DISSERTATION ON
A PRE-EXPERIMENTAL STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING EARLY IDENTIFICATION OF HIGH RISK PREGNANCY AMONG ANTENATAL MOTHERS ATTENDING AT INSTITUTE OF OBSTETRICS AND GYNAECOLOGY, CHENNAI-08.

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CERTIFICATE

This is to certify that this dissertation titled **A Pre-Experimental study To Evaluate The Effectiveness Of Structured Teaching Programme on Knowledge Regarding Early Identification Of High Risk Pregnancy Among Antenatal mothers attending at Institute of Obstetrics and Gynaecology,Chennai-08** is a bonafide work done by Mrs.J.Dhanalakshmi, M.Sc (N) II year student, College of Nursing, Madras Medical College, Chennai submitted to The Tamilnadu Dr.M.G.R Medical University, Chennai-32 towards the partial fulfillment of the requirements for the award of degree of Master of Science in Nursing, Branch – III, Obstetrics and Gynecological Nursing, under our guidance and supervision during the academic year 2015 – 2017.

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ABSTRACT

Title:

A Pre-experimental study To Evaluate The Effectiveness Of Structured Teaching Programme on Knowledge Regarding Early Identification Of High Risk Pregnancy Among Antenatal mothers attending at Institute of Obstetrics and Gynaecology,Chennai-08.

Antenatal period is amazing experience of each and every women. Even though this period is going smooth for many mothers some of them may suffer with some high risk during pregnancy may endanger the life of the mother and fetus. The main aim of the study particularly this group of antenatal mother is early identification of high risk pregnancy, prevention of complications , and management of these conditions.

Need for the study

The researcher had seen various kinds or pregnancy associated complications in obstetric department. The women who are all attending the antenatal outpatient department do not have an adequate knowledge regarding complications of high risk pregnancy.   The researcher felt that to increase the knowledge and awareness about high risk pregnancy and selected this topic.

Objectives

1)   The assess the knowledge regarding high risk pregnancy among antenatal women

2)   To assess the effectiveness of structured teaching programme on knowledge regarding high risk pregnancy among antenatal women.

3)   To associate the findings with selected demographic variables and obstetrical variables.

Key words

High risk pregnancy, Structured Teaching Programme, Identification of high risk pregnancy.

Methodology

Research approach	Quantitative research approach
Duration of the study	Four weeks (20.11.2016 to 18.12.2016)
Study setting	Antenatal OPD at IOG
Research design	Pre- experimental design
Study Population	Antenatal mothers with gestational age 8-28 weeks.
Sampling Technique	Purposive Sampling Technique
Sample size	60

Data collection procedure

After obtaining informed and written consent, approximately three to five samples were selected every day and pretest questionnaire was assessed by means of interview method. Structured Teaching Programme was given to the participants for 30 minutes. After pre-test, post -test was conducted after one week to assess the knowledge of women regarding early identification of high risk pregnancy.

Data analysis

The data were tabulated and analyzed using descriptive statistics like mean, standard deviation, frequency distribution and percentage.

Inferential statistics like paired t-test, McNemars test and chi-square test.

Results

The findings of the study revealed that the Structured Teaching Programme had improved the knowledge of women regarding early identification with paired t –test P value is 0.001. There is statistical significance in knowledge attainment on early identification of high risk pregnancy which shows the effectiveness of Structured teaching programme.

Discussion

Hypothesis was proved by the great statistically significance occurs after Structured Teaching Programme. The chi square test shows that there is a statistically significant association between the post- test level of knowledge and demographic variables among women.

Recommendation

A comparative study can be conducted between the knowledge of the patients with high risk pregnancy and their practices.

A follow up study can be recorded to determine the participation in screening practice for the prevention and early detection of high risk pregnancy.

Conclusion

The result of the study shows that the Structured Teaching Programme was effective in improving the knowledge regarding early identification of high risk pregnancy among antenatal mothers.

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ABBREVIATION

WHO   World Health Organization

MMR   Maternal Mortality Rate

OPD   Outpatient Department

IOG   Institute of Obstetrics and Gynaecology

STP   Structured Teaching Programme

GDM   Gestational Diabetes Mellitus

RCT   Randomized controlled trial

SSC   Skin to Skin Contact

MNMR   Maternal and Neonatal Mortality Rate

RBC   Red Blood Cells

PUFA   Poly Unsaturated Fatty Acid

DIC   Disseminated Intravascular Coagulation

NTD   Neural tube Defects

USA   United States of America

HAPO   Hyperglycemia and Adverse Pregnancy Outcome

OGTT   Oral Glucose Tolerance Test

ICU   Intensive Care Unit

NICU   Neonatal Intensive Care Unit

ART   Assisted Reproductive Technology

BF   Breast Feeding

CHAPTER –I
INTRODUCTION

A women is the full circle. Within her is the power to create, nurture and transform.

-Diane Mariechild.

Women form the centre of the family and their health is of prime importance to the well-being of the whole family. With the emergence of nuclear family type, health of the women has increased in its relevance. Moreover, women's health is of cardinal importance to the health of the society.

It implies that if the mother is healthy, then the child will also be healthy. **"Child health"** is based on the **"Mother's health".**

"A happy child is a Nation's pride" and every child will be happy with his or her mother's bonding and family care. Health is wealth of the family. Preserving this health during the antenatal period becomes quite imperative to guard the mother from ill health.

Pregnancy is a unique experience in every woman's life. The thought of growing fetus in the mother's womb indeed is nature's way of expressing the attributes of motherhood. Most of the pregnant mothers suffer with many high risk conditions in their journey towards motherhood.

Identification of risk factors related to pregnancy is important because "A pregnant woman is like a ship on stormy sea, out of balance" seeking a new equilibrium in waves of physical and physiological change. Therefore nurses as women, midwives and health care providers have special responsibility to reduce the annual loss of life through early identification of high risk pregnancy related to maternal mortality and morbidity.

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The prevalence of medical problems in pregnancy is increasing because of a complex interplay between demographic and lifestyle factors, and developments in modern medicine. Maternal mortality and morbidity resulting from treatable medical conditions, such as anemia, gestational diabetes mellitus and hypertensive disorders have not decreased in recent years.It is vital that the health care professionals must acquire a basic knowledge and understanding of medical problems in pregnancy.This includes pre pregnancy measures such as counseling and optimization of medical therapy, as well as multidisciplinary management throughout the pregnancy and the postpartum period. **(Narayan B, Nelson-Piercy C, 2016)**[1]

During pregnancy, a woman's body undergoes complex physiological changes, still which may not be understood. Every system in a woman's body adapts to the demand of the growing fetus. A great deal of attention during pregnancy is focused on ensuring minimum risk at delivery and maximum health of the women and her fetus **(Cooper, 2012)**[2]

Prenatal care is essential for ensuring the overall health of the mother and the infant. It is a major strategy for helping to reduce complications of pregnancy. Prenatal care should include collection of obstetric history, measuring height and weight, taking blood pressure to check preclampsia, screening for anemia and giving education regarding complications during pregnancy. So that the signs of complications can be identified and also measures can be taken to modify, control and reduce and high risk pregnancy **(Barley.E.Rose, 2010)**[3]

Several organizations have mentioned a large number of high risk maternal conditions which need to be identified during pregnancy. The maternal risk conditions can be classified as maternal characteristics of

physical conditions ,medical illness or disorder, obstetrical conditions and warning signs.

Teaching is an important nursing intervention because a woman with illness must make modifications in her usual therapy to adjust to pregnancy. Pregnancy often stimulates woman to learn more about primary diseases. **(Pillitteri, 2003)**[4]

1.1 Need for the study

"Prevention is better than cure"

All pregnant women by virtue of their pregnant status face some level of maternal risk. Data suggest that amount all pregnant women around 40% of them have some complications. About 15% of the pregnant women need obstetric care to manage complications, which is potentially the threatening to mother and fetus.**(Samiya M, Samina M, 2015)**[5]

Approximately 10-20 % of all pregnancies in the United states are labeled as high risk. High risk pregnancies are account for more than half of all fetal and prenatal deaths. Nurses are in unique position to educate and empower women, through the phases of child birth, for them to achieve a healthy pregnancy with optimum outcome of a healthy baby. Despite various measures taken to reduce maternal mortality rate and morbidity rate, it remains very high in India **(http://www.faqs.org/ health/topics/ 3/High-risk pregnancy.html)**[6]

Global statistics (WHO)

❖ Every day, approximately 830 women die from preventable causes related to pregnancy and childbirth.

❖ 99% of all maternal deaths occur in developing countries.

- ❖ Between 1990 and 2015, maternal mortality worldwide dropped by about 44%.

- ❖ Between 2016 and 2030, as part of the Sustainable Development Goals, the target is to reduce the global maternal mortality ratio to less than 70 per 100 000 live births.

Indian Scenario

556/one lakh live births– during 1990

398/one lakh live births – during 1997-1998

301/one lakh live births – during 2001-2003

178/ one lakh live births- during 2010-2012

At present 174/ one lakh live births (WHO, UNICEF, UNFPA, WORLD BANK AND UNITED NATIONS POPULATION DIVISION, 2015)

Tamilnadu Scenario

No State in India, except Tamil Nadu is able to calculate MMR reliably. In TamilNadu, the district level MMR has been calculated every year from 1994. Around 1100 maternal deaths occur every year which is approxi-mately 10% of maternal deaths occur in India and 0.2% of maternal deaths in the world. This gives an estimate MMR of 100 in TamilNadu while the SRS estimate is 134 (2001-03) During the year 2007-08, 1059 maternal deaths has reported which gives an estimate of 95 per one lakh live births. The district level MMR varies from 226 in Nilgiris district (hill area) to 32 in Chennai (100% urban areas) district. About 22% of deaths occur in ante natal Period, 6% in natal period and the remaining 72% on post natal period. The maternal deaths from SC/ST community constitute 38% all deaths where as the

share of SC / ST population in total population is 20%. Among the 11% of maternal deaths occur in home deliveries, the share of SC / ST community is 50%. The major causes of maternal morbidity are pregnancy induced hypertension, anaemia, hemorrages and diabetic induced pregnancy. Cause of maternal deaths shown that 20% of mothers die due to PPH followed by PIH with severe anaemia. Maternal morbidity is another major cause for concern.

V.C. Subash Gandhi, coordinator of the Tamil Nadu Health System Project, said the staff nurses should play a key role in bringing down the maternal mortality rate. A close observation and surveillance would go a long way in achieving the desired results, he added.

Institutional Statistics

Table 1.1: Maternal Death at Institute of Obstetrics and Gynaecology

2012-13	Causes	2013-144	2014-15	2015-16	2016-17
3	Haemorrhage	1	2	1	2
4	Eclampsia	3	4	5	3
1	DIC	1	1	2	1
-	Cardiac failure	1	-	1	4
1	Amniotic fluid embolism	1	1	2	1
-	Heart diseae	1	1	-	2
9	Total	8	9	11	13

The cost of prenatal care is modest compared to the expense of managing serious, preventable complications in the mother and fetus. It is clear that prenatal education on danger signals of pregnancy is a cost effective means for improving health of the mother and infant. **(Arulkumaran, 2012)**[7]

A descriptive study conducted at Belgaum in selected hospitals, to evaluate the prenatal care among 100 risk mothers, revealed that they did not receive adequate prenatal care even though they had attended prenatal clinics. They were not informed about simple measure to prevent high risk conditions. This study recommends imparting education to high risk mothers on various aspects of prenatal care and signs of complications. This study also opens an avenue for research on the effect to maternal education for prevention of complications during pregnancy **(Reddy SR, 2014)**[8]

The researcher had seen various kinds or pregnancy associated complications in obstetric department. The women who are all attending

the antenatal outpatient department do not have an adequate knowledge regarding complications of high risk pregnancy. The researcher felt that in order to increase the knowledge and awareness about high risk pregnancy this topic has been selected.

1.2. Statement of the problem:

A Pre-experimental study To Evaluate The Effectiveness Of Structured Teaching Programme on Knowledge Regarding Early Identification Of High Risk Pregnancy Among Antenatal mothers attending at Institute of Obstetrics and Gynaecology,Chennai-08.

1.3. Objectives of the study

1) The assess the knowledge regarding high risk pregnancy among antenatal women

2) To assess the effectiveness of structured teaching programme on knowledge regarding high risk pregnancy among antenatal women.

3) To associate the findings with selected demographic variables and obstetrical variables.

1.4. Operational definitions

Effectiveness- refers to the extent to which the structured teaching programme on high risk pregnancy has achieved the desired effects in improving the knowledge of antenatal women as evident from gain in knowledge scores.

Structured teaching programme- refers to a systematically organized teaching programme for antenatal women to provide information regarding high risk pregnancy.

Knowledge- refers to understanding level of antenatal women regarding high risk pregnancy, as determined by their sources based on their responses.

Antenatal mother- refers to pregnant women between 8-28 weeks or gestational age.

High risk pregnancy- refers to pregnancy which is complicated by conditions such as Anemia, Pre-eclampsia, Gestational diabetes mellitus and Multiple pregnancy that adversely affect the maternal and fetal outcome.

1.5. Assumptions

1) Antenatal mothers have lack of knowledge regarding high risk pregnancy.

2) Structured teaching programme on high risk pregnancy will improve their knowledge and they can prevent further complications.

1.6. Research hypothesis

Antenatal women who receive structured teaching programme on high risk pregnancy will show a significant increase in the level of knowledge in post- test than that in pre-test.

1.7. Delimitations

1) Mother who come for antenatal checkup in antenatal outpatient department at Institute of Obstetrics and Gynaecology.

2) Study period is limited to 4 weeks.

3) Antenatal mothers with gestational age of 8-28 weeks.

CHAPTER-II
REVIEW OF LITERATURE

The material gathered in the literature review should be treated as an integral part of the research data, since what is found in the literature cannot only have an important influence of the problem, but also find the design of the research, and provide useful comparative material when the data collected in the research is analysed.

Literature review is defined as a broad, comprehensive, in depth, systematic and critical review of scholarly publication, unpublished printed audio or visual materials and personal communications. **(Suresh.K Sharma 2015)** [9]

This chapter consists of two parts.

Part I : 2.1 Literature review related to study.

Part II: 2.2 Conceptual framework

2.1. Literature review related to study

This part is divided into two sections.

Section-A

2.1.1 Studies related to identification of high risk pregnancy.

Section -B

2.1.2 Studies related to Anemia.

2.1.3 Studies related to Pregnancy Induced Hypertension.

2.1.4 Studies related to Gestational Diabetes Mellitus.

2.1.5 Studies related to Multiple Pregnancy.

Section-A:

2.1.1 *Studies related to Identification of high risk pregnancy:*

 (Samar k et al., 2014), conducted an exploratory descriptive study aimed to identify profile of high risk pregnancy among Saudi pregnant women in Taif. A convenient sample of two hundreds were included in the study subjects, an interview questionnaire also was used for data collection. The results revealed that 44% of Saudi women with high risk pregnancy and about two-thirds (66%) of them had previous complicated pregnancies and 68.7% of them complained of different medical associated conditions during their current pregnancies such as: anemia (25.3%), gestational diabetes (16.2%), pregnancy induced hypertension (15.2%). 40% of them reported exposure to smoking while 22% exposed to pesticide during their current pregnancies.[10]

 (Dutta S &Das 2012), conducted a descriptive study regarding identification of high risk pregnancy at Srinagar. The study concludes that perinatal mortality rate was 46.1/ 1000 live birth. The perinatal mortality rate in women with no risk factor was 5.02 per 1000 live births, which rose with the level of risk from 27 per 1000 in low risk to 96 in moderate risk to 222 in the high risk group. The women with one or more risk factors were 17.1 times more likely to lose their baby during the perinatal period than those with no risk.[11]

 (Shahzada J Malik 2010), conducted a prospective study to identify the preventable factors in high risk pregnancy in India. Over a period of one year, of total 1,600 deliveries, 1,107 were considered to be at high risk, 33 fetal and 31 early neonatal deaths with an overall perinatal mortality rate of 40/1,000 births. The mortality was higher in mothers who had received inadequate antenatal care or with bad obstetric history.[12]

(Dr.Mahmuda Mubasher 2010), conducted a study to find out prevalence and outcome of high risk pregnancies in Pakistan. The sample was composed of 226 pregnancies. The study shows that high risk pregnancies were 69.5% as compared to 30.5% of low risk category. This indicates high prevalence of high-risk pregnancies in the area. It also shows that 73.24% of females with high-risk pregnancy were illiterate as compared to 62.31% with low risk pregnancy. Literate women were of 26.75% in high-risk pregnancies and of 37.68% in low risk.[13]

(Taehan Kanho 2010) , conducted a descriptive study regarding the identification of high-risk pregnancy, using a simplified risk-scoring system at Chung Ang Medical Center, Korea. This study was based on the 1300 pregnant women. The results of the study show that 560 infants (42.7%) were born to mothers with risk-scores greater than 7, and 753 infants (57.3%) were born to mothers with risk scores less than 7. 2. Maternal age, parity, educational level,demographic factors was significant related statistically to identify the high risk pregnancies.[14]

(Yara Almerie et al.,2010), conducted a prospective study regarding near-miss and maternal mortality in maternity university hospital, Damascus, Syria revealed that there were 28025 deliveries, 15 maternal deaths and 901 near-miss cases. The study showed a MNMR of 32.9/1000 live births, a MMR of 54.8/1000 live births. Hypertensive disorders (52%) and haemorrhages (34%) were the top causes of near-misses.[15]

Section B:

2.1.2 *Studies related to anemia*

(Jimenez K, Lang M.2016) , quoted that anemia affects a fourth of the global population, with iron deficiency being the primary cause. It is associated with diminished work capacity, fatigue, impaired

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cognitive function, and can negatively impact the course of diseases like chronic heart failure or chronic kidney disease.[16]

(Shander A 2014) , stated that anemia means haemoglobin below 13 g/dl in males, 12 g/dl in non-pregnant women, and 11 g/dl in pregnant women. Anemia is prevalent in various patient populations. The detrimental effect of anemia is present in all of this population of patients. [17]

(Breymann C,2015), emphasized a meta-analysis study that anemia is a common problem in obstetrics and perinatal care. Any hemoglobin below10.5 g/dL can be regarded as true anemia regardless of gestational age. Reasons for anemia in pregnancy are mainly nutritional deficiencies, parasitic and bacterial diseases, and inborn red blood cell disorders such as thalassemias. The main cause of anemia in obstetrics is iron deficiency, which has a world wide prevalence between estimated 20%-80% and consists of a primarily female population.[18]

(Rahman MM et al.,2016), conducted a systematic review and meta-analysis on maternal anemia and risk of adverse birth and health outcomes in low- and middle-income countries. Overall, 42.7% (95% CI: 37.0%, 48.4%) of women experienced anemia during pregnancy in low- and middle-income countries. There were significantly higher risks of low birth weight (RR: 1.31; 95% CI: 1.13, 1.51), preterm birth (RR: 1.63; 95% CI: 1.33, 2.01), perinatal mortality (RR: 1.51; 95% CI: 1.30, 1.76), and neonatal mortality (RR: 2.72; 95% CI: 1.19, 6.25) in pregnant women with anemia.[19]

(Burke RM, Leon JS, Suchdev PS 2014), stated that iron deficiency is a global problem across the life course. Maternal iron deficiency during pregnancy can predispose offspring to the development of iron deficiency during infancy, with potentially lifelong sequelae. This review explores iron status throughout these "first 1000

days" from pregnancy through two years of age, covering the role of iron and the epidemiology of iron deficiency. [20]

(De-Regil LM et al.,2015) , conducted all randomised or quasi-randomised trials evaluating the effect of periconceptional folate supplementation alone, or in combination with other vitamins and minerals, in women independent of age and parity. Five trials involving 7391 women (2033 with a history of a pregnancy affected by a NTD and 5358 with no history of NTDs) were included. Four comparisons were made: 1) supplementation with any folate versus no intervention, placebo or other micronutrients without folate (five trials); 2) supplementation with folic acid alone versus no treatment or placebo (one trial); 3) supplementation with folate plus other micronutrients versus other micronutrients without folate (four trials); and 4) supplementation with folate plus other micronutrients versus the same other micronutrients without folate (two trials). Concluded that Folic acid, alone or in combination with vitamins and minerals, prevents NTDs, but does not have a clear effect on other birth defects.[21]

(Taylor S, Rampton D,2015) , conducted a comparative study was on the indications for oral and Intravenous iron therapy. While most patients respond well to oral iron preparations, a substantial minority have side effects that make them adhere poorly to their treatment. For oral iron-intolerant patients, those responding poorly despite good adherence, and those with severe and/or symptomatic anemia, intravenous iron is an excellent alternative. [22]

(Orlov IuP, Lukach VN, Govorova NV.2014), analysed a descriptive study with a modern view of iron exchange in general and during pregnancy. According to a large number of studies assigning to pregnant iron on the one hand, contributes to excessive activation of free radical oxidation, the accumulation of lipid peroxidation products and

demonstrations of eclampsia, and from the other potentiates the bacterial aggression and development of purulent-septic diseases that generally leads to the development of complications in pregnancy.[23]

(Shi Q et al.,2015), made a meta-analysis of randomised controlled trials comparing patients treated with intravenous iron sucrose (intravenous group) with those treated with oral iron (oral group) for IDA during pregnancy was performed. Significant increases in haemoglobin [meandifference (MD), 0.85; 95% confidence interval (CI), 0.31-1.39; p = 0.002] and ferritin levels (MD, 63.32; 95% CI, 39.46-87.18; p < 0.00001) were observed in the intravenous group. Compared with the oral group, there were fewer adverse events in the intravenous group (risk ratio, 0.50; 95% CI, 0.34-0.73; p =0.0003). There was no significant difference in birth weight between the two groups.[24]

(Hlimi T,2015) , adopts a systematic approach to investigate the maternal outcome of anemia and eclampsia in relation to seasonality. A review of 23 published studies, shows a statistically significant link between these maternal disorders and seasonality in developing countries in Sub-Saharan Africa and Central and South Asia. Anemia and eclampsia tend to decrease during the dry season, only to increase with greater rainfall, low and cold temperatures. More research is required to identify the seasonal link between malaria and eclampsia particularly as climate change may exacerbate the rate of the disorders in tropical and sub-tropical areas.[25]

