for giving me all the wisdom, knowledge, strength and guidance for the successful completion of my study.

I am immensely grateful thanks to Sri Sri Bhataraikya Sri Balagadharanatha Mahaswamiji and Chairman Dr. Mahalingam, chairman sakthi sugars limited for giving me an opportunity to undertake the course at Dharmarathnakara Dr. Mahalingam and Institute Of Paramedical Sciences and Research Sakthinagar.

I extend my sincere thanks to the most honourable Secretary and Correspondent of our college our Dharmarathnakara Dr. Mahalingam Institute Of Paramedical Sciences And Research Sakthinagar, for giving me an opportunity to undertake the course at Dharmarathnakara Dr. Mahalingam Institute Of Paramedical Sciences And Research Sakthinagar.

I wish to express my sincere grateful thanks and gratitude to Prof. Mrs. K. Kalaivani M.Sc (N) Principal Dharmarathnakara Dr. Mahalingam Institute Of Paramedical Sciences And Research Sakthinagar, for the encouragement inspiration, support as well as for providing all facilities for successful completions of this study.

My sincere gratitude and heartfelt thanks to my guide Mrs. M. Janaki,Vice Principal HOD of Obstetric and gynecology nursing, and my class.co-ordinator, Dharmarathnakara Dr. Mahalingam Institute Of Paramedical Science And Research Sakthinagar, for her able guidance highly instructive suggestions, precious advice and encouragement at each and every step of this study.

It is my heart felt desire in expressing profound gratitude to Mrs. Hemalatha M.Sc(N) for her valuable guidance and thought provoking stimulation to present this study.

I express my profound gratitude and exclusive thanks to Mrs. Deepa M.Sc(N) HOD of psychiatric Department, for her valuable guidance to do this study.

I extend my sincere gratitude to Mrs. Tamzhil selvi M.Sc(N) Lecturer of Psychiatric department, for her valuable guidance to do this study.

My sincere gratitude with exclusive thanks to Mrs. Srideepa M.Sc(N) HOD of Community Health Nursing for her valuable guidance to do this study.

I would like to thank profoundly Mrs. Saranya M.Sc(N) Lecturer of medical surgical nursing, for her valuable guidance to do this study.

I would like to thank profoundly Mrs. Radha M.Sc(N) Lecturer of Community Health Nursing, for her valuable guidance to do this study.

I would like to thank profoundly Mrs. Logeshwari M.Sc(N) Lecturer of obstetric and gynecology nursing, for her valuable guidance to do this study.

Grateful acknowledgement is extended to Mr. Dhanapal Lecturer in statistics for his valuable guidance in statistical analysis of this study.

I extend my sincere gratitude to Mrs. Sumithra devi.T.S MA. M.phil for editing the dissertation.

I also accord my respect and gratitude to the all faculties of Dharmarathnakara Dr. Mahalingam Institute Of Paramedical Science And Research for their timely assistance, co-operation and support throughout the period.

I am truly grateful to thank to all the participants who formed the core and basis of this study with their whole hearted co-operation.

I am thankful to the Mr.Kumar and Mrs.Dhanalakshmi Librarian of Dharmarathnakara Dr. Mahalingam Institute Of Paramedical Science And Research for helping me with literature work & for extending library facilities throughout the study.

My sincere thanks to all my classmates and friends for making me successful in all the encounters and difficulties faced during the study.

I am very much grateful to thank my beloved parents, my brother, my father and mother in law, my brother and sister in law there is no word to express the priceless patience, encouragement & for the continued support. I owe a great deal to them.

Words are beyond expression for the case with fervent prayers and faith of my beloved husband Mr. R. Guru for nurturing my cherished dream into a reality through his continuous challenging encouragement, Moral and financial support.

I would like to thank all my friends for their help and support.

Mrs. M. DRAUBATHAI

TABLE OF CONTENTS

TABLE OF CONTENTS

LIST OF TABLES AND FIGURES

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

S.NO	ABBREVIATIONS	EXPANDED FORMS
1.	WHO	World Health Organization
2.	STP	Structure teaching programme
3.	AV Aids	Audio, Visual Aids
4.	DMIPSR	Dharmarathnakara Dr.N.Mahalingam institute of paramedical science and research
5.	H1	Research Hypothesis
6.	HOD	Head of the Department
7.	R	Reliability
8.	SD	Standard Deviation
9.	%	Percentage
10	Prof.	Professor
11.	No	Number
12.	Fig	Figure
13.	&	And
14	LMP	Last Menstrual period
15.	TORCH	Toxoplasmosis, Rubella, Cytomegalo virus, Herpes simplex virus and other Viral infections
16.	CMV	Cytomegalo virus
17.	HSV	Herpes simplex virus
18.	IUGR	Intra Uterine Growth Retratation

ABSTRACT

TITLE OF THE STUDY

A study to evaluate the effectiveness of structured teaching programme on knowledge regarding prevention of “TORCH” infections during pregnancy among antenatal mothers in a selected hospital at Erode District.

OBJECTIVES OF THE STUDY

To assess the level of knowledge regarding prevention of TORCH infection during pregnancy antenatal mothers in experimental and control group.

To evaluate the effectiveness of structured teaching programme on knowledge regarding prevention of TORCH infection during pregnancy among antenatal mothers in experimental group.

To find out the post test knowledge regarding prevention of TORCH infection during pregnancy among antenatal mothers with their selected demographic variable.

HYPOTHESIS

H1-There will be a significant differences between the pre and post test knowledge regarding prevention of TORCH infection during pregnancy among antenatal mothers in experience and control group.

H2-There will be a significant differences between post test level of knowledge regarding prevention of TORCH infection with the experimental and control group.

H3-There will be a significant associations in knowledge regarding TORCH infection with the demographic variable.

CONCEPTUAL FRAME WORK

The conceptual frame work adopted for this study based on the general system theory (modified). “Ludwing Von Bertalaneffy’s model (1968).

Research Methods

The research design adopted for this study was true experimental design and research approach adopted for this was to evaluative the educative approach. The size was 60 months. In this 30 months were selected for experimental group and 30 for control group by convenient sampling method. Mothers were selected in selected hospitals in Erode District.

RESULTS

The findings of the experimental group of mother’s pre test knowledge score was 27 (90%) level of knowledge was inadequate. 1 (3%) level of knowledge was Moderately adequate knowledge. 2(7%) level of knowledge was adequate in experimental group.

Now the level of knowledge score was adequate in experimental group.

Hence the evaluate the effectiveness of STP on post test knowledge in experimental group was 34.0% , pre test % was 4.8.

Comparison in post test percentage of knowledge in experimental group the knowledge score was 34.17 whereas in control group the knowledge score was 3.79.

The overall mean post test knowledge score of mothers in the experimental group was significantly higher than the pre test knowledge score of mothers the paired t test value was t = 25 for knowledge.

The paired test and chi square shows that three was significant association between pre test and post test knowledge score in the experimental and control group of mothers with their demographic variables like age of mother, education religion die try pattern, No. of. Pregnancy type of family, antenatal visit, weeks of gestation source of information.

INTERPRETATION AND CONCLUSION

The findings of this study was the need of obstetric nurse to conduct training programme to the mothers coming to the antenatal visit to increase the knowledge of mother regarding prevention of TORCH infection.

This study has proved that mothers gained their knowledge regarding prevention of TORCH infection the level remarkably when compared to their previous knowledge prior to the administration of STP.

Thus in the future there is need to improve their knowledge by conducting the training programme for prevention of "TORCH" infection. Among antenatal mothers during pregnancy.

INTRODUCTION

CHAPTER-I

INTRODUCTION

“ Pregnancy is special , let make it as safe .”

- WHO theme.

“Feeling fat lasts nine months but the joy of becoming a mom lasts forever.”

- Attributed to Nikki Dalton

Pregnancy is the most fascinating and delicate experience for a women. Not only the health of the baby in the womb but also the woman's health is of equal importance to all her friends’ well wishers and family members. Every pregnancy is unique experience for the women experiences will be new and uniquely different.

The state of carrying a developing embryo or fetus within the female body. This condition can be indicated by positive results on an over-the-counter urine test, and confirmed through a blood test, ultrasound, detection of fetal heartbeat, or an X-ray. Pregnancy lasts for about nine months, measured from the date of the woman's last menstrual period (LMP). It is conventionally divided into three trimesters, each roughly three months long.

Reproduction though considered to be an usual process in the life of a women, is stressful and can lead to the threats in reproductive age group women unless, appropriate measures are taken in time, it may reach its peak and endanger the life of mothers. Some infections are more common than usual but all of them need to be prevented at best or at worst nipped in the bud for sure. The primary infections includes TORCH infections an acronym of Toxoplasma, Other infections (like varicella, syphilis, hepatitis, etc…) Rubella , Cytomegalovirus and Herpes. The impact and diagnosis of the disease just mentioned have been touched upon as well as the vaccination strategies to prevent them have been important.

As everyone waits with bated breath for the new arrival, any signs of illness in the mother can throw a spanner in the celebrations. So it is Imperative that all care is taken to avoid anything untoward from happening and prime concern is to avoid infection at any cost. However much may aborn them, we cannot deny that infections have become part of our normal life. But pregnancy and infections not a great combo by any standards! Infections during this period can pose a risk not only to the mother but the child too and infants may also pose a great risk to the pregnancy itself.

Maternal infections are now being increased and recognized as a major cause of birth defects in newborn babies. In pregnant women the virus can cross placenta and result in fetal infections.

TORCH is common in all socio-economic groups but congenital infections with significant impairment is seen at highest rate in population in which women in child bearing age have highest risk of acquiring primary infections. In addition to placental route, TORCH can be transmitted at delivery via the maternal genital tract, during the post partum period in breast milk and transfused blood products.

All of the TORCH infections can affect people of any age or sex. However, the term TORCH is only used when it applies to pregnant women and their unborn or newborn children. As a group, TORCH infections represent a common cause of birth defects. They can cause still births in the delivery of a dead baby.

Recurrent pregnancy loss is defined as three or more consecutive spontaneous losses of pregnancy. Despite the tremendous scientific and technological advances it has remained a dilemma. It's still remains a diagnostic challenge and frustrating therapeutic experience to most obstetricians. It is a highly frustrating experience for the patient. Despite great advances made by the modern science and cutting edge technology, the large number of cases, almost 43% are still classified as due to unknown etiology. Known etiological factors include anatomical defects in Mullerian tract, TORCH infections, immunological problems. Many modern therapies, which are in

current use, do not lead to a successful pregnancy outcome, resulting in great frustration to the patient and also to the obstetrician.

Immunology plays a significant role in the pregnancy. There are many placenta-mediated mechanisms that prevent the immune response of the mother against the fetus, which is foreign body. In normal pregnancy, asymmetrical antibodies develop resulting in T helpers' cell 2 type responses. It is associated with good progesterone secretion from the placental tissue resulting in a successful outcome of pregnancy. The immunological response from the mother is blocked by progesterone and if this progesterone –blocking factor is suppressed, it lead to unsuccessful pregnancy out come.

Good hygiene, antenatal screening, antiviral therapies, development and introduction of good vaccine may achieve the goal of controlling TORCH infections in mother and its related congenital defects in newborn. The importance may primarily be given to introduction of antenatal screening for TORCH infections in the developing countries like India as has been implemented against HIV. Data generated will help the health authorities to make policy against congenital TORCH infections prevailing in the country. Children affected by one of the TORCH infections need close monitoring.

The pregnant woman by gaining a teaching finds it useful and get to realize the importance of being aware of the health implications especially during as delicate period as pregnancy.

NEED FOR THE STUDY

Pregnancy is a period of great anabolic activity, when the most rapid rate of growth takes place. It is a condition in which the fetal growth is accompanied by extensive changes in the maternal body composition and metabolism.

Mother and children not only constitute a large group, but they are also a "vulnerable" or special risk group, the risk is connected with Childbearing in the case of women.

Certain infections collectively called TORCH infections can produce Stillbirths, congenital anomalies, abortions, blindness, severe deafness and mental retardation in the offspring's. That may be acquired in utero or during the birth process causing heavy morbidity to both mother and child.

The first trimester is usually the most dangerous time for the mother to catch these infections quite a great risk of the fetus also being affected during this stage. The risk to baby depends on the particular stage of pregnancy and for each infections it varies e.g. first trimester for rubella or at delivery for herpes simplex virus etc, with such a serious implications it becomes important to diagnose TORCH infections so as to treat as well as help to decide about termination of pregnancy. The onus is therefore not only to detect the maternal infections but once detected it is important to know whether the fetus is also infected or not.

A pilot study was conducted on TORCH infections among antenatal mothers to analyze TORCH infections in mothers are transmissible to fetus in the womb or during the birth and cause a cluster of symptomatic birth defects.

A study was conducted on Primary TORCH infections in the mother can lead to severe fetal anomalies or even fetal loss. A prospective study was designed to detect the seroprevalence of IgM antibodies to Toxoplasma gondii, rubella virus and cytomegalovirus and IgG antibodies to Herpes simplex virus type 1 and 2. one hundred and twenty pregnant woman presenting to the antenatal clinic of a tertiary health center were included in this study. Out of these 120 women, 112 (93.4%) had evidence of one or more infections. Prevalence pf IgG antibodies to HSV was 70% seroposivities for toxoplasmosis, rubella and CMV respectively were 11.6, 8.3 and 20.8%. Our data demonstrating high frequency of primary infections during pregnancy support the conclusion that routine prenatal TORCH screening is justified.

In a study the researcher says that primary infections caused by TORCH can lead to serious complications in pregnant women and suggested that consequently, because of high seropositivity

of TORCH in pregnant women, the country's health authorities should be alerted, and preventive measures should be taken.

All of the TORCH infections can be spread to other persons. The infections usually cause few, if any symptoms in the pregnant women. On the other hand, babies risk serious birth defects if they catch one of these infections during pregnancy or delivery. Babies are usually most severely affected when the mother gets the infection in the first trimester, or first

three months of pregnancy. This is the time of pregnancy when the baby's organs are first starting to form .

TORCH can cause serious, permanent birth defects. They can leave a child with severe communication, behavioral, or learning disorders. Some children appear normal at birth, only to have behavioral, emotional, or learning problems arise later in life. Hepatitis B can cause severe ongoing liver cancer.

A study was conducted on perinatal viral infections among the TORCH agents , occurrence of rubella and human T-lymphotropic virus type 1 (HTLV-1) were studied. Rubella epidemics occurred throughout. These conditions could be explained by the lower rate of rubella H1 antibiotics in the female population.

All TORCH infections have been associated with varying degrees of pregnancy loss. The magnitude of the risk is somewhat related to the severity of the maternal illness.

In an Article regarding TORCH infections it states the prenatal infections accounts for 2% to 3% of all congenital anomalies. TORCH are some of the most common infections associated with congenital anomalies.

Most of TORCH infections causes' mild maternal morbidity but has serious fetal consequences and treatment of maternal infections frequently has no impact on fetal outcome.

Therefore, recognition of maternal disease and fetal monitoring once disease is recognized are

important for all clinicians. Knowledge of these disease will help the clinician appropriately counsel mothers on preventive measures to avoid these infections, and will aid in counseling parents on the potential for adverse fetal outcomes when these infections are present .

The healthy mother brings forth the healthy child. TORCH infections can be screened and prevented during pregnancy. Even non-pregnant woman and adolescent girls can get TORCH tests done so they can be well treated in advance and can enjoy a TORCH infections- free pregnancy.

Investigator in her own experience found that the Antenatal mothers have inadequate knowledge regarding remedial measures for screening and prevention of TORCH infections during pregnancy. So the researcher is interested in providing teaching programme for all antenatal mothers regarding prevention of TORCH infections during pregnancy.

STATISTICAL MORTALITY RATES REGARDING TORCH INFECTIONS DURING PREGNANCY

A number of infectious diseases can be transmitted to pregnant women and passed on to their babies, increasing the risk of miscarriage, birth defects, and developmental problems. These infections, collectively referred to as

TORCH infections, include toxoplasmosis, other (e.g., syphilis, HIV), rubella, cytomegalovirus (CMV), and herpes simplex virus.

It is important to educate women about these diseases and their risks, optimally prior to pregnancy. Vaccination is available for some of the diseases, and taking precautions to avoid exposure, such as frequent hand washing, can also aid in disease prevention. The best way for a woman to protect her unborn child from congenital diseases is to protect herself.

- Worldwide, congenital HIV infection is a major cause of infant and childhood morbidity and mortality, responsible for an estimated 4 million deaths since the start of the HIV pandemic.
- CMV is the most common virus known to be transmitted during pregnancy, affecting approximately 0.5–1.5% of births. approximately 40% of maternal CMV infections during pregnancy result in congenital infection.
- In pregnant women with untreated early syphilis, 25% of pregnancies result in stillbirth and 14% in neonatal death, an overall perinatal mortality rate of about 40%.

Summary of Cases Reviewed in 2010

This report includes reviews conducted by the Maternal and Perinatal Death Review Committee in 2010. Cases reviewed may involve deaths that occurred in previous years.

Total number of cases reviewed:	**41**
Total number of recommendations:	**83**
Number of maternal cases reviewed:	11
Number of maternal cases noted for statistical purposes only*:	6
Total number of maternal deaths:	17
Number of recommendations from the maternal deaths reviewed:	12
Number of neonatal cases reviewed:	19
Number of recommendations from the neonatal deaths:	48
Number of stillborn cases reviewed:	11
Number of recommendations from the stillborn cases:	20

* The Maternal and Perinatal Death Review Committee reviews the deaths of all women who died "during pregnancy and following pregnancy in circumstances that could reasonably be attributed to pregnancy." Deaths involving women who are pregnant, but where the pregnancy did not attribute to the death, are noted for statistical purposes only and a formal review is not conducted.

STATEMENT OF THE PROBLEM

A study to evaluate the effectiveness of structured teaching programmed on knowledge regarding Prevention of TORCH infections during pregnancy among Antenatal mothers in a selected hospital at Erode district.

OBJECTIVES OF THE STUDY

To assess the level of knowledge regarding prevention of TORCH infection during pregnancy antenatal mothers in experimental and control group.

To evaluate the effectiveness of structured teaching programmed on knowledge regarding prevention of TORCH infection during pregnancy among antenatal mothers in experimental group.

To Compare the post test level of knowledge regarding prevention of TORCH infection among antenatal mothers in experimental and control group.

To find out the post test knowledge regarding prevention of TORCH infection during pregnancy among antenatal mothers with their selected demographic variable.

HYPOTHESIS

H1-There will be a significant differences between the pre and post test knowledge regarding prevention of TORCH infection during pregnancy among antenatal mothers in experience and control group.

H2-There will be a significant differences between post test level of knowledge regarding prevention of TORCH infection with the experimental and control group.

H3-There will be a significant associations in knowledge regarding TORCH infection with the demographic variable.

ASSUMPTIONS

- STP will improve knowledge of TORCH infection among antenatal mothers regarding prevention of TORCH infection.

LIMITATION OF THE STUDY

- Only 60 samples were used
  - 30 for experimental group
  - 30 for control group.
- The study was limited only to antenatal mothers who are all attending the antenatal OPD in selected hospitals in erode district.
- The study was limited for the assessment of the knowledge and practice regarding TORCH infection.

OPERATIONAL DEFINITIONS

Evaluate: In this study it refers to the determined outcome of structure teaching programme regarding prevention of TORCH infections during pregnancy among Antenatal mothers with their existing knowledge.

Effectiveness: It refers to desired changes brought by structured teaching programme by post-test score.

Structured Teaching programme: It refers to a system of planned instructional teaching to impart information in order to bring a change in knowledge regarding prevention of TORCH infections during pregnancy among Antenatal mothers.

Prevention: It refers to precautionary a measure which is taken by the antenatal mothers to prevent TORCH infections during pregnancy.

TORCH: It refers to infections which occurs during pregnancy includes Toxoplasmosis, Rubella, Cytomegalovirus, Herpes simplex virus, and others (e.g. syphilis, hepatitis, varicella virus).

Pregnancy: It refers to the period from conception to the delivery of the fetus.

Antenatal mothers: It refers to pregnant mothers who are in I, II, and III trimester.

CONCEPTUAL FRAME WORK

Conceptual frame work means – interrelated concepts or abstractions that are assembled together in some rationale scheme by virtue of their relevance to a common theme.

- Polit and Hungler (2010)

The conceptual frame work adopted for this study was derived from "General System Theory" formulated by **Ludwig Von Bertalaneffy** (1968). According to General System theory, a system is a set of component or units interacting with in the boundary that filter the kind and rate of flow of input and output from the system.

The main concept of General system theory is input, throughput and output. Input refers to the student's energy and information that enters into system through its boundary. Throughput refers to processing where system transformation the energy to students and information. Output refers to matter, energy and information that are processed through the system.

The aim of the study was to increase the knowledge and knowledge on practice of students regarding selected drugs used in obstetrics. Ludwig von Bertalaneffy's (1968) explained that any system has four major aspects such as input, throughput, output and feed-back.

Input

The input was assessing the knowledge and imparting knowledge about TORCH infection in structured teaching programme on various aspects of TORCH infection such as definition incidence, etiology, maternal infection, fetal effect, diagnosis, prevention and treatment.

Throughput

Throughput was the processing of input.

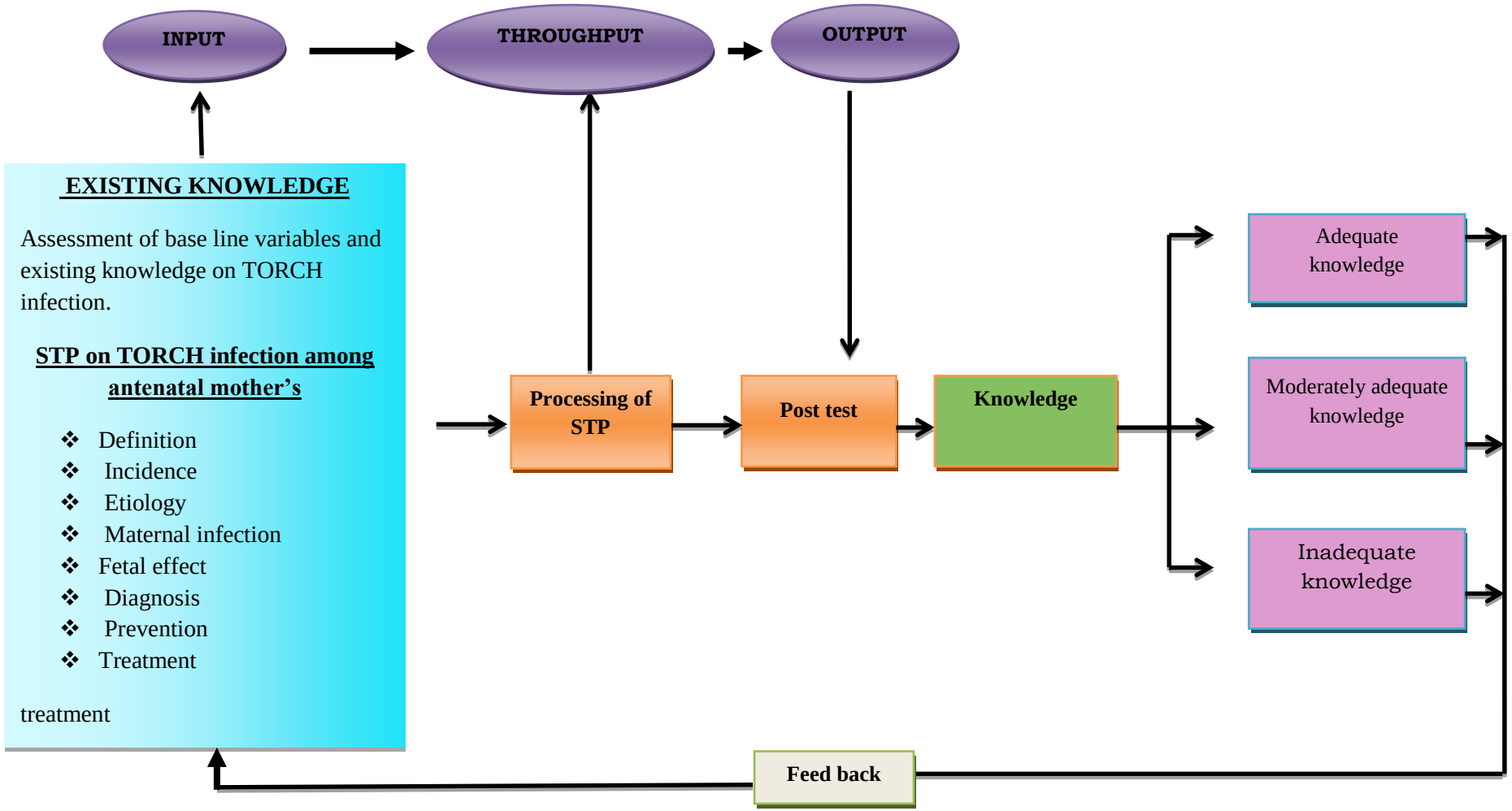
Output

The output was gain in the knowledge among the antenatal mother after structured teaching programme on TORCH Infection.

Feed back

The feed-back was the environment's response to the system. Feed-back may be positive (or) negative (or) neutral. In this study the feed-back emphasizes to strengthen the input and throughput. It is necessary, if the result shows any inadequate knowledge regarding TORCH infection. The structured teaching programme may need to be repeated.

FIG: 1 CONCEPTUAL FRAMEWORK BASED ON GENERAL SYSTEM THEORY (MODIFIED) "LUDWIG VON BERTALANEFFY'S MODEL" (1968)



REVIEW OF LITERATURE

CHAPTER – II

Review of literature

Review of literature is a key step in research process. It is defined as a broad comprehensive, in depth systematic and critical review of scholarly publications unpublished scholarly print materials, audio – visual materials and personal communication.

Review of literature is an essential activity of scientific research project, help to familiarize with the practical issues related to avoid unintentional duplication of studies.

The related literate has been organized and presented under the following;

Section - I

Literature related to TORCH infection during pregnancy.

Section - II

Literature related to screening of TORCH infections during pregnancy.

Section - III

Literature related to prevention and treatment of TORCH infections.

SECTION-I

LITERATURE RELATED TO TORCH INFECTION DURING PREGNANCY

Mangala Gowri et al (2013) A study was conducted on awareness about TORCH infection. Among nurses working in a hospital and in general hospital in delhi India .A pre test questionnaire survey was performed on 2013 nurses the study showed that the a substantial number of nurses have in adequate knowledge regarding causative factors the Importance of lab test only 40.2% of TORCH infection nurses had satisfactory level of awareness there was no effect of increasing age or years of experience on the level of awareness.

Karen E Johnson (2011) A study was conducted to assess the effectiveness of structured teaching programme on knowledge and of TORCH infections and its problem among mothers and fetal in vani villas hospital Bangalore the descriptive evaluation study was conducted on 20 antenatal mother data collection done using a structured interview schedule and observational checklist analysis of data revealed that 50% of mothers had satisfactory level of knowledge about the advantages of to know about the TORCH infection. The desirable mothers and child relationship before was 15% and after instruction was 50% significant at less than 0.05 levels.

Janat skees dnp (2010) A study was conducted to evaluate the effectiveness of Structured teaching on standard precautions for caring blood borne Bio-Hazard diseases by one group pre-test post-test design, 60 samples were selected by sample free technique. In pre-test majority of the participants (55%) had moderately adequate knowledge, 43% of participants have inadequate knowledge and only 2% participants have adequate knowledge.

In the post-test 90% of the participants gained adequate knowledge, 10% of participants had moderately adequate knowledge and none of them had inadequate knowledge.

Francaca CM (2004) During gestation, many microorganisms can infect the fetus, causing severe birth defects. Such organisms and the resulting clinical syndromes have been categorized as TORCH infections, a useful acronym referring to Toxoplasma gondii, other microorganisms (like syphilis), rubella virus, cytomegalovirus, and herpes viruses. Since dental patients typically report pregnancy or previous infections as part of their health history, and TORCH infections can manifest oral symptoms, the dentist is in a position to act as an educator and screener for these infections. This article reviews TORCH agents for dentists to help the clinician in educating pregnant patients about the risks these infections pose to the fetus. The authors also note oral symptoms related to these infections.

Med j aust (2002) Some infections are more serious in pregnant than non-pregnant women because of the potential for vertical transmission to the fetus or infant (e.g. varicella, rubella, cytomegalovirus infection, toxoplasmosis and listeriosis). Pre-pregnancy or routine antenatal screening for presence of, or susceptibility to, some of these infections and appropriate management can prevent adverse fetal or perinatal outcomes; screening should include rubella IgG, hepatitis B surface antigen, serological tests for syphilis and HIV antibody. If certain other vertically transmissible infections are suspected because of a positive antenatal test result, confirmatory tests for maternal and, if indicated, fetal infection are essential before intervention is considered (e.g. cytomegalovirus infection). For some vertically transmissible infections that are not readily preventable, appropriate management of maternal infection can reduce fetal damage (eg, toxoplasmosis).

LITERATURE RELATED TO SCREENING OF TORCH INFECTION DURING PREGNANCY.

Andiappan et al (2014) the study was conducted with in the pregnant women attending the antenatal clinic At Songklana Garind hospital hat yai, ongkhla province, Thailand. The sera of a total of 760 consecutive pregnant women were screened using standard commercial ELISA kits for detection of anti- toxoplasma IgG and IGM antibodies were also assessed. The pregnant women's socio- demographic, obstetrics and risk factors associated with toxoplasma sero positivity data were analyzed using univariable and multivariable analyses. were reviewed for identifying maternal illnesses and placental causes associated with IUGR.

J Clin Diagn Res. (2012) The acute infections which are caused by Toxoplasma gondii, Rubella virus, Cytomegalovirus (CMV) and the Herpes Simplex Virus (HSV-2) during pregnancy are often associated with adverse fetal outcomes and reproductive failures. In the Indian context, the exact seroprevalence of these infections is not known due to unavailability of baseline data. The present study was undertaken to determine the serological evidence of the acute TORCH infections in women who were in the first trimesters of their pregnancies in and around Varanasi, north India. The study population involved pregnant women with bad obstetric histories, who were in the first trimester of their pregnancy. AND The specific IgM antibodies were found to be positive in 74(19.4%) cases for toxoplasmosis, in 126 (30.4%) cases for the Rubella virus, in 130 (34.7%) cases for CMV and in 151 samples (33.5%) for the HSV-2 infections. The study showed a high prevalence of the infections which were caused by the TORCH complex amongst pregnant women with bad obstetric histories. Therefore, all the antenatal cases should be routinely screened for the TORCH infections, for carrying out early interventions to prevent fetal loss.

J Obstet Gynaecol Res. (2012) The objective of this study was to evaluate the significance of maternal toxoplasmosis, rubella, cytomegalovirus (CMV) and herpes simplex virus (TORCH) screening in cases of fetal growth restriction (FGR). The medical records of women carrying fetuses with FGR who underwent TORCH screening over a 10year period were retrospectively reviewed for maternal and congenital TORCH infection. Women carrying fetuses with FGR routinely underwent serologic TORCH tests and systematic ultrasound evaluation for congenital abnormalities. In 319 patients, no cases of maternal or congenital infection with toxoplasma, rubella, or herpes simplex virus were found. Conversely, six cases (1.8%) were diagnosed with congenital CMV infection, two of which had no structural abnormalities other than FGR. A complete maternal TORCH screening for cases of FGR appears to be unnecessary. Although a maternal CMV test can be considered, the incidence of congenital CMV infection was found to be low in FGR cases.

Renu Dutta (2011) This pilot case-control study at a tertiary-care hospital over a four-month period was aimed at evaluating the possible usefulness of screening of TORCH (*Toxoplasma gondii*, rubella virus, cytomegalovirus, and Herpes simplex virus) in females with bad obstetric history. The study included 12 women with bad obstetric history and a similar number of matched controls with previous normal pregnancies. A serological evaluation of TORCH infections was carried out by detecting IgG and IgM antibodies against these infections by ELISA test-kit.

Alves RC et al (2006) a study shows that knowledge and practice of university day care center workers relative to torch infection in antenatal period given the increasing frequency of TORCH infections in day care centers, the objective of this work was to identify knowledge and practices of day care center workers relative to the prevention, precocious detection and management of these illness. Consider education and care complementary in

antenatal attendance revealing the need for better preparation for caring have in daily activities the source of their knowledge.

Kauchali S et al (2004) conducted a study to assess maternal ability to recognize TORCH infection and to identify local beliefs and practices around TORCH infection in selected hospital. Mothers were asked to describe perceived types, signs and symptoms, causes of actions and taken for each infection.

Bhattacharyya K et al (2000) A study shows that the reduction of maternal and fetal mortality from TORCH infections depends upon a management strategy which encourages the decision to seek treatment. This approach views treatment decisions as a result not only of local conceptual models of illness, but also of the specific circumstances of illness episodes involving different types of social relationship and control over resources.

LITERATURE RELATED TO PREVENTION AND TREATMENT OF TORCH INFECTIONS.

Congenit Anom Kyoto (2014) state the acquisition of cytomegalovirus, Toxoplasma gondii, or parvovirus B19 was significantly lower than To reduce the incidence of infants with congenital infections, women should be aware of and know prevention measures against maternal infection with mother-to-child infections during pregnancy. Our objective was to assess the awareness of and knowledge about mother-to-child infections in Japanese pregnant women. A survey of 343 Japanese pregnant women was completed. Awareness of 13 pathogens capable of mother-to-child transmission was surveyed.

Knowledge about the transmission route, the most susceptible time of infection that may cause severe fetal disease during pregnancy, and methods to prevent maternal infection were investigated for four major pathogens (cytomegalovirus, rubella virus, Toxoplasma gondii, and parvovirus B19) and results were compared between these pathogens.

The proportion of women aware of pathogens concerning TORCH syndrome was the following: rubella virus 76%, Treponema pallidum 69%, and Toxoplasma gondii 58%, parvovirus B19 28%, herpes simplex virus 27%, and cytomegalovirus 18%. Only 8% knew how cytomegalovirus is transmitted, and only 12% knew how parvovirus B19 is transmitted; both were significantly lower than those who knew transmission routes for rubella virus or Toxoplasma gondii.

Zhoghua shiyan (2011) describe the serum IgM specific for TORCH were detected in 2.83% of 1307 pregnant women for toxoplasma,2.37% for rubella virus 0.46% for CMV,2.45% for herpes simplex virus.the total positive rate of serum IgM specific for TORCH was 1.45%.the serum IgG specific for TORCH were detected in 3.98% of 1307 pregnant women for toxoplasma 72.3% for rubella virus 97.78% for CMV 80.34% for herpes simplex virus. The total positive rate of serum IgG specific for TORCH was 63.60% there was no significant difference among the women with different pregnant situation in terms o f the serum IgM and IgG specific for TORCH.

Inshaque et al (2011) states that a total of 25 studies were included in the review a random effects meta analysis of observational studies of detection and treatment of syphilis during pregnancy showed a significant 80% reduction in still births relative risk (RR)=0.20,95% confidence interval (CI)0.12-0.34 that is recommended for inclusion in the list model. our meta analysis showed the malaria prevention intervention i.e. intermittent

preventive treatment and insecticide-treated mosquito nets can reduce still births by 22% however result were not statistically significant.

Curr women's health rep (2002) states that Perinatal infections account for 2% to 3% of all congenital anomalies. TORCH, which includes Toxoplasmosis, Other (syphilis, varicella-zoster, parvovirus B19), Rubella, Cytomegalovirus (CMV), and Herpes infections, are some of the most common infections associated with congenital anomalies. Most of the TORCH infections cause mild maternal morbidity, but have serious fetal consequences, and treatment of maternal infection frequently has no impact on fetal outcome. Therefore, recognition of maternal disease and fetal monitoring once disease is recognized are important for all clinicians. Knowledge of these diseases will help the clinician appropriately counsel mothers on preventive measures to avoid these infections, and will aid in counseling parents on the potential for adverse fetal outcomes when these infections are present.

Amer j perinatal (2000) states that many infants with intrauterine growth retardation (IUGR) are screened for TORCH infections. The yield and costs of such a practice may not be justifiable. Medical charts of infants with IUGR who had a workup for toxoplasmosis, other (infections), rubella, cytomegalovirus (infection), and herpes (simplex) (titer) (TORCH) infections were reviewed for the presence of clinical findings, laboratory and head ultrasound abnormalities associated with intrauterine infections. Maternal charts and reports of placental pathology were reviewed for identifying maternal illnesses and placental causes associated with IUGR.

METHODOLOGY

CHAPTER-III

METHODOLOGY

Methodology is the most important part of research study which enables the researcher to project blue print for the research under taken. Research methodology is a systematic way to problem. It may be under stood as a scientific any of doing research.

This chapter explains the research methodology adopted for the study which include the research design ,variables ,setting ,population, ethical consideration, sampling technique, inclusion and exclusion criteria sample size, development and description of instrument, validity and pilot study report, reliability, data collection, procedure and plan for analysis.

RESEARH APPROACH

The Educative and Evaluative approach was used to assess the effectiveness of structured teaching programme on knowledge regarding TORCH infection among antenatal mother's in selected hospital at Erode district.

RESEARCH DESIGN

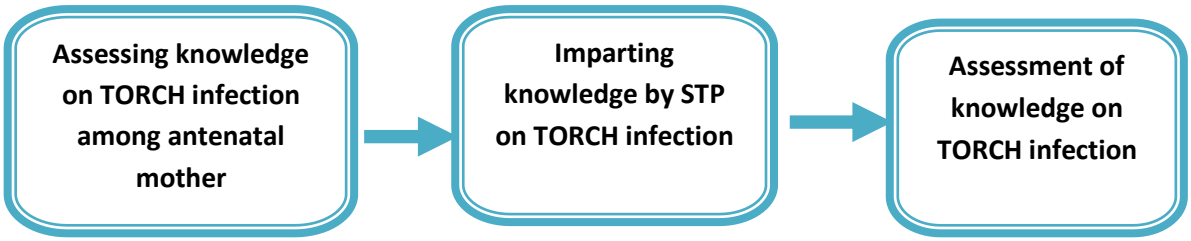
Polit (2008) stated that the research design is the researcher's overall plan for obtaining answers to the research question. The research design of this study was the true experimental research design. One group was served with experimental group and the other with control group.

Experimental group

Control group

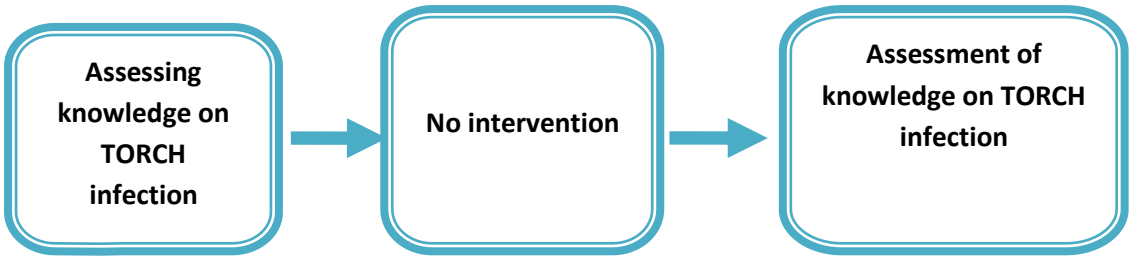
Experimental group

Pretest **post test**



Control group

Pre test **post test**



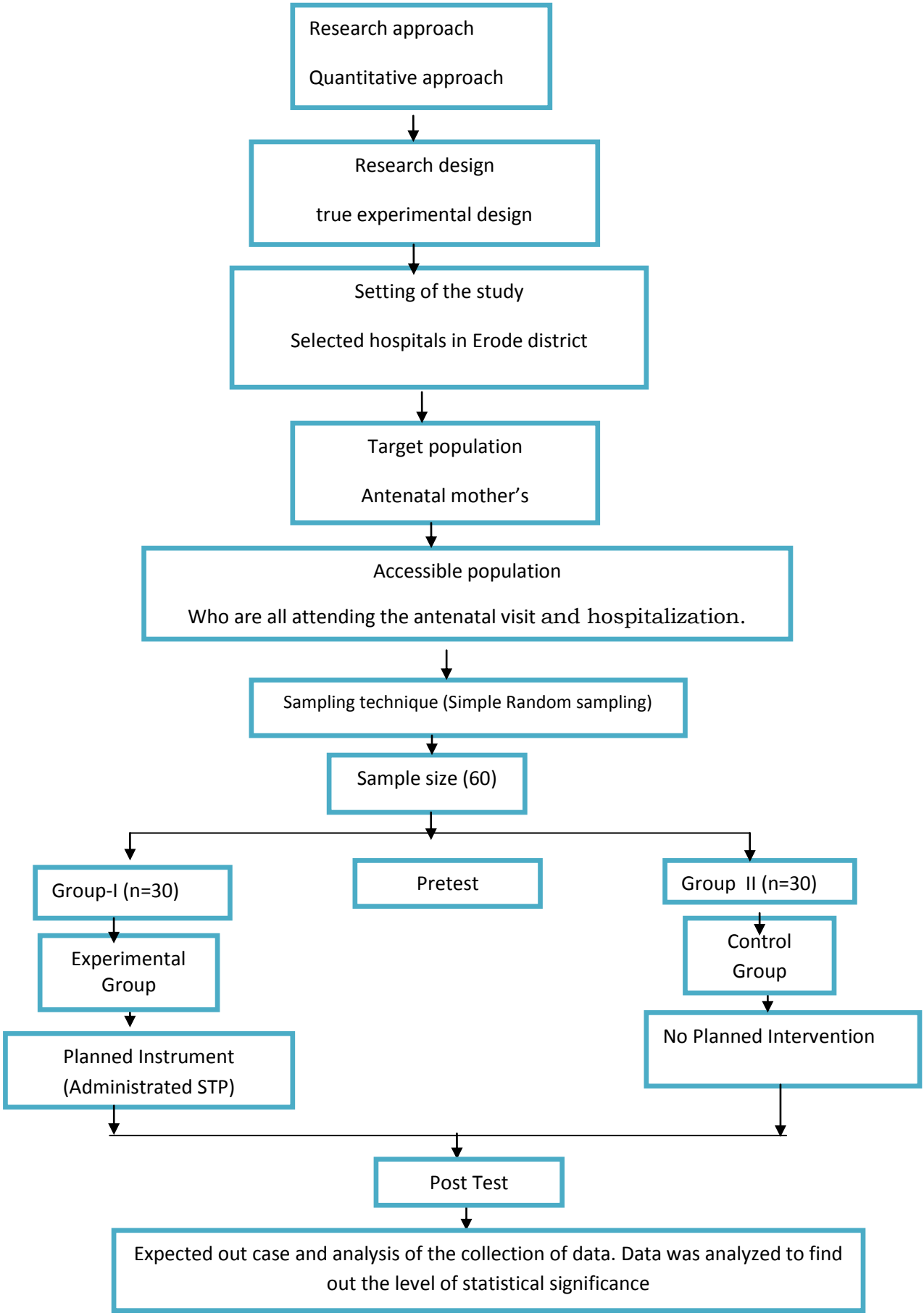
DIAGRAMMATIC REPRESNTATION

Q=observation

Q1, Q3-pre-test

Q2, Q4-post –test

SCHEMATIC RE PRESENTATION OF THE RESEARCH DESIGN



VARIABLES IN THE STUDY

Independent variable

a. STP on TORCH infection.

b. Method of teaching lecture method.

Dependent variable

Knowledge of mother's on TORCH infection.

Extraneous variable

The extraneous variable are the interest, health condition, fetal condition, environment of mother's in learning during teaching.

SETTING OF THE STUDY

Selected hospital at Erode district.

POPULATION

All Mothers who are attending antenatal visit and hospitalization.

SAMPLE

Antenatal mothers in selected hospital at Erode district.

SAMPLE SIZE

- The sample uses for this study is 60 antenatal mothers.
- Sampling is the process of selecting a group of people, events, behavior or other elements with which to conduct a study.

- Sample is a subset of population selected to participate in a research study.
- The samples for the present study were 60 antenatal mothers of selected hospital at erode district.

SAMPLING TECHNIQUE

Simple Random sampling technique in that Lottery method was done.

CRITERIA FOR SAMPLE SELECTION

Inclusion criteria;

Antenatal mothers;

- Who are in 1^{st}, 2^{nd}, 3^{rd}, trimester.
- Who are primigravida, multigravida, elderly primi, grand multi Para mothers.
- Who are attending antenatal visit and hospitalization.
- Who are given consent.
- Who are willing to participate and present during the period of data collection.
- Who can understand English or Tamil.

Exclusion criteria;

- Who are undergone any training programme or health information.
- Who are taking any steroid drugs.
- Who are having any complication like pregnancy induced hypertension, diabetes, HIV etc.,

DESCRIPTION OF DATA COLLECTION INSTRUMENT

Development of the tool;

The data collection instrument was developed after having consultation with the experts in the concerned topic and after reviewing the various literatures and research studies.

Description of the tool;

Self administered questionnaire was prepared in the form of open ended questionnaire. The instrument consisted of two parts.

Section A; mother's profile (demographic data);

It includes the variables including name, age, religion, educational status, dietary pattern, no of pregnancy, previous knowledge regarding TORCH infection among antenatal mother's and mark percentage.

Section B; Knowledge Regarding TORCH infection;

It consists of 37 multiple choices Question related to TORCH infection, Toxoplasmosis, Rubella, Cytomegalovirus, Herpes simplex virus, other viral infections.

SCORING KEY

- The knowledge part consist of 37 multiple choice questions.
- Each correct multiple choice response to carries '1'mark
- Wrong response carries '0' marks.
- The total score was 37.

SCORE INTERPRETATION

1. Inadequate knowledge ------- <50%
2. Moderately adequate knowledge ------ 51-75%
3. Adequate knowledge ---------- >75%

DATA ANALYSIS & INTERPRETATION

CHAPTER - IV

ANALYSIS AND INTERPRETATION

Analysis is the process of categorizing organizing, manipulating and summarizing the data to obtain answers to research questions. The purpose of analysis to reduce data to intelligible and interpretable form which the relations of research problem can be studied and tested. -Polit (2004)

STATISTICAL ANALYSIS

The data obtained was classified tabulated and the following analysis was performed in fulfilling the objectives of the study. The data analysis involves the translation of the information collected during the course of the research project into interpretable convenient and descriptive terms to draw inference from the using statistical method. The purpose of analysis is to summarize compare and test the proposed relationships and inferential findings.

TOPIC

"A study to evaluate the effectiveness of structured teaching programme on knowledge regarding prevention of "TORCH" Infection during pregnancy among antenatal mothers in a selected hospital at Erode district."

OBJECTIVES OF THE STUDY

To assess the level of knowledge regarding prevention of TORCH infection during pregnancy antenatal mothers in experimental and control group.

To evaluate the effectiveness of structured teaching programme on knowledge regarding prevention of TORCH infection during pregnancy among antenatal mothers in experimental group.

To Compare the post test level of knowledge regarding prevention of TORCH infection among antenatal mothers in experimental and control group.

To find out the post test knowledge regarding prevention of TORCH infection during pregnancy among antenatal mothers with their selected demographic variable.

HYPOTHESIS

H1-There will be a significant differences between the pre and post test knowledge regarding prevention of TORCH infection during pregnancy among antenatal mothers in experience and control group.

H2-There will be a significant differences between post test level of knowledge regarding prevention of TORCH infection with the experimental and control group.

H3-There will be a significant associations in knowledge regarding TORCH infection with the demographic variable.

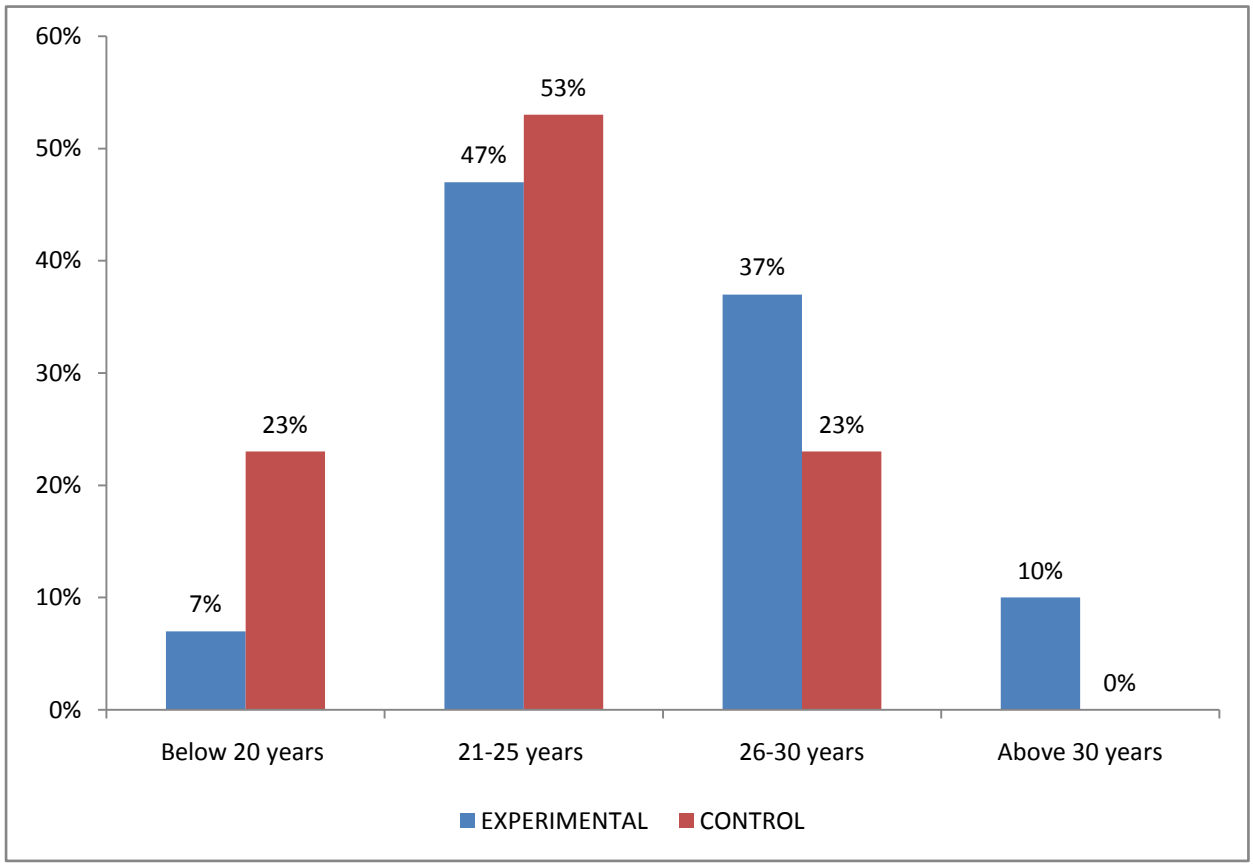
ORGANIZATION OF FINDINGS

Section-I	Distribution of demographic variables of responds.
Section-II	Assess the level of knowledge regarding prevention of TORCH infection in experimental and control group.
Section-III	Evaluate the effectiveness of structured teaching programme on knowledge regarding prevention of TORCH infection during pregnancy among antenatal mothers in experimental and control group.
Section-IV	Compare the post test level of knowledge regarding prevention of TORCH infection among antenatal mothers in experimental and control group.
Section-V	Find out the association between level of knowledge regarding prevention of TORCH infection among antenatal mothers with their demographic variables.

SECTION-I: DISTRIBUTION OF SAMPLES ACCORDING TO SELECTED VARIABLES FREQUENCY AND PERCENTAGE DISTRIBUTION OF SAMPLE ON DEMOGRAPHIC VARIABLES

Demographic Variables		Control group (n=30)		Experimental group (n=30)	
		Frequency	Percentage	Frequency	Percentage
Age	Below 20	7	23%	2	7%
	21-25	16	53%	14	47%
	26-30	7	23%	11	37%
	Above 30	0	0%	3	10%
Education	Non-formal	2	7%	0	0
	1-5	2	7%	1	3%
	6-10	4	13%	8	27%
	11-12	8	27%	6	20%
	UG	6	20%	11	37%
	PG	8	27%	4	13%
Religion	Hindu	28	93%	29	97%
	Christian	1	3%	1	3%
	Mushlim	1	3%	0	0
	Others	0	0	0	0
	Hindu	28	93%	29	97%
Dietry Pattern	Veg	15	50%	11	37%
	Non-veg	15	50%	19	68%
No.of pregenancy	Primi mother	18	60%	18	60%
	Multi mother	12	40%	10	33%
	Elderly multi	0	0%	1	3%
	Grand multi	0	0%	1	3%
Type of family	Nuclear family	17	57%	13	43%
	Joint family	13	43%	17	57%
ANC Visit	Regular	28	93%	28	93%
	Irregular	2	7%	2	7%
Weeks of Gestation	12-20 wks	13	43%	6	20%
	22-30 wks	5	17%	13	43%
	30-34 wks	4	13%	4	13%
	36-38 wks	8	27%	7	23%
Source of information	TV	0	0%	1	3%
	CHN	0	0%	3	10%
	Others	0	0%	0	0
	Non-of the above	30	100%	26	87%

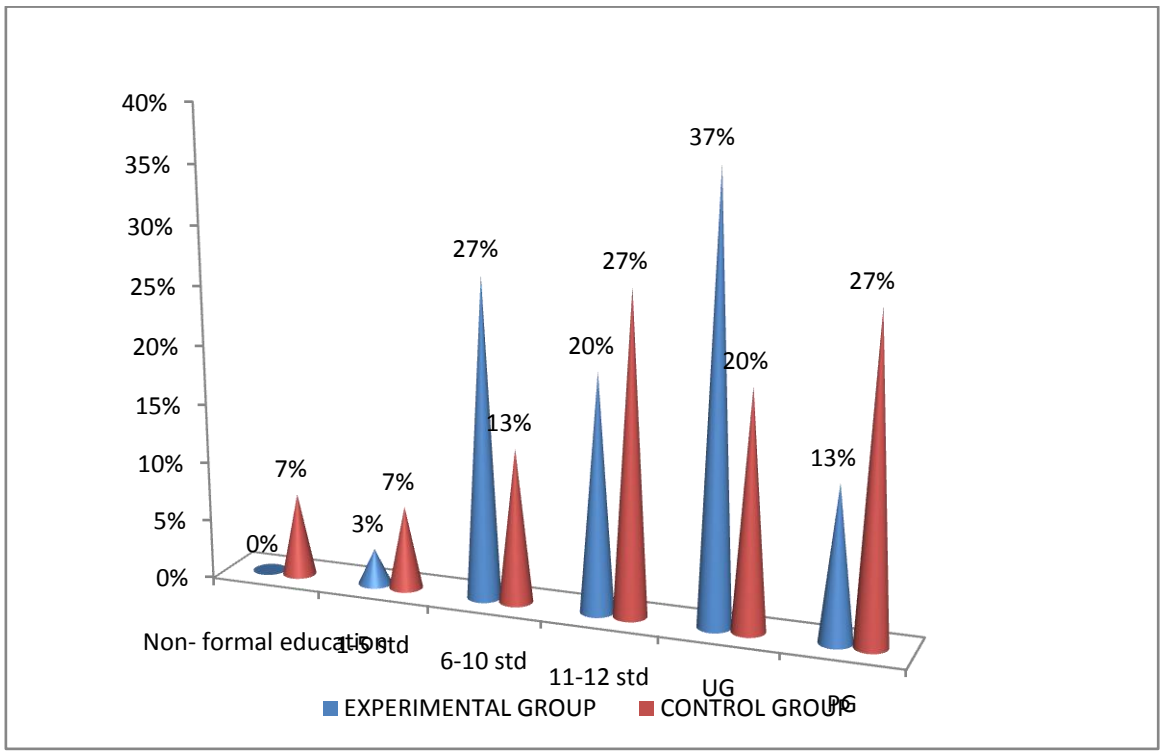
BAR DIAGRAM SHOWING THE DISTRIBUTION OF SAMPLE PERCENTAGE ACCORDING TO AGE



The data presented in the above diagram is according to age of patients in experimental group of, 2(7%), of the samples are in the age group of below 20 years, 14(47%) of the samples are in the age group of 21-25 years,11(37%) of the samples are in the age group of 26-30 years , 3(10%) of the samples are in the age group of above 30 years.