(Kidson-Gerber G et al., 2015), conducted an observational study that demonstrated an association between refusal of blood products in major obstetric haemorrhage and increased morbidity and mortality. This review draws upon evidence in the literature, physiological principles and expert opinion for strategies and guidance to optimise the

outcomes of pregnant women in whom blood transfusion is either refused or impossible. The importance of a multidisciplinary antenatal and perinatal management plan, including optimisation of haemoglobin and iron stores pre-delivery, blood loss minimisation, early haemorrhage control and postpartum anaemia treatment, is discussed.[26]

(*Rukuni R 2015*), conducted a study to appraise whether a national screening programme could reduce the prevalence of iron deficiency anaemia and/or iron deficiency in pregnancy and improve maternal and fetal outcomes. Many studies evaluated haematological outcomes of anaemia, but few analysed clinical consequences. Haemoglobin and ferritin appeared the most suitable screening tests, although future options may follow recent advances in understanding iron homeostasis. The clinical consequences of iron deficiency without anaemia are unknown. Oral and intravenous iron are effective in improving haemoglobin and iron parameters. There have been no trials or economic evaluations of a national screening programme for iron deficiency anaemia in pregnancy.[27]

2.1.3 Studies related to pre-eclampsia

(*Dhariwal NK, Lynde GC, 2017*), quoted that hypertensive disorders of pregnancy complicate approximately 10% of all deliveries in the United States and are a leading cause of maternal and fetal morbidity and mortality. Preeclampsia is defined as hypertension in association with proteinuria, thrombocytopenia, impaired liver function, renal insufficiency, pulmonary edema, or new-onset cerebral or visual disturbances.[28]

(*Spradley FT, Palei AC, Granger JP, 2015*), made a systemic review summarized the current experimental evidence supporting the concept that obesity and metabolic factors like lipids, insulin, glucose, and leptin affect placental function and increase the risk for developing

hypertension in pregnancy by reducing placental perfusion; enhancing placental release of soluble factors; and by increasing the sensitivity of the maternal vasculature to placental ischemia-induced soluable factors.[29]

(Singh MD et al., 2015), researched a systematic search strategy to identify citations in electronic databases for the following terms: folic acid supplementation AND pre-eclampsia, folic acid supplementation AND genome stability, folate AND genome stability AND pre-eclampsia, folic acid supplementation AND DNA methylation, and folate AND DNA methylation AND pre-eclampsia. Forty-three articles were selected according to predefined selection criteria. The present review highlights associations between folate deficiency and certain biomarkers observed in various tissues of women at risk of pre-eclampsia.[30]

(Mudaliar and Menon 2015) **,** revealed that Pregnancy induced hypertension is defined as hypertension that develops for the first time in pregnancy after 20 weeks of gestation .Hypertension has been defined as blood pressure of 140/90 mm of Hg or greater, on at least two occasions, four to six hours apart.[31]

(Cormick G et al., 2016), assessed the risk of recurrent pre-eclampsia in the immediate subsequent pregnancy according to different birth intervals. Meta-analysis of adjusted odds ratios (aOR) with 95 % confidence intervals (CI) was used to measure the association between various interval lengths and recurrent pre-eclampsia or eclampsia. We identified 1769 articles and finally included four studies with a total of 77,561 women. The meta-analysis of two studies showed that compared to inter-pregnancy intervals of 2-4 years, the aOR for recurrent pre-eclampsia was 1.01 [95 % CI 0.95 to 1.07, I(2) 0 %] with

intervals of less than 2 years and 1.10 [95 % CI 1.02 to 1.19, I(2) 0 %] with intervals longer than 4 years.[32]

(Vigil-De Gracia P, Ludmir J 2015) , made a randomized controlled trials comparing anticonvulsants with placebo or no anticonvulsant for prevention (a) of eclampsia in women with severe preeclampsia diagnosed during the postpartum period or diagnosed before delivery but without previous treatment and (b) prevention of seizures recurrence in women with eclampsia postpartum. There was no clear difference between the groups reporting eclampsia (relative risk: 0.54, 95% confidence interval: 0.16-1.80). For seizure recurrence, magnesium sulfate was superior to diazepam, but there was no significant difference compared with phenytoin. No conclusion can be drawn on the role of magnesium sulfate post partum as established in antepartum pre-eclampsia/eclampsia management because of lack of powered randomised controlled trials.[33]

(Brown CM, Garovic VD 2014), conducted study that compared and contrasted the recommendations from different treatment guidelines and outlined some newer perspectives on management, aims to provide a clinically oriented guide to the drug treatment of hypertension in pregnancy. A recent report highlighted hypertensive disorders as one of the major causes of pregnancy-related maternal deaths in the USA, accounting for 579 (12.3 %) of the 4,693 maternal deaths that occurred between 1998 and 2005. In low-income and middle-income countries, preeclampsia and its convulsive form, eclampsia, are associated with 10-15 % of direct maternal deaths. [34]

(Meher S et al., 2017), researched a meta-analysis of individual participant data including 32,217 women and 32,819 babies recruited to 31 randomized trials comparing low-dose aspirin or other antiplatelet agents with placebo or no treatment for the prevention of preeclampsia.

There was no significant difference in the effects of antiplatelet therapy for women randomized before 16 weeks' gestation compared with those randomized at or after 16 weeks for any of the prespecified outcomes.[35]

2.1.4 Studies related to gestational diabetes mellitus

*(Taschereau-Charron A et al., 2017),*conducted a comparative study to compare FA profiles in different blood lipid fractions and the influence of dietary fat intake in women with GDM or normoglycemic pregnancies. Results show that women with GDM have more saturated and less polyunsaturated FA (PUFA) in their red blood cell (RBC) membranes than normoglycemic pregnant women. Further research is required to determine whether FA profiles are altered prior to the diagnosis of GDM and can be prevented by diet.[36]

(Rozenberg P, 2016), conducted a randomized control trial was for induction of labour and expectant management in macrosomic babies.The mean birth weight (±SD) was 3831 (±324) g in the induction group 4118(±392) g in the expectant group. Induction of labor significantly reduced the risk of shoulder dystocia or associated morbidity (8/407; 2 %) compared with expectant management (25/411; 6 %); P=0.004.[37]

(Harrison AL et al., 2016),conducted a randomised trials in Pregnant women diagnosed with gestational diabetes mellitus. This systematic review identified eight randomised, controlled trials involving 588 participants; seven trials (544 participants) had data that were suitable for meta-analysis. Five trials scored ≥ 6 on the PED scale, indicating a relatively low risk of bias. Meta-analysis showed that exercise, as an adjunct to standard care, significantly improved postprandial glycaemic control (MD-0.33mmol/L, 95% CI -0.49 to -0.17) and lowered fasting blood glucose (MD -0.31mmol/L, 95% CI -

0.56 to -0.05) when compared with standard care alone, with no increase in adverse events.[38]

(McCance DR, 2013), made a randomised trials have offered new insight of hyperglycaemia to adverse pregnancy outcome was clearly demonstrated by the Hyperglycaemia and Adverse Pregnancy Outcome (HAPO) study, but translation of these data into clinical practice has proved challenging because of the continuum of risk. Long-term metabolic and cardiovascular implications of hyperglycaemia during pregnancy for mother and child are now generally recognised with major implications for public health.[39]

(Valentina Palkova, 2011), conducted a quasi experimental study to assess the effectiveness of an educational program on gestational diabetes mellitus was done among 30 patients with mild GDM and between 19 and 41 years of age. The women were divided into two groups-for group 1 (n=15) education was given group II (n=15) was considered as control group. One month educational programmed was conducted. The clinical data and metabolic control for the two groups were evaluated. Group I showed better improvement in comparison with Group II, and also mild improvement in the blood glucose level. The results proved that the educational approach has the patients to improve patient's quality of life.[40]

Tieu J et al., (2011), analysed a randomised controlled trials (RCTs) and quasi-RCTs to assess the effects of dietary advice interventions compared with no intervention (standard care), or to different dietary advice interventions. Very low-quality evidence from five trials suggests a possible reduction in GDM risk for women receiving dietary advice versus standard care, and low-quality evidence from four trials suggests no clear difference for women receiving low- versus moderate- to high-GI dietary advice. A possible reduction in

pregnancy-induced hypertension for women receiving dietary advice was observed and no clear differences were seen for other reported primary outcomes.[41]

Farrar D et al (2016), conducted a systematic review and meta-analysis on hyperglycaemia and risk of adverse perinatal outcomes. the odd ratios is large for gestational age per 1 mmol/L increase of fasting and two hour post-load glucose concentrations (after a 75 g OGTT) were 2.15 (95% confidence interval 1.60 to 2.91) and 1.20 (1.13 to 1.28), respectively. This review and meta-analysis identified a large number of studies in various countries. There was a graded linear association between fasting and post-load glucose concentration across the whole glucose distribution and most adverse perinatal outcomes in women without pre-existing or gestational diabetes.[42]

2.1.5 Studies related to multiple pregnancy

(Moldenhauer JS, Johnson MP, 2015) , quoted that although monochorionic (MC) twins comprise only 20% of all twin pregnancies, the risk for fetal loss and long-term morbidity is significantly higher than dichorionic twins due to the presence of placental vascular anastomoses.[43]

(Tran et al., 2015), conducted a study on delayed- interval delivery in multifoetal pregnancy. Among 18 relevant cohort studies 391 twin and 39 triplet pregnancies could be analyzed. In case of delayed delivery, the survival rate of the second twin or higher order multiple was respectively 44.8% and 82.7% when the first twin was born before or after 24 weeks of gestation. The later was the delivery of the first twin, the higher was the second twin's survival rate, but the shorter was the interval between births(14 Vs 26 days).[44]

(Joshua, p. Vogel, 2013), conducted multilevel logistic regression to determine the association between twins and adverse maternal and

perinatal outcomes.279.425 mothers gave birth to 276,187(98.8%) singletons and 6,476(1.2%) twins. Odds of severe adverse maternal outcomes (Death, blood transfusion, ICU admission or hysterectomy) (AOR 1.85, 95% CI 1.60-2.14) and perinatal mortality (AOR 2.46, 65% CI 1.40-4.35) in twin pregnancies were higher, however early neonatal deaths didn't reach significance. [45]

(Lee, K.E,2012) , conducted a study to develop a greater understanding of the grief parents of a multi-fetal pregnancy experience when one or more of their infants are lost either prior to delivery or in the neonatal period. Recommendations are put forth as to how the NICU nurse can provide care for bereaved parents of multiples as aligned with the human science paradigm of nursing. [46]

(Richards, J et al.,2015), carried out a qualitative study with mothers who had experienced a loss in pregnancy or the neonatal period and had a surviving twin on the neonatal unit. The analysis identified three key themes in the accounts mothers gave of their experiences: the status of 'special'; the importance of trust; and control and empowerment. Where the surviving co-twin remained in hospital for many weeks, mothers described the emotional support of health professionals as crucial to their wellbeing.[47]

(Whitford HM et al., 2017), made a quasi-randomised trial to assess effectiveness of breastfeeding education and support the women with twins or higher order multiples. We searched the Cochrane Pregnancy and Childbirth Group's Trials Register (30 June 2016), ClinicalTrials.gov (30 June 2016), We found no evidence from randomised controlled trials about the effectiveness of breastfeeding education and support for women with twins or higher order multiples, or the most effective way to provide education and support . [48]

(Kushnir VA et al., 2017) , conducted a Systematic review of worldwide trends in assisted reproductive technology . SETs and utilization of frozen-thawed embryos increased worldwide over the study period. In 2012 SET utilization in all ART cycles was highest in Japan and Australia/New Zealand (82.6% and 76.3% respectively) and lowest in Latin America (16.0%). [49]

(Lumbiganon P et al., 2016), analysed all identified published, unpublished and ongoing randomised controlled trials (RCTs) assessing the effect of formal antenatal breast feeding education or comparing two different methods of formal antenatal breast feeding education, on the duration of BF. Assessed all potential studies identified as there was no conclusive evidence supporting any antenatal BF education for improving initiation of BF, proportion of women giving any BF or exclusively BF at three or six months or the duration of BF. There is an urgent need to conduct a high-quality, randomised controlled study to evaluate the effectiveness and adverse effects of antenatal BF education, especially in low- and middle-income countries. [50]

(Moore ER et al., 2016), emphasized a randomized controlled trial that compared immediate or early Skin to Skin Contact with usual hospital care. Quality of the evidence was assessed using the GRADE approach. Evidence supports the use of SSC to promote breastfeeding. Studies with larger sample sizes are necessary to confirm physiological benefit for infants during transition to extra-uterine life and to establish possible dose-response effects and optimal initiation time. Methodological quality of trials remains problematic, and small trials reporting different outcomes with different scales and limited data limit our confidence in the benefits of SSC for infants. [51]

2.2. Conceptual frame work

A conceptual framework deals with abstraction, which is assembled by nature of their relevance to a common theme. It describes the mental image of phenomenon and integrates them into a meaningful configuration. It is a visual diagram by which the researcher explains the specific area of interest.

The study was aimed at determining the effectiveness of structured teaching programme on knowledge regarding early identification of high risk pregnancy among antenatal women.

The investigator adopted "Modified Pender's Health Promotion Model (1984)

The model focuses on aspects of individuals configuration to perceptional factors, modifying factors and participation on health promoting behavior. The model also identifies factors that influence health promotion activities.

The Model focuses on the following areas :

1)   Cognitive perceptual factors

2)   Perceived health status

3)   Health promoting services

4)   Perceived benefits of health promotions

5)   Barriers to health promoting behavior

Cognitive perceptual factors

In this modified model, the investigator finds out the cognitive perceptual factors of antenatal women on high risk pregnancy. The investigator assessed their knowledge regarding the causes, signs and

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symptoms, prevention, management and complications and high risk pregnancy by using structured questionnaire.

Perceived health status

The antenatal women have inadequate knowledge regarding early identification of high risk pregnancy and such women should undergo the next step that involves health promoting services.

Health promoting services

Structured teaching programme on high risk pregnancy is given as health promoting service to the antenatal women irrespective of their knowledge.

Perceived benefits of health promotion

Health promoting behavior is the desired behavioral outcome. In this study health promoting behavior developed by the teaching programme will result in improved knowledge on high risk pregnancy among antenatal women.

Barrier to health promoting behavior

In this study, if the antenatal women have inadequate knowledge on high risk pregnancy, reassessment of the antenatal women knowledge has to be done. But it is not included in this study.

CHAPTER-III
RESEARCH METHODOLOGY

Introduction

Methodology is the most important part of any research study, which enables the researcher to form a blue print for the study undertaken. This chapter deals with the methodology related to evaluate the effectiveness of Structured Teaching Programme on knowledge regarding early identification of high risk pregnancy among antenatal mothers attending at Institute of Obstetrics and Gynaecology,Chennai-08.

3.1. Research approach

Research approach involves the description of the plan to investigate the phenomenon under study in a structured, unstructured or a combination of the two methods. For this research study the investigator selects the quantitative research approach.

3.2. Study design

Research design incorporates the most important methodology called decisions that the researcher make in conducting a research study. It helps the researcher in the selection of subjects and the manipulation of independent variables to be studied.

The investigator proposed Pre- experimental research design for this Study.

In pre-experimental research design one group pre-test post-test design was used.

Pre Test	Structured Teaching Programme	Post Test
O1	X	O2

In the present study pretest is administered by means of structured questionnaire and then planned teaching programme will be provided to the group .Post test will be conducted by using the same structured questionnaire.

$O_{1=}$ Assess the pretest level of knowledge regarding Early identification of High risk pregnancy among antenatal mothers.

X= Structured Teaching Programme on Early identification of High risk pregnancy.

O_2= Assess the posttest level of knowledge among the same group, one week after STP.

3.3. Setting of the study

The study was conducted in Institute of Obstetrics and Gynaecology and Government Hospital for Women and Children, Chennai. This hospital was started in the year 1844 for public service. It is a 1075 bedded maternity hospital, tertiary care centre and referral centre. The hospital is renowned for its excellence in medical experts, nursing care and quality diagnostic services. All facilities are provided for conducting normal, high risk and instrumental deliveries. IOG has departments like neonatal intensive care unit, family planning services, oncology department, endocrinology, human milk bank and genetic department which are rendering comprehensive care for entire Tamilnadu and for neighboring state like Andhra Pradesh also.

3.4. Duration of the study

The study was conducted for a period of 4 weeks from 20.11.16 to 18.12.2016.

3.5. Study population

Population is the aggregation of all the unit in which the researcher is interested.

All antenatal mothers attending antenatal outpatient Department are the population for my study.

3.5.1 Target population

A target population consists of the total number of people or objects which are meeting the designated set of criteria.

Antenatal mothers who are in 8-28 weeks of pregnancy are target population of this study.

3.5.2 Accessible population

It is the aggregate of cases that conform to designated criteria and also accessible as study subjects for study.

Antenatal mothers between 8-28 weeks and who have attended Antenatal Outpatient Department during the data collection period are the accessible population for this study.

3.6. Sample

The sample comprised of all antenatal women with gestational age of 8-28 weeks, and who met the inclusion criteria .

3.7.Sampling criterion

The researcher specified certain inclusion and exclusion characteristics for the population to be considered as a sample. Accordingly the population was studied and those come under inclusion were selected as the sample and the other elements were excluded from the study.

3.7.1. Inclusion criteria

❖   Antenatal women with gestational age of 8-28 weeks.

❖   Antenatal women who attended antenatal outpatient department..

❖   Antenatal women who are willing to participate.

❖   Antenatal women who can able to read and speak Tamil and or English.

3.7.2. Exclusion criteria

❖   Antenatal women who have visual and hearing impairment.

❖   Antenatal women with mental illness.

❖   Antenatal women having related obstetrical complications like severe Anemia, Pre- eclampsia, Gestational Diabetes Mellitus, and Multiple pregnancy.

3.8. Sample size

Sample size of the study is 60.

3.9. Sampling technique

Purposive sampling technique was adopted for this study.

3.10. Research variables

Variables are concept at different levels of abstraction that are concisely defined to promote their measurement and manipulation within the study.

3.10.1 . Independent variable

Structured Teaching Programme on knowledge regarding high risk pregnancy is the independent variable of the study.

3.10.2. Dependent variable

Knowledge of antenatal mother is the dependent variable of the study.

3.10.3 . Influencing variable

Age, education, occupation, type of family, age at marriage, and obstetrical score of antenatal mother is the influencing variable.

3.11. DEVELOPMENT AND DESCRIPTION OF TOOL

3.11.1 development of tool

A structured questionnaire was developed on the basis of objectives of the study. Tool was developed after extensive review of literature from various text books, journals, internet search and discussion and guidance from the experts in the field of Nursing, and medical experts from the Institute of Obstetrics and Gynaecology. The tool was developed in English and translated into Tamil. Congruency was maintained in translation.

3.11.2 . Description of the tool

The tool consists of three section.

Section-A

It consists of demographic variables of the sample such as age, religion, type of family, education, occupation and family monthly income.

Section-B

It consists of obstetrical variables of the sample such as age at marriage, last menstrual period, expected date of delivery, obstetrical score, age during first child birth and pre- pregnant health status.

Section-C

Structured questionnaire is to assess the knowledge of antenatal women regarding high risk pregnancy. It consists of 30 multiple choice questions regarding high pregnancy. It consists of Part A,B ,C and D.Part A and B each consists of 8 questions and part C and D each consists of 7 questions.

Part A: Questions related to anemia

Part B: Questions related to Pre-eclampsia

Part C: Questions related to gestational diabetes mellitus

Part D: Questions related to multiple pregnancy

Scoring key

Each correct answer carries – One Mark

Each wrong answer carries – Zero Mark

<50% - Inadequate knowledge

51-75%- Moderately adequate knowledge

76-100% - Adequate knowledge

3.11.3 Teaching Module

The teaching module was developed by literature review and by obtaining expert's opinion. The aid used for this study was a booklet on high risk pregnancy. The structured teaching programme consists of introduction, definition, causes, signs and symptoms, preventive measures, management and complications of high risk pregnancy. The method of teaching programme will be given by lecture cum discussion.

3.12. Content validity

Validity of the tool was assessed using content validity. Content validity was determined by experts from Nursing and Medical. They suggested certain modifications in tool. After the modifications, they agreed this tool to evaluate the effectiveness of Structured Teaching Programme on knowledge regarding early identification of High risk pregnancy among antenatal mothers attending at Institute of Obstetrics and gynaecology, Chennai.

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3.13. Protection of human subjects

Following submission of study proposal, the permission was obtained from Institutional Ethics committee. Permission for conducting the study was obtained from the Director of Institute of Obstetrics & gynaecology and Hospital for Women and Children. Thus the investigator followed the guidelines which were issued by the Institutional Ethics committee. Confidentiality of the results and anonymity will be assured to the subjects. Throughout the study period the respect of the mother and the family members will be maintained. The participants, were assured that at anytime they can withdraw from the study.

3.14. Reliability of the tool

Reliability of the tool was assessed by using Test-retest method and its correlation coefficient r value was 0.84. This correlation coefficient is very high and it is a good tool to evaluate the effectiveness of Structured Teaching Programme on knowledge regarding early identification of High risk pregnancy among antenatal mothers attending at Institute of Obstetrics and gynaecology, Chennai.

3.15. Pilot study

Pilot study is a trial run for the major study to test the reliability, practicability, appropriateness and flexibility of the tool for the study. The investigator conducted a pilot study with 10 samples in Institute of Obstetrics and Gynaecology, Egmore. The data was analysed by using descriptive statistics that is percentage, mean and standard deviation of the variables and were calculated and compared. In the pilot study the researcher had no difficulties and the study was found to be feasible and practicable. The investigator proceeded for the main study.

3.16. Data collection procedure

The study was conducted in Antenatal outpatient department, after obtaining permission from the Director of IOG. Before the data collection, the researcher introduced herself, explained the purpose of the study to the OPD staff nurse and antenatal mothers between the 8-28 weeks of gestational age. The confidentiality was assured and consent was obtained from the participants. Three to five participants were selected every day and assured that at anytime they can withdraw from the study.