Similarly in Control group, 7(23%) of the samples are in the age group of below 20 years 16(53%) the samples are in the age group of 21-25 year s, 7(23%) of the samples are in the age group of 26-30 years, 0(0%) of the samples are in the age group of above 30 years.

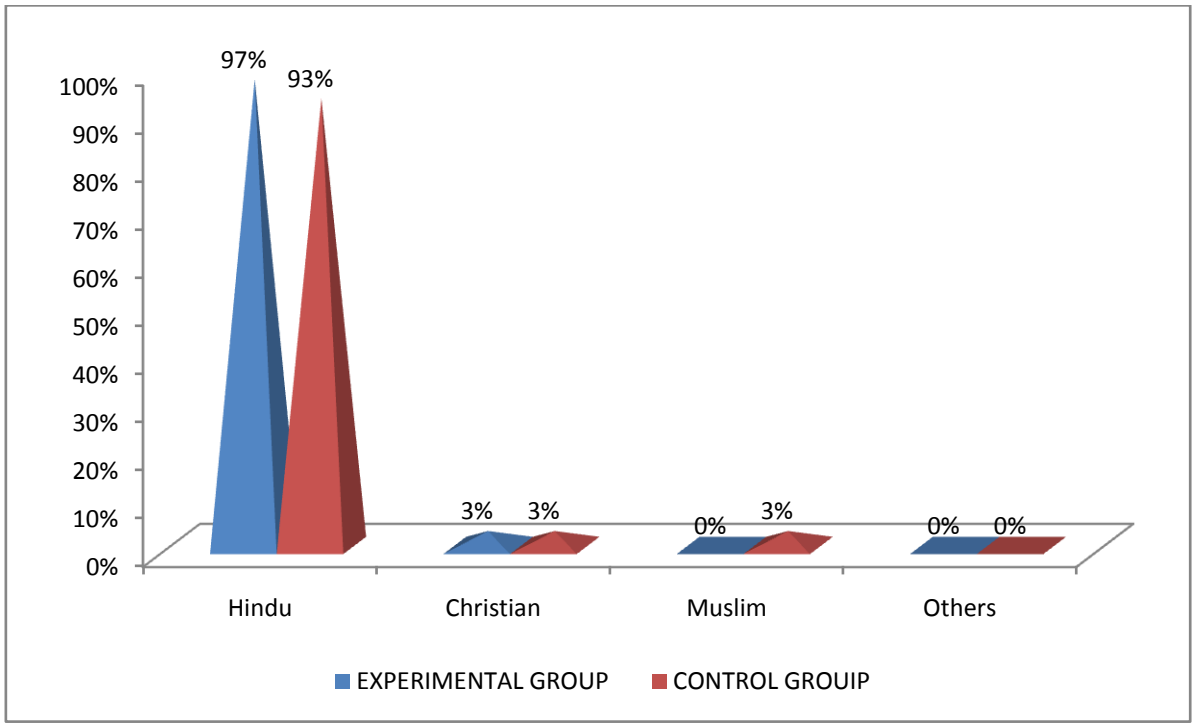
CONICAL DIAGRAM SHOWING THE DISTRIBUTION OF SAMPLE ACCORDING TO EDUCATION



The above diagram represents educational status of the mothers in experimental group 0% Of the samples are in non-formal education 2(7%) of the samples are in the 1-5 std, 8(27%) of the samples are in the 6-10 std, 6(20%) of the samples are in the 11-12 std, 11(37%) of the samples are in the UG and 4(13%) of the samples are in the PG.

Similarly in control group 2(7%) of the samples are in the Non – formal education, 2(7%) of the samples are in the 1-5 std, 4(13%) of the samples are in the 6-10std,4(13%) of the samples are in the 6 - 10 std, 8(27%) of the samples are in the 11-12 std, 6(20%)of the samples are in the UG,and 8(27%) of the samples are in the PG.

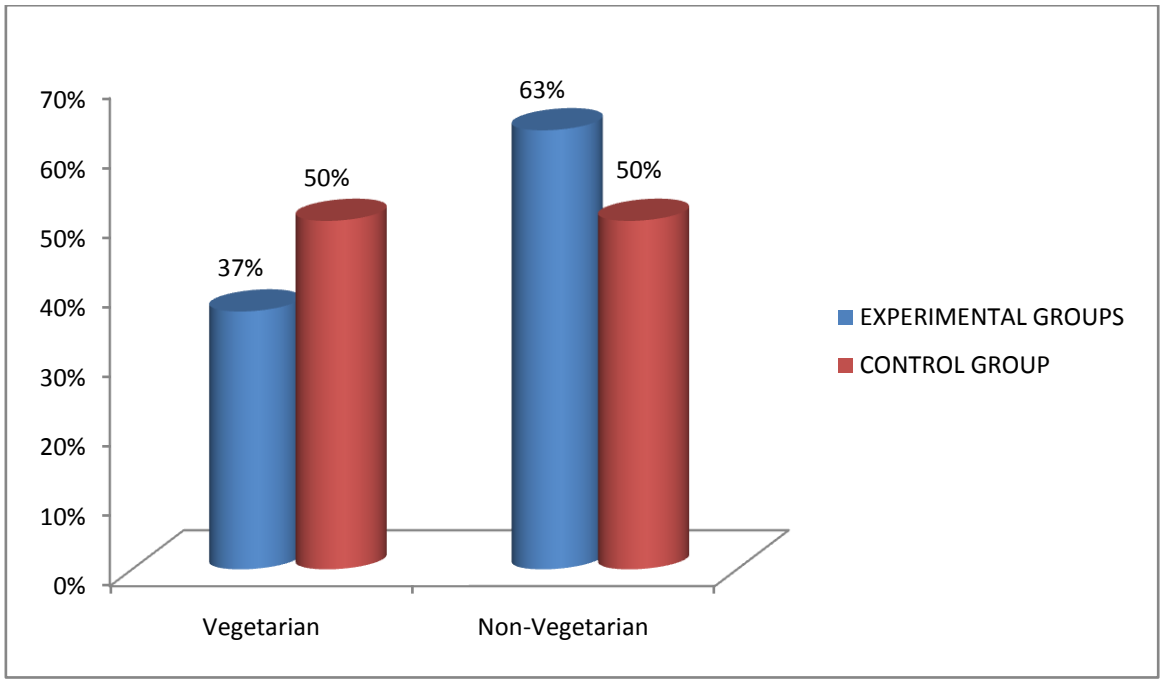
PYRAMIDAL DIAGRAM SHOWING THE DISTRIBUTION OF SAMPLE PERCENTAGE ACCORDING TO RELIGION



It is observed that according to the Religion of the mothers. In experimental group 29(97%) of the samples are in the hindu,1(3%) of the samples are in the Christian, 0(0%) of the samples are in the Muslim,and 0(0%) of the samples are in the others.

Similarly in control group 28(93%) of the samples are in the Hindu, 1(3%) of the samples are in the Christian, 1(3%) of the samples are in the Muslim and 0(0%) of the samples are in the others.

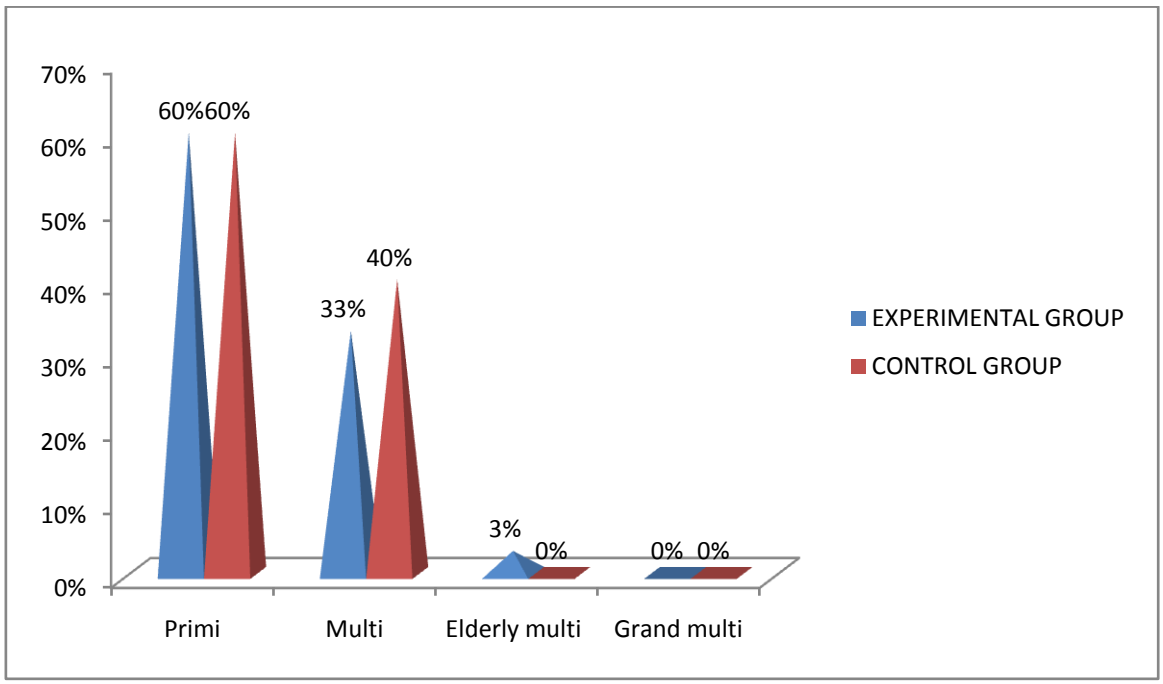
CYLINDRICAL DIAGRAM SHOWING THE DISTRIBUTION ACCORDING TO TYPE OF DIETRY PATTERN



The above diagram represents type of dietry pattern in experimental group 11(37%) of the samples are in the Vegetarian,and 19(63%) of the samples are in the Non – vegetarian.

Similarly in control group 15(50%) of the samples are in the vegetarian,and 15(50%) of the samples are in the Non- vegetarian.

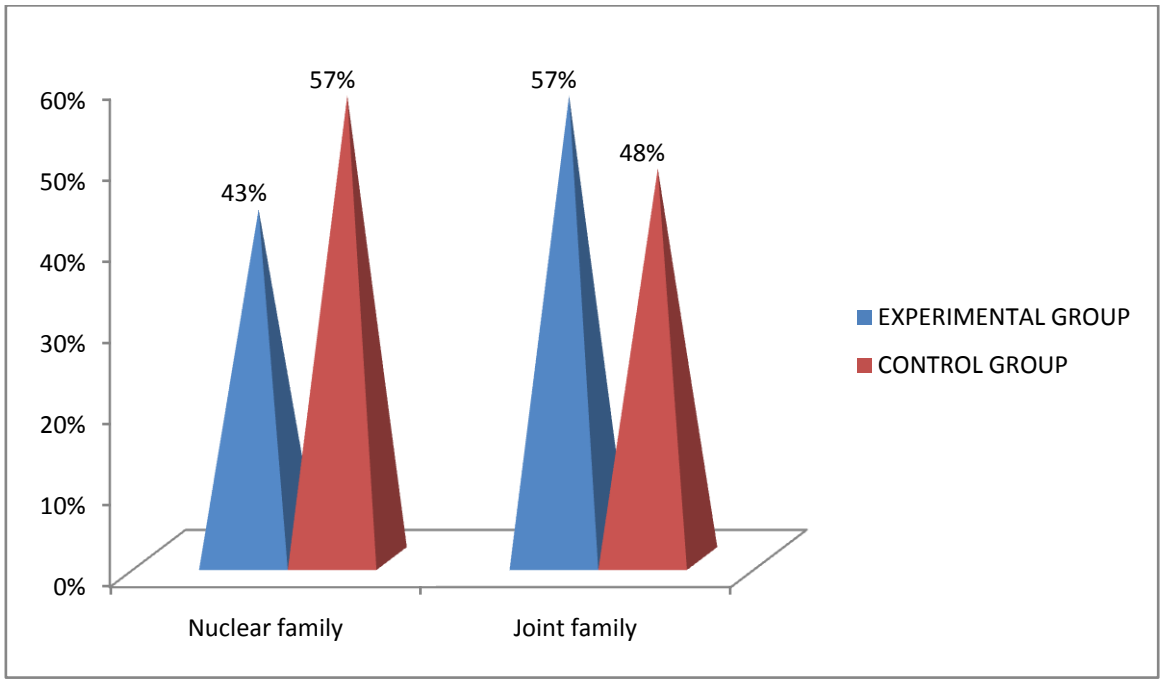
CONICAL DIAGRAM SHOWING THE DISTRIBUTION OF SAMPLE PERCENTAGE ACCORDING TO NUMBER OF PREGNANCY.



The above diagram represents No of pregnancy of the mothers in experimental 18(60%) of the samples are in the primi mother, 10(33%) of the samples are in the multi mother, 1(3%) of the samples are in the elderly multi mother,and 1(3%) of the samples are in the grand multi mothers.

Similarly in control group 18 (60%) of the samples are in the primi, 12(40%) of the samples are in the multi mother, 0(0%) of the samples are in the elderly multi mother,and 0(0%) of the samples are in the grand multi mother.

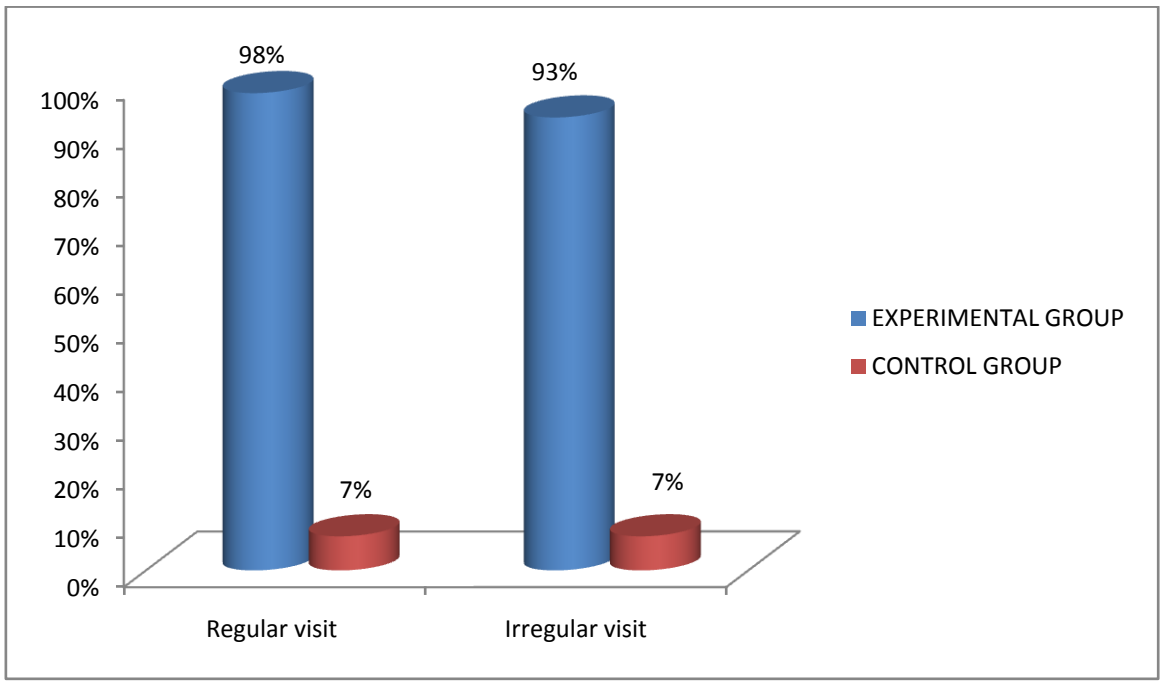
CONICAL DIAGRAM SHOWING THE DISTRIBUTION OF SAMPLE PERCENTAGE ACCORDING TO TYPE OF FAMILY.



The above diagram represents the type of family in experimental group 13(43%) of the samples are in the nuclear family,and 17(57%) of the samples are in the joint family.

Similarly in control group 17(57%) of the samples are in the nuclear family and 13(43%) of the samples are the joint family.

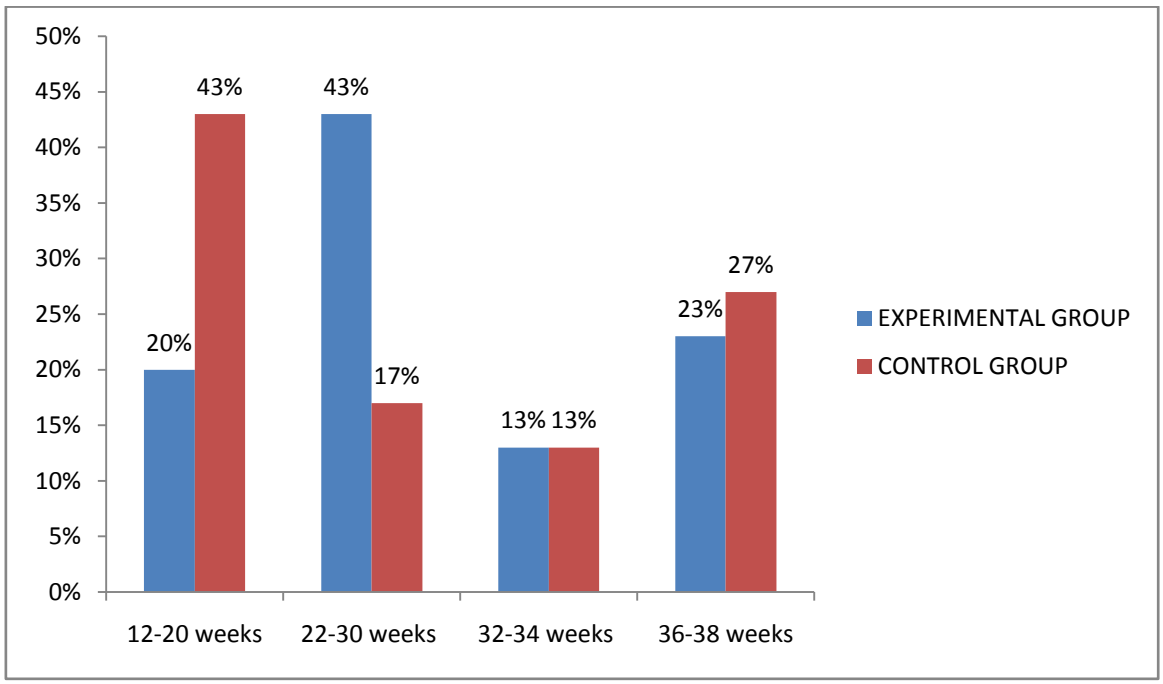
YLINDRICAL DIAGRAM SHOWING THE DISTRIBUTION OF SAMPLE PERCENTAGE ACCORDING TO ANTENATAL VISIT.



The above diagram represents the attending antenatal visit of the mothers in experimental group 28(93%) of the samples are attending regular antenatal visit,and 2(7%) of the samples are attending irregular antenatal visit.

Similarly in control group 28(75%) of the samples are attending regular antenatal visit and 2(7%) of the samples are attending irregular antenatal visit.

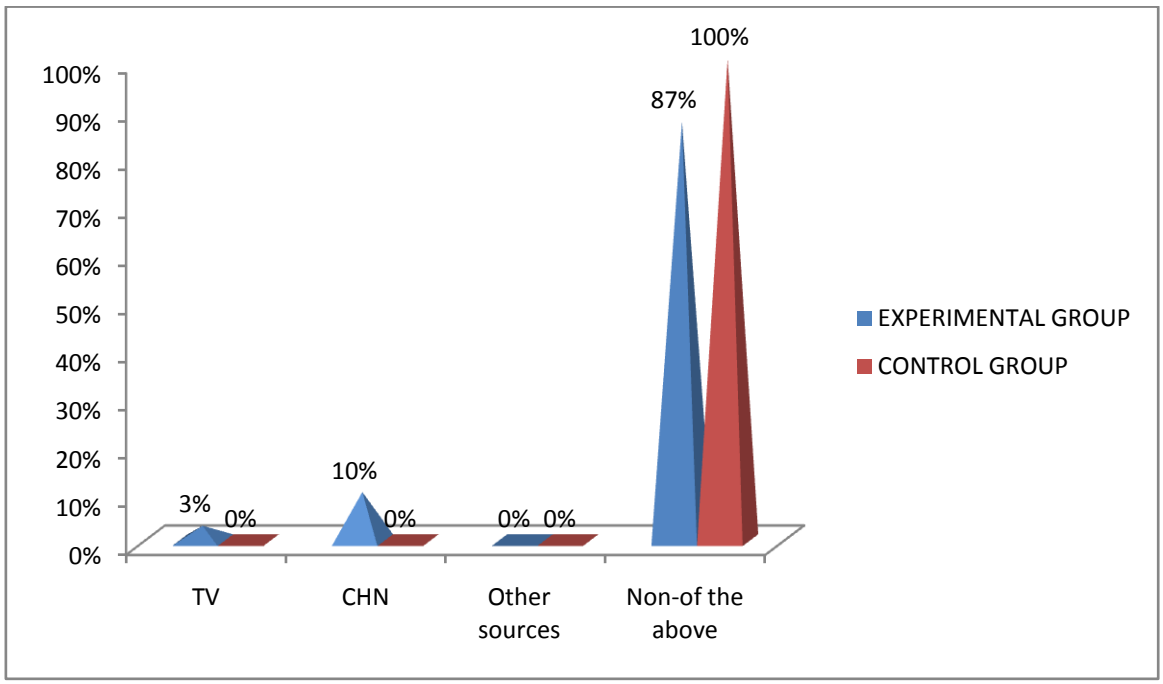
BAR DIAGRAM SHOWING THE DISTRIBUTION OF SAMPLE PERCENTAGE ACCORDING TO WEEKS OF GESTATION.



The data presented in the above diagram is according to weeks of gestation in experimental group 6(20%) of the samples are in the 12 -20 weeks of gestation, 13(43%) of the samples are in the 22 -30 weeks of gestation, 4(13%) of then samples are in the 32 – 34 weeks of gestation,and 7(23%) of the samples are in the 36 – 38 weeks of gestation.

Similarly in control group 13(43%) of the samples are in the 12 – 20weeks of gestation, 5(17%) of the samples are in the 22 -30 weeks of gestation, 4(13%) of the samples are in the 32 -34 weeks of gestation,and 8(27%) of the samples are in the 36 – 38 weeks of gestation.

CONICAL DIAGRAM SHOWING THE DISTRIBUTION OF SAMPLE PERCENTAGE ACCORDING TO SOURCE OF INFORMATION



The above diagram represents the source of information in experimental groups 1(3%) of the samples are in the getting information from the TV, 2(10%) of the samples are in the getting information from then CHN, 0(0%) of the samples are in the getting information from other source, and 26(87%) of the samples are in the getting information from the non - of the above.

Similarly in control group- 0(0%) of the samples are in the getting information from TV, 0(0%) of the samples are in the getting information from CHN, 0(0%) of the samples are in the getting information from other sources,and 30(100%) of the samples are in the getting information from non – of the above.

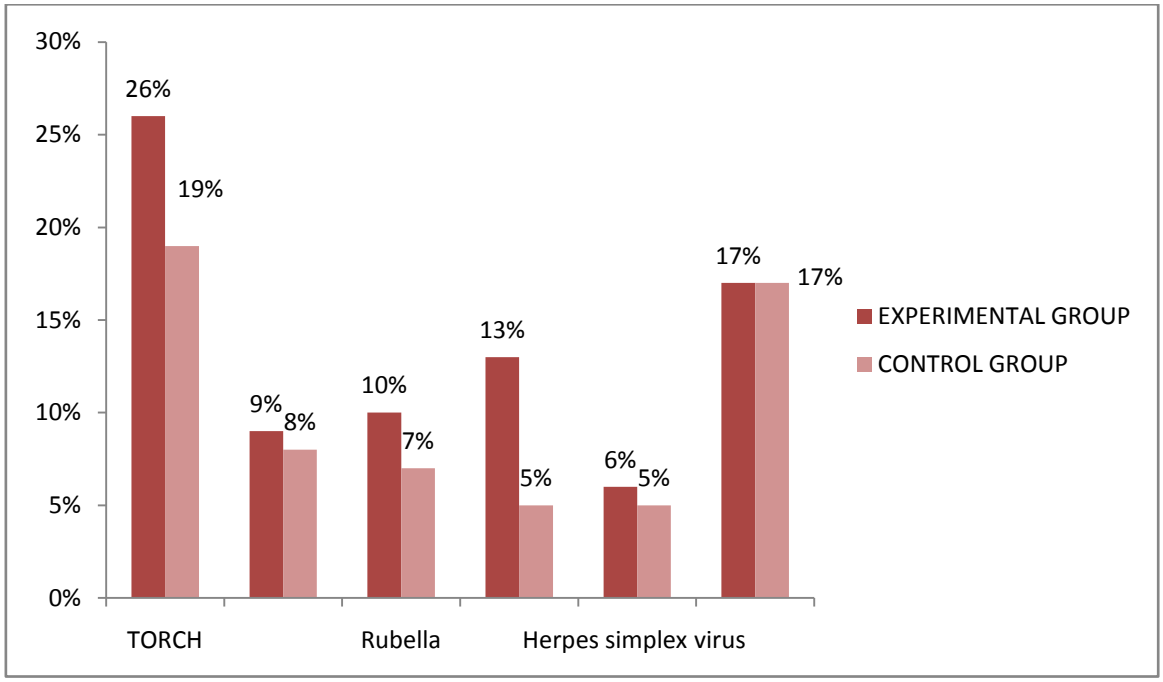
SECTION-II

ASSESS THE LEVEL OF KNOWLEDGE REGARDING PREVENTION OF TORCH INFECTION IN EXPERIMENTAL AND CONTROL GROUP.

ASPECT WISE PRE TEST PERCENTAGE OF LEVEL OF KNOWLEDGE REGARDING PREVENTION OF TORCH INFECTION AMONG ANTENATAL MOTHERS IN EXPERIMENTAL AND CONTROL GROUP.