Data collection was done using questionnaire method. In pretest the researcher administered structured questionnaire to each participant to assess the knowledge of antenatal women on high risk pregnancy. The subjects took 20-30 minutes to answer the questionnaire by interview method. After that a structured teaching programme was conducted on the same day approximately for 30 minutes per subject and booklets were provided. After that the researcher clarified many doubts asked by the participants regarding my study and also in general, according to the need of each participant. Then each mother was thanked and instructed to come on seventh day after the pretest. The researcher had given a reminder through phone on previous day. Post test was conducted after one week by using the same questionnaire to find out the effectiveness of teaching programme. The data collection process was terminated after thanking the participants for their co-operation. After collecting the posttest questionnaire, every now and then, coding sheet were entered.

The data collection period was 4 weeks.(20.11.16 to 18.12.2016). Data was collected for 6 days in a week.

3.17. Intervention protocol

Place   : Antenatal OPD, IOG, Chennai.

Intervention tool   : Lecture cum discussion

Duration   : 30 minutes

Frequency   : One-time teaching

Time   : 7am-1pm

3.18. Data entry analysis

The obtained data were analyzed on the basis of objectives and hypothesis by using the descriptive and inferential statistics.

1)   Organize the data.

2)   Descriptive statistics was used to analyse the frequency,percentage, mean and standard deviation of the following variables.

    a. Demographic variables were analysed in terms of   frequency and percentage.

    b. Obstetrical variables were analysed in terms of frequency and percentage.

    c. Knowledge on high risk pregnancy among antenatal women before and after administration of structured teaching programme was analysed in terms of frequency, percentage and standard deviation.

3)   Inferential statistics was used to determine the comparison and association.

a. Difference between pre-test and post-test was calculated using McNemars test.

b. Paired 't' test was used to find out the effectiveness of structured teaching programme by comparing the pre-test and post- test knowledge scores.

c. Chi-square was used to associate the knowledge with selected demographic and obstetrical variables.

4) P<0.05 was considered statistically significant.

CHAPTER-IV
DATA ANALYSIS AND INTERPRETATION

Analysis is categorizing, ordering, manipulation and summarizing of data to obtain the answers for hypothesis.

This chapter deals with the analysis and interpretation of data collected from 60 antenatal mothers between the gestational age of 8-28 weeks at Institute of Obstetrics and Gynaecology, Egmore, to evaluate the effectiveness of structured teaching programme on high risk pregnancy.

The purpose of analysis was to reduce the collected data to an intelligible and interpretable form so that the relation of the research problem can be studied and tested.

The collected data was analyzed by using descriptive and inferential statistics.

Organization of data

Section-A: Demographic and Obstetric information of antenatal mothers those who participated in the study.

Section-B: Assess the pre-test knowledge regarding high risk pregnancy in the study group.

Section-C: Assess the post-test knowledge regarding high risk pregnancy in the study group.

Section-D: Evaluating the effectiveness of structured teaching programme on knowledge regarding high risk pregnancy in the study group.

Section-E: Association of findings with selected demographic and Obstetric variables.

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Statistical analysis

1) Demographic variables in categorical/ dichotomous were given in frequencies with their percentage.

2) Knowledge score was given in mean and standard deviation.

3) Difference between pre-test and post-test was analysed using student paired t-test.

4) Categorical variables difference between pre-test and post-test was calculated using McNemars test.

5) Differences between pre-test and post-test score was analysed using percentage with 95% CI and mean difference with 95% CI.

6) Association between post-test knowledge score with demographic variables are analysed using Chi-square test.

7) Association between knowledge gain score with demographic variables are analysed using oneway analysis of variance and student independent t-test.

8) $P<0.05$ was considered statistically significant.

Section-A : Demographic and obstetric information of antenatal mothers those who participated in the study

Table-4.1:Demographic and Obstetrical profile in the study group:

Demographic variables		Antenatal women	%
Age	< 20 years	1	1.7%
	20 -28 years	50	83.3%
	> 28 years	9	15.0%
Religion	Hindu	54	90.0%
	Muslim	3	5.0%
	Christian	3	5.0%
Family type	Nuclear family	24	40.0%
	Joint family	36	60.0%
Education	Elementary education	13	21.7%
	Middle education	11	18.3%
	Higher secondary education	22	36.7%
	Graduate	14	23.3%
Job	Home maker	54	90.0%
	Government job	1	1.7%
	Private job	2	3.3%
	Self job	3	5.0%
Income	< Rs.10000	37	61.7%
	Rs.10001 -20000	23	38.3%
Age at marriage	< 20 years	19	31.7%
	21 -25 years	33	55.0%
	> 25 years	8	13.3%
Gravida	Primi	32	53.3%
	Multi	28	46.7%

Table 4.1 shows the demographic and obstetrical information of antenatal mothers who are participated in the study.

In considering the **age** wise distribution of antenatal mothers,83.3% were 20-28 years of age, 15% were in more than 28 years of age group, and remaining 1.7% belongs to less than 20 years of age.

In the **religion** wise distribution , 90% are Hindus , 5% belongs to Christian religion and remaining 5% are of in Muslim religion.

In considering the **family type**, 60% are in joint family and remaining 40% belongs to nuclear family.

In **education** wise distribution, 36.7% (22)   had Higher secondary education, 23.3% (14) were graduates, 21.7%(13) had elementary education and 18.3%(11) were of middle education status.

In considering the **job**, 90%(54) of them were home makers, 5%(3), of them had self job, and 3.3%(2) of them were working in private sector and only 1.7%(1) in Government jobs.

In the **monthly income** status, 61.1%(37) family monthly income was below Rs.10,000 and remaining 38.8%(23) monthly income was Rs. 10001-20000.

In considering the Obstetrical variables, in **age at marriage**, 55% (55) were married at the age of 21-25 years, and 31.7%((19) were married at the age of below 20 years and remaining 13.3%(8) were married at more than 25 years of age.

In **gravida**, 53.3%(32) were primi and remaining 46.7%(28) were multi.

Section-B : Assess the pre-test knowledge regarding high risk pregnancy in the study group.

Table-4.2: Percentage of pre-test knowledge score in the study group:

		Mean	SD	% of knowledge
Anemia	8	3.35	1.89	41.9%
Pre-eclampsia	8	3.10	1.66	38.8%
Gestational Diabetes Mellitus	7	2.57	1.81	36.7%
Multiple pregnancy	7	2.45	1.73	35.0%
Total	30	11.47	4.64	38.2%

Table 4.2 represents the percentage of pretest knowledge score each domain wise. They are having more score in anemia(41.9%) , and moderate score of 38.8% in pre-eclampsia and 36.7% in gestational diabetes mellitus, and minimum score in multiple pregnancy(35.0%) Overall they are having 38.2% of score.

Table 4.3: Pre-test level of knowledge score in the study group:

Level of knowledge	No. of antenatal women	%
Inadequate	46	76.7%
Moderate	14	23.3%
Adequate	0	0.0%
Total	60	100%

Table 4.3 shows the level of pretest knowledge regarding early identification of high risk pregnancy among antenatal women before administration of structured teaching programme. 76.7%(46) of the antenatal women had inadequate knowledge score, 23.3%(14) of them had moderate knowledge score, and none of them are having adequate level of knowledge score.

Section-C: Assess the post-test knowledge regarding high risk pregnancy in the study group.

Table-4.4: Percentage of post-test knowledge score in the study group:

		Mean	SD	% of knowledge
Anemia	8	6.78	1.01	84.8%
Pre-eclampsia	8	6.52	.97	81.5%
Gestational Diabetes Mellitus	7	5.93	.86	84.7%
Multiple pregnancy	7	5.80	.88	82.9%
Total	30	25.03	2.22	83.4%

Table 4.4 shows each domain wise post-test percentage of knowledge score regarding early identification of high risk pregnancy among antenatal women. They are having more score in anemia(84.8%), and minimum score in preeclampsia(81.5%), score in gestational diabetes mellitus(84.7%), and score in multiple pregnancy (82.9%). Overall they are having 83.4% of score.

Table 4.5: Post-test level of knowledge score in the study group:

Level of knowledge	No. of antenatal women	%
Inadequate	0	0.0%
Moderate	13	21.6%
Adequate	47	78.4%
Total	60	100%

Table 4.5 represents the level of posttest knowledge regarding early identification of high risk pregnancy among antenatal women after administration of structured teaching programme. 78.4%(47) of them are having adequate level of knowledge score , 21.6%(13) of them are having moderate knowledge score, None of the antenatal women are having inadequate knowledge score.

Section-D : Evaluating the effectiveness of structured teaching programme on knowledge regarding high risk pregnancy in the study group.

Table-4.6: Comparison of pre and post-test knowledge score on high risk pregnancy:

	Knowledge score				Mean Difference	Student's paired t-test
	Pre-test		Post-test			
	Mean	SD	Mean	SD		
Anemia	3.35	1.89	6.78	1.01	3.43	t=12.41, P=0.001*** significant
Pre-eclampsia	3.10	1.66	6.52	.97	3.42	t=16.05, P=0.001*** significant
Gestational Diabetes Mellitus	2.57	1.81	5.93	.86	3.37	t=15.01 P=0.001*** significant
Multiple pregnancy	2.45	1.73	5.80	.88	3.35	t=14.25, P=0.001*** significant

* significant at P≤0.05

** highly significant at P≤0.01

*** very highly significant at   P≤0.001.

Table 4.6 shows comparison of Pretest and Posttest mean knowledge score.

Considering anemia aspects, in pretest antenatal mothers are having 3.45 score where as in posttest they are having 6.78 score, so the difference is 3.43. This difference between pretest and posttest is large and is statistically significant.

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Considering preeclampsia aspects, in pre-test antenatal mothers are having 3.10 score where as in posttest they are having 6.52 score, so the difference is 3.42. This difference between pretest and posttest is large and it is statistically significant.

Considering Gestational Diabetes Mellitus aspects, in pretest, antenatal mothers are having 2.57 score where as in posttest they are having 5.93, so the difference is 3.37.This difference between pretest and posttest is large and it is statistically significant.

Considering Multiple Pregnancy aspects,in pretest antenatal mothers are having 2.45 score where as in posttest they are having 5.80 score, so the difference is 3.35. This difference between pretest and posttest is large and it is statistically significant.

Statistical significance was calculated by using student's paired 't' test.

Table-4.7: Comparison of overall pre and post-test knowledge score on high risk pregnancy:

	No. of antenatal women	Knowledge score Mean ± SD	Mean Difference	Student's paired t-test
Pretest	60	11.47±4.64	13.57	t=21.88 P=0.001*** significant
Posttest	60	25.03±2.22		

* significant at P≤0.05

** highly significant at P≤0.01

*** very highly significant at P≤0.001

Table 4.7 represents the comparison of overall pretest and posttest knowledge score. Considering overall knowledge score, in pretest antenatal women are having 11.47 score where as in posttest they are having 25.03, so the difference is 13.57.The difference between pre-test and post-test score is large and it is statistically significant. Differences between pretest and posttest score was analysed using students paired 't' test

Table4. 8: Pre-test and post-test level of knowledge score in the study group:

	Level of knowledge				Extended McNemar's test
	Pre-test		Post-test		
	N	%	n	%	
Inadequate	46	76.7%	0	0.0%	χ2=53.83 p=0.001*** DF= 2 significant
Moderate	14	13.3%	13	21.6%	
Adequate	0	0.0%	47	78.4%	
Total	60	100%	60	100%	

* significant at P≤0.05

** highly significant at P≤0.01

*** very highly significant at   P≤0.001

Table 4.8 shows the pre-test and post-test level of knowledge score regarding early identification of high risk pregnancy among antenatal women, before and after administration of Structured Teaching Programme. In pretest, 76.7% of antenatal   women are having inadequate knowledge score, 13.3%   of them are having moderate knowledge score, none of them   are having adequate level of knowledge score.

In posttest, none of the antenatal women are having inadequate knowledge score, 21.6% of them are having moderate knowledge score, 78.4% of them are having adequate level of knowledge score.

Statistically there is a significant difference between pretest and posttest   knowledge score. It was confirmed using   extended McNemar's test.

Table-4.9: Percentage of knowledge gain score on high risk pregnancy:

	Max score	knowledge score Mean ± SD	Mean Difference in score with 95% Confidence interval	Percentage of gain score with 95% Confidence interval
Pretest	30	11.47±4.64	13.57(12.33 – 14.81)	45.2%(41.1% – 49.4%)
Posttest	30	25.03±2.22		

Table 4.9 shows the comparison of overall knowledge score between pretest and posttest. On an average, in posttest, antenatal women gained 45.2% of knowledge score after having Structured Teaching Programme regarding early identification of high risk pregnancy. Differences between pretest and posttest score was analysed using proportion with 95% confidence interval and mean difference with 95% confidence interval. This 42.5% of knowledge gains shows the effectiveness of Structured Teaching programme on early identification of high risk pregnancy among antenatal women.

Table-4.10: Effectiveness of structured teaching programme on high risk pregnancy:

Domains	Pre-test Knowledge	Post-test Knowledge	% of knowledge Gain
Anemia	41.9%	84.8%	42.9%
Pre-eclampsia	38.8%	81.5%	42.7%
Gestational Diabetes Mellitus	36.7%	84.7%	48.0%
Multiple pregnancy	35.0%	82.9%	47.9%
Overall	38.2%	83.4%	45.2%

Table 4.10 represents each domain wise percentage of knowledge gain. 42.9% of knowledge gain anemia aspects, 42.7% knowledge gain in preeclampsia aspects, and 48% knowledge gain in Gestational diabetes mellitus and 47.9% of knowledge gain in Multiple pregnancy aspect. Overall they gained 45.2% of knowledge score when comparing pretest and posttest after having STP. This shows the effectiveness of STP on knowledge regarding high risk pregnancy among antenatal women.

Section-E: Association of findings with selected demographic and obstetric variables.

Table4. 11: Association between pretest level of knowledge score with demographic and obstetrical variables:

Demographic variables		Pretest level of knowledge				Total	Chi square test
		Inadequate		Moderate			
		n	%	n	%		
Age	< 20 years	1	100.0%	0	0.0%	1	χ2=2.85 P=0.24 DF=2 NS
	20 -28 years	40	80.0%	8	20.0%	50	
	> 28 years	5	55.6%	4	44.4%	9	
Religion	Hindu	41	75.9%	13	24.1%	54	χ2=1.09 P=0.57 DF=2 NS
	Muslim	3	100.0%	0	0.0%	3	
	Christian	2	66.7%	1	33.3%	3	
Family type	Nuclear family	19	79.2%	5	20.8%	24	χ2=0.14 P=0.71 DF=1 NS
	Joint family	27	75.0%	9	25.0%	36	
Education	Elementary education	10	76.9%	3	23.3%	13	χ2=0.92 P=0.81 DF=3 NS
	Middle education	8	72.7%	3	27.3%	11	
	Higher secondary education	16	72.7%	6	23.3%	22	
	Graduate	12	85.7%	2	14.3%	14	
Job	Home maker	41	75.9%	13	24.1%	54	χ2=1.09 P=0.78 DF=3NS
	Government job	1	100.0%	0	0.0%	1	
	Private job	2	100.0%	0	0.0%	2	
	Self job	2	66.7%	1	33.3%	3	

Demographic variables		Pretest level of knowledge				Total	Chi square test
		Inadequate		Moderate			
		n	%	n	%		
Income	< Rs.10000	28	75.7%	9	24.3%	37	$\chi2=0.06$ P=0.82 DF=1 NS
	Rs.10001 - 20000	18	78.3%	5	21.7%	23	
Age at marriage	< 20 years	13	68.4%	6	31.6%	19	$\chi2=1.33$ P=0.51 DF=2 NS
	21 -25 years	26	78.8%	7	21.2%	33	
	> 25 years	7	87.5%	1	12.5%	8	
Gravida	Primi	27	84.4%	5	15.6%	32	$\chi2=2.27$ P=0.13 DF=1 NS
	Multi	19	67.9%	9	32.1%	28	

* significant at P≤0.05

** highly significant at P≤0.01

*** very highly significant at   P≤0.001

Table 4.11 shows the association between pretest level of knowledge score with clients demographic variables. None of the demographic variables are significantly associated with their pretest level of knowledge. It was confirmed using Chi square test.

Table 4.12:Association between posttest level of knowledge score with demographic and obstetric variables:

Demographic variables		Posttest level of knowledge				Total	Chi square test
		Moderate		Adequate			
		n	%	n	%		
Age	< 20 years	1	100.0%	0	0.0%	1	χ2=6.61 P=0.03* DF=2 S
	20 -28 years	12	24.0%	38	76.0%	50	
	> 28 years	0	0.0%	9	100.0%	9	
Religion	Hindu	12	22.2%	42	77.8%	54	χ2=1.08 P=0.58 DF=2 NS
	Muslim	1	33.3%	2	66.7%	3	
	Christian	0	0.0%	3	100.0%	3	
Family type	Nuclear family	9	37.5%	15	62.5%	24	χ2=5.90 P=0.02* DF=1 S
	Joint family	4	11.1%	32	88.9%	36	
Education	Elementary education	3	23.1%	10	76.9%	13	χ2=0.37 P=0.94 DF=3 NS
	Middle education	3	27.3%	8	72.7%	11	
	Higher secondary education	4	18.2%	18	81.8%	22	
	Graduate	3	21.4%	11	78.6%	14	
Job	Home maker	13	24.1%	41	75.9%	54	χ2=1.84 P=0.61 DF=3NS
	Government job	0	0.0%	1	100.0%	1	
	Private job	0	0.0%	2	100.0%	2	
	Self job	0	0.0%	3	100.0%	3	
Income	< Rs.10000	9	24.3%	28	75.7%	37	χ2=0.40 P=0.52 DF=1 NS
	Rs.10001 - 20000	4	17.3%	19	82.7%	23	
Age at marriage	< 20 years	6	31.6%	13	68.4%	19	χ2=3.31 P=0.19 DF=2 NS
	21 -25 years	7	21.2%	26	78.8%	33	
	> 25 years	0	0.0%	8	100.0%	8	
Gravida	Primi	10	31.3%	22	68.7%	32	χ2=3.96 P=0.05* DF=1 S
	Multi	3	10.7%	25	89.3%	28	

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* significant at P≤0.05

** highly significant at P≤0.01

*** very highly significant at   P≤0.001

Table 4.12 shows the association between post-test level   of knowledge score and antenatal women demographic variables. When considering the age   76.0% of 20-28 years age group gained adequate knowledge and 100% of above 28 years age group gained adequate knowledge. This is statistically significant(P value=0.03).

When taking family type 62.5% of nuclear family women have gained adequate knowledge and 88.9% of joint family women have gained   adequate knowledge. This is also statistically significant.(P value= 0.02).

When considering the gravid 68.7% of   primi   gravid   women have gained adequate knowledge and 89.3% of multi gravid women have gained adequate knowledge.This is also statistically significant(P value= 0.05).

So, elder, joint family and multi gravid women   gained more knowledge than others after STP. It was confirmed using Chi square test.

Table-4.13 Association between post-test level of knowledge score with demographic and obstetric variables:

Demographic variables		Knowledge gain score						Total	Oneway ANOVA F-test/ t-test
		Pretest		Posttest		Knowledge gain= post-pre			
		N	%	n	%	N	%		
Age	< 20 years	14.00	0.00	23.00	0.00	9.00	0.00	1	F=3.12 P=0.05* S
	20 -28 years	11.26	4.45	23.28	2.31	12.02	4.68	50	
	> 28 years	11.11	5.86	27.09	1.09	15.98	5.88	9	
Religion	Hindu	11.65	4.72	25.00	2.27	13.35	4.87	54	F=0.71 P=0.49 NS
	Muslim	8.00	1.73	24.67	2.08	16.67	2.31	3	
	Christian	11.67	4.73	26.00	2.00	14.33	5.51	3	
Family type	Nuclear family	11.33	4.45	23.54	2.12	12.21	4.49	24	t=1.99 P=0.05*S
	Joint family	11.56	4.83	26.31	2.28	14.75	5.06	36	
Education	Elementary education	7.54	3.10	25.31	2.14	17.77	2.89	13	F=1.76 P=0.14 NS
	Middle education	10.73	5.24	25.48	1.94	14.75	4.93	11	
	Higher secondary education	11.05	4.80	26.12	2.63	15.07	2.30	22	
	Graduate	13.21	2.69	27.30	1.91	14.09	2.97	14	
Job	Home maker	11.50	4.72	24.89	2.23	13.39	4.87	54	F=0.31 P=0.81 NS
	Government job	13.00	.	30.00	.	17.00	.	1	
	Private job	10.00	5.66	25.50	.71	15.50	6.36	2	
	Self job	11.33	5.03	25.67	.58	14.33	4.51	3	
Income	< Rs.10000	11.05	4.70	25.05	2.12	14.00	4.91	37	t=0.88 P=0.33 NS
	Rs.10001 - 20000	12.13	4.57	25.00	2.43	12.87	4.64	23	
Age at marriage	< 20 years	12.63	5.18	24.53	2.22	11.89	5.58	19	F=2.28 P=0.11 NS
	21 -25 years	11.21	4.47	25.18	2.38	13.97	4.28	33	
	> 25 years	9.75	3.73	25.63	1.41	15.88	4.02	8	
Gravida	Primi	12.00	4.24	23.30	2.33	11.30	4.39	32	t=2.05 P=0.05* S
	Multi	11.00	5.08	25.95	2.12	14.95	4.30	28	

* significant at P≤0.05

** highly significant at P≤0.001.

Table 4.13 represents the   association between post-test level of knowledge score with antenatal women demographic variables.

In considering the **age**, 20-28 years age group gained knowledge score of 4.68%, more than 28 years gained knowledge score of 5.88%. P value is 0.05. This is statistically significant.

In **family type,** 4.49% knowledge gain score in nuclear family type, and 5.06% knowledge gain score in joint family type. P value is 0.05. This is also statistically significant.

In considering the **Gravida,** 4.39% of knowledge gain score in primi gravida, and 4.30% of knowledge gain score in multi gravida mothers.P value is 0.05. This is also statistically significant.

CHAPTER-V
SUMMARY OF RESULTS

The study was done to determine the effectiveness of the effectiveness of Structured Teaching Programme on knowledge regarding early identification of high risk pregnancy among antenatal mothers attending at Institute of Obstetrics and Gynaecology.

5.1. Based on demographic findings

The study findings reveal the following demographic and obstetric characteristic features of 60 antenatal mothers who participated in the study.

❖ **Age** wise distribution ,83.3% were 20-28 years of age, 15% were in more than 28 years of age group, and remaining 1.7% belonged to less than 20 years of age.

❖ In **religion** , 90% are Hindus , 5% belongs to Christian religion and remaining 5% are of Muslim religion.

❖ In **family type**, 60% were in joint family and remaining 40% nuclear family.

❖ In **education** wise, 36.7% (22) had Higher secondary education, 23.3% (14) were graduates, 21.7%(13) had elementary education and 18.3%(11) were of middle education status.

❖ **Job** wise, 90%(54) of them are home makers, 5%(3), of them had self job, and 3.3%(2) of them working in private sector and only 1.7%(1) were in Government jobs.

❖ In the **monthly income** , 61.1%(37) family monthly income was below Rs.10,000 and remaining 38.8%(23) monthly income was Rs. 10001-20000.

❖ In **age at marriage**, 55% (55) were married at the age of 21-25 years, and 31.7%((19) were married at the age of below 20 years and remaining 13.3%(8) were married more than 25 years of age.

❖ In **gravida**, 53.3%(32) were primi and remaining 46.7%(28) were multi.

5.2. Based on Pre-test knowledge of antenatal mothers in the study group

The percentage of pretest knowledge score in each domain wise. They are having more score in anemia(41.9%) , and moderate score of 38.8% in pre-eclampsia and 36.7% in gestational diabetes mellitus, and minimum score in multiple pregnancy(35.0%) Overall they are having 38.2% of score.

The level of pretest knowledge regarding early identification of high risk pregnancy among antenatal women before administration of structured teaching programme. 76.7%(46) of the antenatal women had inadequate knowledge score, 23.3%(14) of them had moderate knowledge score, and none of them are having adequate level of knowledge score.

5.3. Based on post-test knowledge of antenatal mothers on high risk pregnancy in the study group

Each domain wise post-test percentage of knowledge score regarding early identification of high risk pregnancy among antenatal women. They are having more score in Anemia(84.8%), and minimum score in preeclampsia(81.5%), score in Gestational Diabetes Mellitus(84.7%), and score in Multiple pregnancy (82.9%). Overall they are having 83.4% of score.

The level of posttest knowledge regarding early identification of high risk pregnancy among antenatal women after administration of

Structured teaching programme. 78.4%(47) of them having adequate level of knowledge score , 21.6%(13) of them are having moderate knowledge score, None of the antenatal women are having inadequate knowledge score.

5.4. Based on the effectiveness of structured teaching programme on knowledge regarding high risk pregnancy in the study group

Considering anemia aspects, in pretest antenatal mothers are having 3.45 score where as in posttest they are having 6.78 score, so the difference is 3.43. This difference between pretest and posttest is large and is statistically significant.

Considering preeclampsia aspects, in pre-test antenatal mothers are having 3.10 score where as in posttest they are having 6.52 score, so the difference is 3.42. This difference between pretest and posttest is large and it is statistically significant.

Considering Gestational Diabetes Mellitus aspects, in pretest, antenatal mothers are having 2.57 score where as in posttest they are having 5.93, so the difference is 3.37.This difference between pretest and posttest is large and it is statistically significant.

Considering Multiple Pregnancy aspects,in pretest antenatal mothers are having 2.45 score where as in posttest they are having 5.80 score, so the difference is 3.35. This difference between pretest and posttest is large and it is statistically significant.

Statistical significance was calculated by using student's paired 't' test.

The comparison of overall pretest and posttest knowledge score. Considering overall knowledge score, in pretest antenatal women are having 11.47 score where as in posttest they are having 25.03, so the difference is 13.57. The difference between pretest and posttest score is large and it is statistically significant. Differences between pretest and posttest score was analysed using students paired 't' test.

In post-test, none of the antenatal women are having inadequate knowledge score, 21.6% of them having moderate knowledge score, 78.4% of them are having adequate level of knowledge score.

Statistically there is significant difference between pretest and posttest knowledge score.

Each domain wise percentage of knowledge gain. 42.9% of knowledge gain anemia aspects, 42.7% knowledge gain in preeclampsia aspects, and 48% knowledge gain in Gestational diabetes mellitus and 47.9% of knowledge gain in Multiple pregnancy aspect. Overall they gained 45.2% of knowledge score when comparing pretest and posttest after having STP. This shows the effectiveness of STP on knowledge regarding high risk pregnancy among antenatal women.

5.5. Based on association between posttest score with selected demographic and Obstetrical variables

In considering the **age**, 20-28 years age group gained knowledge score of 4.68%, more than 28 years gained knowledge score of 5.88%. P value is 0.05. This is statistically significant.

In **family type,** 4.49% knowledge gain score in nuclear family type, and 5.06% knowledge gain score in joint family type. P value is 0.05. This is also statistically significant.

In considering the **Gravida**, 4.39% of knowledge gain score in primi gravida, and 4.30% of knowledge gain score in multi gravida mothers.P value is 0.05. This is also statistically significant.

CHAPTER-VI
DISCUSSION

In this study the researcher has made an attempt to identify the common high risk among antenatal mothers who are attending antenatal outpatient department. Prevention of many high risk pregnancies and its complications is very essential for successful outcome of healthy mother and healthy child.

The purpose of the study was to evaluate the effectiveness of Structured teaching programme on high risk pregnancy among antenatal women. The sample size for this study was 60 antenatal mothers who were labeled into one group. Pretest was conducted in each participants by interview method with the use of Structured questionnaire. Structured teaching programme on early identification of high risk pregnancy was given nearly 30 minutes. One week after STP posttest was conducted to assess the effectiveness of teaching programme.

The results of the study were based on the statistical analysis. The effectiveness of teaching programme was assessed by using Paired 't' test. Chi-Square was used to find the association between the level of knowledge with selected demographic and obstetric variables. The results were formulated according to the stated objectives.

The details of demographic characteristics of 60 antenatal mothers who participated in the study were as follows.

In considering the **age** wise distribution of antenatal mothers,83.3% were 20-28 years of age, 15% were in more than 28 years of age group, and remaining 1.7% belongs to less than 20 years of age.

In the **religion** wise distribution , 90% are Hindus , 5% belongs to Christian religion and remaining 5% are of Muslim religion.

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In considering the **family type**, 60% were of joint family and remaining 40% belonged to nuclear family.

In **education** wise distribution, 36.7% (22) had Higher secondary education, 23.3% (14) were graduates, 21.7%(13) had elementary education and 18.3%(11) only in middle education status.

In considering the **job**, 90%(54) of them are home makers, 5%(3), of them had self job, and 3.3%(2) of them working in private sector and only 1.7%(1) in Government jobs.

In the **monthly income** status, 61.1%(37) family monthly income was below Rs.10,000 and remaining 38.8%(23) monthly income was Rs. 10001-20000.

In considering the Obstetrical variables, in **age at marriage**, 55% (55) were married at the age of 21-25 years, and 31.7%((19) were married at the age of below 20 years and remaining 13.3%(8) were married more than 25 years of age.

In **gravida**, 53.3%(32) were primi and remaining 46.7%(28) were multi.

To assess the Knowledge regarding high risk pregnancy among antenatal women.

The level of knowledge of antenatal women on high risk pregnancy was assessed by using Structured questionnaire. It denotes the percentage of pretest knowledge score each domain wise. They are having more score in anemia(41.9%) , and moderate score of 38.8% in pre-eclampsia and 36.7% in Gestational diabetes mellitus, and minimum score in multiple pregnancy(35.0%) .Overall they are having 38.2% of score.

The percentage   of pretest knowledge regarding early identification of high risk pregnancy among antenatal women before administration of structured teaching programme. 76.7%(46) of the antenatal women had inadequate knowledge score, 23.3%(14) of them had moderate knowledge score, and none of them are having adequate level of knowledge score.

(Singh. N.J 2010) A study was conducted at the urban centers in Bangalore, to assess the effectiveness of a structured teaching programme on warning signs in pregnancy among 60 primi gravid women.The results indicated that the mean percentage of pretest knowledge score was 25.58%, which was considered to be lower of mean percentage.[52]

To assess the effectiveness of Structured teaching programme on knowledge regarding high risk pregnancy among antenatal women.

A Structured teaching programme on high risk pregnancy was conducted for 30 minutes. Posttest was conducted with the same questionnaire on 7th day.

It was evident that the percentage of posttest knowledge scores on level of knowledge among antenatal women on high risk pregnancy. It denotes that in post-test 84.8% of them adequate knowledge   on anemia, 81.5% of them are having adequate knowledge on pre-eclampsia, whereas in gestational diabetes mellitus 84.7% of them are having adequate knowledge, and in multiple pregnancy, 82.9 % of them are having adequate knowledge.They are having more score in anemia (84.8%) and minimum score in Pre-eclampsia(81.5%). Overall they are having 83.4% of knowledge score.

It shows the posttest knowledge score among 60 antenatal women, 13 of them (21.6%) are having moderate knowledge and 47 of them

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(78.4%) are having adequate knowledge, and none of them are having inadequate knowledge on high risk pregnancy.

It shows the comparison of overall knowledge score between pretest and posttest. On an average, in posttest, antenatal women gained 45.2% of knowledge score after having structured teaching programme regarding early identification of high risk pregnancy. Differences between pre-test and post-test score was analysed using proportion with 95% confidence interval and mean difference with 95% confidence interval. This 42.5% of knowledge gain shows the effectiveness of structured teaching programme on early identification of high risk pregnancy among antenatal women.

The findings of the present study reveals the domain wise percentage of knowledge gain. Overall they gained 45.2% of knowledge score when compared pre-test and post-test after having STP. This shows the effectiveness of STP on knowledge regarding high risk pregnancy among antenatal women.

To evaluate the effectiveness of structured teaching programme the pretest and posttest values are compared. The calculated 't' value is greater than the tabulated value at 5% level of significance. It shows that the teaching was effective.

(Irbaihat. Jamil2009) A study was conducted at the antenatal clinic of St. John's Medical College Hospital in Bangalore, to assess the effectiveness of a Structured teaching programme on high risk pregnancy, among 100 antenatal women. The results indicated that the mean percentage of pretest knowledge score was 45.6%, which was considered to be the average. The mean post-test knowledge scores 78% is significantly higher than the mean pre-test knowledge score(t=44.04). It could be presumed that the teaching programme on high risk

conditions in pregnancy was effective in enhancing the knowledge of the mother.[53]

To associate the findings with selected demographic and Obstetric variables.

It revealed the association between the level of knowledge on high risk pregnancy with selected demographic and obstetrical variables such as age, religion, family type, education, job, income, age at marriage and gravida.

It shows the association between pretest level of knowledge score with clients demographic variables. None of the demographic variables are significantly associated with their pretest level of knowledge. It was confirmed using Chi square test.

The findings of the present study shows the association between posttest level of knowledge score with antenatal women demographic variables. When considering the age 76.0% of 20-28 years of age group gained adequate knowledge and 100% of above 28 years age group gained adequate knowledge. This is statistically   significant(P value=0.03).

When taking family type 62.5% of nuclear family ,women have gained adequate knowledge and 88.9% of joint family women have gained adequate knowledge. This is also statistically significant.(P value= 0.02).

When considering the gravid 68.7% of primi gravid women have gained adequate knowledge and 89.3% of multi gravid women have gained adequate knowledge.This is also statistically significant(P value= 0.05).

So, elder, joint family and multi gravid women gained more knowledge than the others after STP. It was confirmed using Chi square test.

(Christ Anees 2008) A study was conducted in Ludhiana, to assess the knowledge of urban mothers about high risk conditions in pregnancy and relationship of knowledge with education, age group and occupation. 40 samples were selected for this study. The findings revealed that the mothers possessed high level of mean percentage score(70.62%). The mothers with highest level of education obtained the highest level of mean percentage knowledge scores(88.4%). Those with VIII pass had low level of mean percentage knowledge scores(36.25%). Younger group had (17-26 years) had high level of mean percentage of knowledge score (80.35%), whereas older (37-47 years) had lowest mean percentage knowledge scores (48%). In the same way, the mothers who had been working had a higher knowledge score than the housewives.[54]

(Mahalingam G, Venkatesan M 2014)A descriptive design with cross sectional survey approach was conducted in Dehradun to assess the mothers knowledge on warning signs of pregnancy, labour and puerperium. Data was collected from 50 antenatal mothers by purposive sampling technique and questionnaire was used as a data collection tool. Result of this study shows that 36% of the mothers has poor knowledge, 24% has average knowledge,34% has good knowledge and only 6% had excellent knowledge about warning signs of pregnancy, labour, and puerperium. The overall knowledge percentage mean which was 50.73% revealed that the antenatal mothers has average knowledge about warning signs of pregnancy,labour and puerperium.The knowledge of antenatal mothers is statistically , not associated with their age, educational qualification, parity, occupation, family income, type of

family, religion, residential areas and previous source of information. They concluded to conduct the study in larger samples.[55]

Hypothesis

H: Antenatal women who received structured teaching programme on high risk pregnancy shows a significant increase in the level of knowledge in post-test than pre-test.

From the findings of the present study it was concluded that the structured teaching programme on early identification of high risk pregnancy improves the knowledge of antenatal mothers who participated in the study. **Thus the hypothesis was proved statistically.**

CHAPTER-VII
CONCLUSION AND RECOMMENDATIONS

7.1 Implications of the study

The investigator has drawn the following implication for the study which is vital concern in the field of nursing practice, nursing education, nursing administration and nursing research.

Some of the implications for the present study in various areas as follows:

Nursing practice

❖ The nurses working in the health care services should update the knowledge about current trends and treatments in high risk pregnancy.

❖ Structured teaching programme on high risk pregnancy is to be scheduled in the obstetrical department.

❖ Self instructional module can be distributed to the high risk groups who are visiting the hospital.

Nursing education

❖ Conferences, workshops and seminars can be held for impart, to update the knowledge and positive attitudes.

❖ In-service education updating their knowledge and skill in various health care settings can be given.

❖ Nursing curriculum has to focus on enabling the nursing students to develop skill in identifying risk groups and prevent the complications.

❖ Every student can be motivated to plan and give health education for antenatal women in high risk pregnancy.

❖ Short term courses can be organized for the nurses, who are working in obstetrical unit.

Nursing administration

The present study is proposed to help the health administrators to strategically plan and meet the health needs of the antenatal women.

❖ The administrators in both private and government sectors should take initiative actions to update the knowledge of risk groups on high risk pregnancy.

❖ The administrator can encourage the nurses for conducting research in various aspects high risk pregnancy.

❖ The administrator can organize conference, workshop and seminars for nurses working in the community.

❖ The administrator should support the staffs to conduct programme on high risk pregnancy.

❖ The nursing administration should awaken to the fact that patient education is a necessity and should provide resources in terms of manpower, money and material.

Nursing research

❖ The study will be a valuable reference material for further researchers.

❖ This study is a preliminary set up for exploring the concept of knowledge on high risk pregnancy.

❖ The results of the study encourage the antenatal women to adopt healthy life.

7.2 Limitations

❖ The sample size is limited to 60 antenatal mothers.

❖ The study was limited to mothers only attending antenatal out patient department at Institute of Obstetrics and Gynaecology.

7.3 Recommendations for further study

The study recommends the following,

❖ A similar study can be undertaken for a large sample in different settings.

❖ A comparative study can be conducted between urban and rural antenatal women.

❖ A similar study can be conducted among antenatal women in community area.

❖ A similar study can be conducted using pre-test and post- test with control group.

❖ Experimental study can be conducted on anemia, pregnancy induced hypertension, gestational diabetes mellitus and multiple pregnancy and its management for high risk women, in terms of gain in knowledge and control of symptoms.

Conclusion

Nursing personnel must have holistic knowledge regarding the different aspects of high risk pregnancy among antenatal mothers. Nurses play a vital role in the teaching aspects of high risk pregnancy.The present study had been supported by a series of other

studies which confirmed that the knowledge on high risk pregnancy among antenatal women is important to get healthy baby and healthy mother. From the analysis and results, it was found that Structured teaching programme on high risk pregnancy is an essential intervention to identify the high risk pregnancy in the earlier stage and prevent from complications of high risk pregnancy.

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FIG: 2.3: MODIFIED PENDER'S HEALTH PROMOTION MODEL
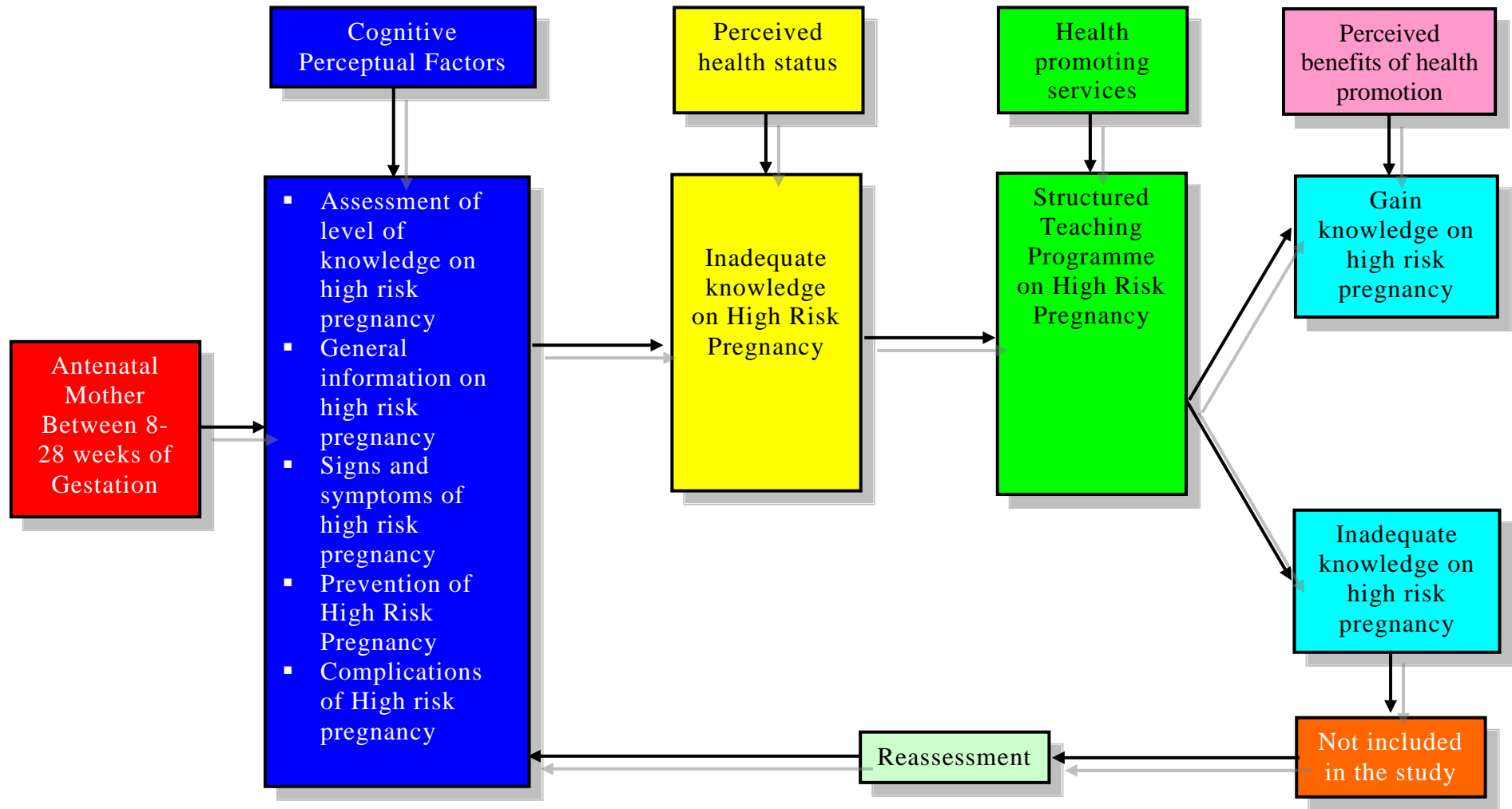
Figure: 3.5: Schematic Representation of the study

Quantitative Approach

↓

One Group Pretest- Post Test Design

↓

Study Setting: Antenatal outpatient Department, Institute of Obstetrics & Gynaecology, Chennai

↓

Population: Antenatal women who are visiting Antenatal OPD

↓

Sampling Technique: Purposive Sampling Technique

↓

Sample Size: 60

↓

Pretest: Assessment of Pretest knowledge on High Risk Pregnancy

↓

Structured Teaching Programme on High Risk Pregnancy

↓

Post test: Assessment of effectiveness of Structured Teaching Programme on High Risk Pregnancy