S.NO.	Aspect	No. of Questions	Min Max score	Level of knowledge			
				Experiment		control	
				Mean score	Mean %	Mean score	Mean %
1	TORCH	5	0-5	1.3	26%	0.96	19%
2	Toxoplasmosis	7	0-7	0.63	9%	0.53	8%
3	Rubella	7	0-7	0.7	10%	0.46	7%
4	cytomegalo virus	6	0-6	0.76	13%	0.3	5%
5	Herpes simplex virus	5	0-5	0.3	6%	0.26	5%
6	Others	7	0-7	1.2	17%	1.2	17%

BAR DIAGRAM DEPICTING ASPECT WISE PRE TEST PERCENTAGE OF KNOWLEDGE LEVEL



The Pre-test knowledge score of the mothers in experimental group related to TORCH 26%, Toxoplasmosis 9%, Rubella 10%,cytomegalo virus 13% Herpes simplex virus 6% and other viral infection 17%

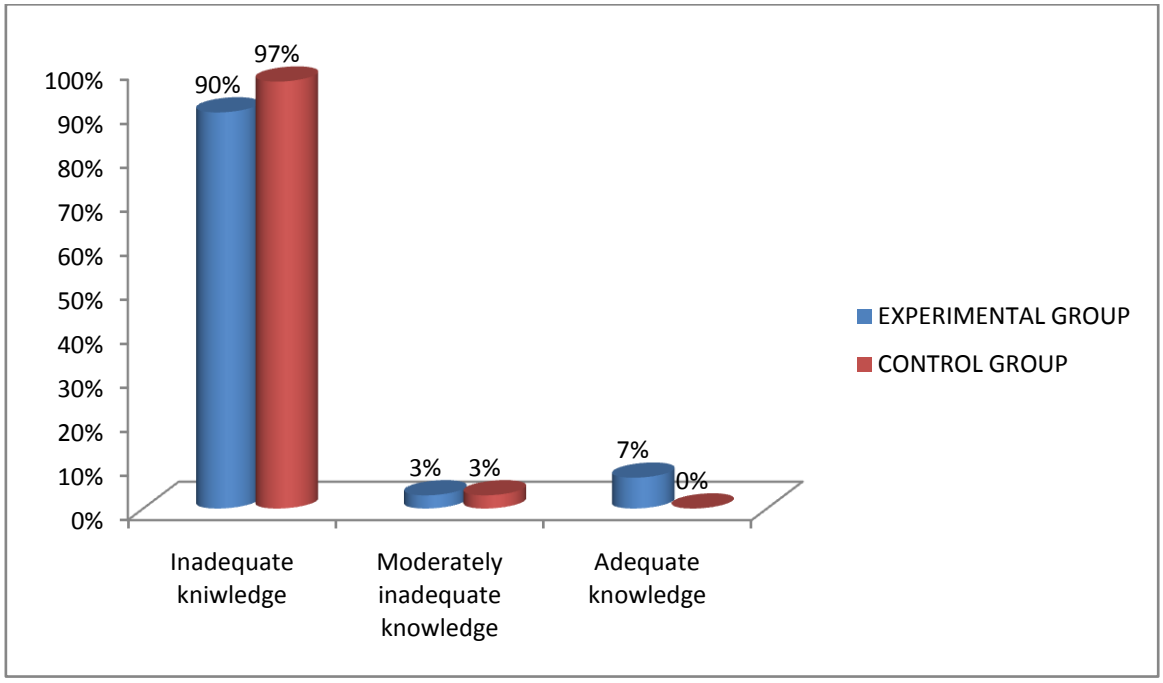
Similarly in control group related to TORCH 19%, Toxoplasmosis 8%, Rubella 7%, Cytomegalo virus 5% herpes simplex virus 5% and other viral infection 17%.

TABLE-4

OVER ALL PRE TEST PERCENTAGE OF LEVEL OF KNOWLEDGE REGARDING PREVENTION OF TORCH INFECTION AMONG ANTENATAL MOTHERS IN EXPERIMENTAL AND CONTROL GROUP

S.NO.	Level of knowledge	Experimental		Control	
		No. of Samples	**Percentage**	**No. of Samples**	**Percentage**
1	Inadequate knowledge	27	90%	29	97%
2	Moderately adequate knowledge Adequate knowledge	1	3%	1	3%
3		2	7%	0	0%

CYLINDRICAL DIAGRAM DEPICTING OVER ALL PRE TEST PERCENTAGE OF KNOWLEDGE LEVEL



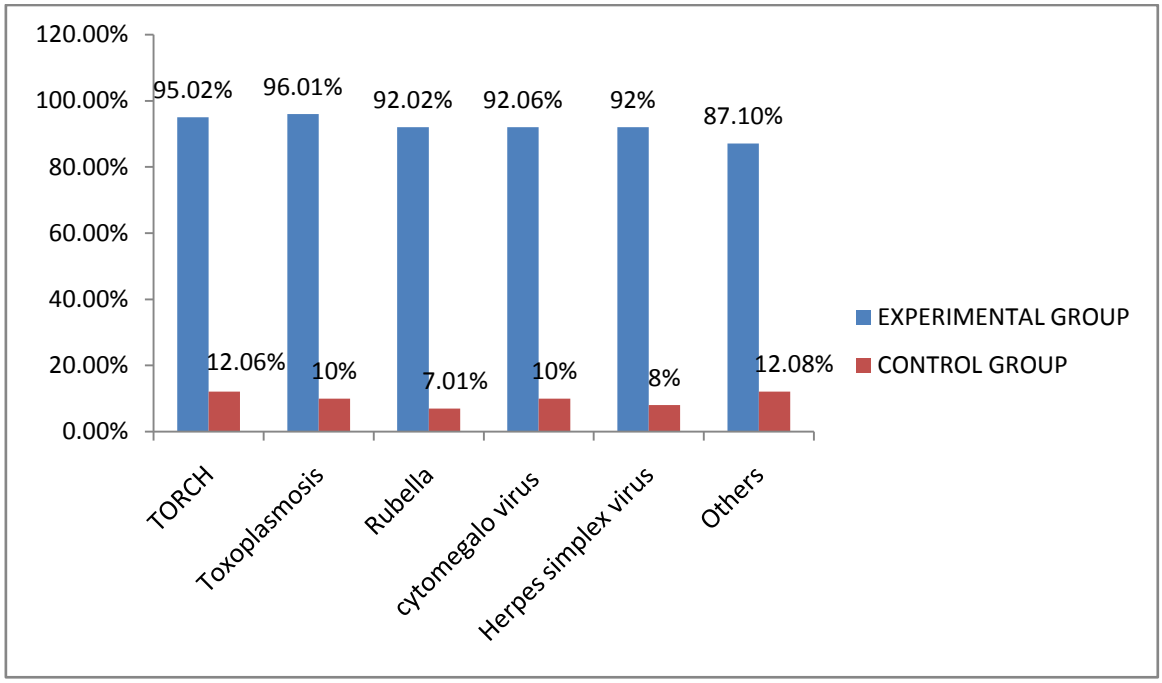
In experimental group 90% of mothers had inadequate knowledge 3% of mothers had moderately adequate knowledge,and 7% of mothers had adequate knowledge.

In control group 97% of mothers had inadequate knowledge 3% of the mothers had moderately adequate knowledge,and 0% of the mothers had adequate knowledge.

ASPECT WISE POST TEST PERCENTAGE OF PREVENTION OF TORCH INFECTIONS IN EXPERIMENTAL AND CONTROL GROUP.

S.NO.	Aspect	No. of Question	Min Max	Knowledge level			
				Experimental		Control	
				mean score	mean %	mean score	mean %
1	TORCH	5	0-5	4.76	95.2%	0.63	12.6%
2	Toxoplasmosis	7	0-7	6.73	96.1%	0.7	10%
3	Rubella	7	0-7	6.46	92.2%	0.5	7.1%
4	cytomegalo virus	6	0-6	5.56	92.6%	0.6	10%
5	Herpes simplex virus	5	0-5	4.6	92%	0.4	8%
6	Others	7	0-7	6.1	87.1%	0.9	12.8%

BAR DIAGRAM DEPICTING ASPECT WISE POST TEST PERCENTAGE OF KNOWLEDGE LEVEL



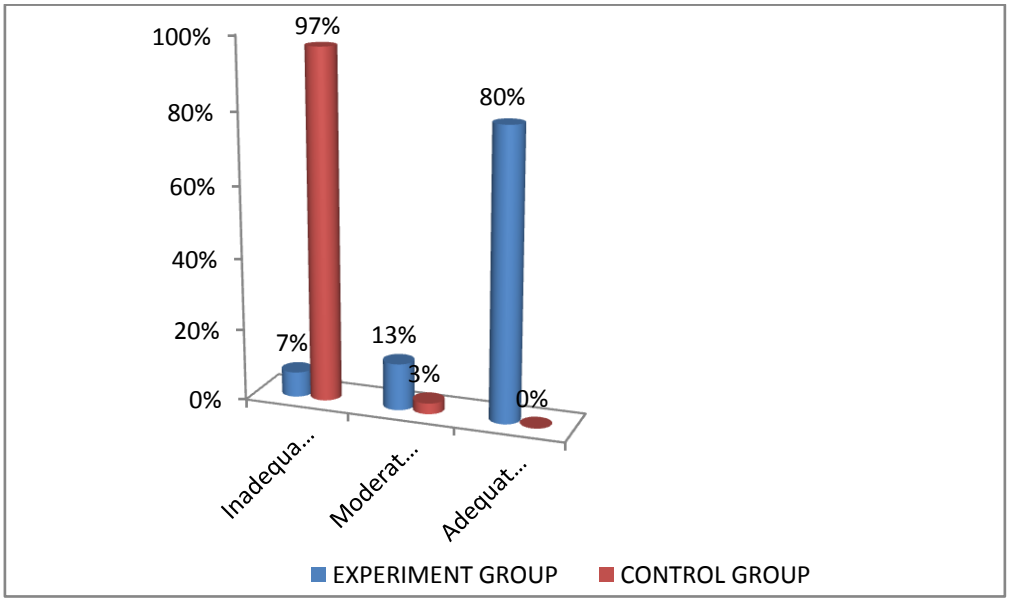
The post test knowledge level of mothers in experimental group related to TORCH 95.2%, toxoplasmosis 96.1%, Rubella 92.2%, cytomegalo virus 92.6%, Herpes simplex virus 92%,and other 87.1%.

Similarly in control group related to TORCH 12.6%, toxoplasmosis 10%, Rubella 7.1%, cytomegalo virus 0%, herpes simplex virus 8%,and other viral infection 12.8%.

OVERALL POST TEST PERCENTAGE OF PREVENTION OF TORCH INFECTION AMONG ANTENATAL MOTHERS IN EXPERIMENTAL AND CONTROL GROUP.

S.NO.	Level of knowledge	Experimental		Control	
		No. of sample	Percentage	No. of sample	Percentage
1	In adequate knowledge	2	7%	29	97%
2	Moderately adequate knowledge	4	13%	1	3%
3	Adequate knowledge	24	80%	0	0%

CYLIDERICAL DIAGRAM DEPICTING OVERALL POST TEST PERCENTAGE OF PREVENTION OF TORCH INFECTION AMONG ANTENATAL MOTHERS IN EXPERIMENTAL AND CONTROL GROUP.



In experimental group 7% of mothers had in adequate knowledge, 13% of mothers had moderately adequate knowledge,and 80% of mothers had adequate knowledge.

In control group 97% of mothers had in adequate knowledge 3% of mothers had moderately adequate knowledge and 0% of mothers had adequate knowledge.

SECTION - 3

EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMMED ON KNOWLEDGE REGARDING PREVENTION OF TORCH INFECTION DURING PREGNANCY AMONG ANTENATAL MOTHERS IN EXPERIMENTAL GROUP

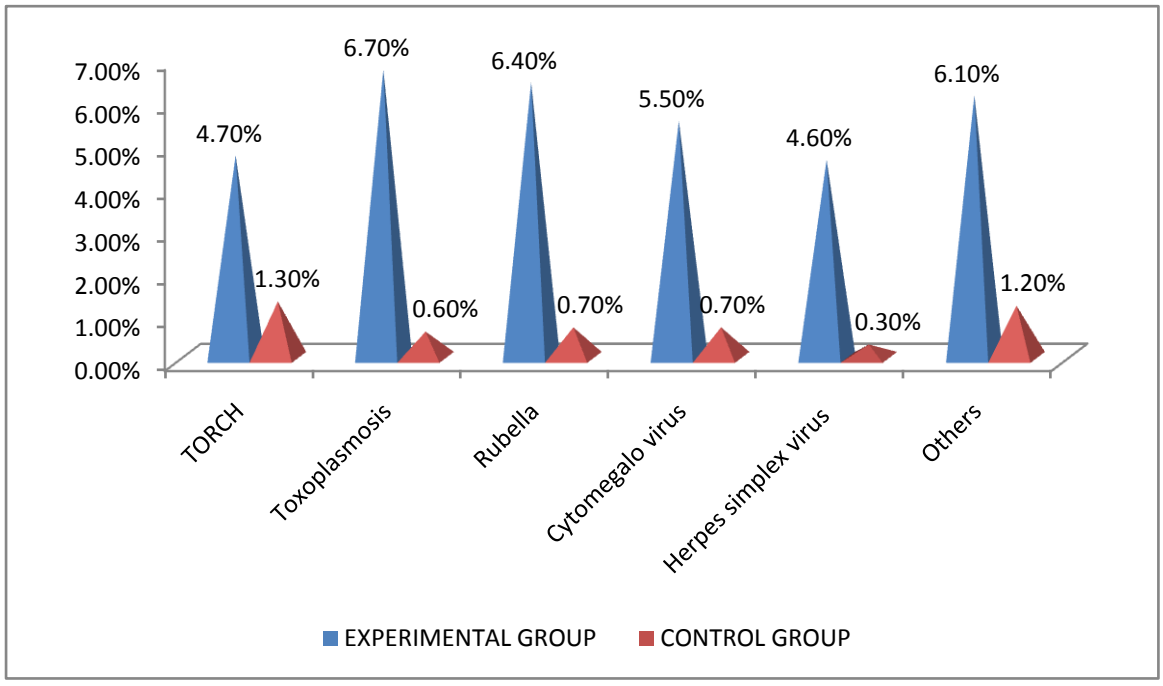
ASPECT WISE COMPARISON OF MEAN SCORES BETWEEN PRE AND POST TEST LEVEL OF KNOWLEDGE REGARDING PREVENTION OF TORCH INFECTION IN EXPERIMENTAL GROUP

S.NO	Aspect	Observation	Mean	Mean differ	SD	Tvalue	Significance
1	TORCH	Post test	4.7	3.4	1.23	13.5	(P<0.05) Significant
		pre test	6.73				
2	Toxoplasmosis	Post test	1.3	6.1	1.47	22	(P<0.05) Significant
		pre test	0.63				
3	Rubella	Post test	6.46	5.76	2	16.2	(P<0.05) Significant
		pre test	0.7				
4	Virus Herpes	Post test	5.56	4.8	1.33	20.2	(P<0.05) Significant
		pre test	0.76				
5	simplex	Post test	4.6	4.3	4.02	5.4	(P<0.05) Significant
		pre test	0.3				
6	Others	Post test	6.1	4.9	1.95	13.5	(P<0.05) Significant
		pre test	1.2				

The above table depicts that the computed "t" value on TORCH aspect "t" =13.5, toxoplasmosis aspect "t" =22, rubella aspect "t"=16.2, cytomegalo virus aspect "t"=20.2, herpes simplex virus "t"= 5.4, other aspect "t"= 13.5. These are all higher than the table value at 0.05 level of significance.

Hence H1 (there is significant difference between pretest and post test level of knowledge among mothers with experimental group) was accepted.

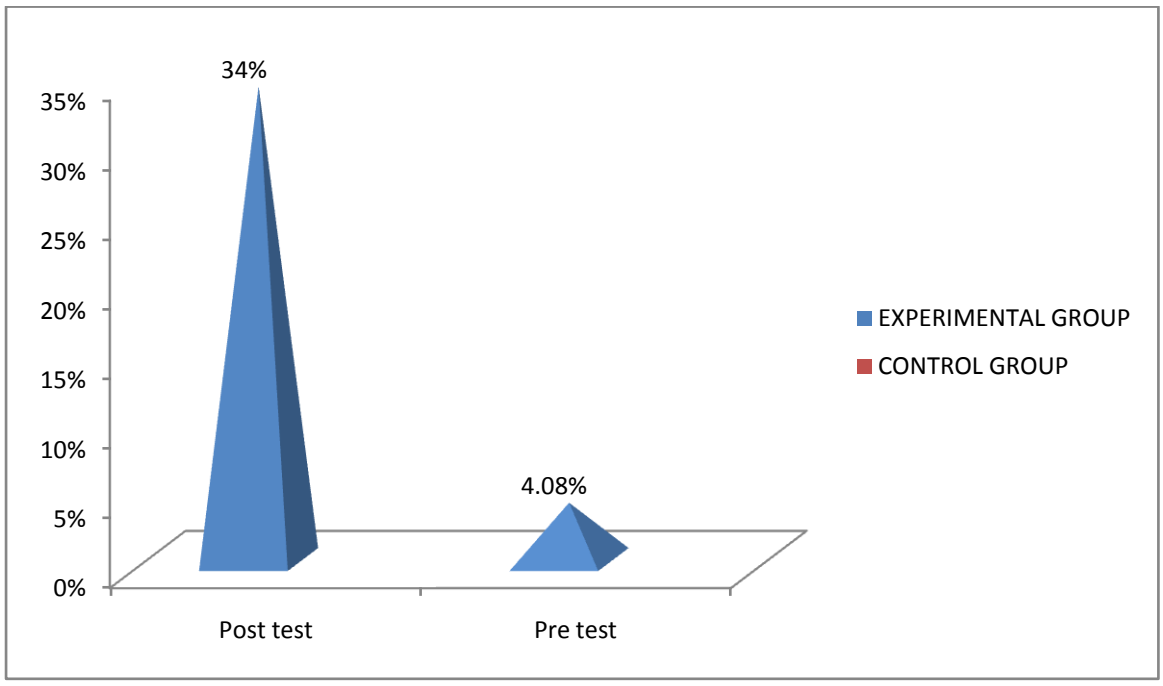
CONICAL DIAGRAM DEPICTING ASPECT WISE COMPARISON OF MEAN SCORE BETWEEN PRE TEST AND POST TEST LEVEL OF KNOWLEDGE AMONG ANTENATAL MOTHERS IN EXPERIMENTAL GROUP.



OVER ALL COMPARISON OF MEAN SCORE BETWEEN PRE TEST AND POST TEST LEVEL OF KNOWLEDGE IN PREVENTION OF TORCH INFECTION AMONG ANTENATAL MOTHERS IN EXPERIMENTAL GROUP.

S.NO.	Components	Observation	Mean	Mean different	SD	"t" value	Significant
	Level of knowledge	Post test	34.0	29.2	7.48	22	Significant
		pre test	4.8				

CONICAL DIAGRAM DEPICTING OVER ALL COMPARISON OF MEAN SCORE BETWEEN PRE TEST AND POST TEST LEVEL OF KNOWLEDGE IN PREVENTION OF TORCH INFECTION AMONG ANTENATAL MOTHERS IN EXPERIMENTAL GROUP.



There is significant increase knowledge after post test.

SECTION - 4

COMPARE THE POST TEST LEVEL OF KNOWLEDGE REGARDING PREVENTION OF TORCH INFECTION AMONG ANTENATAL MOTHERS IN EXPERIMENTAL AND CONTROL GROUP.

ASPECT WISE COMPARISON OF POST TEST LEVEL OF KNOWLEDGE REGARDING PREVENTION OF TORCH INFECTION AMONG ANTENATAL MOTHERS IN EXPERIMENTAL AND CONTROL GROUP.

S.No	Aspect	Observation	Mean	Mean differ	SD	T value	Significance
1	TORCH	Experimental	4.7	4.13	1	17	(p<0.05) Significant
		control	1.3				
2	Toxoplasmosis	Experimental	6.73	6.03	1	25	Significant
		control	0.63				
3	Rubella	Experimental	6.461.3	5.96	1.06	19	Significant
		control	0.7				
4	Cytomegalo virus	Experimental	5.56	4.96	1.01	17	Significant
		control	0.76				
5	Herpes simplex virus	Experimental	4.6	4.14	8	2.08	Significant
		control	0.3				
6	Others	Experimental	6.1	5.16	1.44	15	Significant
		control	1.2				

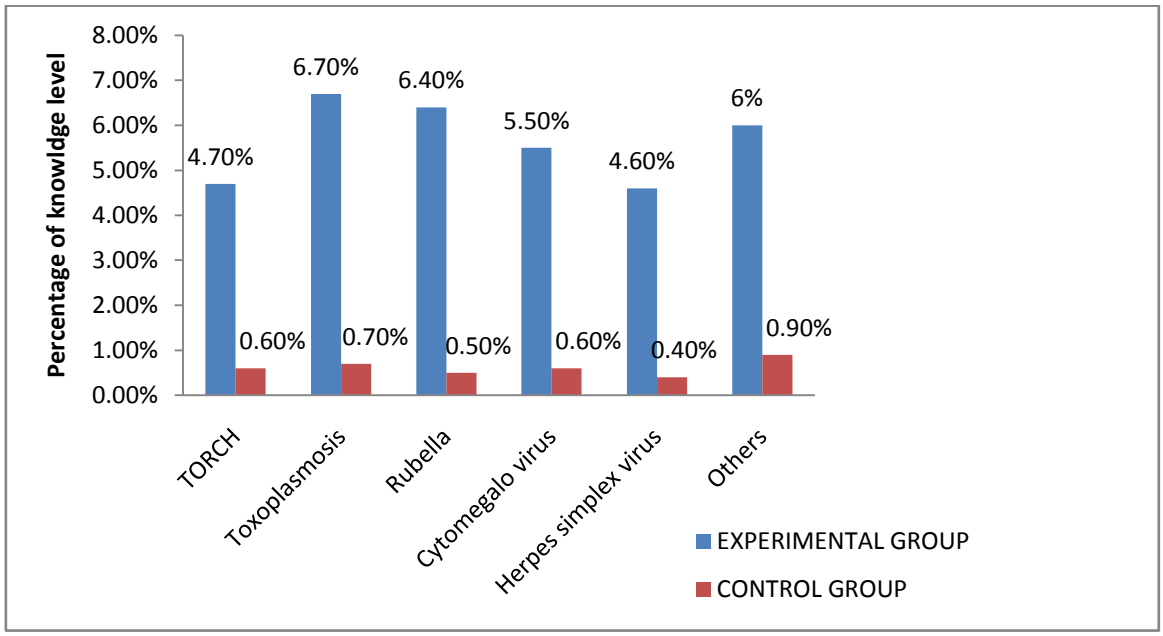
The above table depicts the computed "t" value on TORCH aspect t = 17, toxoplasmosis aspect t =25, rubella aspect t = 19, cytomegalo virus aspect t=17, herpes simplex virus aspect t =2.08, other viral aspects t = 15. these are all the higher than the table value at 0.05 level of significant.

Hence, H2 (there is significant difference in post test level of knowledge among antenatal mothers in experimental and control group) was accepted.

BAR DIAGRAM DEPICTING ASPECT WISE COMPARISON OF POST TEST LEVEL OF KNOWLEDGE SCORE.

ASPECT WISE KNOWLEDGE SCORE

ExperimentalExperimental

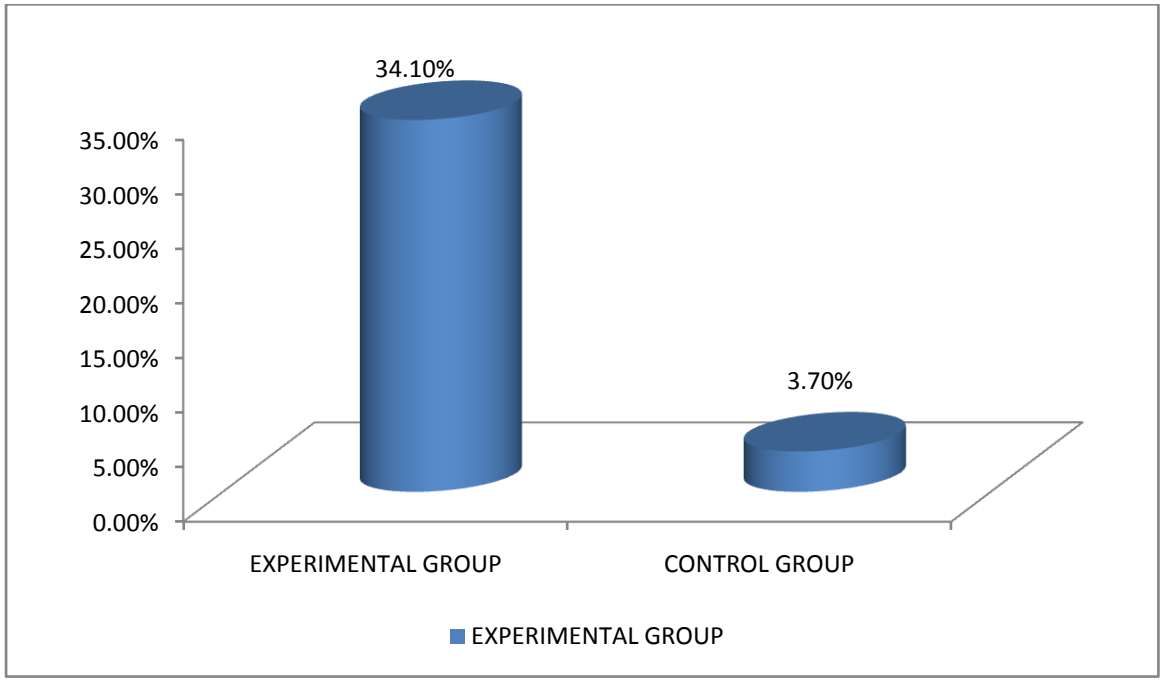


OVER ALL MEANS SCORE BETWEEN POST TEST LEVEL OF KNOWLEDGE REGARDING PREVENTION OF TORCH INFECTION AMONG ANTENATAL MOTHERS IN EXPERIMENTAL AND CONTROL GROUP.

S.NO.	Components	Observation	Mean	Mean different	SD	"t" value	Significant
1	Knowledge score	Experimental	34.17	30.38	5.09	25	Significant
		control	3.79				

CYLINDRICAL DIAGRAM DEPICTING OVER ALL MEANS SCORE BETWEEN POST TEST LEVEL OF KNOWLEDGE.

OVERALL MEAN SCORE BETWEEN POST TEST LEVEL OF KNOWLEDGE



There is significant difference between post test level of knowledge between experimental and control group.

SECTION – 5

FIND OUT THE ASSOCIATION BETWEEN LEVEL OF KNOWLEDGE REGARDING PREVENTION OF TORCH INFECTION AMONG THE ANTENATAL MOTHERS WITH THEIR DEMOGRAPHIC VARIABLES.

ASSOCIATION BETWEEN PRE TEST LEVEL OF KNOWLEDGE REGARDING PREVENTION OF TORCH INFECTION AMONG ANTENATAL MOTHERS WITH THEIR SELECTED DEMOGRAPHIC VARIABLES IN EXPERIMENTAL GROUP.