↓

Data Analysis: Descriptive and Inferential Statistics

↓

Findings and Conclusion

INFLUENCING VARIABLE

- ➢ AGE
- ➢ EDUCATION
- ➢ OCCUPATION
- ➢ TYPE OF FAMILY
- ➢ AGE AT MARRIAGE
- ➢ GRAVIDITY
- ➢ PARITY

DEPENDENT VARIABLE

- KNOWLEDGE OF ANTENATAL MOTHER

INDEPENDENT VARIABLE

- ➢ STRUCTURED TEACHING PROGRAMME ON HIGH RISK PREGNANCY

Figure 3.4: Schematic representation of   relationship between variables
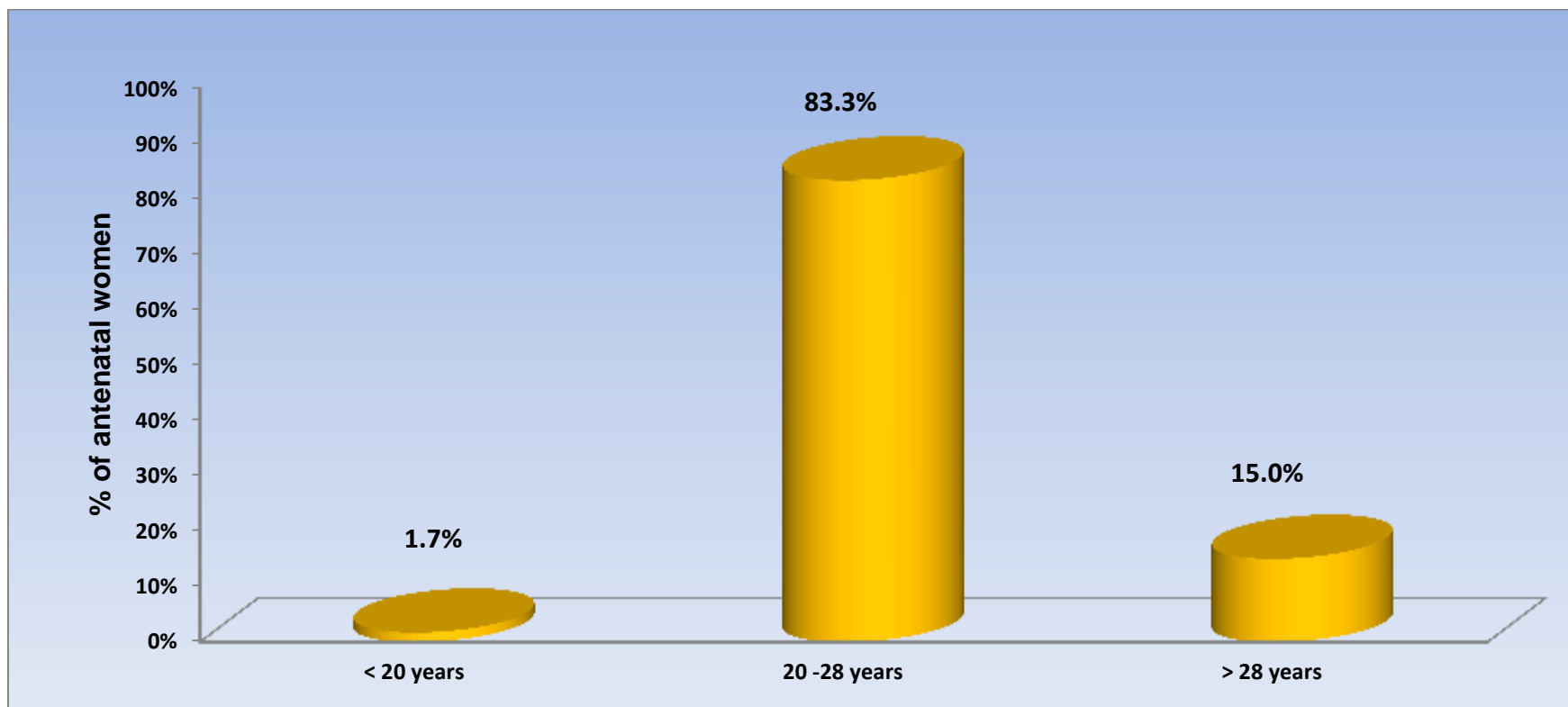
Figure 4.6: Age wise distribution of antenatal mothers
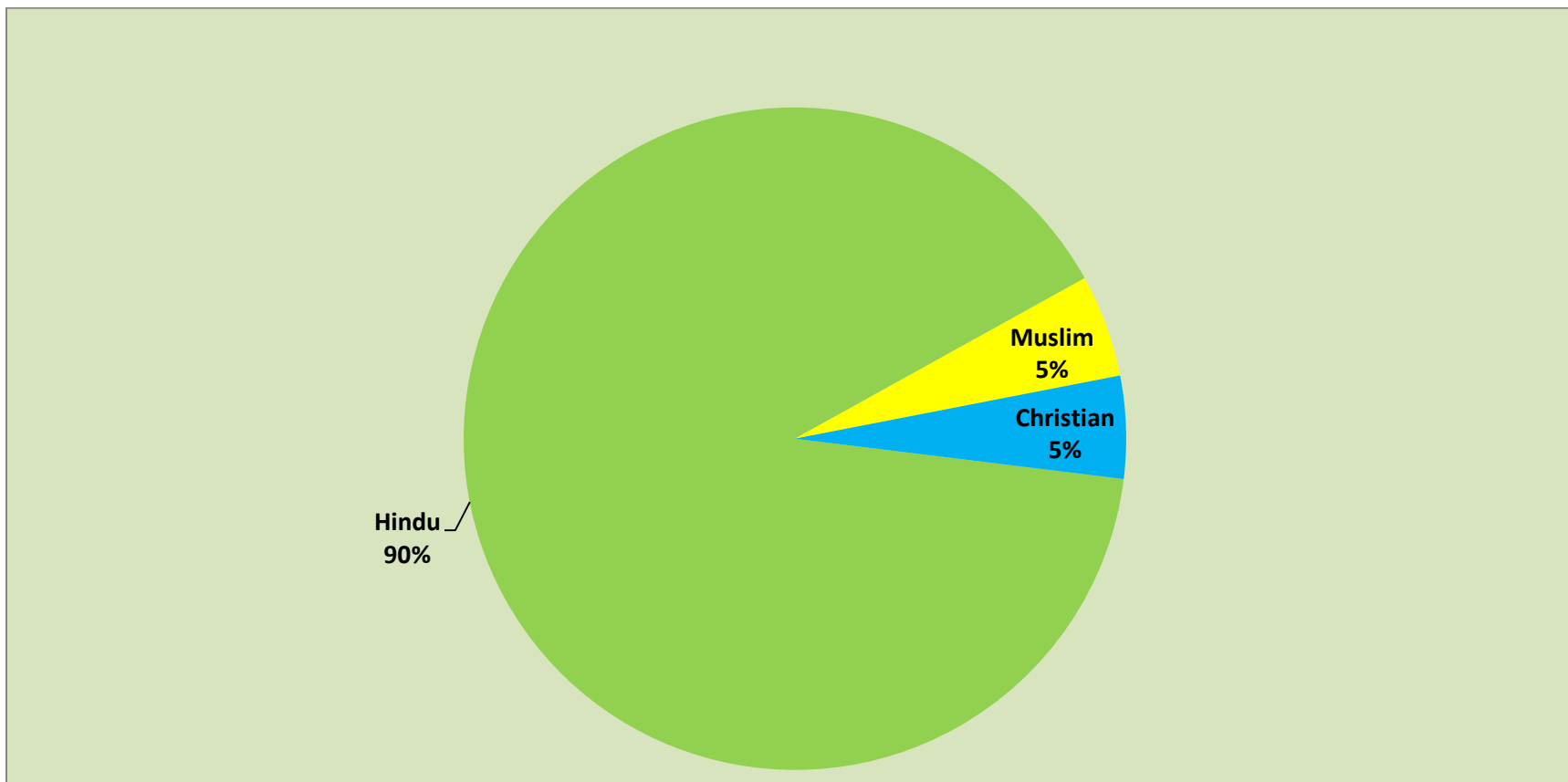
Figure 4.7: Religion wise distribution of antenatal mothers.
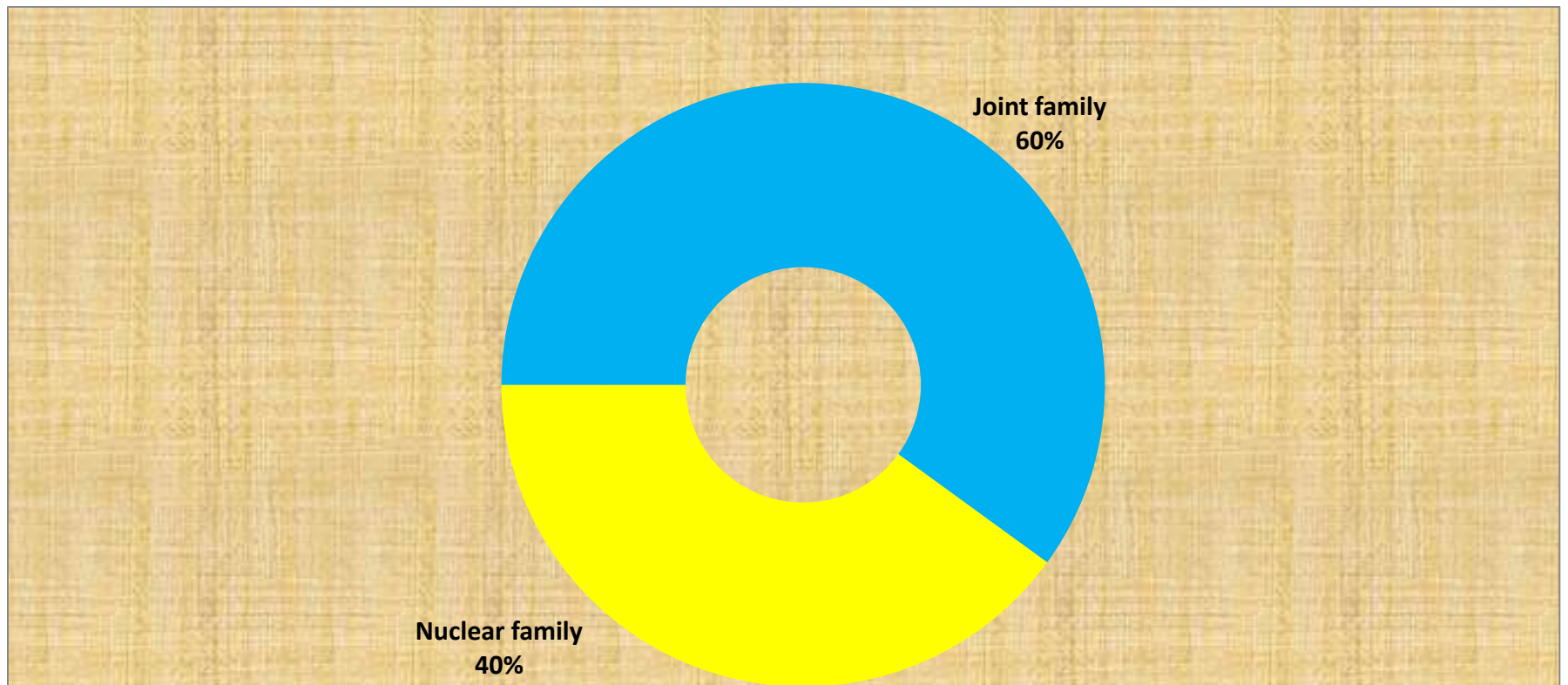
Figure 4.8: Type of family system of antenatal mothers.
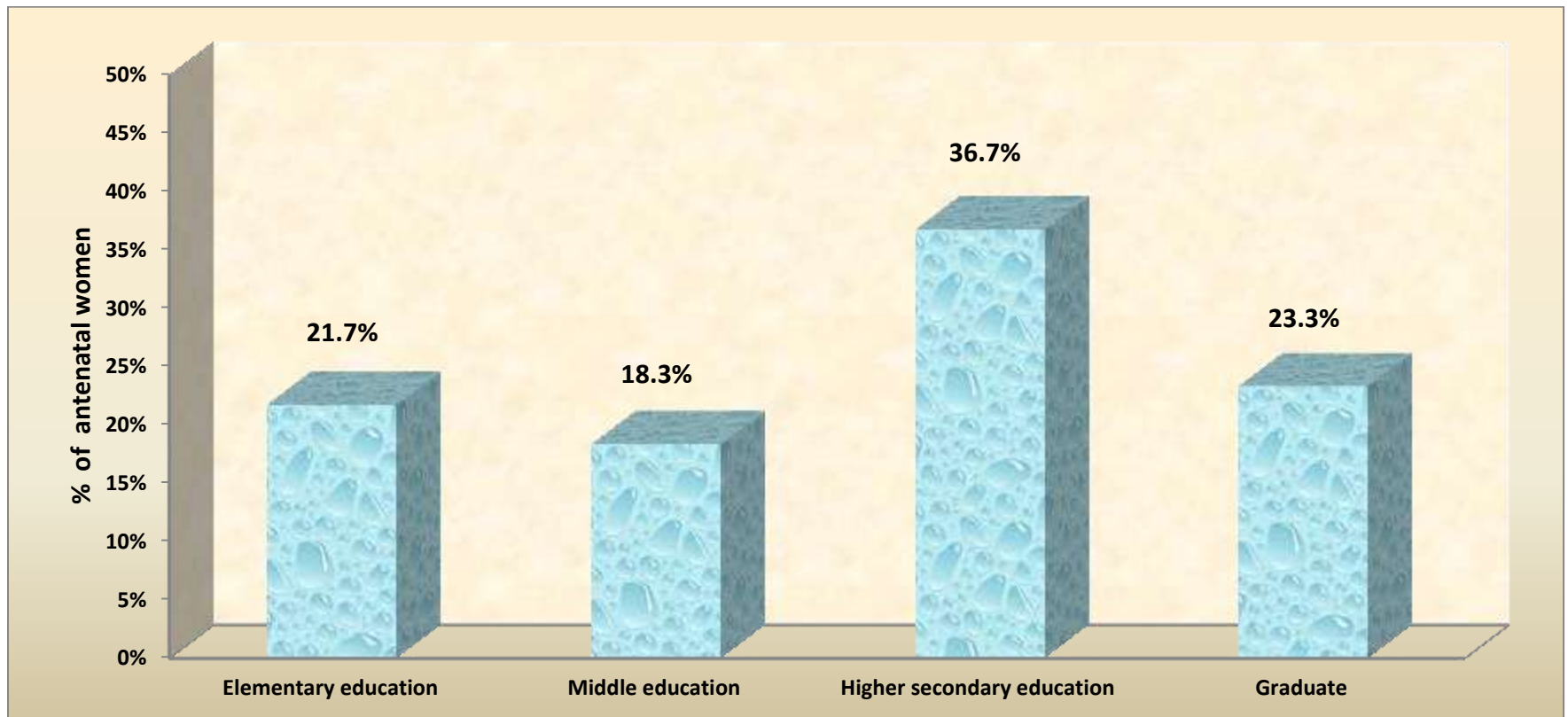
Figure 4.9: Educational status of antenatal mothers.
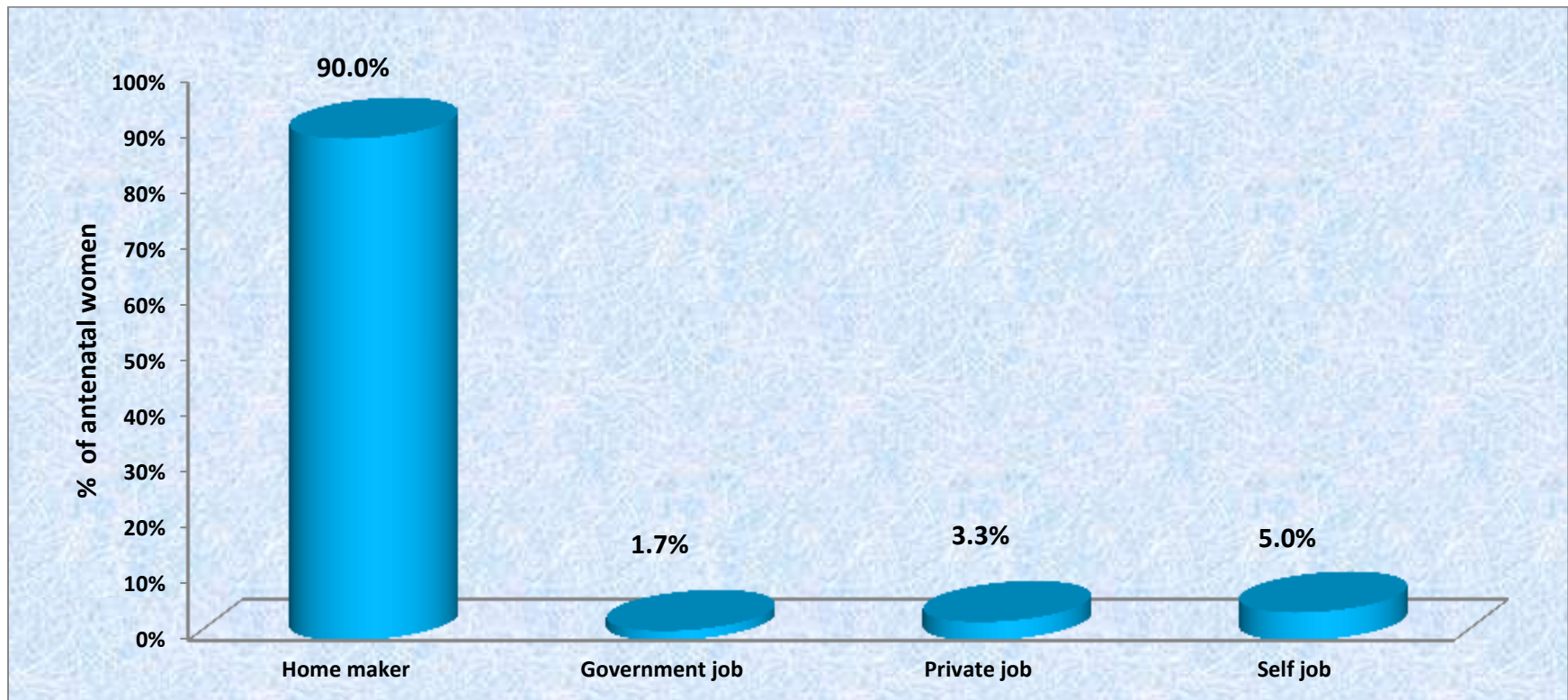
Figure 4.10: Occupational status of the antenatal mothers.
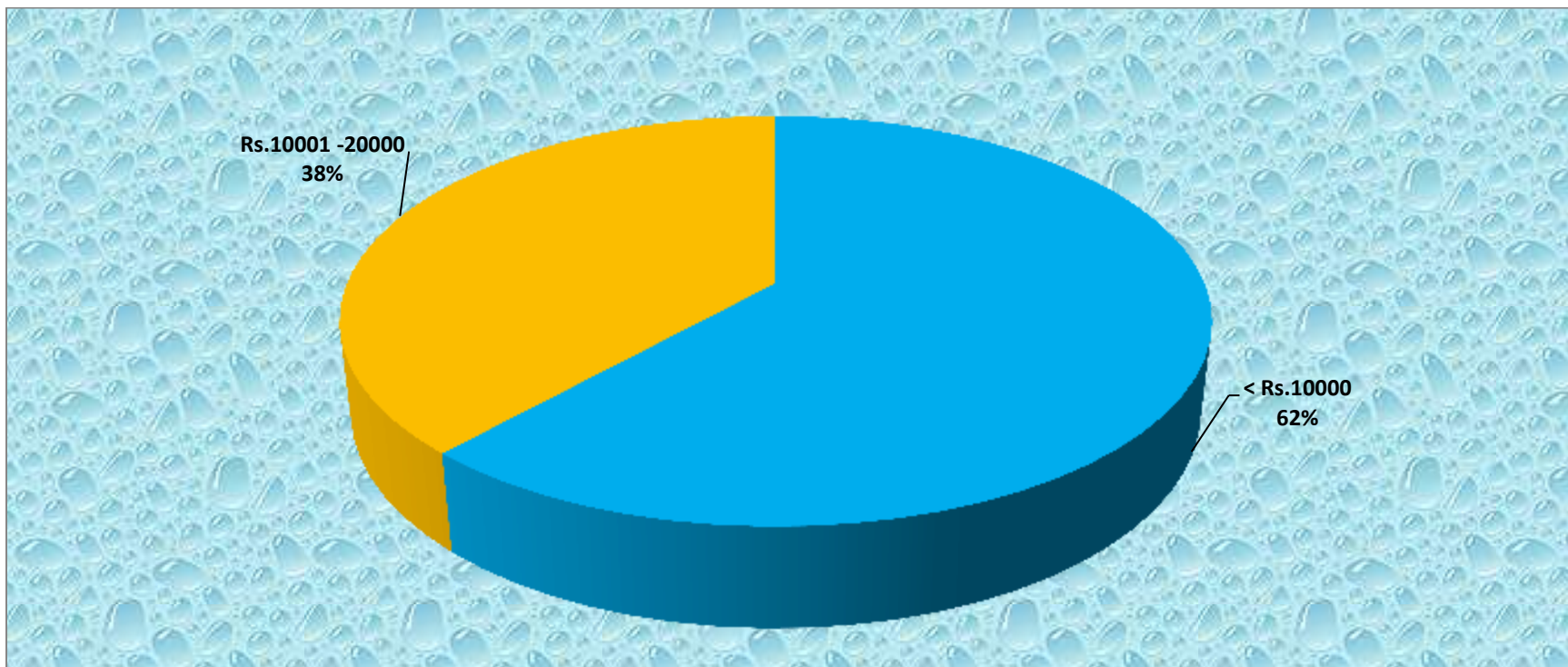
Figure 4.11: Monthly income status of antenatal mothers.
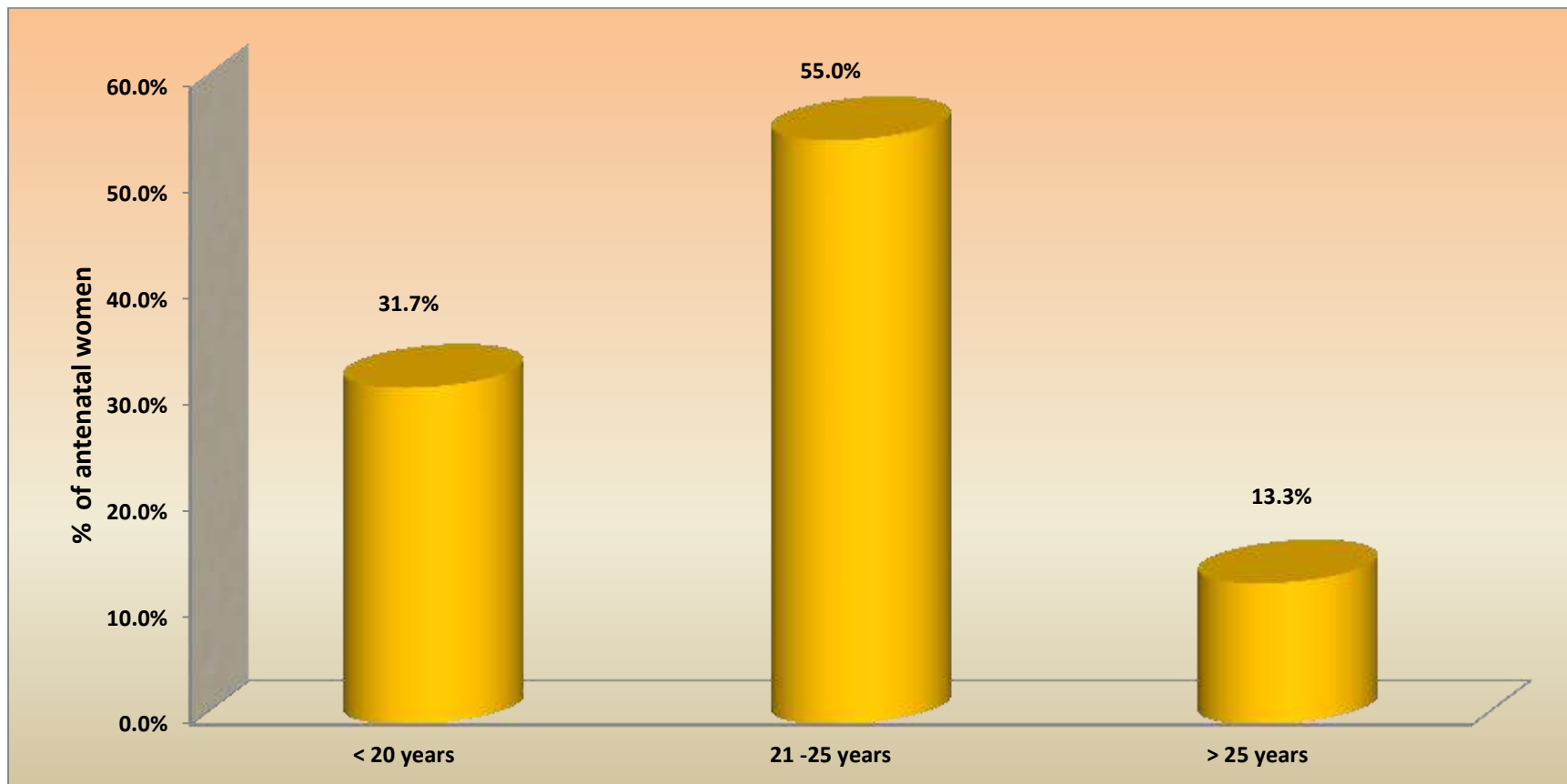
Figure 4.12: Age at marriage of antenatal mother
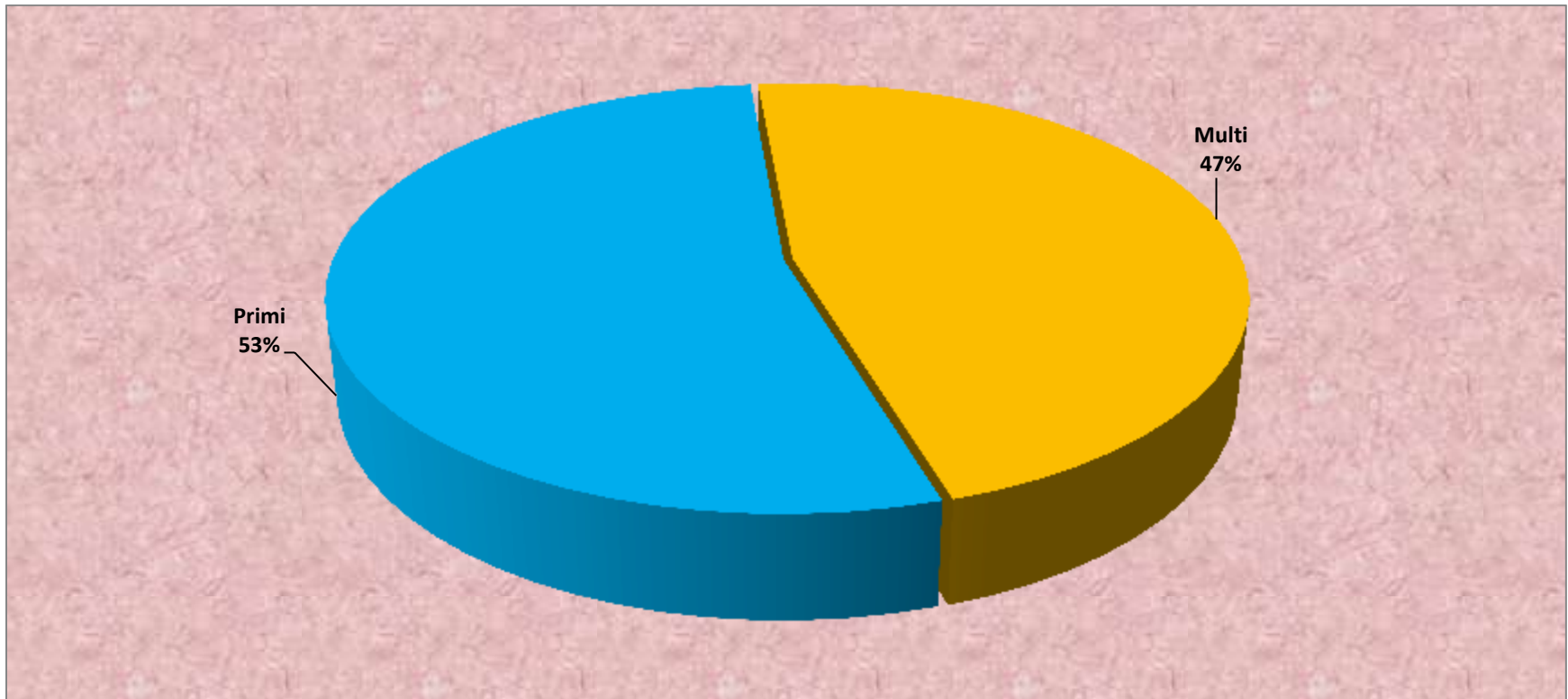
Figure 4.13: Gravida wise distribution of antenatal mothers.