Demographic variables		Level of knowledge						Significant chi square
		Mild		Moderate		Adequate		
		F	%	F	%	F	%	p>0.05 6df =12.59 2.5->Non-significant
Age	a)below 20	2	7%	0	0%	o	0%	
	b)21-25	12	40%	2	7%	0	0%	
	c)26-30	11	37%	0	0%	0	0%	
	d)above 30	2	7%	0	0%	1	3%	
Education	a)Non formal	0	0%	0	0%	0	0%	p>0.05 10df =18.31 1->Non-significant
	b)1-5	1	3%	0	0%	0	0%	
	c)6-10	7	23%	0	0%	1	3%	
	d)11-12	5	17%	1	3%	0	0%	
	e)UG	10	33%	1	3%	0	0%	
	f)PG	4	13%	0	0%	0	0%	

Religion	a)Hindu	26	87%	2	7	1	3%	6df=12.59=0 Non-significant.
	b)Christian	1	3%	0	0%	0	0%	
	c)Muslim	0	0%	0	0%	0	0%	
	d)Other	0	0%	0	0%	0	0%	
	a)Hindu	26	87%	2	7	1	3%	
Dietry Pattern	a)Vegetaria	10	83%	1	3%	0	0%	2df=5.99 0=Non-significant
	b)Non-vegetarian	17	57%	1	3%	1	3%	
NO. of Pregnancy	a)Primi	17	57%	0	0%	1	3%	6df=12.5 2=Non-significant
	b)Multi	9	30%	1	3%	0	0%	
	c)Elderly	1	3%	0	0%	0	0%	
	d)Grand multi	0	0%	1	3%	0	0%	
Type of Family	a)Nuclear	13	43%	0	0%	0	0%	2df=5.99 2.14=Non-significant.
	b)Joint	14	47%	2	7%	1	3%	
Antenatal visit	a)Regular visit	25	83%	2	7%	1	3%	2df=5.99 0=Non-significant.
	b)Irregular visit	2	7%	0	0%	0	0%	
Weeks of	a)12-20wks	6	20%	0	0%	0	0%	6df=12.59

gestation								3=Non-significant.
	b)22-30wks	11	37%	1	3%	1	3%	
	c)32-34wks	4	18%	0	0%	0	0%	
	d)36-38wks	6	20%	1	3%	0	0%	
Source of information	a)TV	1	3%	0	0%	0	0%	6df=12.59 0=Non-significant.
	b)CHN	3	10%	0	0%	0	0%	
	c)Other AN mother	0	0%	0	0%	0	0%	
	d)Non of the mother	23	77%	2	7%	1	3%	

ASSOCIATION BETWEEN PRE TEST LEVEL OF KNOWLEDGE AMONG ANTENATAL MOTHERS WITH THE SELECTED DEMOGRAPHIC VARIABLES IN CONTROL GROUP.

Demographic variables		Level of knowledge						Significance chi square
		Inadequate		Moderately adequate		Adequate		
		F	%	F	%	F	%	
Age	a)below 20	6	16%	1	3%	0	0%	6df =12.59 1.2=Non-significance
	b)21-25	16	43%	0	0%	0	0%	
	c)26-30	7	19%	0	0%	0	0%	
	d)above 30	0	0%	0	0%	0	0%	
Education	a)Non-formal	2	5%	0	0%	0	0%	0.12= non significant
	b) 1-5	2	5%	0	0%	0	0%	
	c) 6-10	4	11%	0	0%	0	0%	
	d)11-12	7	19%	1	3%	0	0%	
	e)UG	6	16%	0	0%	0	0%	
	f)PG	8	22%	0	0%	0	0%	
	a)Hindu	27	73%	1	3%	0	0%	6df=12.59

Religion	b)Christian	1	3%	0	0%	0	0%	0=Non-significance.
	c)Muslim	1	3%	0	0%	0	0%	
	d)Other	0	0%	0	0%	0	0%	
Dietry Pattern	a)Vegetarian	15	40.5%	0	0%	0	0%	2df=5.99
	b)Non-vegetarian	14	38%	1	3%	0	0%	1.25=Non-significant.
No. of Pregnancy	a)Primi	17	46%	1	3%	0	0%	6df=12.5
	b)Multi	12	32%	0	0%	0	0%	0= Non-significant
	c)Elderly multi	0	0%	0	0%	0	0%	
	d)Grand multi	0	0%	0	0%	0	0%	
Type of Family	Nuclear	17	46%	0	0%	0	0%	2df=5.99 1.13= Non-significant
Antenatal visit	Joint	12	32%	1	3%	0	0%	2df=5.99
	Regular	27	73%	1	3%	0	0%	0=Non-

	Irregular	2	5%	0	0%	0	0%	significant.
Weeks of gestation	a)12-20wks	12	32%	1	3%	0	0%	6df=12.59
	b)22-30wks	5	13%	0	0%	0	0	0.07= Non-significant
	c)32-34wks	4	11%	0	0%	0	0%	
	d)36-38wks	8	22%	0	0%	0	0%	
Source of information	TV	0	0%	0	0%	0	0%	6df=12.59
	CHN	0	0%	0	0%	0	0%	
	Others	0	0%	0	0%	0	0%	0=Non-significant
	Non-of-the above	29	78%	1	3%	0	0%	

DISCUSSION

CHAPTER – V

DISCUSSION

This chapter discusses the main findings of the research study and reviews that in relation to the findings from the results of the present study for this study the data was obtained regarding prevention of "TORCH" infection during pregnancy among antenatal mothers in a selected hospital at Erode district.

Statement of The Problem

"A study to evaluate the effectiveness of structured teaching programme on knowledge regarding prevention of TORCH infections during pregnancy among antenatal mothers in a selected hospital at Erode district"

Objectives

To assess the level of knowledge regarding prevention of TORCH infections during pregnancy among antenatal mothers in experimental and control group.

To evaluate the effectiveness of structured teaching programme on knowledge regarding prevention of TORCH infections during pregnancy among antenatal mothers in experimental group.

To Compare the post test level of knowledge regarding prevention of TORCH infection among antenatal mothers in experimental and control group.

To find out the post test of knowledge regarding prevention of TORCH infection among antenatal mothers with the selected demographic variable.

To assess the level of knowledge regarding prevention of TORCH infection during pregnancy among antenatal mothers in experimental and control group.

Based on the above objective the pre test knowledge score of the mothers in experimental group related to TORCH 1.3(26%) Toxoplasmosis 0.63(9%) rubella 0.7(10%) cytomegalo virus 0.76(13%) Herpes Simplex vireo 0.3(6%) other viral infection 1.2(17%).

Similarly in control group related to TORCH 0.96(19%) Toxoplasmosis 0.53(8%) rubella 0.46(7%) cytomegalo virus 0.3(5%) Herpes Simplex vireo 0.26(5%) other viral infection 1.2(17%) of the score was obtained.

The finding of the pre test percentage of level of knowledge score in experimental group 27(90%) of mothers had inadequate knowledge 1(3%) of the mothers had moderately adequate knowledge 2(7%) of the mothers had adequate knowledge.

The finding of the pre test percentage of level of knowledge score in control group 29(97%) of the mothers had inadequate knowledge 1(3%) of the mothers had moderately adequate knowledge 0(0%) of the mothers had adequate knowledge.

Evaluate the effectiveness of structured teaching program on knowledge regarding prevention of TORCH infection during pregnancy among antenatal mothers in experimental group.

The Findings of the pre and post test knowledge regarding prevention of TORCH infection in experimental group was computed "E" value on TORCH aspect "t" =13.5, toxoplasmosis aspect t = 22, rubella aspect t =16.2, cytomegalo virus aspect t= 20.2, Herpes simplex virus aspect t = 5.4, other viral infection aspect t =13.5. These are all higher than the table value that 0.05 level of significant. Hence there is significant difference between pre test and post test level of knowledge among patients with experimental group was accepted.

The findings off pre and test post test level of knowledge in prevention of TORCH infection among antenatal mothers in experimental group knowledge score was 34.0% in post test, 4.8% in pre test. There is significant increase in knowledge after the post test.

To Compare the post test level of knowledge regarding prevention of TORCH infection among antenatal mothers in experimental and control group.

The findings of the post test level of knowledge regarding prevention TORCH infection in experimental and control group computed "t" value on TORCH aspect t = 17, toxoplasmosis aspect t =25, rubella aspect t = 19, cytomegalo virus aspect t=17, herpes simplex virus aspect t =2.08, other viral aspects t = 15. these are all the higher than the table value at 0.05 level of significant.

Hence, H2 (there is significant difference in post test level of knowledge among antenatal mothers in experimental and control group) was accepted.

To find out the association between level of knowledge regarding prevention of TORCH infection among antenatal mothers with their demographic variable.

The findings shows that the there was no positive association between the pre - test level of knowledge score in experimental group.

Similarly in these was no positive association between the pre test level of knowledge score in control group.

Summary;-

This chapter discuss that the findings of the study was non – significant and there was important in the level of knowledge regarding prevention of TORCH infection among antenatal mothers.

SUMMARY, CONCLUSION & RECOMMENDATION

CHAPTER – VI

SUMMARY CONCLUSION AND RECOMMENDATION

INTRODUCTION:

The primary aim of the study was to identify the pre test knowledge score of prevention of TORCH infection among antenatal mothers after administration of structure teaching programme in the experimental group post test knowledge was assessed and find out the association between the level of knowledge regarding prevention of TORCH infection among antenatal mothers and demographic variables.

SUMMARY OF THE STUDY:

Education plays the key role in promoting the knowledge of mothers and so, the investigator conducted "A study to evaluate the effectiveness of structured teaching programme on knowledge regarding prevention of TORCH infection during pregnancy among antenatal mothers in a selected hospital at Erode District" Lud Wig Von Bertalaneffy's (1968) General system theory was adopted for the conceptual frame work.

THE OBJECTIVES FORMULATED FOR THIS STUDY WERE:

To assess the level of knowledge regarding prevention of TORCH infection during pregnancy among antenatal mothers in experimental and control group.

To evaluate the effectiveness of Structured teaching programme on knowledge regarding prevention of TORCH infection during pregnancy among antenatal mothers in experimental group.

To compare the post test level of knowledge regarding prevention of TORCH infection among antenatal mothers in experimental and control group.

To find out the post test knowledge regarding prevention of TORCH infection among antenatal mothers with their selected Demographic Variables.

An in – depth review of literature was done for the study.

The instrument used for the study consisted of this section.

SECTION –A: Demographic variables

SECTION - B: Knowledge of TORCH infection.

METHODOLOGY:

The research design adopted from this study was true experimental design and research approach adopted for this study was evaluative and educative approach. This sample size 60 antenatal mothers from selected hospital from Erode District.

SECTION – 1: Demographic Variables

SECTION – 2: Questionnaire regarding knowledge of TORCH infection.

The data collection was done

The obtained data was analyzed and interpreted based on the objective of the study. The collected data was summarized and tabulated by utilizing descriptive statistics.

RESULT:

The finding of the pre test knowledge score was 27(90%) of the mothers had inadequate knowledge, 1(3%) of the mothers had moderately adequate knowledge in experimental group. Hence comparison in pre test and post test % knowledge of experimental group of mother having 34.0%.In the experimental group mother's knowledge score is significant and statistical and significantly tested by paired "t" test (22) there is a significant association between post test knowledge score in the experimental group.

Hence comparison with experimental group knowledge score was 34.17% where as in control group knowledge score was 3.79% and the difference relating to knowledge was 30.38%.It is revealing the effectiveness of structured teaching program further the independent‘t’ test is used to find the difference. Analysis shows that P value is less than 0.05 is significant Chi square analysis shows the association between experimental group and control group mothers and their demographic data like order of Age, Education, Religion, Dietary pattern, antenatal visit, weeks of gestation, source of information of the antenatal mothers.

The findings of this study support the need for obstetric nurse to conduct training program to increase the knowledge of the antenatal mother regarding prevention of TORCH infection in various set up like community.

CONCLUSION:-

From the findings of the present study it is concluded that the level of knowledge regarding of TORCH infection among antenatal mothers during pregnancy. Antenatal mother had inadequate knowledge among the experimental and control group during the pre-test assessment. The findings of the post test in the experimental group the level of the knowledge improved and the score has indicated an adequate.

Where as in control group no improvements in experimental group mothers had improvements in the level of knowledge due to the administration of the structured program. Therefore the knowledge of the mother can be further improved by providing ongoing teaching and training programs.

Implications of the study:-

The findings of the study have implications related to nursing education regarding increase in knowledge related to prevention of torch infection among the antenatal mothers during pregnancy.

Nursing Administration:-

Nursing Administrators should take interest in motivating the nursing personnel to improve their educational status updating their knowledge by conducting training programme for mothers residing at rural areas. The nursing personnel in the community level can train the community health nurse and auxiliary nurses and midwives. Who have direct contact with the community and they can provide education through anganvadi workers.

Nursing Practice:-

An implication for nursing practice derived from the study to improve the mother's knowledge in various aspects like TORCH, Toxoplasmosis, Rubella, Cytomegalo virus, Herpes simplex virus, Other viral infection. The responsibilities of the nurse are to find out the knowledge deficit of mothers and provide appropriate training to the mothers.

Nursing Education:-

The present study emphases on the enhancements in the knowledge, regarding prevention of TORCH infection in education. Therefore, the nurses must have the adequate knowledge regarding all the aspects of prevention of TORCH infection.

Nursing Research:-

The findings of the present study is helpful for the nursing professional and nursing students to conduct further studies to find out the effectiveness of various methods of providing education on prevention TORCH infection. It will in turn strengthen nursing research pertaining to the obstetric nursing.

Recommendation:-

- Based on the findings of the present study the following recommendations are made.
- Flash card method should be used widely knowledge on practice.
- Study can be done to assess the knowledge regarding prevention of TORCH infection.
- Similar study can be done for including the practice
- A Quasi experimental study can be conducted to assess the effectiveness of structure teaching programme among antennal mothers.
- Mothers with low grade should motivate assisted to gain knowledge better.
- Similar study can be conducted using experimental research design.
- A similar study can be conducted among the antenatal mothers.
- A follow up study can be conducted to evaluate the effectiveness of structured teaching programme on practice.

BIBLIOGRAPHY

BIBLIOGRAPHY

BOOKS:-

1. Adele pilliteri (2009) **"MATERNAL AND CHILD HEALTH NURSING".** 6th edition. Little browns company Toronto Pp:-288-290.
2. Annamma Jacob (2005)" **COMPREHENSIVE TEXT BOOK OF MID WIFERY"** Jaypee mothers medical publicers (p) Ltd, Newdelhi.Pp:675
3. A parthasarathy (2006)"**IAP TEXT BOOK OF PEDIATRICKS"** 3rd edition , Jaypee brothers medical publishers (p)Ltd Pp:-204, 243, 304.
4. Bobak Jensen (1991) **"ESSENTIALS OF MATERNITY NURSING"** 3rd , Mosby year book publication Pp:- 654-659, 863-871.
5. BT Basavanthappa (2009) **"MEDICAL SURGICAL NURSING"** 2nd edition, Japyee brothers medical publishers (p) Ltd Pp:- 529-532.
6. Barbara C. Long, Wilmaj. Phipps, virginnia L Cassmeger **"A NURSING PROCESS APPROACH"** 3rd edition , Mosby publication Pp:- 394-398.
7. BT Basavanthappa (2008) **"COMMUNITY HEALTH NURSING"** 2nd edition,Japyee brothers medical medical publishers (p) Ltd Pp:- 678-682.
8. Diane M. Frases, Margaret A. Cooper (2009) **"MYLES TEXT BOOK FOR MIDWIVES"** 15th edition & elsevier publication Pp:- 274, 921-922.
9. Dawn CS(2004) **"TEXT BOOK OF OBSTETRICKS AND NEONATOLOGY"** Dawns books publications, kolkatta.
10. D.C Datrta (2004) **"TEXT BOOK OF OBSTETRICS"** New central book publication, Calcutta.
11. Eleanor D. Thompson (1990) **"MATERNITY AND PEDIATRIC NURSING" W.B.** Saunders company Pp:- 88-92, 245, 861.

12. Erna E. Ziegel, Mecca S. cranley (1984) **"TEXT BOOK OF OBSTETRIC NURSING"** 8th edition Macmillian Publishing company, newyork,Pp: 294, 691.
13. Jean D Neeson, Katharyn A. May,(1986) **"COMPREHENSIVE MATERNITY NURSING"** J.B Lipincott company, Philadelphia, new york Pp:567-571.
14. Jane W.Ball, Rath C. Bindler (2009) **"PEDIATRIC NURSING CARING FOR CHILDREN"** 4th edition, person education publication. Pp: 616.
15. K. Park (2009) **"PARK'S TEXT BOOK OF PREVENTIVE AND SOCIAL MEDICINE"** 20th edition, M/S Banarsidas phanot publishers Pp:- 138-144.
16. Lewis, Leit kemper Dirksen, (2007) **"MEDICAL SURGICAL NURSING"** 7th edition, Mosby elsevier, Pp:- 250, 267, 437.
17. Meenakshi masin (2008) **"COMMUNICABLE DISEASES"** NR brothers publications. Pp:- 177, 249-270, 306-308, 315, 347-348,354-357.
18. Maharajan (2006) **"METHODS IN BIOSTATISTICS"** 6th edition, jaypee brothers Medical publishers (p) Ltd, new Delhi. Pp:-147-149.
19. Maldonado YA Nizet V.Klein Jo.et al (2011) **"CURRENT CONCEPTS OF INFECTIONS OF THE FETUS AND NEW BORN INFANT IN INFECTIONS DISEASES OF THE FETUS AND NEW BORN INFANT"** 7th edition Elsevier saunder Philadelphia pp;2
20. Nicki L pott, Barbara L. Mandleco (2002) **"PEDIATRIC NURSING CARING FOR CHILDREN AND THEIR FAMILIES"** Delmar Thomson learning publication. Pp: 432 , 437, 338
21. Polit Hungler (1999) "nursing research principles and methods " 6th edition Lippincott, Philadelphia

22. Sharon J. Reeder, Leonide L Martin (1987) **"MATERNITY NURSING "** 16th edition, J.B. Lippin cott Company, Philadelphia. Pp:941-942.
23. Sally B. Olds, Marcia L.London, partricia A Ladewing (1988) **"MATERNAL NEW BORN NURSING"** 3rd edition, Addison, Wesley publishing company.Pp:-237-240, 512-519, 1212.
24. Shirish N. daftary, Sudhip Chakravarthi (2005) **"MANUAL OF OBSTETRICKS"** 2nd edition, elsevier publication. Pp:176-182,610-613.
25. Swarna Rekha bhat (2009) **"TEXT BOOK OF PEDIATRICS"**4th edition , university press publication. Pp:- 206, 235, 303, 391-393.
26. Sheldon B. Korones, Jean Lancastee (1986) "**HIGH RISK NEWBORN INFANTS THE BASIS FOR INTENSIVE NURSING CARE"** 4th edition, the C.V Mosby company publication.Pp:-386-389

JOURNALS :-

- A Garcia- Enguidanos, Risk factors in miscarriage (2002) **"EUROPEAN JOURNAL OF OBSTETRIC AND GYNECOLOGY AND REPRODUCTIVE BIOLOGY** Vol 102. Pp: 111-119.
- J clin Diagn – **"JOURNAL OF CLINICAL AND DIAGNOSTIC RESERCH"**
- JD Pizzo (2011) Congenital Infections **(TORCH) "INDIAN JOURNAL OF PEDIATRICS"** Vol -32 Pp-537-542.
- J. Kishor Adverse Reproductive Outcome Induced by Parvovirus B_{19} and TORCH infections in women with high risk pregnancy **"JOURNAL OF INFECTIONS IN DEVELOPING COUNTRIES"** Vol5 Pp:- 868-873.
- Lois Haggerty **"JOURNAL OF OBTESTRIC, GYNECOLOGIC AND NEONATAL NURSING"** Vol-14 Pp-111-115.

- Newton, Edward **R. MD, CRINICAL OBSTETRICS AND GYNECOROGY"** Vol-42 PP-57-58.
- O. Liesenfield, J. G. Montaya, confirmatory serologic testing foracute toxoplasmosis . (2001) **"AMERICAN JOURNAL OF OBSTETRICS AND GYNECOLOGY"** Vol. 184. Pp:- 140-145.
- R.N. Kaur, D. Gupta, screening for TORCH Infection in pregnant women , a report from Delhi (1999) **"SOUTH EAST AASIAN JOURNAL OF TROPHICAL MEDICINE AND PUBLIC HEALTH"** Vol 30 Pp:- 284-286.
- Savithri, Sowmya, Nutan Agarwal **"ASIAN JOURNAL OF OBSTETRICS AND GYNAE COLOGY"** Vol-1, Pp-53.
- S. M. Garland G.L. Gilbert Investigation of congential infection- the TORCH screen is not a legitimate test (2000) **"MEDICAL JOURNAL OF AUSTALIA"** Vol. 17. Pp: 131-135.

SECONDARY SOURCES :-

- Cullen A, Brown S, Cafferkay M et al current use of the TORCH SCREEN in the Diagnosis of congenital Infection J. Infect.
- G. M. Bhopale "Review Pathogenesis of Toxo plasma" comparative Immunology, microbiology and Infectious Diseases 2003.
- Johnson K. Overview of TORCH Infections.
- Kapil A .Broor S primary cytomegalo virus infection in pregnant and non pregnant women in India, Indian Jmed.
- MC Cable, R, Remington JS. Toxoplasmosis the time has come N Eng J Med. 1998.
- Rubella and pregnancy. A COG technical bullet in number 171- August 1992 Int J Gynecol obset. Pubmed.

- Sebastian D. Zuhara KF sekara K.The influence of the TORCH infection in the first trimester miscarriages in the Malabar region of kerala African journal of microbiology rsearch.
- Singh S. The mother to child transmission and the Diagnosis of the toxoplasma gondii Infection during pregnancy Indian Jmed Microbiol 2003, pubmed.
- Stagno S, Pass. RF. Cloud G et al. Primary Cytomegalovirus infection in pregnancy. JAMA 1986.
- VKumar AK, Abbas , pathologic basis of disease. Elsevier-2009.

ANNEXURE

SRI ADICHUNCHANAGIRI SHIKSHANA TRUST®

COLLEGE OF NURSING

DHARMARATHNAKARA Dr. MAHALINGAM INSTITUTE OF PARAMEDICAL SCIENCES & RESEARCH

(Kannada Linguistic Minority Institution)

Sakthinagar - 638 315. Bhavani Taluk, Erode District, Tamilnadu.

e-mail : dmipsr@gmail.com

Phone : 04256 - 247321
246321

Ref. No.

LETTER SEEKING PERMISSION TO CONDUCT PILOT STUDY

From

Ms.Draubathai M, M.Sc., (N) II Year,
(Speciality – Obstetrical & Gynecological Nursing),
Dr. Mahalingam College of Nursing,
Sakthi Nagar (Po),
Bhavani (TK), Erode (DT),
Tamilnadu.

Permitted

Dr. K. MAHALAKSHMI M.B.B.S., D.G.O.
MEDICAL OFFICER,
Urban Child & Maternity Hospital
SAKTHINAGAR-638 315

To

Dr. K. Mahalakshmi MBBS, DGO
Shriram Hospital
Kavindapadi Road, Sakthinagar.

Through : The Principal,
Dharmarathnakara Dr.Mahalingam Institute of Paramedical Sciences & Research,
Sakthi Nagar, Bhavani Tk,
Erode dist – 638315.

PRINCIPAL
COLLEGE OF NURSING
DHARMARATHNAKARA DR MAHALINGAM INSTITUTE
OF PARAMEDICAL SCIENCES AND RESEARCH
SRI ADICHUNCHANAGIRI SHIKSHANA TRUST

Respected Sir / Madam,

SUB: Permission to conduct study - Reg.

I the II year M.Sc., Nursing student of Dr. Mahalingam College of Nursing, Sakthi Nagar. As a partial fulfillment of Master of Science in Nursing, I have undertaken the following research study, which has to be submitted to The Tamilnadu Dr.M.G.R.Medical University, Chennai.

RESEARCH STUDY :

SRI ADICHUNCHANAGIRI SHIKSHANA TRUST®

COLLEGE OF NURSING

DHARMARATHNAKARA Dr. MAHALINGAM INSTITUTE OF PARAMEDICAL SCIENCES & RESEARCH

(Kannada Linguistic Minority Institution)

Sakthinagar - 638 315. Bhavani Taluk, Erode District, Tamilnadu.

e-mail : dmipsr@gmail.com

Phone : 04256 - 247321
246321

Ref. No.

Date.....

I kindly request you to permit me to do reliability of the prepared tool on structured teaching programme on knowledge regarding prevention of TORCH infections during pregnancy among antenatal mothers in selected hospitals at Erode district with effect from [illegible] to [illegible].

I kindly request you to permit me to conduct the proposed study. Please, kindly do the needful.

Thanking you,

Date : 18/8/2014

Place : Sakthinagar

Yours Sincerely,

(DRAUBATHAI M)

SRI ADICHUNCHANAGIRI SHIKSHANA TRUST®
COLLEGE OF NURSING
DHARMARATHNAKARA Dr. MAHALINGAM INSTITUTE OF PARAMEDICAL SCIENCES & RESEARCH
(Kannada Linguistic Minority Institution)
Sakthinagar - 638 315. Bhavani Taluk, Erode District, Tamilnadu.
e-mail : dmipsr@gmail.com
Phone : 04256 - 247321
246321

Ref. No. Date.....

LETTER SEEKING PERMISSION TO CONDUCT STUDY

From

Ms.Draubathai M, M.Sc., (N) II Year,
(Speciality – Obstetrical & Gynecological Nursing),
Dr. Mahalingam College of Nursing,
Sakthi Nagar (Po),
Bhavani (TK), Erode (DT),
Tamilnadu.

To

Hasiharan Hospital
45, T. Ramnagar, Gobi,

THROUGH PRINCIPAL
COLLEGE OF NURSING
DHARMARATHNAKARA DR MAHALINGAM INSTITUTE OF PARAMEDICAL SCIENCES AND RESEARCH
SRI ADICHUNCHANAGIRI SHIKSHANA TRUST

Respected Sir / Madam,

SUB: Permission to conduct study - Reg.

I the II year M.Sc., Nursing student of Dr. Mahalingam College of Nursing, Sakthi Nagar. As a partial fulfillment of Master of Science in Nursing, I have undertaken the following research study, which has to be submitted to The Tamilnadu Dr.M.G.R.Medical University, Chennai.

RESEARCH STUDY :

"A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PREVENTION OF TORCH INFECTIONS DURING

SRI ADICHUNCHANAGIRI SHIKSHANA TRUST®

COLLEGE OF NURSING

DHARMARATHNAKARA Dr. MAHALINGAM INSTITUTE OF PARAMEDICAL SCIENCES & RESEARCH

(Kannada Linguistic Minority Institution)

Sakthinagar - 638 315. Bhavani Taluk, Erode District, Tamilnadu.

e-mail : dmipsr@gmail.com

Phone : 04256 - 247321
246321

Ref. No. *Date*.....

I kindly request you to permit me to do reliability of the prepared tool in giving the structured teaching programme on knowledge regarding prevention of TORCH infections during pregnancy among antenatal mothers in selected hospitals at Erode district with effect from [illegible] to [illegible] ----.

I kindly request you to permit me to conduct the proposed study. Please, kindly do the needful.

Thanking you,

Date :

Place :

Yours Sincerely,

(DRAUBATHAI M)

CONTENT VALIDITY CERTIFICATE

This is to certify that the student Ms.Draubathai M, D/o.Mr.Mani K studying in final year M.Sc., (N) Post Graduate Degree Course at Dharmarathnakara Dr.Mahalingam Institute of Paramedical Sciences & Research, Sakthi Nagar.

Topic Entitled:

"A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME REGARDING PREVENTION OF TORCH INFECTION DURING PREGNANCY AMONG ANTENATAL MOTHERS IN SELECTED HOSPITALS AT ERODE DISTRICT"

Her content for the study is validated and was found reliable.

Date: 12/8/2014

Place: Pallipalayam

Signature of guide with Seal

PRINCIPAL
Dhanvantri College of Nursing
Ganapathypuram,
No.1, Rasipuram Road
Pallipalayam Po.,
NAMAKKAL (Dt)-637 303

CONTENT VALIDITY CERTIFICATE

This is to certify that the student Ms.Draubathai M, D/o.Mr.Mani K studying in final year M.Sc., (N) Post Graduate Degree Course at Dharmarathnakara Dr.Mahalingam Institute of Paramedical Sciences & Research, Sakthi Nagar.

Topic Entitled:

"A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME REGARDING PREVENTION OF TORCH INFECTION DURING PREGNANCY AMONG ANTENATAL MOTHERS IN SELECTED HOSPITALS AT ERODE DISTRICT"

Her content for the study is validated and was found reliable.

Date: 12.8.14.

Place: Veerachipalayam

K. Gokilavani

Signature of guide with Seal

K. GOKILAVANI, M.Sc(N)
Vice principal
Vivekanandha Nrg. College for Women
Veerachipalayam.

CONTENT VALIDITY CERTIFICATE

This is to certify that the student Ms.Draubathai M, D/o.Mr.Mani K studying in final year M.Sc., (N) Post Graduate Degree Course at Dharmarathnakara Dr.Mahalingam Institute of Paramedical Sciences & Research, Sakthi Nagar.

Topic Entitled:

"A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME REGARDING PREVENTION OF TORCH INFECTION DURING PREGNANCY AMONG ANTENATAL MOTHERS IN SELECTED HOSPITALS AT ERODE DISTRICT"

Her content for the study is validated and was found reliable.

Date: 12/8/14.
Place: Pallakkapalayam.

T. 12/8/14.

Signature of guide with Seal

MRS. T. JAYADEEPA,
READER,
OBSTETRICS & GYNAECOLOGICAL NSG,
DHANVANTRI CON,

CONTENT VALIDITY CERTIFICATE

This is to certify that the student Ms.Draubathai M, D/o.Mr.Mani K studying in final year M.Sc., (N) Post Graduate Degree Course at Dharmarathnakara Dr.Mahalingam Institute of Paramedical Sciences & Research, Sakthi Nagar.

Topic Entitled:

"A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME REGARDING PREVENTION OF TORCH INFECTION DURING PREGNANCY AMONG ANTENATAL MOTHERS IN SELECTED HOSPITALS AT ERODE DISTRICT"

Her content for the study is validated and was found reliable.

Date: 6/8/14

Place: Erode - 52.

Signature of guide with Seal

H.O.D.
Dept. of Obs. & Gynae Nursing,
Nandha College of Nursing
ERODE - 638 052.

CONTENT VALIDITY CERTIFICATE

This is to certify that the student Ms.Draubathai M, D/o.Mr.Mani K studying in final M.Sc., (N) Post Graduate Degree Course at Dharmarathnakara Dr.Mahalingam Institute of Paramedical Sciences & Research, Sakthi Nagar.

Topic Entitled:

"A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PREVENTION OF TORCH INFECTIONS DURING PREGNANCY AMONG ANTENATAL MOTHERS IN SELECTED HOSPITALS AT ERODE DISTRICT".

Her content for the study is validated and was found reliable.

Date: 14-8-2014

Place: Erode

K. (K. DHANAPAL)

Signature of expert with seal

Professor of Statistics.

CONTENT VALIDITY CERTIFICATE

This is to certify that the student Ms.Draubathai M, D/o.Mr.Mani K studying in final M.Sc., (N) Post Graduate Degree Course at Dharmarathnakara Dr.Mahalingam Institute of Paramedical Sciences & Research, Sakthi Nagar.

Topic Entitled:

"A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PREVENTION OF TORCH INFECTIONS DURING PREGNANCY AMONG ANTENATAL MOTHERS IN SELECTED HOSPITALS AT ERODE DISTRICT".

Her content for the study is validated and was found reliable.

Date:

Place:

Signature of expert with seal

MEDICAL OFFICER
V.M.KAILASAM HOSPITAL
SAKTHINAGAR-638315

CERTIFICATE BY THE EDITOR

This is to certify that the dissertation entitled, "**A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PREVENTION OF TORCH INFECTIONS DURING PREGNANCY AMONG ANTENATEL MOTHERS IN A SELECTED HOSPITAL AT ERODE DISTRICT**" is a bonafide research work done by DRAUBATHAI M, M.Sc.,(Nursing) II year student of Dharmarathnakara Dr.Mahalingam Institute of Paramedical Sciences & Research, Sakthinagar, Bhavani Tk, Erode dist. I, Mrs.Sumithradevi T.S.,M.A.,M.Phil edited the manuscript of this study on behalf of the partial fulfilment of the requisite for the degree of Master of Science in Nursing with Speciality, Branch III - OBG.

Date : 24/10/2015

Place: Sakthi nagar

Signature of the editor

CERTIFICATE BY THE EDITOR

This is to certify that the dissertation entitled," **"A STUDY TO EVALUATE THE EFFECTIVNESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING PREVENTION OF "TORCH" INFECTIONS DURING PREGNANCY AMONG ANTENATAL MOTHERS IN A SELECTED HOSPITAL AT ERODE DISTRICT."** is a Bonafide research work done by M.Draubathai, II year M.sc (nursing) student of Dharmarathnakara Dr.Mahalingam Institute of Paramedical Sciences and Research, Sakthinagar, Bhavani Taluk, Erode DT. Mrs.Rejinarani M.A.,B.ED., Tamil, edited the manuscript of this study on behalf of the partial fulfillment of the pre requisite for the degree of Master of Science in Nursing (Obstetrics and Gynecological Nursing).

28/11/15

Signature of the Editor

Date: 28.11.15

Place: ORICHERIPUDUR

பட்டதாரி தலைமையாசிரியை
ஊராட்சி ஒன்றிய நடுநிலைப்பள்ளி
ஓரிச்சேரிப்புதூர், பவானி வட்டம்
ஈரோடு மாவட்டம்-638 315.

EVALUTION CRITERIA CHECKLIST

Dear Sir/ Madam,

Kindly go through the content and place right mark against questionnaire in the following columns ranging from relevant to not relevant. When found to need modification, Kindly give your opinion in the remarks given.

Section – A

Questionnaire on Demographic data

S.No	Items	Relevant	Needs Modification	Not Relevant	Remarks
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					

Modified Questionnaire on Knowledge of TORCH Infection

S.No	Items	Relevant	Needs Modification	Not Relevant	Remarks
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					

26.					
27.					
28.					
29.					
30.					
31.					
32.					
33.					
34.					
35.					
36.					
37.					

CORRECT ANSWERS KEY FOR KNOWLEDGE QUESTIONS

QUESTION NUMBERS	ANSWERS
1.	**a**
2.	**b**
3.	**a**
4.	**a**
5.	**d**
6.	**a**
7.	**d**
8.	**a**
9.	**a**
10.	**a**
11.	**d**
12.	**a**
13.	**a**
14.	**b**
15.	**d**
16.	**c**
17.	**b**
18.	**c**
19.	**a**
20.	**b**
21.	**d**
22.	**a**
23.	**a**
24.	**d**
25.	**a**
26.	**b**
27.	**c**
28.	**a**
29.	**a**
30.	**b**
31.	**d**
32.	**c**
33.	**a**
34.	**a**
35.	**a**
36.	**b**
37.	**a**

RESEARCH TOOL

SECTION A

DEMOGRAPHIC DATA

INSTRUCTION;

Kindly read following questions properly and select which one is suitable for you;

1. Age
    a) 20yrs
    b) 25yrs
    c) 28yrs
    d) 30yrs
2. Educational status of the mother
    a) Primary educated
    b) Secondary educated
    c) Graduate
    d) Post Graduate
3. Religion
    a) Hindu
    b) Christian
    c) Muslim
    d) Others
4. Type of dietry pattern
    a) vegetarian
    b) Non Vegetarian
5. Obstetrical Score
    a) Primi
    b) Multi
    c) Elderly Primi
    d) Grand multipara

7.Antenatal Visit
    a) Regular
    b) Irregular

8. Gestational Weeks
    a) 12-20 Weeks
    b) 22-30 Weeks
    c) 32-34 Weeks
    d) 36-38 Weeks

9. Have you obtained any information regarding Torch infection through following these resources?
    a) Multimedia
    b) Peer group
    c) Health team members
    d) Non of the above

SECTION-B

Knowledge regarding TORCH infection

TORCH

1. What is TORCH
   a) Infection is caused by human being
   b) Infection is caused by human being to human being
   c) Infection is caused by animals to animal
   d) Infection is caused by animals to human being
2. What is the expansion for TORCH
   a) Virus bacteria fungus
   b) Toxoplasmosis rubella cytomegalovirus herpes simplex virus other viral infections
   c) Human being animals and infection
   d) All of the above
3. How to prevent the fetus from the TORCH infection
   a) Treatment and lab test
   b) Brought the medicine from medical shops
   c) Visit temples
   d) To take traditional drink
4. Who are easily affected from TORCH infection
   a) Pregnant mother
   b) Males
   c) Old age
   d) Adolescent
5. How to transmit the TORCH infection from mother to fetus
   a) Breast feeding
   b) Blood
   c) Placenta
   d) Saliva

Toxoplasmosis

6. What is toxoplasmosis?
   a) Common human infection
   b) Common wild animal infection
   c) Common domestic animal infection
   d) All the above
7. Toxoplasmosis is transmitted through the
   a) Uncooked meat
   b) Un pasteurized great milk
   c) Infected cat faeces
   d) All the above

8. What are the maternal effects in toxoplasmosis?
    a) Fever
    b) Cough
    c) Nausea
    d) Vomiting
9. What are congenital effects in toxoplasmosis in newborn?
    a) Jaundice
    b) Hepatomegaly
    c) Microcephaly
    d) All of the above
10. The toxoplasmosis is diagnosed through
    a) ELISA test
    b) CT scan
    c) M R I
    d) All the above
11. What are the side effects in toxoplasmosis treatment?
    a) Nausea
    b) Vomiting
    c) Diarrhea
    d) All the above
12. How to prevent the toxoplasmosis during pregnancy
    a) Avoid ingestion of raw meat
    b) Avoid ingestion of raw vegetable
    c) Avoid ingestion of green leafy
    d) All of the above

Rubella

13. What is rubella?
    a) Viral infection
    b) Bacterial infection
    c) Fungal infection
    d) Non of the above
14. Rubella is transmitted through
    a) Water
    b) Animal
    c) Droplet
    d) All of the above
15. What are the maternal effects in rubella?
    a) Macular papular rash
    b) Fever
    c) Cough
    d) All of the above

16. What are the fetal effects in newborn?
    a) Fever
    b) Cancer
    c) Congenital cataract
    d) Rashes

17. When the pregnant women should be screen for to detect the rubella
    a) Pre natal visit
    b) Intra natal visit
    c) Post natal visit
    d) All of the above
18. After rubella vaccination how many month she should avoid pregnancy
    a) 2month
    b) 1month
    c) 3month
    d) 4month
19. In which period rubella vaccine should take
    a) Adult
    b) Adolescent
    c) Pregnancy
    d) Non of the above

Cytomegalovirus

20. Where the cytomegalovirus affect in pregnant women
    a) Cervix
    b) Vagina
    c) Uterus
    d) Fallopian tube
21. During pregnancy the cytomegalovirus is transmitted through
    a) Vaginal secretion
    b) Breast milk
    c) Semen
    d) All of the above
22. Cytomegalovirus is detect from
    a) Cervical mucus
    b) Semen
    c) Vaginal secretion
    d) D N A
23. When the vaginal delivery is possible
    a) No genital lesion
    b) No infection
    c) No rectal lesion
    d) All of the above

24. The cytomegalovirus is cultured from
    a) Blood
    b) Saliva
    c) Urine
    d) All of the above
25. How the cytomegalovirus is transmitted through mother to fetus
    a) Transplacental
    b) Body fluid
    c) Breast milk
    d) All of the above

Herpes Simplex Virus

26. What is herpes simplex virus?
    a) Congenital infection
    b) Genital infection
    c) Maternal infection
    d) All of the above
27. Herpes simplex virus transmitted through the
    a) Droplet
    b) Vertical
    c) Sexual contact
    d) Non of the above
28. What are the signs and symptoms of herpes simplex virus?
    a) Low grade fever
    b) Nausea
    c) Diarrhea
    d) All of the above
29. In herpes simplex virus infection occurs in pregnant women through_____ infection
    a) Perineal
    b) Rectal
    c) Vaginal
    d) All the above
30. What are the hazards of herpes simplex virus during pregnancy?
    a) Spontaneous abortion
    b) Pre term labour
    c) Malformation
    d) All of the above

Other Viral Infections

31. In the following which one is the other viral infection in TORCH?
    a) Measles
    b) Chicken pox
    c) Mumps
    d) All of the above

32. In hepatitis virus fatigue is present in _____ weeks
    a) 3-4weeks
    b) 2-3weeks
    c) 1-2weeks
    d) 4-6 weeks
33. What is the fetal neonatal effect in measles?
    Congenital malformation
    a) Jaundice
    b) CNS defect
    c) IUGR
34. When the mother have to take measles vaccine
    a) Before pregnancy
    b) After pregnancy
    c) During pregnancy
    d) All of the above
35. What is the commonest cause of viral hepatitis?
    a) Jaundice in pregnancy
    b) Fever in pregnancy
    c) Diarrhea in pregnancy
    d) All of the above
36. AIDS is transmitted through the
    a) Sexual contact
    b) Multiple sex partners
    c) Droplet
    d) Saliva
37. If gonorrhea let un treated during pregnancy that may lead to
    a) Sepsis
    b) Fever
    c) Nausea
    d) Vomiting

CODE NO:–

குறிப்பு :– பிரிவு – அ

கீழே கொடுக்கப்பட்டுள்ள கேள்விகளை முறையாக படித்து சரியான விடை ஒன்றை தேர்ந்தெடுக்கவும்:

1. வயது ஆண்டுகளில்

அ) 20 வயதிற்கு உட்பட்டவர்கள்
ஆ) 21 முதல் 25 வயதிற்கு உட்பட்டவர்கள்
இ) 26 முதல் 30 வயதிற்கு உட்பட்டவர்கள்
ஈ) 30 வயதிற்கு மேற்பட்டவர்கள்

2. தாயின் கல்வித் தகுதி

அ) பள்ளி சாரா கல்வி
ஆ) தொடக்க கல்வி (1 முதல் 5ஆம் வகுப்பு வரை)
இ) உயர் நிலை கல்வி (6 முதல் 10ஆம் வகுப்பு வரை)
ஈ) மேல் நிலைக் கல்வி (11 முதல் 12ஆம் வகுப்பு வரை)
உ) இளங்கலை பட்டப்படிப்பு
ஊ) முதுகலை பட்டப்படிப்பு

3. மதம்

அ) இந்து
ஆ) கிறிஸ்துவர்கள்
இ) முகம்மதியர்
ஈ) மற்றவர்கள்

4. உணவு முறையின் வகைகள்

அ) அசைவ உணவு முறை
ஆ) அசைவ உணவு முறை

5. கர்ப்பங்களின் கணக்கீடு

அ) முதல் முறை கர்ப்பம்
ஆ) 2ஆம் முறை கர்ப்பம்
இ) 30 வயது கடந்து கருவுற்றவர்கள்
ஈ) 4 குழந்தைகள் அல்லது அதற்கு மேல் குழந்தைகளை முன்னரே பெற்று உயிருடன் உள்ள குழந்தைகளின் தாயின் கர்ப்பம்

6. குடும்ப வகை

அ) தனிக் குடும்பம்
ஆ) கூட்டுக் குடும்பம்

7. கர்ப்பகாலத்தின் போது கர்ப்பிணிகளின் மருத்துவ பரிசோதனைக்கு வருகை புரிந்த விபரம்

அ) தொடர்ச்சியான வருகை
ஆ) ஒழுங்கற்ற வருகை

8. கர்ப்ப குடும்ப வாச காலம்

அ) 12லிருந்து 20 வது வாரம்

பிரிவு – ஆ

டார்ச் என்ற நோயின் தொற்றுக் கிருமிகள் பற்றிய அறிவு

டார்ச் தொற்றுக்கிருமிகள்

1. டார்ச் என்றால் என்ன?

அ) தொற்றுக்கிருமிகளால் மனிதர்களுக்கு ஏற்படும் நோய்
ஆ) மனிதர்களால் மனிதர்களுக்கு ஏற்படும் நோய்
இ) விலங்குகளால் விலங்குகளுக்கு ஏற்படும் நோய்
ஈ) மனிதர்களால் விலங்குகளுக்கு ஏற்படும் நோய்

2. டார்ச் என்ற சொல்லின் தொகுப்புகள் என்ன?

அ) வைரஸ், பாக்டீரியா , பூஞ்சையின் தொகுப்புகள்
ஆ) டாக்ஸோபிளாஸ்மோஸிஸ், ரூபெல்லா, சைட்டோமெகலோ வைரஸ் மற்றும் ஹெர்பஸ்சிம்லக்ஸ் வைரஸின் தொகுப்புகள்
இ) மனிதர்கள் , விலங்குகள், கிருமிகளின் தொகுப்புகள்
ஈ) மேற்கூறிய அனைத்தும்

3. டார்ச் கிருமியின் தொற்றுகளில் இருந்து கருவில் உள்ள சிசுவை எவ்வாறு பாதுகாக்கலாம்?

அ) முறையான பரிசோதனை மற்றும் சிகிச்சைகளின் மூலம்
ஆ) மருந்துக் கடைகளில் மாத்திரைகள் வாங்கி உண்பதன் மூலம்
இ) கோவில்களுக்கு செல்வதன் மூலம்
ஈ) கசாயங்களை பருகுவதன் மூலம்

4. யார் டார்ச் கிருமிகளின் தாக்குதலுக்கு அதிகமாக ஆளாகிறார்கள்.

அ) கர்ப்பிணிகள்
ஆ) ஆண்கள்
இ) முதியோர்கள்
ஈ) வயர் இளம் பருவத்தினர்

5. டார்ச் தொற்றுக் கிருமிகள் தாயிடமிருந்து சேய்க்கு அதிகமாக எவ்வழியாக பரவுகிறது.

அ) தாய்ப்பால் மூலம்
ஆ) திரவங்கள் மூலம்
இ) நஞ்சுக் கொடி மூலம்
ஈ) உமிழ்நீர் மூலம்

டாக்ஸோபிளாஸ்மோஸிஸ்

6. டாக்ஸோபிளாஸ்மோஸிஸ் என்றால் என்ன?

அ) பொதுவாக மனித இனங்களில் காணப்படும் தொற்றுக்கிருமி
ஆ) பொதுவாக வனவிலங்குகளில் காணப்படும் தொற்றுக்கிருமி
இ) பொதுவாக வீட்டு விலங்குகளில் காணப்படும் தொற்றுக்கிருமி
ஈ) மேலே குறித்துள்ள அனைத்திலும் காணப்படும் தொற்றுக்கிருமி

7. டாக்ஸோபிளாஸ்மோஸிஸ் பரவும் விதம்

அ) சமைக்காத இறைச்சி

9. கருவில் உள்ள குழந்தைக்கு டாக்ஸோபிளாஸ்மோசிஸ் நோயினால் ஏற்படும் பாதிப்புகள்.

அ) மஞ்சள் காமாலை

ஆ) கல்லீரல் வீக்கம்

இ) மூளை பாதிப்பு

ஈ) மேற்கூறிய அனைத்தும்

10. டாக்ஸோபிளாஸ்மோசிஸ் நோயை கண்டறியும் பரிசோதனை முறைகள்

அ) எலைஷா பரிசோதனை

ஆ) சி.டி.ஸ்கேன்

இ) எம்.ஆர்.ஐ.

ஈ) மேற்கூறிய அனைத்தும்

11. டாக்ஸோபிளாஸ்மோசிஸ் நோய்க்கு அளிக்கப்படும் சிகிச்சையினால் ஏற்படும் பக்க விளைவுகள்

அ)சொம்பல்

ஆ) வாந்தி

இ) வயிற்றுப்போக்கு

ஈ) மேற்கூறிய அனைத்தும்

12. கர்ப்ப காலத்தில் டாக்ஸோபிளாஸ்மோசிஸ் நோய் வராமல் தடுக்கும் வழி முறைகள்

அ)முறையாக சமைக்கப்படாத இறைச்சியை உண்பதை தவிர்த்தல்

ஆ)முறையாக சமைக்கப்படாத காய்கறிகளை உண்பதை தவிர்த்தல்

இ) முறையாக சமைக்கப்பட்டாத கீரைகளை உண்பதை தவிர்த்தல்

ஈ) மேற்கூறிய அனைத்தும்

ரூபெல்லா

13. ரூபெல்லா என்றால் என்ன ?

அ) வைரஸ் கிருமிகளினால் ஏற்படும் நோய்

ஆ) பாக்டீரியாவினால் ஏற்படும் நோய்

இ) பூஞ்சையினால் ஏற்படும் நோய்

ஈ) மேற்கூறிய எதுவும் இல்லை

14. ரூபெல்லா பரவும் விதம்

அ) தண்ணீர் மூலமாக

ஆ) நுண்துகள்கள் மூலமாக

இ) தும்மல் மூலமாக

ஈ) மேற்கூறிய அனைத்தும்

15. ரூபெல்லாவின் அறிகுறிகள்

அ) தோலில் ஏற்படும் தடிப்புகள்

ஆ) காய்ச்சல்

இ) இருமல்

ஈ) மேற்கூறிய அனைத்தும்

16. பிறந்த குழந்தைகளுக்கு கருவில் இருக்கும் சமயத்தில் ரூபெல்லா கிருமி ஏற்படுத்திய பாதிப்புகள்

அ) காய்ச்சல்

ஆ) புற்றுநோய்

இ) கண்புரையுடன் கூடிய பிறப்பு

ஈ) தோலில் தடிப்புகள்

17. ரூபெல்லா நோயை கண்டறிய சரியான காலம் எது ?

அ) கர்ப்ப காலத்தில் எந்த பரிசோதனைக்கு செல்லும் போது

19. ரூபெல்லா தடுப்பூசி போட்டுக் கொள்வதற்குரிய சரியான காலம்

அ) வளர்ந்த பருவத்தினர்
ஆ) இளமைப் பருவம்
இ) கருவுற்ற காலம்
ஈ) மேற்கூறிய எதுவும் இல்லை

சைட்டோமெகலோ வைரஸ்

20. சைட்டோமெகலோ வைரஸ் கிருமியால் பாதிக்கப்படும் உறுப்புகள்

அ) கருப்பைவாய்
ஆ) பிறப்புறுப்பு
இ) கருப்பை
ஈ) கருமுட்டை குழாய்

21. கருவுற்ற காலத்தின்பொழுது சைட்டோமெகலோ வைரஸ் பரவும் விதம்

அ) பிறப்பு உறுப்பில் சுரக்கும் நீர்
ஆ) தாய்ப்பால்
இ) விந்தணு
ஈ) மேற்கூறிய அனைத்தும்

22. சைட்டோமெகலோ வைரஸ் எதிலிருந்து கண்டறியப்படுகிறது.

அ) கருப்பைவாய் சளி
ஆ) விந்தணு
இ) யோனி சுரப்பு
ஈ) டி என் ஏ

23. பிறப்புறுப்பின் வாயிலாக பிரசவம் ஏற்படும் வாய்ப்பு எப்பொழுது

அ) பிறப்புறுப்பில் புண் இல்லாதபோது
ஆ) பிறப்புறுப்பில் தொற்று இல்லாதபோது
இ) மலக்குடல் சிதைவு இல்லாதபோது
ஈ) மேற்கூறிய அனைத்தும்

24. சைட்டோமெகலோ வைரஸ் எதன் மூலமாக கண்டறியப்படுகிறது.

அ) இரத்தம்
ஆ) உமிழ்நீர்
இ) சிறுநீர்
ஈ) மேற்கூறிய அனைத்தும்

25. சைட்டோமெகலோ வைரஸ் எவ்வாறு கருவுற்ற தாயிடம் இருந்து கருவிலிருக்கும் குழந்தைக்கு பரவுகிறது.

அ) நஞ்சுக் கொடி மூலமாக
ஆ) உடலில் உற்பத்தி ஆகும் திரவங்கள் மூலமாக
இ) தாய்ப்பால் மூலமாக
ஈ) மேற்கூறிய அனைத்தும்

ஹெர்பஸ்சிம்லெக்ஸ் வைரஸ்

26. ஹெர்பஸ்சிம்லெக்ஸ் வைரஸ் என்றால் என்ன?

28. ஹெர்பஸ்சிம்லெக்ஸ் வைரஸ் நோய்க்கிருமிகளின் தாக்குதலினால் ஏற்படும் அறிகுறிகள்.

அ) குறைந்த நர காய்ச்சல்
ஆ) கொப்புளம்
இ) வயிற்றுப்போக்கு
ஈ) மேற்கூறிய அனைத்தும்

29. ஹெர்பஸ்சிம்லெக்ஸ் வைரஸ் கருவில் உள்ள குழந்தைக்கு ஏற்படுத்தும் பாதிப்புகள் யாவை?

அ) கருச்சிதைவு
ஆ) கண்புரை
இ) அதிக எடை
ஈ) காய்ச்சல்

30. ஹெர்பஸ்சிம்லெக்ஸ் வைரஸ் கிருமி தொற்று ஏந்த உறுப்பின் வழியாக கர்ப்பிணி பெண்களை சென்றடைகிறது .

அ) கல்லீரல்
ஆ) இனப்பெருக்க உறுப்பு
இ) மண்ணீரல்
ஈ) சிறுநீர் துளை

மற்ற வைரஸ் தொற்றுகள்

31. டார்ச் நோயினால் ஏற்படும் பிற வைரஸ் நோய்கள்

அ) சின்னம்மை
ஆ)பெரியம்மை
இ) பொன்னுக்கு வீங்கி
ஈ) மேற்கூறிய அனைத்தும்

32. வைரஸ் கிருமிகளினால் கல்லீரலில் ஏற்படும் வீக்கத்தினால் சோர்வு ஏற்படக் கூடிய வாரங்கள்.

அ) 3 முதல் 4 வாரங்கள்
ஆ) 2 முதல் 3 வாரங்கள்
இ) 1 முதல் 2 வாரங்கள்
ஈ) 4 முதல் 6 வாரங்கள்

33. சின்னம்மையினால் கருவில் உள்ள குழந்தைக்கு ஏற்படும் பாதிப்புகள் .

அ) கருவில் உள்ள குழந்தைக்கு உறுப்பு குறைபாடு
ஆ) மஞ்சள் காமாலை
இ) அதிக நரம்பு மண்டல பாதிப்பு
ஈ) கருவில் உள்ள குழந்தையின் வளர்ச்சியில் பாதிப்பு

34. சின்னம்மை தடுப்பூசி போட்டுக் கொள்ளக் கூடிய சரியான காலம்

அ) கரு உருவாவதற்கு முன்பு
ஆ) கருத்தரித்த உடன்
இ) கருத்தரித்த சிலமாதங்கள் கழித்து
ஈ) மேற்கூறிய அனைத்தும்

35. வைரஸ் கிருமிகளால் கல்லீரல் வீக்கத்திற்கான பொதுவான காரணங்கள்

அ) கருத்தரிக்கும் சமயத்தில் மஞ்சள் காமாலை
ஆ) கருத்தரிக்கும் சமயத்தில் காய்ச்சல்
இ)கருத்தரிக்கும் சமயத்தில் வயிற்றுப்போக்கு
ஈ) மேற்கூறிய அனைத்தும்

36. எய்ட்ஸ் எந்த வழிகளின் மூலமாக பரவுகிறது.

General objective:-

At the end of the class mother's will be able to gain in depth of the knowledge about the "TORCH" infection want its treatment and will be able to apply in practice.