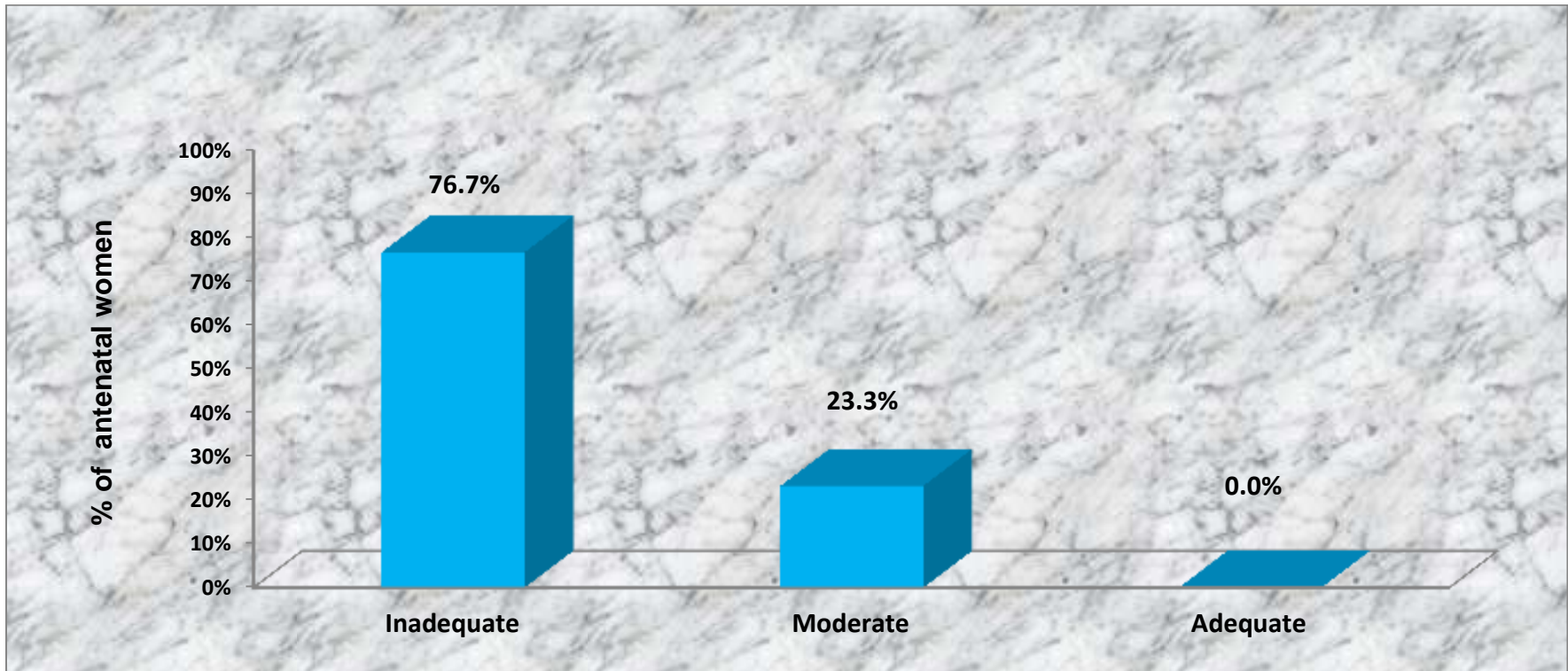
Figure 4.14: Pretest level of knowledge score of antenatal mothers.
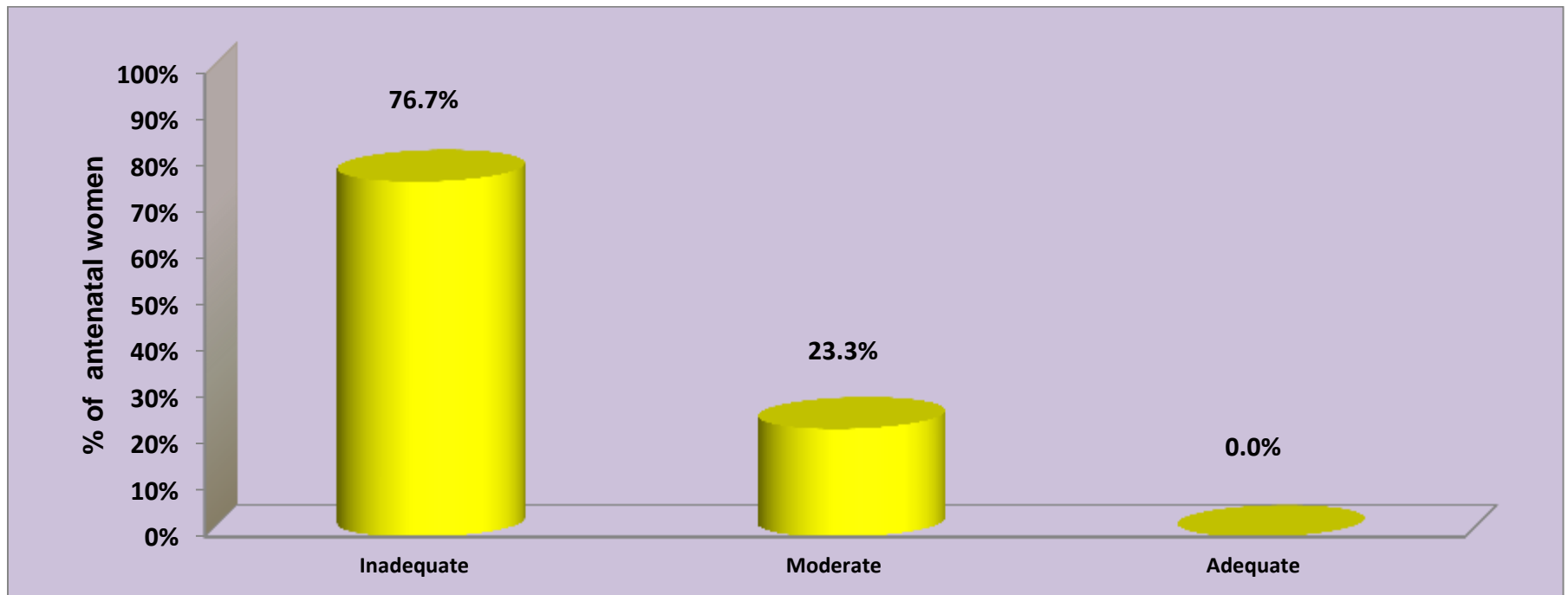
Figure 4.15: Posttest level of knowledge score of antenatal mothers.
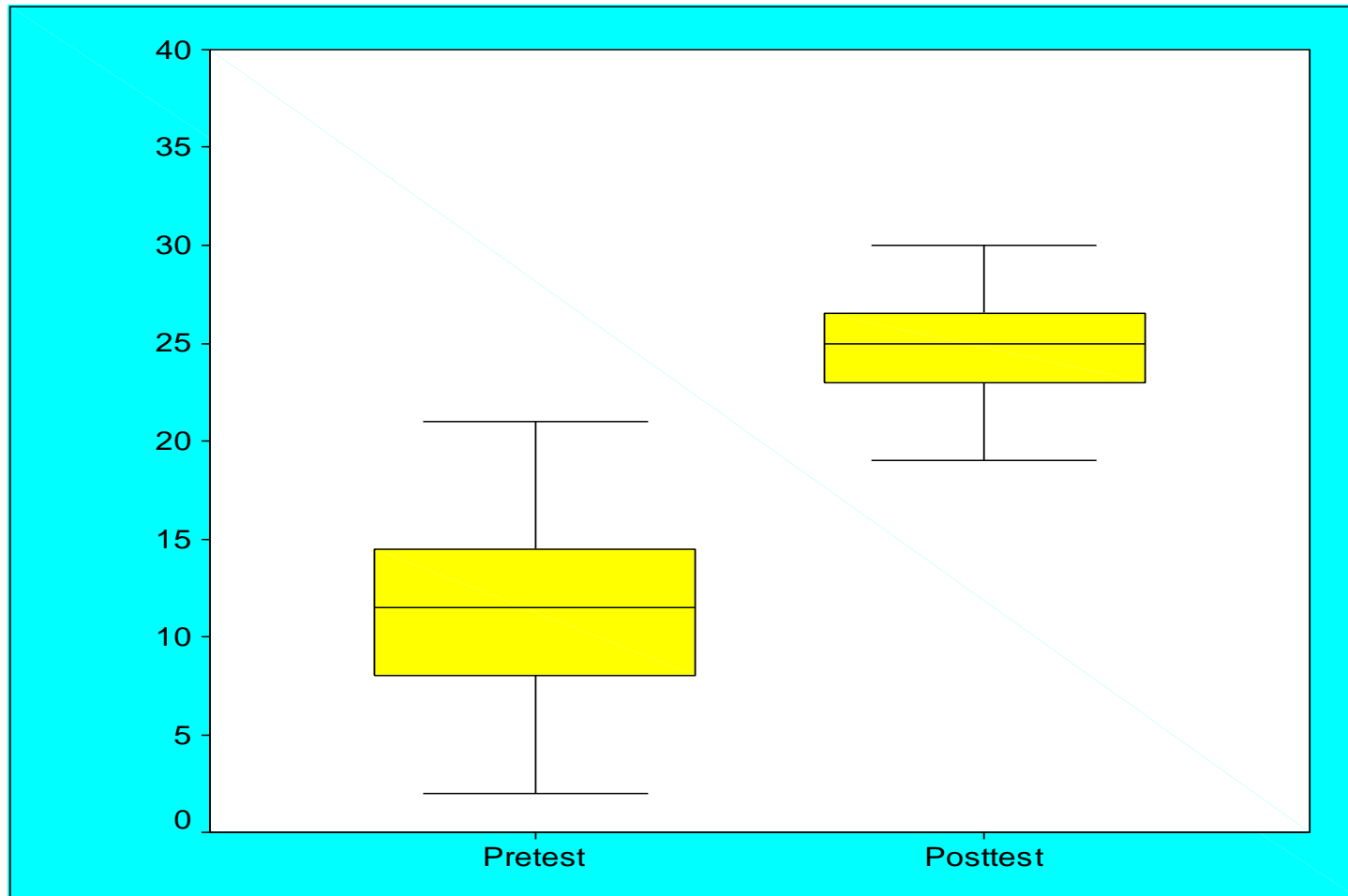
Figure 4.16: Mean pretest and posttest knowledge score of antenatal mothers.
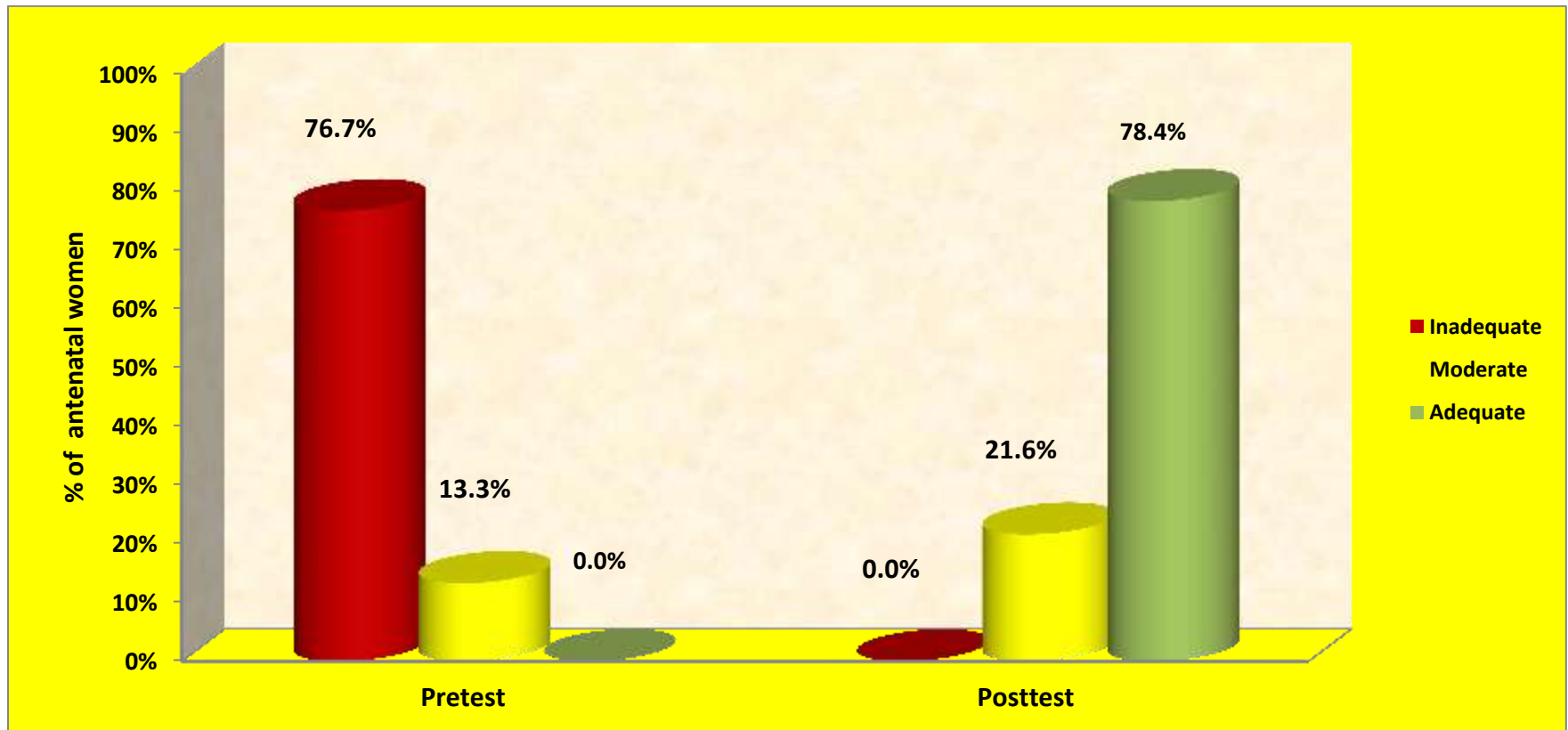
Figure 4.17: Pretest and posttest level of knowledge score.
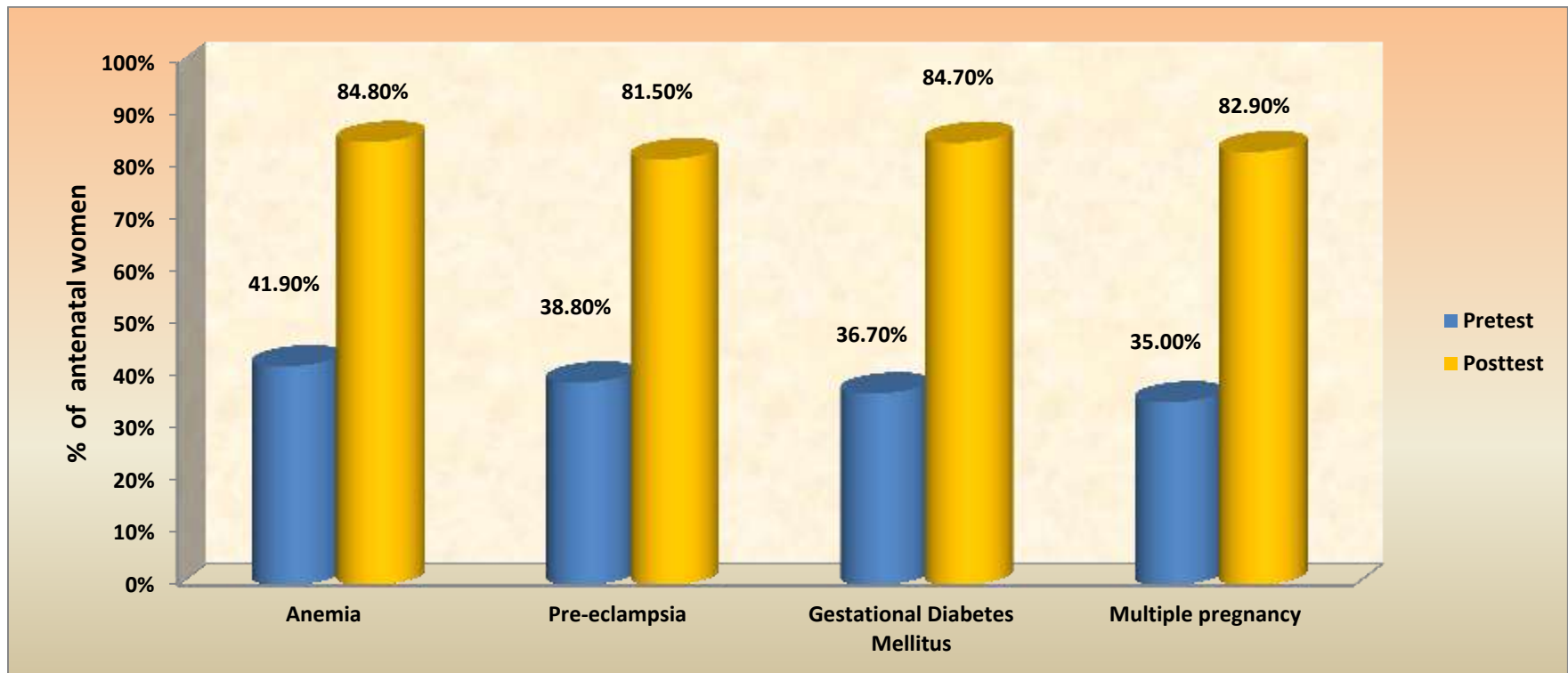
Figure 4.18: Pre and posttest percentage of knowledge score of antenatal mothers.
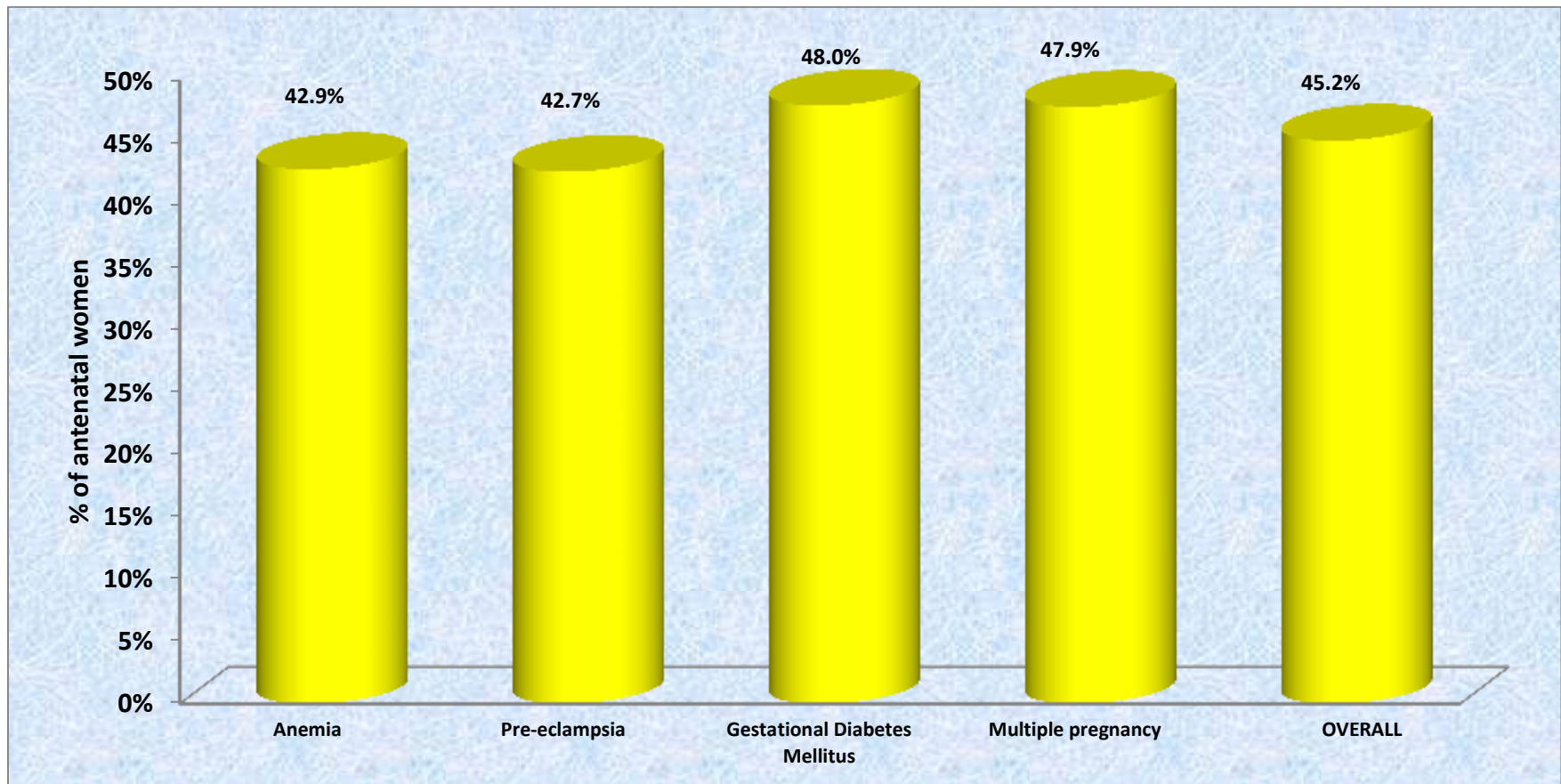
Figure 4.19: Percentage of knowledge gain.
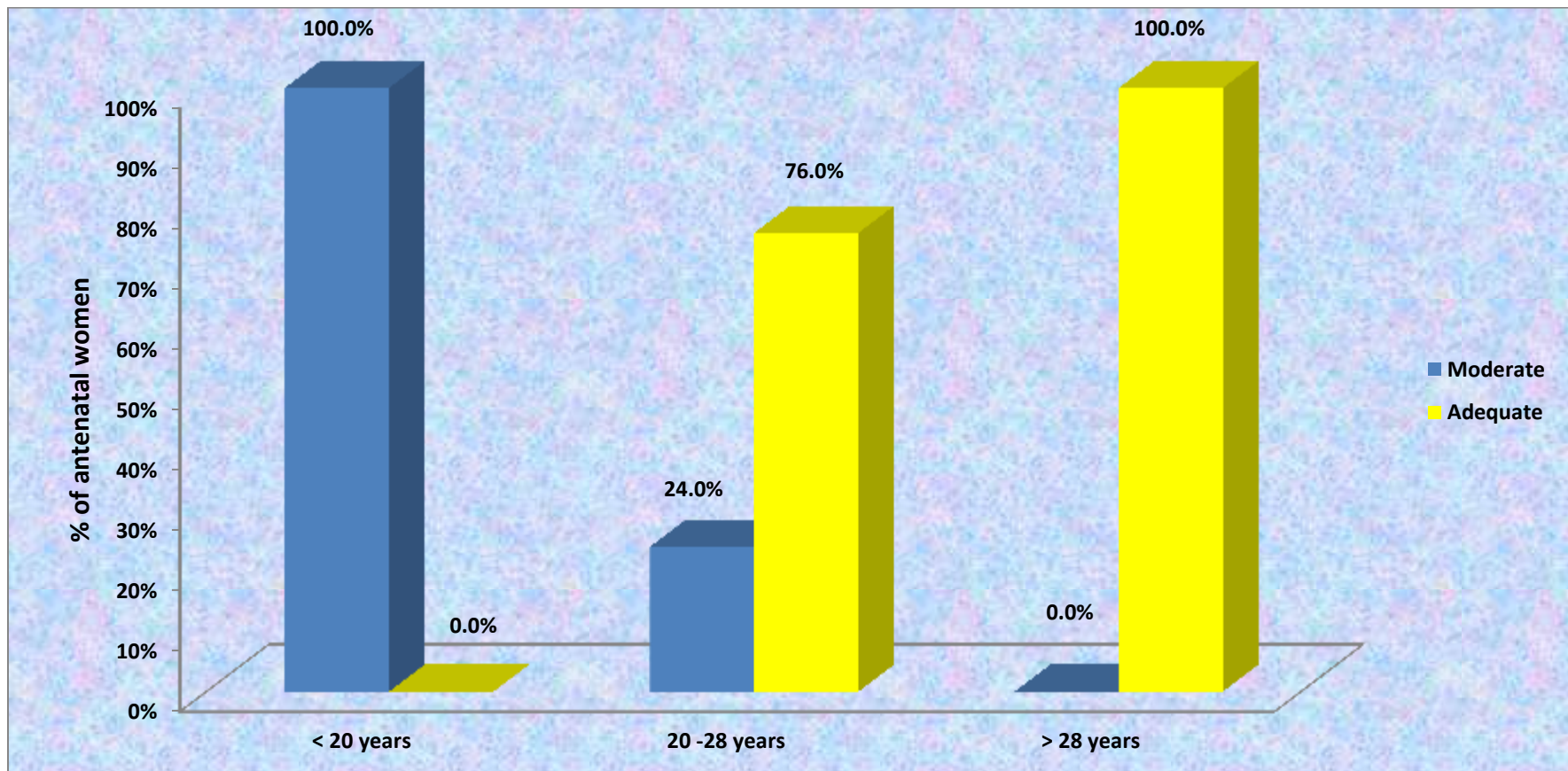
Figure 4.20: Association between posttest level of knowledge and antenatal women age.
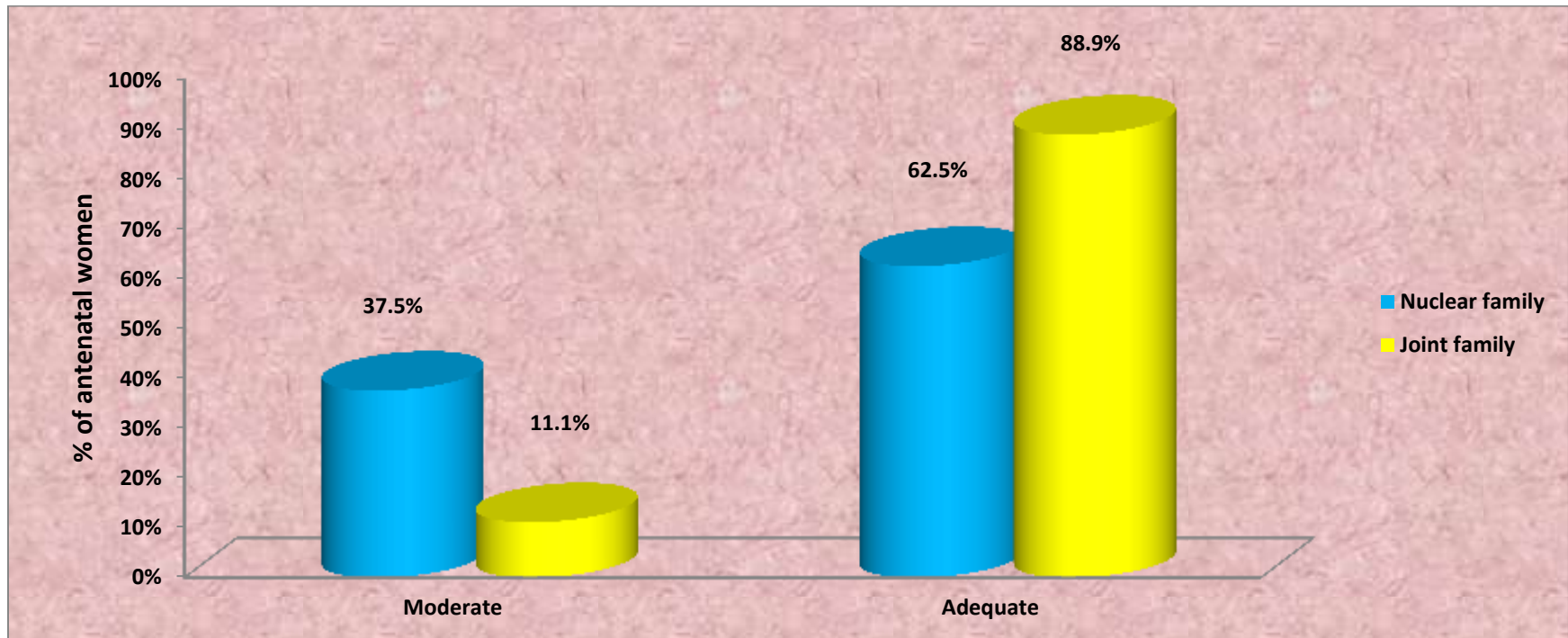
Figure 4.21: Association between posttest level of knowledge and antenatal women type of family system.
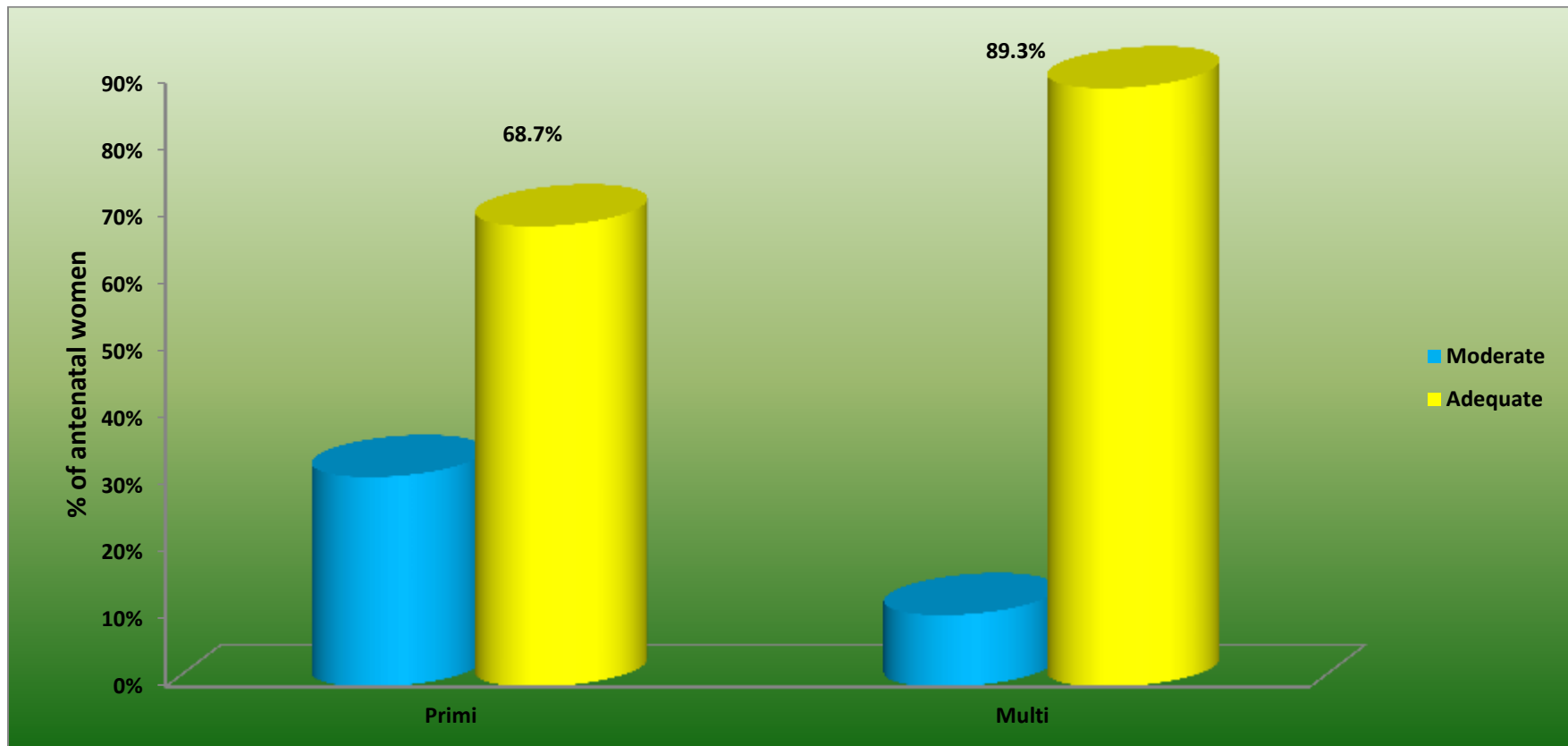
Figure 4.22: Association between posttest level of knowledge score and antenatal women gravida.
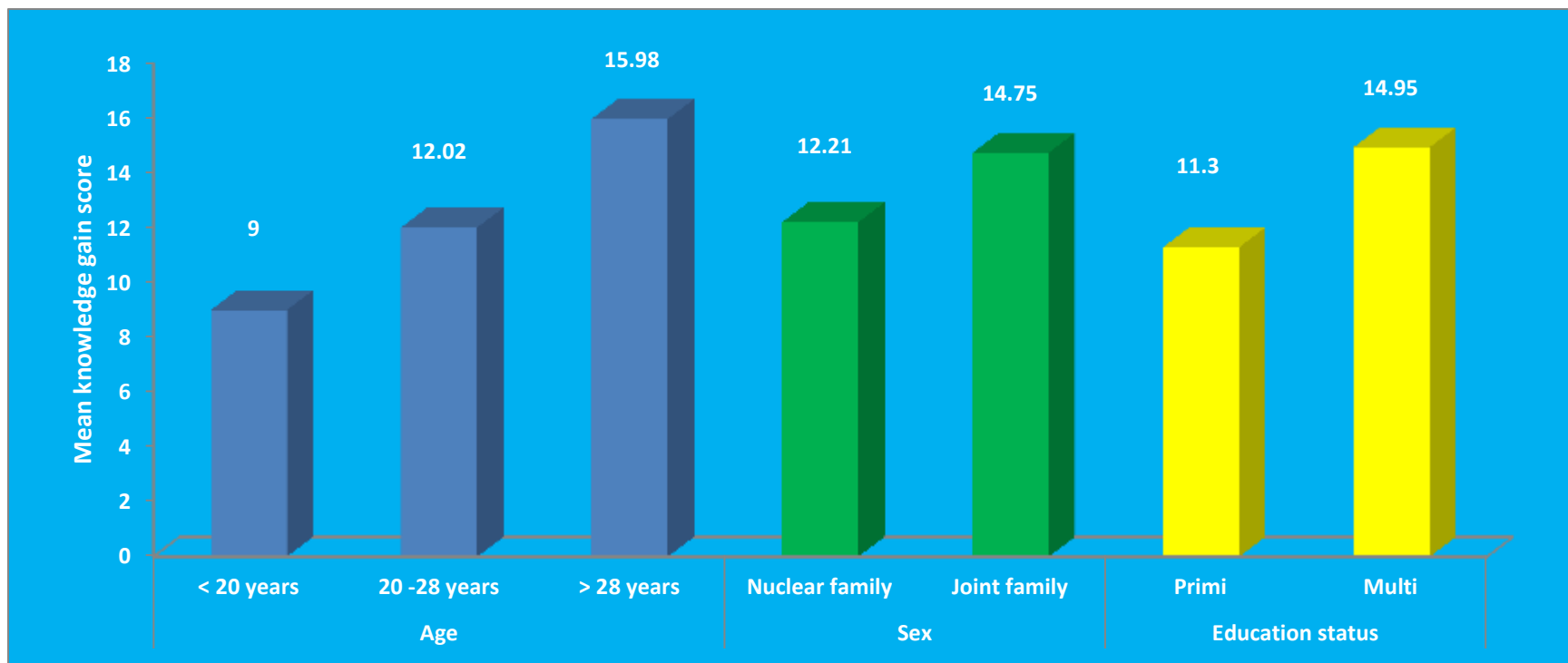
Figure 4.23: Association between knowledge gain score and demographical variables.
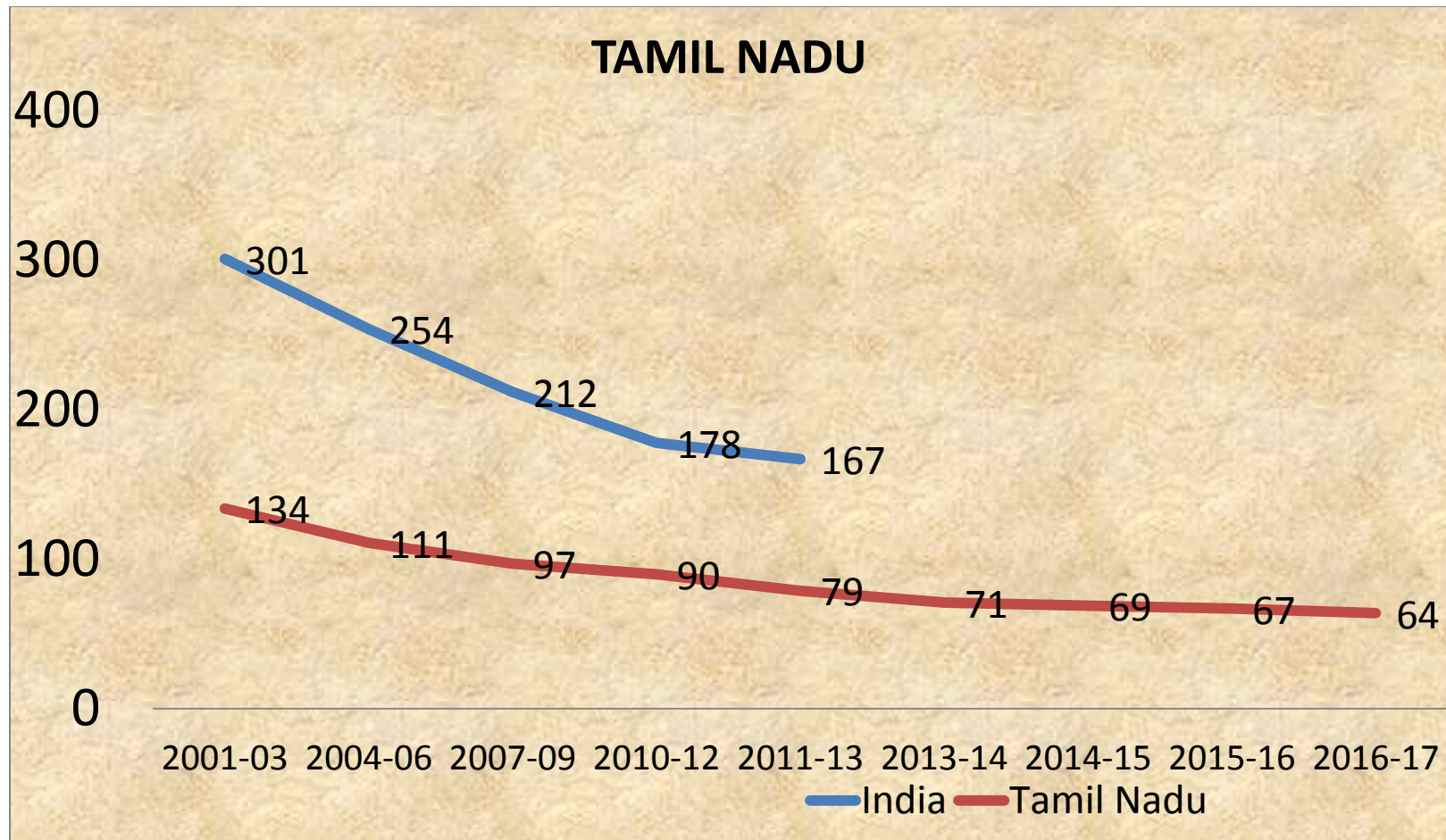
TAMIL NADU