Specific objective:-

Mother's are able to:-

- Introduce about the topic
- explain about the toxoplasmosis
- status the rubella
- enlist the cytomegalovirus
- mention the helps simplex virus
- list out the other viral diseases
- discuss the sexually transmitted disease

Name of the Subject	: OBSTETRIC & GYNECOLOGY
Group	: Antenatal mother's
Venue	: Erode district in selected hospital
Method of teaching	: lecture cum discussion
Topic	: A study to evaluate the effectiveness of structured teaching programme in prevention of TORCH infections. During pregnancy among antenatal Mothers in a Selected Hospitals, Erode District, Tamil Nadu
AV Aids	: flash card
Total timing	: 1 hour
Previous knowledge	: the mother's doesn't have knowledge about TORCH INFECTION.

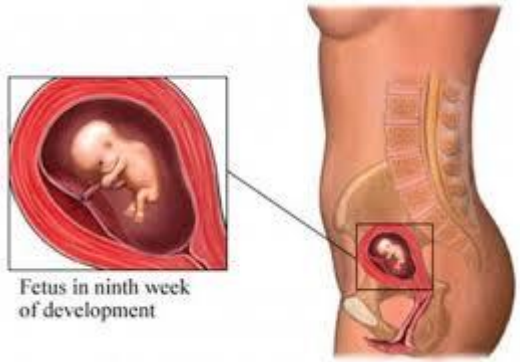
S. No	Time	Specific objective	Content	Method of teaching	Teachers learners activity	A.V aids	Evaluation
1.	5mts	Introduce the about the TORCH infection	**INTRODUCTION;** The account for 2-3%of birth defect these arise from a spectrum of organisms having varying models of transmission not all birth defects are routinely screened for during prenatal care, but birth defects do pose a risk to perinatal outcome the variation in residual status of the mother after primary infection needs evaluation to assess risk to the fetus. Caesarean delivery is recommended only for mothers who have active genital herpetic lesions at the time of delivery the composite term "TORCH"infections is used to describe these infections. As diagnosis skills and technology improve more infections are being discovered that are detrimental to fetal development and wellbeing. The effects these infection have on the fetus are related to the gestational age at which infection occur. Early infections might precipitate spontaneous abortion others may cause deafness or cataracts infections during the birth process can cause deafness or cataract infection during the birth process can cause neonatal sepsis. Some problems infections are indicated in the term "TORCH "was applied to perinatal infections. • T_TORCH • O-OTHER • R-RUBELLA • C-CYTOMEGALO VIRUS • H-HERPES SIMPLEX VIRUS The term is still meaningful but the other is rapidly becoming the most frequent cause of perinatal infection.	Lecture cum discussion	**Teacher activity:** Teacher introduce about the topic. **Mother's activity;** Mother's are listening.	Flash card	

2.	10mts	Explain about the toxo plasmosis,etiology, maternal infection, congenital toxo plasma in newborn diagnosis and it's treatment	**TOXOPLASMOSIS;** This is a systematic infection caused by the protozoan toxoplasma gondii.it is one of the most common human infections worldwide. It is transmitted through the uncooked meat or consumption of un pasteurized goat milk or exposure to an infected cat's faeces.  **INCIDENCE;** • Primary infection during pregnancy is less than 0.1%. • The prevalence of seropositivity during the reproductive years is 10-40%. **ETIOLOGY;** Toxoplasma gondii intracellular parasite is transmitted by taking toxoplasma cyst from infected under cooked meat and cat faeces or trans placental infection occur worldwide.	Lecture cum discussion	**Teacher activity:** Teacher explain about the toxoplasmosis. **Mother's activity;** Mother's are listening and asking doubts	Flash card	What are all the etiological factors?

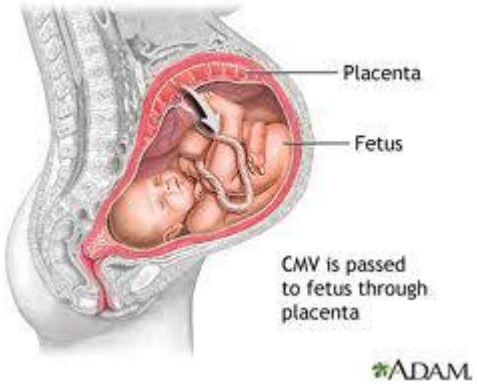
			MATERNAL INFECTION; Congenital toxoplasma develops in new born when mother gets infection during pregnancy. infection Rate rises from first trimester to third trimester. Infection rate rises mostly subclinical. fever , macular rash and lymphadenopathy are manifestation First trimester Second trimester Third trimester **FIRST TRIMESTER;** Estimated risk is about 15% it constitutes the most severe infection with risk of perinatal loss of almost 75% of affected fetuses. **SECOND TRIMESTER;** Estimated risk of infection is 25%. **THIRD TRIMESTER** ; Estimated risk is 65% but although the risk of incidence is highest, the infections are generally mild or subclinical. **CONGENITAL TOXOPLASMA IN NEWBORN ;** Newborn is affected most when mother acquires toxoplasma at early or mid pregnancy. less than 10% newborn shows jaundice, hepatomegaly, microcephaly, deafness, chorioretinitis and later mental retardation.	Lecture cum discussion	**Teacher activity:** Teachers explain about the toxoplasmosis. **Mother's activity;** Mother's are listening and asking doubts	Flash card	what are all congenital toxo plasma in newborn?

			 X-ray skull shows scattered calcification throughout brain .severe mental handicap is not universal. **DIAGNOSIS;** Serological test is done by immunofluorescent or dye testing for toxoplasma specific IgG antibodies .ELISA testing of antibodies is also done. Antibody titre showing rise in repeat test is useful. Recent infection is diagnosed by IgM antibodies. **TREATMENT;** • Rovamycin administered at three weekly intervals throughout the pregnancy has been found to be effective and acceptable. • Spiramycin passes in breast milk. Side effects; Nausea, vomiting and diarrhea.	Lecture cum discussion	**Teacher activity:** Teacher explain about the toxoplasmosis. **Mother's activity;** Mother's are listening and asking doubts		

3.	10mts	State the rubella or German measles, causes back ground, maternal infection, fetaleffect,diagnosis and its treatment	**PREVENTION;** ➢ Prenatal counseling. ➢ Avoid contact with cat litter and faeces during pregnancy. ➢ Wear gloves whilst gardening. ➢ Avoid ingestion of raw meat and in properly sterilized milk. ➢ MTP is considered for early pregnancy in severe toxoplasma infection. **RUBELLA:** It is a viral infection of childhood and early adult hood. **CAUSES;** Rubella virus exposure to this single stranded RNA virus confers lifelong immunity. 	Lecture cum discussion	**Teacher activity:** Teacher explain about the toxoplasmosis. **Mother's activity;** Mother's are listening and asking doubts	Flash card	How to prevent the toxo plasmosis? What is rubella or german measles?

			BACKGROUND: It is transmitted via air droplets about 10-15% of woman are susceptible. The prevalence of seropositivity in the general population is 35-90%. Globally rubella is a childhood and disease affecting children and adolescents in the age group of 5-15years. **MATERNAL INFECTION;** Disease can be acquired during pregnancy. Maternal infection shows maculopapular rash, fever, cough, cervical lymadenopathy.disease last for a 2weeks. **FOETAL EFFECT;** Direct infection of fetus occurs. Abortion and still birth rise 2-4times.  Congenital rubella syndrome symmetric IUGR, congenital heart disease, hepatospleenomegaly and thrombocytopenic purpura.	Lecture cum discussion	**Teacher activity:** Teacher state the rubella or geeman measles. **Mother's activity:** mother's are listening and asking doubts	Flash card	

			CNS manifestation; deafness, eye lesion like congenital cataract retinopathy. Infection late in pregnancy results in mental retardation deafness and less deleterious fetal malformation first born is affected more. **DIAGNOSIS;** Rubella virus can be isolated from pharyngeal secretion, blood, urine, and stool. ELISA testing of rubella specific IgM in blood aids in diagnosis. NEONATE; umbilical cord blood at birth reveals a positive IgG titre at 5 month age is diagnostic. **TREATMENT;** Inj.gammagloblulin confers no benefit of prophylaxis after the mother has been exposed adolescent girl without seropositivity is given rubella vaccine. **PREVENTION;** All pregnant women should be screened for rubella anti bodies at the first prenatal visit. Pregnant women with a negative titre should be counseled to avoid exposure during pregnancy. Post partum women with negative titre should be vaccinated with attenuated live rubella virus almost 90% of them acquire immunity. This should be confirmed after 6 weeks of vaccination. Maternal vaccination poses no hazards to the neonate even though the mother is breast feeding her infant. The mother should be advised to avoid conception for at least 3 months after vaccination.	Lecture cum discussion	**Teacher activity:** Teacher state the rubella or germen measles. **Mother's activity:** mother's are listening and asking doubts	Flash card	How to prevent the Rubella?

4.	8mts	Enlist the cyto megalo virus,background, maternal infection, neonatal infection, congenital defect diagnosis and it's treatment and prevention.	**CYTOMEGALOVIRUS;** It is a herpes virus that infects pregnant woman and is excreted in cervical secretion in third trimester. It is a DNA virus that belongs to the herpes virus family. The infection is systematic with a tendency to lifelong latency.  **BACKGROUND;** **Transmission;** CMV is transmitted through blood via transfusion or transplacental route commonly. Body fluids semen, vaginal secretion, saliva, urine breast milk.organtransplant and rarely through direct contact. **INCIDENCE;** CMV is the most common congenital viral infection. It affects about 1-2% of all live born infants. **MATERNAL INFECTION;** It is self limited disease does not increase abortion or preterm labour.	Lecture cum discussion	**Teacher activity:** Teacher enlist the cytomegalo virus **Mother's activity:** mother's are listening and asking doubts	Flash card	What is cyto Megalo virus?

			NEONATAL EFFECT; Virus transplacentally affects fetus or baby gets infected in the birth canal or from breast milk.  **CONGENITAL DEFECT;** Develops in 10% IUGR, macrocephaly, deafness, congenital heart disease, and jaundice with hepatospleenomegaly. **DIAGNOSIS;** ✓ Virus can culture from blood, saliva, urine, and cervicalmucus. ✓ Affected fetus is evaluated by USG. ✓ Culture of virus obtained by amniocentesis or cordocentesis and high antibody rise help diagnosis.	Lecture cum discussion	**Teacher activity:** Teacher enlist the cytomegalo virus **Mother's activity;** Mother's are listening asking doubts.		What are all the congenital defect?

			TREATMENT; Anti viral agents have been tried nursing pregnancy and in newborn. The principles of management are as follows: ➢ Specific treatment ganciclovir. ➢ Prophylaxis there is no benefit gamagloblulin after maternal exposure. **PREVENTION;** • Counseling avoids exposure during pregnancy. • Observe meticulous hygiene in high risk setting neonatal nursery day care centers and intensive care units. • Blood transfusion check for CMV. • Caesarean section does not prevent vertical transmission.	Lecture cum discussion	**Teacher activity:** Teacher enlist the cytomegalo virus **Mother's activity;** Mother's are listening asking doubts.	Flash card	

5.	7mts	Mention the herpes simplex virus back ground, trans mission, epide miology, sympto m effect of fetus, effect on newborn , diagnosi s and it's treatme nt	**HERPES SIMPLEX VIRUS;** Infection occurs in pregnant woman through genital infection. types 2 virus causes genital herpes. It is a virus is a member of the herpes virus family. It is a DNA virus it establishes permanent incurable latency in the sensory nerve root ganglia.  **BACKGROUND:** **INCIDENCE**; Almost 90% of infection is caused by herpes simplex virus type-ii.About 10% are caused by HSV-I. **TRANSMISSION;** Through intimate mucocutaneous contact. It is one of the most contagious sexually transmitted disease. **EPIDEMIOLOGY;** Cervical shedding during pregnancy occurs in 10% after their primary episode of HSV and in 0.5% of woman after recurrent episode of HSV.	Lecture cum discussi on	**Teacher's activity;** Teacher mention the herpes simplex virus **Mother's activity**; Mother's are listening and asking doubts.		What is herpes simplex virus?

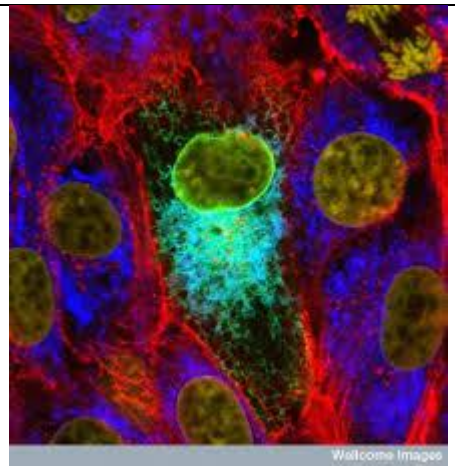
			Symptoms; • These appear 3-7 days following exposure. Prodromal symptoms include mild paraesthesias and burning. • Evidence of systemic disease, low grade fever, malaise, and inguinal lymphadenopathy. • Clear, painful, tender vesicles on the vulval labia and perineum. **EFFECT ON FETUS;** Herpetic infection causes increased incidence of abortion, preterm labour, low birth weight baby central nervous anomalies. **EFFECT ON NEWBORN**; Fifty percent newborn delivered through infected birth canal acquires localized or disseminated hepatic infection baby develops CNS disease, thrombocytopenia and shock.  **DIAGNOSIS;** a) Virus culture on hanks medium: fluid aspirate from reside or debrided ulcer. b) Cytology; multi nucleated giant cells.	Lecture cum discussion	**Teacher's activity;** Teacher mention the herpes simplex virus **Mother's activity**; Mother's are listening and asking doubts.	Flash card	

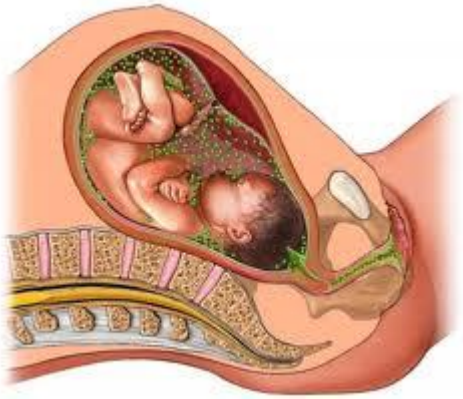
			Significance; Obstetric hazards include the following; ❖ Spontaneous abortion. ❖ Intrauterine growth retardation. ❖ Fetal death. ❖ Preterm labour. ❖ Malformation not reported. ❖ Neonatal infection. **TREATMENT;** **Gynecological treatment;** ➢ There is no effective cure. ➢ Screen for other STD"S. ➢ Symptomatic relief sitz bath. ➢ Acyclovir administered 200mg-4times-daily-14days. ➢ Topical administration of acyclovir cream. ➢ Severe infection intra venous administration of acyclovir 5.0mg|kg body weight 8 hourly 5 days. **Obstetric treatment;** • Culture and cytology. • Vaginal delivery permitted if there are no genital lesions. • Caesarean section to avert neonatal exposure to infection. **Neonatal treatment;** • Isolation not recommended. • Breast feeding; if there are no breast lesions present.	Lecture cum discussion	**Teacher's activity;** Teacher mention the herpes simplex virus **Mother's activity**; Mother's are listening and asking doubts.	Flash card	How do treat the herpes simplex virus?

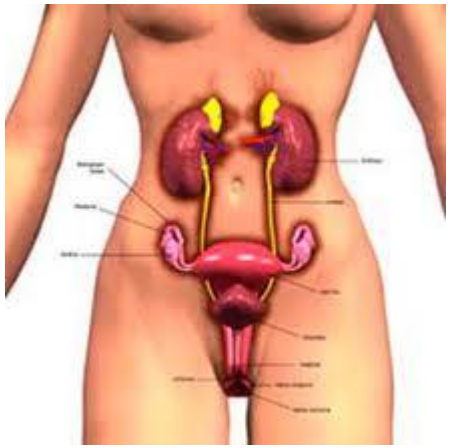
6.	10mts	List out the other viral diseases in pregnancy, measles, Chicken pox,small pox, mumps, viral hepatitis	**OTHER VIRAL DISEASE IN PREGNANCY;** **1.MEASLES;** It is a viral disease that can be contracted in pregnancy maternal infection. Typical koplick"s spot on mucosa of month and skin rash fever. **FETONEONATAL EFFECT;** Virus crosses to fetus across placenta-increased abortion pre term labour. Newborn may be born with measles. a few reports not all show increased congenital malformation. **Vaccine;** Woman who has no measles should have measles vaccine before pregnancy but no vaccine during pregnancy.  	Lecture cum discussion	**Teacher's activity;** Teachers list out the other viral diseases in pregnancy **Mother's activity;** Mother's are listening and asking doubts	Flash card	What is measles?

			2.CHICKEN POX (VARICELLA); It can occur during pregnancy maternal infection caused by varicella zoster virus shows typical macula papulo pustular spots on face limbs and trunk infection becomes severe during pregnancy. **FOETONEONATAL INFECTION;** Virus crosses to fetus in 10%. Infection during early pregnancy results in congenital malformation cerebral cortical atrophy hydro nephrosis and long leg defects. **TREATMENT;** Zoster immunoglobulin is given to pregnant woman exposed to varicella. **3.SMALLPOX;** Because of worldwide vaccination programme of WHO disease has not occurred since 1977.no vaccination is required. **4.MUMPS;** Can rarely develop during pregnancy maternal infection fever. 	Lecture cum discussion	**Teacher's activity;** Teachers list out the other viral diseases in pregnancy **Mother's activity;** Mother's are listening and asking doubts	Flash card	What is chicken pox? What is small pox? What is mumps?

			FOETONEONATAL EFFECT; Abortion increase malformation does not occur. **5.INFLUENZA;** Affects pregnant women more virus crosses to foetus.however no increases incidence of malformation is shown. **6.VIRAL HEPATITIS;** It is the commonest serious cause of jaundice in pregnancy in tropics. **AETIOLOGY;** Any one of the following; Hepatitis A virus; RNA virus. **Hepatitis virus;** Hepatitis B surface antigen, DNA virus. It contains core antigen, surface antigen antigen and produces corresponding antibodies. **Non A and non B virus hepatitis;** Hepatitis C blood borne hepatitis E enteric transmitted the commonest cause of water borne viral hepatitis epidemic in India.	Lecture cum discussion	**Teacher's activity;** Teachers list out the other viral diseases in pregnancy **Mother's activity;** Mother's are listening and asking doubts		What is viral hepatitis?

			 **CLINICAL FEATURES;** Anorexia, nauseas, vomiting, low fever, fatigue for 1-2 weeks, stool becomes pale, urine darker. **COMPLICATION;** Mortality acute hepatitis during pregnancy has 10times higher mortality (13-20%) during pregnancy than non pregnant (1.6%) in tropics.	Lecture cum discussion	**Teacher's activity;** Teachers list out the other viral diseases in pregnancy **Mother's activity;** Mother's are listening and asking doubts	Flash card	What are all the complication?

7.	10mts	Discuss the sexually transmit diseases in pregnancy syphilis, gonorrhea,aids,and its treatment.	**SEXUALLY TRANSMITTED DISEASES;** **SYPHILIS**: Syphilis is caused by treponema pallidum affects fetus. However congenital syphilis is preventable disease.  **TREATMENT;** Erythromycin 500mg, 2gm is given daily over 15 days. **1.GONORRHOEA;** Gonorrhea is infection of colunae and transitional epithelia of genitourinary tract.gonorrhoea left un treated during pregnancy may lead to puerperal sepsis and opthalmia neonatrum. **TREATMENT;** Inj.cetriaxone 125mg im along with erythromycin 500mg four times daily x7days. **2.AIDS;** Acquired immune deficiency syndrome is caused by RNA retrovirus HIV-I and HIV-II.	Lecture cum discussion	**Teacher's activity;** Teachers discuss the sexually transmitted diseases in pregnancy **Mother's activity;** Mother's are listening and asking doubts		What is sexually transmit diseases? What is AIDS?

			The incubation period is from 2months to 4 years. AIDS is the end stage of HIV infection.  **TREATMENT;** ▪ Prenatal care ▪ Intranatal care ▪ Postnatal care ▪ Contraception. **SUMMARY;** Till now we had discussed about TORCH infection in that we learned about toxoplamosis, rubella or germen measles, cytomegalovirus, herpes simplex virus, other viral disease in pregnancy and sexually transmitted disease.	Lecture cum discussion	**Teacher's activity;** Teachers discuss the sexually transmitted diseases in pregnancy **Mother's activity;** Mother's are listening and asking doubts		

CONCLUSION;

The nature of TORCH infection has changed dramatically as a result of new vaccines new pathogens more sophisticated diagnostic testing and greater public awareness of the need for early prenatal care in the future nurses will find new organisms to consider new vaccines to prevent these diseases and more effective treatments.

BIBLIOGRAPHY;

- Shirish N daftary sudip chakravarti "MANUAL OF OBSTETRICS"2005 2nd edition Elsevier publication page no; 176-182.
- Ema E ziegel macca s cranley "OBSTETRIC NURSING" 8th edition macmillan publishing company newyork page no: 294-297.
- Lowdermilk Perry "MATERNITY NURSING"2006 7th edition Elsevier publication page no: 716,756-759.

பாடம்	:	டார்ச் தொற்றுக் கிருமிகள்
பாடத் தலைப்பு	:	டார்ச் தொற்றுக் கிருமிகளின் காரணங்கள், அறிகுறிகள், சிகிச்சை முறைகள் , மற்றும் தடுக்கும் முறைகள்
மாணவர் குழு	:	கர்ப்பிணிப் பெண்கள்
தேதி மற்றும் நேரம்	:	
காலவரை	:	1 மணி நேரம்
இடம்	:	
பாடத்தை குறித்து கர்ப்பிணி பெண்களின் முன்னறிவு	:	டார்ச் தொற்றுக் கிருமிகள் பற்றி – கர்ப்பிணி பெண்கள் சிறு தகவல்களை அறிந்திருத்தல்
மாணவியின் பெயர் மற்றும் கல்லூரியின் பெயர்	:	**திருமதி. ம.திரௌபதை MSC (N)II வருடம் மருத்துவர் நா. மகாலிங்கம் செவிலியர் கல்லூரி, சக்திநகர்.**

பொதுக் குறிக்கோள்கள் :–

வகுப்பின் இறுதியில் கர்ப்பிணப் பெண்கள் டார்ச் தொற்றுக் கிருமிகளின் காரணங்கள் அறிகுறிகள், சிகிச்சை முறைகள் மற்றும் தடுக்கும் முறைகளைப் பற்றி அறிந்து கொள்ளுதல்.

திட்டமிட்ட குறிக்கோள்கள் :–

வகுப்பின் இறுதியில் கர்ப்பிணி பெண்கள் அறிந்திருக்க கூடியவை.

- டார்ச் தொற்றுக் கிருமிகளினால் ஏற்படும் பாதிப்புகள் குறித்த விளக்கம்.
- டாக்ஸோபிளாஸ்மோஸிஸ் தொற்றுக் கிருமிகள் குறித்த விபரங்கள்.
- ரூபெல்லா வைரஸ் குறித்த விபரங்கள்.
- சைட்டோமெகலோ வைரஸ் குறித்த விபரங்கள்.

வ. எண்	காலம்	திட்டமிட்ட குறிக்கோள்கள்	பொருள்	ஆசிரியரின் பணி	கற்போரின் பணி	மதிப்பிடுதல்
1.	10 நிமிடம்	முன்னுரை	முன்னுரை :- பிறப்பின் போது ஏற்படும் பாதிப்புகளுக்குரிய காரணம் 2.3% கிருமிகளின் தாக்கமே பிறப்பின் போது பல்வேறு வழிகளில் இக்கிருமிகள் பரவுகின்றன. பிரசவத்திற்கு முந்தைய மற்றும் பரசவத்தின்பொழுது கிருமிகளினால் ஏற்படுகின்ற பாதிப்புகளை முறையான மருத்துவ பரிசோதனை செய்யாததினால் கண்டறியப்படுவதில்லை. கிருமிகளினால் பிறப்பின் போது ஏற்படுகின்ற பாதிப்புகளால் பிரசவ காலத்திற்கு பின்பு தாய் மற்றும் சேய்க்கு பலவிதமான சிக்கல்களை ஏற்படுத்துகின்றன. இவ்வாறு பிரசவத்திற்கு பின்பு கிருமிகளால் ஏற்படும் பிரச்சனைகளை தீர்ப்பத்றகு கருவுற்ற காலத்தில் இருந்தே கிருமிகள் தொற்றாமல் இருக்க வழிவகை செய்ய வேண்டும். கிருமிகளினால் முதல்நிலை தாக்குதலுக்கு ஆளான பெண்களுடைய கருவிற்கு ஏற்பட்டுள்ள பாதிப்புகளை முறையாக மதிப்பிட்டு அறிய வேண்டும்.	பட அட்டையின் மூலம் விவரித்தல் மற்றும் கலந்துரையாடல்	கவனித்தல் பதில் கூறுதல்	டார்ச தொற்றுக் கிருமிகள் என்றால் என்ன?

		பிறப்புறுப்பில் வடுக்கள் போன்ற பிரச்சனைகள் உள்ள பெண்களுக்கு அறுவை சிகிச்சை வாயிலாக குழந்தையை பிரசவிக்க அறிவுறுத்தப்படுகிறார்கள். டார்ச் என்ற சொல்லின் தொகுப்பானது கீழே குறித்துள்ள நோய் தொற்றுகளின் விரிவாக்கத்தின் சுருக்கமே ஆகும். T – டாக்ஸோபிளாஸ்மோசிஸ் O – மற்ற வைரஸ் தொற்றுக்கள் R – ரூபெல்லா C – சைட்டோமெகலோவைரஸ் H – ஹெர்பஸ்சிம்லக்ஸ் வைரஸ் மற்ற வைரஸ் தொற்றுக்கள் நவீன விஞ்ஞான மருத்துவ கண்டுபிடிப்புகளால் மற்றும் திறமைகளால் பாதிப்பு ஏற்படுத்தும் நோய் கிருமிகளை எளிதாக கண்டறிய வாய்ப்புகள் நிறைய உள்ளன. நோய் தொற்றுகள் இல்லாமல் கரு நல்ல முறையில் வளர வழிவகை செய்யப்படுகிறது. கருவில் உள்ள குழந்தையின் வளர்ச்சியை பொறுத்து நோய் கிருமிகளின் தாக்கம் மாறுபடும்.	படம் அட்டை யின் மூலம் விவரித்தல் மற்றும் கலந்துரை யாடல்	கவனித்தல் பதில் கூறுதல்	டார்ச் தொற்றுக் களின் தொகுப்புக் கள் யாவை?

		பிறப்புறுப்பில் வடுக்கள் போன்ற பிரச்சனைகள் உள்ள பெண்களுக்கு அறுவை சிகிச்சை வாயிலாக குழந்தையை பிரசவிக்க அறிவுறுத்தப்படுகிறார்கள். டார்ச் என்ற சொல்லின் தொகுப்பானது கீழே குறித்துள்ள நோய் தொற்றுகளின் விரிவாக்கத்தின் சுருக்கமே ஆகும். T – டாக்ஸோபிளாஸ்மோசிஸ் O – மற்ற வைரஸ் தொற்றுக்கள் R – ரூபெல்லா C – சைட்டோமெகலோவைரஸ் H – ஹெர்பஸ்சிம்லக்ஸ் வைரஸ் மற்ற வைரஸ் தொற்றுக்கள் நவீன விஞ்ஞான மருத்துவ கண்டுபிடிப்புகளால் மற்றும் திறமைகளால் பாதிப்பு ஏற்படுத்தும் நோய் கிருமிகளை எளிதாக கண்டறிய வாய்ப்புகள் நிறைய உள்ளன. நோய் தொற்றுகள் இல்லாமல் கரு நல்ல முறையில் வளர வழிவகை செய்யப்படுகிறது. கருவில் உள்ள குழந்தையின் வளர்ச்சியை பொறுத்து நோய் கிருமிகளின் தாக்கம் மாறுபடும்.	படம் அட்டை யின் மூலம் விவரித்தல் மற்றும் கலந்துரை யாடல்	கவனித்தல் பதில் கூறுதல்	டார்ச் தொற்றுக் களின் தொகுப்புக் கள் யாவை?

2.	10 நிமிடம்	டாக்ஸோ பிளாஸ்மோஸிஸ் பற்றி விவரித்தல்	**டாக்ஸோபிளாஸ்மோஸிஸ்** டாக்ஸோபிளாஸ்மோஸிஸ் நோய் ஏற்படுவதற்கான காரணம் டாக்ஸோபிளாஸ்மோஸிஸ் காண்டி என்ற கிருமியின் தாக்கத்தினால் ஏற்படுகின்ற நோயாகும். இந்நோயானது உலக மக்களிடையே பொதுவாக பெரும்பாலும் காணப்படுகின்ற நோயாகும். இந்நோயானது சரியாக சமைக்கப்படாத இறைச்சி, நன்கு காய்ச்சப்படாத வெள்ளாட்டு பால் மற்றும் கிருமி தொற்று ஏற்பட்டுள்ள பூனையின் உடைய எச்சங்கள் மூலமாகவும் பரவுகிறது. **நிகழ்வுகள் :–** கர்ப்பகாலத்தின் போது ஏற்படுகின்ற முதன்மை நோய் தாக்குதல் ஒரு சதவீதத்திற்கும் குறைவு. இனப்பெருக்க காலங்களின் பொதுவாக காணப்படும் சதவீதம் 10 % முதல் 40 % வரையாகும். **காரணிகள் :–** டாக்ஸோபிளாஸ்மா காண்டி என்ற அணுவிற்குள்ளான ஒட்டுண்ணியானது டாக்ஸோபிளாஸ்மா நீர் கட்டிகளை சரியாக சமைக்கப்படாத இறைச்சி மூலமாகவும், பூனையின் எச்சத்தின் வாயிலாகவும் கருவுற்ற தாயிடம் இருந்து நஞ்சுக் கொடி வாயிலாக கருவில்உள்ள குழந்தைக்கு பரவுகிறது. **தாய்வழி தொற்று :–** கருவுற்ற தாய்மார்களுக்கு டாக்ஸோபிளாஸ்மா நோய் கிருமிகளால் பாதிப்பு ஏற்படுகின்றபொழுது கருவில் உள்ள குழந்தை ஊனமாக பிறக்க டாக்ஸோபிளாஸ்மா நோய்	பட அட்டையின் மூலம் விவரித்தல் மற்றும் கலந்துரையாடல்	கவனித்தல் பதில் கூறுதல்	டார்ச் தொற்றுக் கிருமிகள் புரவ காரணங்கள் யாவை?

			கிருமியானது வழி வகைகளை ஏற்படுத்துகிறது. இந்நோயின் தாக்கமானது கர்ப்ப காலம் 3 மாதங்களுக்கு உள்ளடங்கிய கர்ப்பிணிகளை விட 4 முதல் 9 மாதங்கள் வரை உள்ள கர்ப்பிணி பெண்களுக்கு அதிக பாதிப்பினை ஏற்படுத்துகிறது. இதைக் கவனிக்காமல் விட்டால் கர்ப்ப காலத்தில் காய்ச்சல், தோலில் தடுப்புகள், நிணநீர் சுரப்பி பெருக்கம் போன்றவைகளை ஏற்படுத்தும். **கர்ப்ப காலத்தில் பாதிப்பின் சதவிகிதங்கள்:** 1 முதல் 3 மாதங்களுக்கு இடைப்பட்ட கர்ப்ப காலம் 4 முதல் 6 மாதங்களுக்கு இடைப்பட்ட கர்ப்ப காலம் 7 முதல் 9 மாதங்களுக்கு இடைப்பட்ட கர்ப்ப காலம் **1முதல் 3 மாதங்களுக்கு இடைப்பட்ட கர்ப்ப காலம் :–** தோராயமாக இதனுடைய பாதிப்பு 15 சதவீதத்தை உண்டாக்குகிறது. இக்கடுமையான தொற்றுகளால் பிறப்பின் போது இழப்பு, மற்றும் 75 % கருவில் உள்ள குழந்தைக்கு பாதிப்பை ஏற்படுத்துகிறது. **4 முதல் 6 மாதங்களுக்கு இடைப்பட்ட காலம் :–** தோராயமாக இந்த தொற்றின் பாதிப்பு 25 % ஆகும். **7 முதல் 9 மாதங்களுக்கு இடைப்பட்ட கர்ப்ப காலம் :–** தோரயமாக இதனுடைய பாதிப்பு 65 % ஆகும். இதனுடைய நிகழ்வுகள் அதிகமான தொற்றுகளை ஏற்படுத்தலாம்.அல்லது பொதுவாக குறைந்த தொற்றுகளையும் ஏற்படுத்தலாம்.	படஅட்டையின் மூலம் விவரித்தல் மற்றும் கலந்துரையாடல்	கவனித்தல் பதில் கூறுதல்	டாக்ஸோபிளாஸ்மாவின் தாய் வழி தொற்றுக்கள் யாவை?

			பிறவிலேயே ஏற்படும் டாக்ஸோபிளாஸ்மா பாதிப்பு :– கருவுற்று இருக்கும்பொழுது முதல் மாதத்திலேயோ அல்லது இடைப்பட்ட காலத்தில் தாய் டாக்ஸோபிளாஸ்மா தொற்றால் பாதிக்கப்பட்டால் அது குழந்தையை பாதிக்கிறது. பிறந்த குழந்தைகளிடம் 10% க்கும் குறைவாக காமாலை, ஈரல் பெருக்கம், காது கேளாமை, சிறிய தலை , காலம் தாழ்த்திய மனநல பாதிப்பு, விழித்திரை புரை போன்ற பாதிப்புகளை ஏற்படுத்துகிறது. எக்ஸ் – கதிர் மூலம் மூளையில் மென்திசுக்கள் கடினமாக பரவலாக இருப்பதை காண்பிக்கிறது. கடுமையான மன நல ஊனம் அனைவருக்கும் உரித்தானது அல்ல. **நோயை கண்டறியும் வழிமுறைகள் :–** இரத்தத்தில் வெளுத்த மஞ்சள் நிற திரவ பாகத்தை (நிணநீர்) ஆய்வு செய்தல் அல்லது சாயத்தின் நீர் ஆய்வுகளின் மூலம் குறிப்பிட்ட ஐ.ஜி.ஜி. நோய் எதிர்ப்புப் பொருளை கண்டறிய பயன்படுகிறது. எலைசா ஆய்வும் நோய் எதிர்ப்புப் பொருள்களை கண்டறிய பயன்படுகிறது. சிறிது காலத்திற்கு முன் ஏற்பட்ட நோய் தொற்றுகளை ஐ.ஜி.எம் நோய் எதிர்ப்பு பொருள் மூலம் கண்டறியப்படுகிறது.	பட அட்டை யின் மூலம் விவரித்தல் மற்றும் கலந்துரை யாடல்	கவனித்தல் பதில் கூறுதல்	பிறவிலேயே ஏற்படும் டாக்ஸோ பிளாஸ்மா வின் பாதிப்புகள் யாவை? டாக்ஸோ பிளாஸ்மா நோய் தொற்றுக் களை எவ்வாறு கண்டறிய லாம்?

			சிகிச்சை முறைகள் :– ➢ ரோவாமைசின் மூன்று வாரஇடைவெளிகளில் கர்ப்ப காலம் முழுவதும் வழங்க வேண்டும். ➢ ஸ்பைராமைசின் மூன்று வாரஇடைவெளிகளில் கர்ப்ப காலம் முழுவதும் வழங்க வேண்டும். **பக்க விளைவுகள் :–** குமட்டல் , வாந்தி , மற்றும் வயிற்றுப்போக்கு போன்ற பக்க விளைவுகள் ஏற்படும். **தடுப்பு முறைகள் :–** ❖ பிரசவத்திற்கு முந்தைய காலத்தில் அறிவுரை வழங்குதல். ❖ கைஉறைகளை பயன்படுத்துதல். ❖ நன்றாக சமைக்கப்படாத இறைச்சி உண்பதை தவிர்த்தல் ❖ நன்கு காய்ச்சாத பால் அருந்துவததைதவிர்த்தல், பூனை எச்சங்களை முறையாக அகற்றுதல். ❖ கடுமையான டாக்ஸோபிளாஸ்மா தொற்று இருந்தால் மருத்துவ கருக்கலைப்பு செய்து கொள்ளலாம்.	பட அட்டை யின் மூலம் விவரித்தல் மற்றும் கலந்துரை யாடல்	கவனித்தல் பதில் கூறுதல்	டாக்ஸோ பிளாஸ்மா வை தடுக்கும் முறைகள் யாவை ?

			பிறப்பிலேயே ரூபெல்லா வைரஸ் தாக்குதலினால் கருவில் உள்ள குழந்தைக்கு வளர்ச்சி குறைபாடு, இதய நோய்கள், கல்லீரல் மண்ணீரல் வீக்கம், காதுகேளாமை, கண்புரை போன்ற பாதிப்புகள் ஏற்படுகின்றன. இக்கிருமி தொற்றுக்கள் கர்ப்பம் அடைந்து சிலமாதங்கள் கழித்து கருவில் உள்ள குழந்தைக்கு மனநல பாதிப்பு காது கேளாமை, வளர்ச்சி குறைபாடுகளை ஏற்படுத்துகிறது. **ரூபெல்லா வைரஸ் கண்டறியும் வழிமுறைகள் :-** ❖ ரூபெல்லா வைரஸ் உமிழ்நீர், இரத்தம், சிறுநீர் மற்றும் மலம் ஆகியவற்றை பரிசோதிப்பின் மூலமாக கண்டறியப்படுகிறது. ❖ எலைசா ஆய்வு மூலமாக குறிப்பிட்ட ஐ.ஜி.எம். பரிசோதனை செய்யப்படுகிறது. **பச்சிளம் குழந்தைகளிடையே ரூபெல்லா வைரஸ் கண்டறியும் வழிமுறைகள் :-** ❖ தொப்புள் கொடியில் உள்ள இரத்த பரிசோதனை மூலமாக கண்டறிப்படுகிறது. **சிகிச்சை முறைகள் :-** நோய் ஏற்படுவதற்கு முந்தைய நிலையில் உள்ள வளர் இளம் பருவத்திலுள்ள பெண்களுக்கு தடுப்பூசி மருந்தான காமாகுலோபிலின் மருந்தை கொடுப்பதால் மட்டுமே ரூபெல்லா வைரஸ் நோய் தாக்குதலில் இருந்து காப்பாற்ற முடியும். அவ்வாறு இல்லாமல் கருவுற்ற பின் பெண்களுக்கு மேற்கூறிய தடுப்பூசி மருந்தினை அளிப்பதால் ரூபெல்லா வைரஸ் நோய் கிருமியின் தாக்குதலில் இருந்து காப்பாற்ற முடியாது.	பட அட்டையின் மூலம் விவரித்தல் மற்றும் கலந்துரையாடல்	கவனித்தல் பதில் கூறுதல்	ரூபெல்லா வைரஸ் எவ்வாறு கண்டறியப்படுகிறது? ரூபெல்லா வைரஸ்க்கு அளிக்கப்படும் சிகிச்சை முறைகள் யாவை?

4.	10 நிமிடம்	சைட்டோமெகலோ வைரஸ் குறித்த விவரங்கள்	**சைட்டோமெகலோ வைரஸ்:** சைட்டோமெகலோ வைரஸ் என்பது அக்கியை வற்படுத்த கூடிய வைரஸ் கிருமிகளாகும். இந்த வைரஸ் கிருமியால் பாதிக்கப்பட்ட கருவுற்ற தாய்மார்களில் மூன்றாம் நிலையிலுள்ள (7 வது மாதம் முதல் 9வது மாதம் வரை) தாய்மார்களிடம் வெளிப்படுகின்ற கருப்பை வாய் சுரத்தலில் இந்த கிருமியானது வெளி வருகிறது. இது ஒரு டி.என்.ஏ வைரஸ் ஆகும். இது அக்கியை ஏற்படுத்துகின்ற வைரஸ் குடும்பத்தை சார்ந்தது. இத்தொற்றின் சுபாவமானது வாழ்நாள் முழுவதும் செயலற்று இருக்கும் நிலையை உடையது. காரணிகள் :– **பரவும் வழிகள் :–** பொதுவாக சைட்டோமெகலோ வைரஸ் இரத்தம் செலுத்துதல் மூலமாகவும், நஞ்சுக் கொடி மூலமாகவும் பரவுகிறது. விந்துக்கள், பிறப்புறுப்பின் சுரப்புகள் உமிழ்நீர், சிறுநீர், தாய்ப்பால், உடல் உறுப்பு தானம் இவைகளின் மூலமாகவும் பரவுகிறது. **நிகழ்வுகள்:–** சைட்டோமெகலோ வைரஸ் பொதுவாக பிறவிலேயே ஏற்படும் ஒரு வைரஸ் தொற்று இது 1%முதல் 2 % வரை பிறக்கும் குழந்தைக்கு பாதிப்பினை ஏற்படுத்துகிறது.	பட அட்டை மின் மூலம் விவரித்தல் மற்றும் கலந்துரை யாடல்	கவனித்தல் பதில் கூறு தல்	சைட்டோ மெகலோ வைரஸ் என்றால் என்ன? சைட்டோ மெகலோ வைரஸ் பரவும் வழிகள் யாவை?

5.			ஹெர்பஸ்சிம்லக்ஸ் வைரஸ் இக்கிருமி தொற்று கர்ப்பிணி பெண்களை இனப்பெருக்க உறுப்புகளில் ஏற்படும் தொற்றுக்கள் மூலமாக கர்ப்பிணி பெண்களை சென்றடைகிறது. இதில் 2வது வக்க வைரஸ் இனப்பெருக்க உறுப்பில் அக்கி உருவாகக் காரணமாக உள்ளது. இந்த வைரஸ் அக்கி வைரஸ் குடும்பத்தைச் சார்ந்தது ஆகும். நிகழ்வுகள் :– அதிகப்படியாக அதாவது 90% தொற்றுகள் உருவாகக் காரணம் 2வது வகையான ஹெர்பஸ்சிம்லக்ஸ் வைரஸ் ஆகும். 10% தொற்றுக்கள் உருவாகக் காரணம் முதல் வகையான ஹெர்பஸ்சிம்லக்ஸ் வைரஸ் ஆகும். பரவும் வழிமுறைகள் :– ❖ ஹெர்பஸ்சிம்லக்ஸ் வைரஸ் உடலுறவின் மூலம் ஒட்டிப் பரவக் கூடிய ஒரு வகை நோயாகும். ❖ நெருங்கிய தோல் தொடர்பின் மூலமாகவும் பரவுகிறது. தொற்று நோயியல் :– ஹெர்பஸ்சிம்லக்ஸ் வைரஸ் கர்ப்ப காலத்தின் போது கருப்பை வாயில் தங்கிய பிறகு 10% பாதிப்புகளை ஏற்படுத்துகிறது.		கவனத்தில் பதில் கூறுதல்.	ஹெர்பஸ்சிம்லக்ஸ் வைரஸ் என்றால் என்ன? ஹெர்பஸ்சிம்லக்ஸ் வைரஸ் பரவும் வழிமுறைகள் யாவை?

			சிகிச்சை முறைகள் :– மகளிர் நோய் சிகிச்சை முறைகள் :– ❖ உடலுறவின் மூலம் பரவு நோய்களைக் கண்டறிதல். ❖ மற்ற வைரஸ் தொற்றுக்கள் உள்ளதா எனக் கண்டறிதல். ❖ ஏ–சைக்லோவில் மாத்திரைகளை 200 மி.கி. வீதம் 4 முறை தினமும் 14 நாட்கள் வழங்க வேண்டும். ❖ ஏ–சைக்லோவிர் கழிம்பு வழங்குதல் ❖ கடுமையான நோய் தொற்றுகள் இருந்தால் ஏ–சைக்லோவிர் ஊசி மருந்தினை நரம்பு வழியாக உடல் எடைக்கு ஏற்றவாறு வழங்க வேண்டும். 8 மணி நேரத்திற்கு ஒரு முறை 5 நாட்கள் 5.0 மி.கி. வழங்க வேண்டும். பிரசவத்திற்கான சிகிச்சை முறைகள் : ❖ நுண்ணுயிர் வளர்ப்பு மற்றும் செல்கள் பற்றிய அறிவியல் பிரிவை கண்டறிதல். ❖ எவ்வித தொற்றுகளும் இல்லாத போது மட்டுமே யோனி வழி பிரசவத்தை அனுமதிக்க வேண்டும். பச்சிளம் குழந்தைக்கான சிகிச்சை முறைகள் :– ❖ குழந்தைகளை தனிமைப்படுத்துதலை தவிர்க்க வேண்டும். ❖ தாய் தொற்றுக்கு உள்ளாகி இருந்தால் தாய்ப்பால் பொடுப்பதை தவிர்க்க வேண்டும்.		கவனித்தல் பதில் கூறுதல்	ஹெர்பஸ்சிம்லக்ஸ் வைரஸ் பிரசவத்திற்கான சிகிச்சை முறைகள் யாவை?

6.	10 நிமிடம்	கர்ப்பிணி பெண்களை பாதிக்கும் மற்ற வைரஸ் தொற்றுக்கள் குறித்த விவரங்கள்	**கர்ப்பிணி பெண்களை பாதிக்கும் மற்ற வைரஸ் நோய்கள்** **தட்டம்மை அல்லது சின்னம்மை :–** இது ஒரு வகையான வைரஸ் நோயாகும். இந்த வைரஸ் தொற்றால் கர்ப்பிணி பெண்களுக்கு காய்ச்சல், தோளில் தடிப்புகள் தோன்றும். **பச்சிளம் குழந்தைகளின் பாதிப்பு :–** சின்னம்மை வைரஸ் தாயிடமிருந்து சேய்க்கு நஞ்சுக் கொடி மூலமாக பரவி கருச்சிதைவு , சின்னம்மையுடன் கூடிய குழந்தை பிறப்பு மற்றும் ஒரு சில முடிவுகளின்படி ஆராய்ந்தால் கிருமிகள் பிறவிலேயே குறைபாடுகளை ஏற்படுத்துகின்றன. **தடுப்பூசி :–** கர்ப்பம் தரிப்பதற்கு முன்னரே பெண்கள் சின்னம்மை தடுப்பூசி கண்டிப்பாக போட்டுக் கொள்ள வேண்டும். கர்ப்பம் தரித்த பின்னர் இத்தடுப்பூசியை போடக் கூடாது. **விளையாட்டு அம்மை அல்லது நீர்க் கொள்ளுவான் அம்மை.** கர்ப்ப காலத்தின் போது இந்த வைரஸ் வேரிசெல்லாஜோஸ்டர் என்ற வைரஸ் மூலமாக பரவுகிறது. இந்த வைரஸ் நீர்கட்டிகளை முகம், கை,கால்களில் ஏற்படுத்துகின்றன. இக்கிருமிகளின் தாக்குதல் பிரசவ காலத்தில் கடுமையாக இருக்கும்.	படஅட்டை யின் மூலம் விவரித்தல் மற்றும் கலந்துரை யாடல்	கவனித்தல் பதில் கூறு தல்	தட்டம்மை என்றால் என்ன? எப்பொழுது தட்டம்மை தடுப்பூசி போட வேண்டும்?

		பச்சிளம் குழந்தைகளின் தொற்றுகள் : வைரஸ் தாயிடம் இருந்து குழந்தைகளுக்கு 10% பரவ வாய்ப்புகள் உள்ளன. இக்கிருமி தொற்று பெண்களை கர்ப்பம் தரித்த உடனே பாதித்தால் அதனுடைய முடிவு பிறவிலேயே குழந்தைகளுக்கு அவலட்சணமான அமைப்பு, பெருமூளை பாதிப்பு, சிறுநீர் வடிகுழாய் அடைப்பு போன்ற பாதிப்புகளை ஏற்படுத்துகிறது. **சிகிச்சை முறைகள் :–** இத்தொற்றுகளால் பாதிக்கப்பட்ட கர்ப்பிணி பெண்களுக்கு ஜோஸ்டர் இம்மினோகுளோபுளின் தடுப்பூசி வழங்க வேண்டும். **பெரியம்மை :–** உலக சுகாதார நிறுவனத்தின் கடுமையான முயற்சியினால் அவர்கள் உலக மக்களுக்கு வழங்கிய தடுப்பூசிகளால் 1977க்கு பின்பு இப்பூவுலகில் பெரியம்மை நோய் அறவே அடியோடு ஒழிக்கப்பட்டது. **பொன்னுக்கு வீங்கி :–** இந்நோய் கர்ப்பிணி பெண்களிடம் அபூர்வமாக காணப்படும் நோயாகும். இந்நோய் தொற்றால் கர்ப்பிணி பெண்களுக்கு காய்ச்சல் வரும்.	படஅட்டை யின் மூலம் விவரித்தல் மற்றும் கலந்துரை யாடல்	கவனித்தல் பதில் கூறு தல்	

			மருத்துவ நலக் குறைபாடுகள் :- பசியின்மை, குமட்டல், வாந்தி, குறைந்த காய்ச்சல்,சோர்வு, 1 முதல் 2 வாரங்கள் வரை பழுப்பு நிற மலம், சிறுநீர் கழிப்பதில் சிரமம் போன்ற மருத்துவ நலக் குறை பாடுகள் ஏற்படுகின்றன. **பின்விளைவுகள் :-** இந்நோய் தாக்குதலானது கர்ப்பம் தரிக்காத சமயத்தை விட கர்ப்பம் தரித்த சமயங்களில் 10 மடங்கு பாதிப்புகளை ஏற்படுத்துகிறது. **பாலுறவினால் பரவும் நோய்கள் :-** **மேகநோய் (சிபிலிஸ்)** இந்நோய்க்கான காரணம் டிரிப்போனிமா கிருமி ஆகும். இது கருவில் உள்ள குழந்தையை பாதிக்கிறது. பிறவிலேயே ஏற்படும் மேக நோயை தடுக்க முடியும். **சிகிச்சை முறைகள் :-** பெனிசிலின் மாத்திரைகள் 500மி.கி. வீதம் நாளொன்றுக்கு 4 முறைகள் 15 நாட்கள் வழங்க வேண்டும். **வெள்ளை நோய் (அல்லது) வெட்டை நோய் :-** வெட்டை நோயானது சிறுநீர் கழிக்கும் துளை வழி யாக சென்று உடலில் பாதிப்பினை ஏற்படுத்துகிறது. இந்நோய்க்கு சிகிச்சை அளிக்காவிட்டால் அழுகிய புண் காரணமாக இரத்தம் கெடுதல், கண்களில் அழற்சியை ஏற்படுத்தும்.	பட அட்டவணி ன் விவரித்தல் மற்றும் பதில் கூறுதல்	கவனித்தல் பதில் கூறுதல்	முன்பு கர்ப காலத்தால் ஏற்படும் மருத்துவ நலக் குறைபாடு கள் யாவை? மேக நோய் என்றால் என்ன?

			சிகிச்சை முறைகள் :– செப்ட்ரைஆக்சோன் செபிரக்சோன் 125 மி.கி. மற்றும் ஜெந்தமைசின் 500 மி.கி அளவுள்ள மாத்திரைகளை ஒரு நாளைக்கு 4 வேலைகள் வீதம் 7 நாட்களுக்கு வழங்க வேண்டும். எய்ட்ஸ் :– இது ஓருவகையான முயன்று பெறப்பட்ட நோயாகும். இந்நோய்க்கான காரணிகள் ஆர்.என்.ஏ என்ற ரெட்ரோ வைரஸ் ஆகும். எச்.ஐ.வி. – I மற்றும் எச்.ஐ.வி. – II என்ற வைரஸ் கிருமிகளால் மனிதர்களுக்கு இந்நோய் ஏற்படுகிறது. இதற்கான அடைகாக்கும் காலம் 2 முதல் 4 வருடங்கள் எய்ட்ஸ் என்பது இறுதி நிலை எச்.ஐ.வி. தொற்று ஆகும். **சிகிச்சை முறைகள் :–** ❖ பிரசவத்திற்கு முந்தைய பராமரிப்பு செய்து கொள்ளுதல். ❖ பிரசவத்தின் போது பராமரிப்பு செய்து கொள்ளுதல். ❖ பிரசத்திற்கு பிந்தைய பராமரிப்பு செய்து கொள்ளுதல். ❖ கருத்தடை மருந்து மற்றும் கருவிகளை பயன்படுத்துதல். இவைகளின் மூலம் கர்ப்பிணி பெண்களுக்கு எய்ட்ஸ் வராமல் பாதுகாக்கலாம்.	படம் அட்டையின் மூலம் விவரித்தல் மற்றும் கலந்துரையாடல்	கவனித்தல் பதில் கூறுதல்	எய்ட்ஸ் என்றால் என்ன?

			தாய் தொற்று :– இந்நோய் கிருமியினால் கருச்சிதைவு ஏற்படுவதில்லை. மேலும் பிரசவத்திற்கு உரிய குறித்த காலத்தை அடையும் முன்பே ஏற்படுகின்ற குறை பிரசவத்தை ஏற்படுத்துவது இல்லை. **பச்சிளம் குழந்தைகளின் பாதிப்பு :–** சைட்டோமெகலோ வைரஸ் நஞ்சுக் கொடி மூலமாக தொற்றுகளை கருவில் உள்ள குழந்தைக்கு ஏற்படுத்துகின்றது. அல்லது தாயின் பிறப்புறுப்பின் மூலமாகவும் தாய்ப்பால் மூலமாகவும் குழந்தைகளுக்கு பரவுகிறது. **பிறவிலேயே ஏற்படும் பாதிப்புகள் :–** 10 % கருவில் வளர்ச்சி குறைபாடு , பெரியதலை, காதுகேளாமை, இதய நோய்கள் மற்றும் மஞ்சள் காமாலையினால் கல்லீரல் மண்ணீரல் வீக்கம் போன்ற பாதிப்புகளை ஏற்படுத்துகிறது. **நோயை கண்டறியும் வழிகள் :–** சைட்டோமெகலோ வைரஸ் இரத்தம், உமிழ்நீர், சிறுநீர் கருப்பைக்கழுத்து பகுதியில் சுரக்கும் சுரப்பிகள் கொண்டு கண்டறியலாம்.	பட அட்டை பின் மூலம் விவரித்தல் மற்றும் கலந்துரை யாடல்	கவனித்தல் பதில் கூறுதல்	சைட்டோ மெகலோ வைரஸ் பிற விலேயே ஏற்படுத்தும் பாதிப்புகள் யாவை ?

			பாதிக்கப்பட்ட குழந்தைகளை நுண்ணொலி அலகிடு மூலமாக மதிப்பிடலாம். சிகிச்சை முறைகள் :– ○ கேன்சிகேலோவிர் ○ வைரஸ் தொற்றுக்கு எதிரான மருந்துகள். தடுப்பு முறைகள் :– • ஆலோசனை வழங்குதல் • தூய்மையை கடைபிடித்தல் • இரத்தப் பரிசோதனை செய்து அதன் பிறகு இரத்தம் வழங்குதல்.	படவட்டை மின் மூலம் விளக்குதல் மற்றும் கலந்துரையாடல்	கவனித்தல் பதில் கூறுதல்	எவ்வாறு சைட்டோமெகலோ வைரஸ் பரவாமல் தடுக்கலாம்?

PHOTOGRAPHS