Source: SRS (2001-03 to 2011-13)
State HMIS (2013-14 to 2016-17)
Figure 1.1: Maternal Mortality Ratio
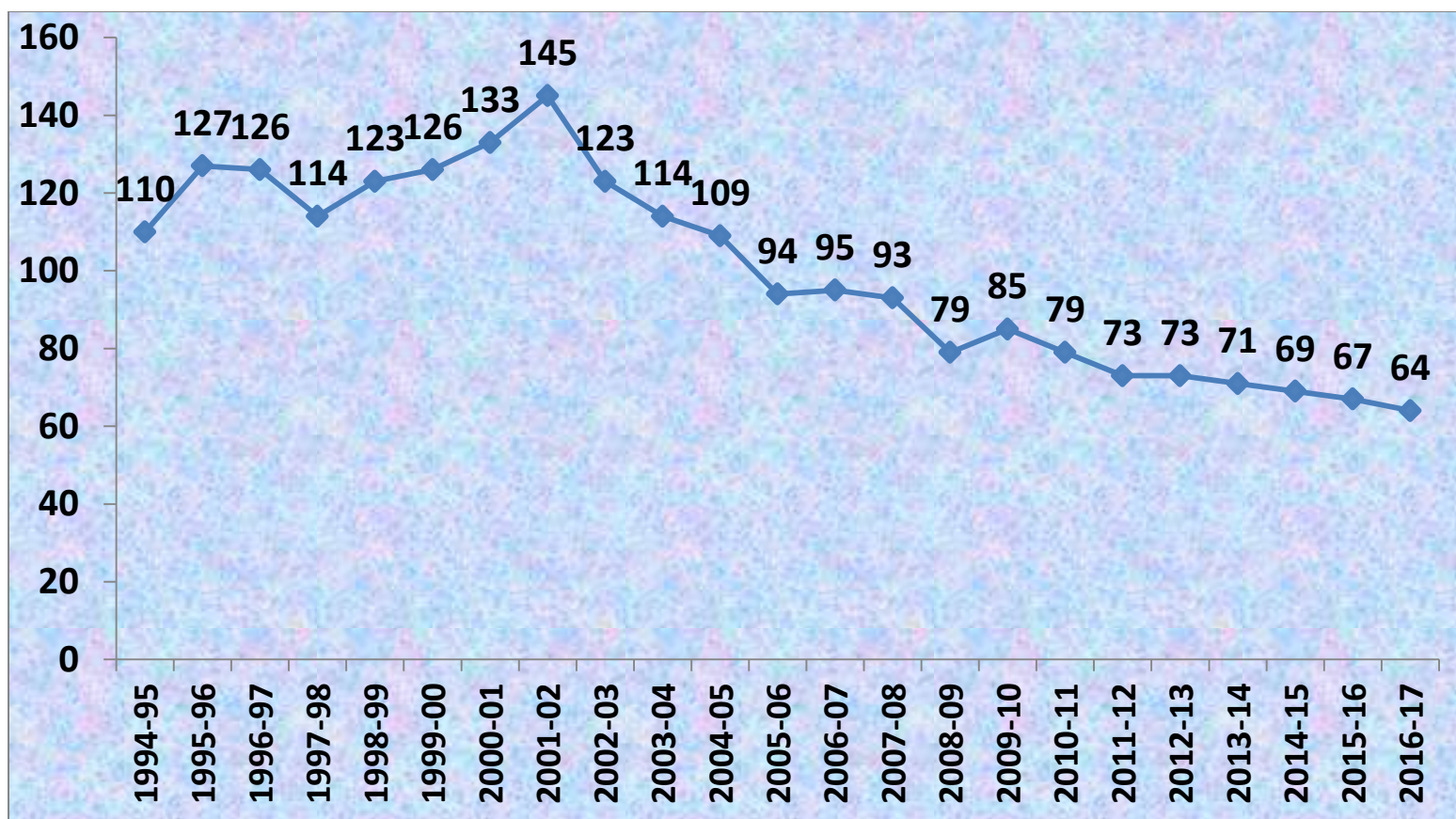
Source: State HMIS
Figure1.2: Time trend in Maternal Mortality Ratio-Tamilnadu

DESCRIPTION OF THE TOOL
SECTION – A
TOOL -1: DEMOGRAPHIC VARIABLES

By interview method the researcher will mark each response of the antenatal women

1   Age (In Years)
- a) Below 20 ☐
- b) 20-28 ☐
- c) Above 28 ☐

2   Religion
- a) Hindu ☐
- b) Muslim ☐
- c) Christian ☐

3   Type of Family
- a) Nuclear Family ☐
- b) Joint Family ☐

4   Educational Level

- a) Elementary education ☐
- b) Middle education ☐
- c) Higher secondary education ☐
- d) Graduate ☐

5   Occupation
- a) Home maker ☐
- b) Government job ☐
- c) Private job ☐
- d) Self job ☐

6   Family monthly income (in rupees)
- a) ≤ 10000 ☐
- b) 10001 to 20001 ☐
- c) >20001 ☐

SECTION-B

TOOL – 2

By the interview method the researcher will mark each response of the antenatal women.

OBSTETRICAL VARIABLES

7.	Age at marriage (in Years)	-----------------------------
8.	Last menstrual period	-----------------------------
9.	Expected date of delivery	-----------------------------
10.	Obstetrical score GPLA	-----------------------------
11.	Age at first child birth (in years)	-----------------------------
12.	Pre pregnant health status	-----------------------------

SECTION – C

TOOL – 3: STRUCTURED QUESTIONARRE REGARDING HIGH RISK PREGNANCY.IT CONSISTS OF PART A,B,C, AND D

By interview method the researcher will mark each response of the antenatal women.

PART A: QUESTION RELATED TO ANEMIA

1.   What is meant by anemia?
   a) Increased level of hemoglobin in the blood ☐
   b) Normal level of hemoglobin in the blood ☐
   c) Decreased level of hemoglobin in the blood ☐

2.   What is the normal hemoglobin level in a pregnant woman?
   a) 10-11 gm/dl ☐
   b) 11-16 gm/dl ☐
   c) More than 16 gm/dl ☐

3.   What is the cause of anemia in a pregnant woman?
   a) Anemia in previous pregnancy ☐
   b) Family history of anemia ☐
   c) Increased need of iron during pregnancy. ☐

4.   Which of the following features are the predictors to identity anemia?
   a) Pallor, fatigue and difficult breathing ☐
   b) Headache, vomiting, diarrhea ☐
   c) Bleeding, abdominal pain and leg cramps ☐

5.   What ate the food items to be added to prevent anemia?
   a)Apple, Guava ☐
   b)Greens, vegetables and dates ☐
   c) Chicken, Cool drinks ☐

6. **Why a pregnant women should avoid consumption of tea after meals?**
   a) Reduce the absorption of iron. ☐
   b) It can cause nausea and vomiting. ☐
   c) It can cause discoloration of teeth. ☐

7. **Which is the most preferable time to prevent anemia?**
   a) Preconception period ☐
   b) After conception ☐
   c) When the antenatal women are diagnosed to have anemia ☐

8. **What is the effect to untreated anemia?**
   a) Increased blood sugar ☐
   b) Preterm labour and low birth weight baby ☐
   c) Increased blood pressure ☐

PART B: QUESTION RELATED TO PRE-ECLAMPSIA

1. **What is meant by pre- eclampsia?**
   a) Presence of normal blood pressure with swelling ☐
   b) Presence of low blood pressure with swelling ☐
   c) Presence of high blood pressure, and swelling ☐

2. **What is normal blood pressure of an antenatal woman?**
   a) 80/50 mm of Hg ☐
   b) 120/80 mm of Hg ☐
   c) 140/100 mm of Hg ☐

3. **Commonly at which gestational age the pre- eclampsia will occur?**
   a) At 12th week ☐
   b) Between 13-20 week ☐
   c) After 20th week ☐

4. **What is relation between bed rest and swelling in pre - eclampsia?**
   a) Swelling increases with bed rest ☐
   b) Swelling decreases with bed rest ☐
   c) Swelling persists with bed rest ☐

5. **Which position a pregnant woman should assume during sleep?**
   a) Right lateral ☐
   b) Left lateral ☐
   c) Supine position ☐

6. **How will you assess the fetal well being?**
   a) By checking blood pressure ☐
   b) By checking weight ☐
   c) By monitoring kick count ☐

7. **What are the warning signs of pre-eclampsia?**
   a) Heart burn, blurred vision, Hands and legs edema ☐
      and reduced urine output
   b) Fever ☐
   c) Back pain ☐

8. **What is the effect of untreated pre- eclampsia?**
   a) Cancer ☐
   b) Fits ☐
   c) Thyroid problems. ☐

PART C : QUESTIONS RELATED TO GESTATIONAL DIABETES MELLITUS

1. **What is normal blood glucose level of an antenatal woman?**
   a) 135-155 mg/dl ☐
   b) 80-120 mg/dl ☐
   c) 50-70 mg/dl ☐

2. **Which of the following is a risk factor for diabetes in pregnancy?**
   a) History of marriage with blood relation ☐
   b) Very low hemoglobin in blood ☐
   c) Family history of diabetes mellitus ☐

3. **What is the cause of diabetes in pregnancy?**
    a) Due to Insufficient insulin production   ☐
    b) Increased intake of sweet by women   ☐
    c) Lack of exercise   ☐

4. **What is symptom of diabetes in pregnancy?**
    a) Bleeding per vagina   ☐
    b) Frequent urination and thirst   ☐
    c) Sudden increase of blood pressure   ☐

5. **Which is the test to be used in diagnosing the diabetes mellitus during pregnancy?**
    a) Hemoglobin estimation   ☐
    b) Blood group analysis   ☐
    c) Oral glucose challenge test   ☐

6. **Which of the following are treatment measures in a pregnant woman with diabetes?**
    a) Special diet, exercise and insulin if needed   ☐
    b) Insulin injection only   ☐
    c) Adequate food only   ☐

7. **Which of the following is the complication of diabetes?**
    a) A small sized baby   ☐
    b) A baby with high blood pressure   ☐
    c) Large sized baby   ☐

PART D: QUESTION RELATED TO MULTIPLE PREGNANCY

1. **What is meant by multiple pregnancy?**
    a) Development of two or more fetus in the uterus   ☐
    b) Development of fetus outside the uterus   ☐
    c) Repeated pregnancies   ☐

2. **What may be the cause of multiple pregnancy?**
    a) Teenage pregnancy   ☐
    b) Heredity   ☐
    c) Obesity   ☐

3.   **What are the signs and symptoms of multiple pregnancy?**

    a) Fetal movement felt in different parts of abdomen at the same time ☐

    b) Increased blood pressure and increased blood sugar ☐

    c) Ectopic pregnancy. ☐

4.   **Which method is used to diagnose multiple pregnancy?**

    a) Blood sugar estimation ☐

    b) Through Ultrasonography ☐

    c) Urine examination ☐

5.   **What will be the ideal food recommended for the babies delivered by a pregnant woman with multiple pregnancy?**

    a) Breast milk for all the babies ☐

    b) Lactogen ☐

    c) One baby with breast milk and others with cow's milk ☐

6.   **What is the dietary requirement for a woman with multiple pregnancy?**

    a) High calorie, High protein, High iron diet ☐

    b) Low fat , Low protein ☐

    c) High fat, High Protein ☐

7.   **What is the complication to fetus due to multiple pregnancy?**

    a) Over weight baby ☐

    b) Infectious baby ☐

    c) Preterm delivery. ☐

LESSON PLAN ON

HIGH RISK PREGNANCY

TOPIC	:	**HIGH RISK PREGNANCY**
DURATION	:	**30 MINUTES**
GROUP	:	**ANTENATAL MOTHER BETWEEN 8-28 WEEKS**
METHOD OF TEACHING	:	**LECTURE CUM DISCUSSION**
AV AIDS	:	**BOOKLET**
VENUE	:	**ANTENATAL OUTPATIENT DEPARTMENT,**
		INSTITUTE OF OBSTETRICS AND GYNAECOLOGY,
		CHENNAI-08.
INVESTIGATOR'S NAME	:	**J.DHANALAKSHMI**
		MSC NURSING II YEAR

CENTRAL OBJECTIVE:

At the end of the teaching program the group will acquire knowledge regarding high risk pregnancy and develop desirable attitude towards early identification of high risk pregnancies and prevention of the complications and apply it in practice.

SPECIFIC OBJECTIVES:

The antenatal mothers will be able to,

➢ state the meaning of each risk pregnancy

➢ list the causes of each high risk pregnancy

➢ identify the signs and symptoms of each high risk pregnancy

➢ describe the diagnosis of each high risk pregnancy

➢ understand the prevention of each high risk pregnancy

➢ explain the management of each high risk pregnancy

➢ enumerate the complications of each high risk pregnancy

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
1 min	state the meaning of high risk pregnancy	**INTRODUCTION** All pregnancies and deliveries are potentially at risk. However, there are certain categories of pregnancies where the mother, the fetus of the neonate is in a state of increased jeopardy. About 20 to 30% pregnancies belong to this category. If we desire to improve obstetric results, this group must be identified and given extra care.	Lecture cum discuss	Discussing	Booklet	What is mean by high risk pregnancy?

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
1 Min		**MEANING OF HIGH RISK PREGNANCY** Pregnancy is complicated by variety of disorders and conditions that can profoundly affect the women and her fetus. The pathophysiology of their disorders may adversely affect the pregnancies. These pregnancies are often regarded as high risk. Some of the high risk pregnancies ➤ Anemia ➤ Pre- eclampsia ➤ Gestational diabetes mellitus ➤ Multiple pregnancy				

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION

1 Min	state the meaning of anemia	**1. ANEMIA**
		
		MEANING
		
		Anemia is a common health problem throughout the world particularly among pregnant women. It is a condition in which there is a low level of hemoglobin in the blood, to a level below 11g/dl. Hemoglobin is red pigment present in the blood cells, and its primary function is to carry oxygen to all parts o the body.
		    The normal hemoglobin level in women is 11-16 g/dl.
		    Approximately 80% of all anemia's in pregnancy result from iron deficiency.
			Discussion	Discussing	Booklet	What is normal hemoglobin level of pregnant women?

1 Min	list the causes of anemia	**CAUSES** ➢ Increased demand for iron ➢ Diminished intake ➢ Physical stress ➢ Pre pregnant health status ➢ Blood loss ➢ Repeated pregnancies at short interval	Lecturing	Listening	Booklet	What are all the causes of anemia?

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
2 Min	identify the signs and symptoms of anemia	**SIGNS AND SYMPTOMS** ❖ Paleness which can be seen inside the lower eyelids, nails, tongue, skin and palms of the hand ❖ Fatigue ❖ Labored breathing ❖ Rapid heart rate ❖ Giddiness ❖ Lethargy ❖ Lack of concentration ❖ Weigh loss ❖ Loss of appetite ❖ Spoon shaped nails in serve anemia **WARNING SIGNS:** ➢ Severe palmar,conjunctival, and nail pallor. ➢ Breathing 30 beats/minute. ➢ Easy fatigability ➢ Breathlessness even at rest.	Explaining	Listening	Booklet	How will you assess the anaemia?

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
1 Min	describe the diagnosis of anemia	**DIAGNOSIS** ➤ Assessment of clinical features ➤ Hemoglobin estimation ➤ Serum binding capacity	Lecture cum discussion	Discussing	Booklet	What are the methods used to test anaemia?
2 Min	understand the prevention of anemia	**PREVENTION OF ANEMIA** ✚ To prevent anemia it should start from pre conception period itself ✚ Early antenatal checkup.				

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
		❖ Avoidance of frequent child birth. Minimum interval between child birth is at least 2 years ❖ Supplementary iron therapy. Even with a well balanced diet supplementary iron to be given. ❖ Examination of stool for infestation of worm. In order to prevent worms infestation. ❖ Total iron requirement during pregnancy is 1000mg. Intake of diet rich in protein and iron much as groundnuts, beans, dark green leafy vegetables, liver, milk, egg, jaggery and dates. ❖ Regular consumption of iron and folic acid as prescribed by the doctor. Every pregnant woman should consume iron and folic acid tablets from the beginning of fourth month of pregnancy. ❖ Don't consume tea after breakfast or a meal. Tea contains a substance and when consumed along with food it will prevent iron absorption.	Discussion	Discussing	Booklet	What are the food items contain more protein and iron?

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
		❖ Adequate Treatment to be given in case of malaria, bleeding piles, urinary tract infection ❖ Early detection of falling of hemoglobin level				
1 Min	Explain the management of anemia	MANAGEMENT OF ANEMIA ❖ Diet: A realistic balanced diet, which is rich in proteins, iron and vitamins. ❖ To improve appetite and facilitate digestion, preparation containing acid pepsin may be given ❖ To eradicate even a minimal septic focus by appropriate antibiotic therapy. Effective therapy to cure the disease contributing to cause anemia ❖ Iron therapy: Oral therapy, Parental therapy ❖ Side effects of these therapies are irritation of stomach, vomiting and black stools. The side effects will be there only for few days and will disappear. ❖ The tablets are better tolerated when taken after meals ❖ Blood Transfusion				What are the side effects of iron therapy?

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
1 Min	Enumerate the complication of anemia in mother and fetus	COMPLICATION OF ANEMIA MOTHER ❖ Infection ❖ Preeclampsia ❖ Uterine inertia ❖ Heart failure ❖ Shock ❖ Puerperal sepsis ❖ Sub involution ❖ Failing lactation ❖ Pulmonary embolism FETUS ❖ Poor fetal growth ❖ Preterm birth ❖ Low birth weight	Lecturing	Listing	Booklet	

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
2 Min	state the meaning of pre -eclampsia	**PRE-ECLAMPSIA:** Blood pressure to the extent of 140/90 mm of Hg or more plus protein in the urine with or without edema occurring after 20th week of pregnancy.	Discussion	Discussing	Booklet	What is pre-eclampsia?
2 Min	list the risk factors of pre -eclampsia	**RISK FACTORS** ✓ Women who have pre -eclampsia in previous pregnancies ✓ Placental factors ✓ Increased placental mass ✓ Abnormal placentation ✓ Pre existing disease of kidney ✓ Pregnancy below 20 years of age ✓ Pregnancy after 35 years of age ✓ Obesity ✓ Family history of high blood pressure ✓ Stress ✓ Past history of diabetes mellitus				
2 Min	identify the signs and symptoms of serve pre -eclampsia	**SIGNS AND SYMPTOMS OF MILD PRE ECLAMPSIA** ➢ High blood pressure: It is equal to or more than 140/90 mmHg				

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
		❖ Swelling Slight swelling on ankles which pits on pressure is found to persist even after 12 hours of bed rest or tightness of the ring on the finger. ❖ While pressing the edema the presence of 2mm depth-mild edema. 4 mm-moderate, 6mm severe, 10 mm very severe . ❖ Weight gain: The average total weight gain during pregnancy is 10-12 kg.In mild pre eclampsia weight gain is greater than 2 kg per month. **SIGNS AND SYMPTOMS OF SEVERE PRE ECLAMPSIA** ❖ Continuous high blood pressure ❖ Blood pressure is equal to or more than 160/110 mm of hg ❖ The swelling extends to the face, hands, abdominal wall, vulva, sacral area, ankles, feet and even the whole body ❖ Rapid weight gain	Discussion	Discussing	Booklet	How much of weight should be increased during pregnancy?

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV SIDS	EVALUATION
1 Min	describe the diagnosis of pre - eclampsia	❖ Presence of protein per 24 hour urine (30 mg/dl) ❖ Head ache, either located over frontal or occipital region ❖ Dizziness ❖ Disturbed sleep ❖ Oliguria ❖ Urine output is less than 400 ml in 24 hours ❖ Epigastric pain associated with vomiting ❖ Blurring vision ❖ Decreased fetal movements WARNING SIGNS: • Severe head ache • Vision defect • Reduced urine output • Abdominal pain • Face and leg edema. **<u>DIAGNOSIS</u>** • Blood pressure monitoring • Urine output in 24 hours • Weight of the patient • Edema testing • Urine testing for protein • Antenatal fetal monitoring • Daily fetal kick count • Ultrasonography	Lecture cum Discussion	Listening	Booklet	What are the methods used to diagnose pre-eclampsia?

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
2 Min	understand the prevention of pre eclampsia	**PREVENTION OF PRE ECLAMPSIA** Pre -eclampsia if not totally preventable disease. The following regime should be enforced in risk groups in an attempt to prevent or detect early manifestations of pre - eclampsia. ↓ Regular antenatal visits Once a month up to 6 month, once in 15days during seventh and eighth month and thereafter once a week till the expected date of delivery ↓ A women at risk should have at least ten antenatal check ups ↓ Adequate rest ↓ Sleep eight to twelve hours daily with 2 hours of rest in the middle of the day and eighty to ten hours during night from the 20th week of pregnancy onwards. ↓ Diet: Well balanced diet rich in protein ↓ Screening tests: Doppler assessment	Lecture cum Discussion	Listening	Booklet	How long the antenatal women have to sleep?

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
		♦ Roll over test: This is done during 28-32 weeks of pregnancy, blood pressure is measured with women lying on her left side then she is asked to roll on her back to check blood pressure once again. Increases of 20 mm of hg in diastolic pressure from side to back position indicate a positive roll over test, which is the evidence of pre-eclampsia.	Lecture cum Discussion	Listening	Booklet	How many antenatal visits are required for a women with pre eclampsia?
2 min	explain the management of pre - eclampsia	**MANAGEMENT OF PRE ECLAMPSIA** ♦ Adequate rest. Assume left lateral position during sleep ♦ Diet: Well balanced diet rich in protein (about 100 gm). ♦ Salt is neither restricted not forced. ♦ Total calorie approximately 1600 kcal/day. ♦ Monitor blood pressure regularly ♦ Monitor weight regularly ♦ Undergo all lab tests that are advised during pregnancy				

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
		✓ Shock ✓ Dimness of vision even blindness ✓ Hemolytic anemia, elevated liver enzyme, low platelet count ✓ Eclampsia **FETAL** ✓ intra uterine growth retardation ✓ Pre mature birth ✓ Intrauterine death ✓ Asphyxia				
1 Min	state the meaning of gestational diabetes mellitus	**III. GESTATIONAL DIABETES MELLITUS** **MEANING** Gestational diabetes mellitus is a condition in which the blood glucose level is increased during pregnancy. The normal blood glucose level is 80-120 mg/dl. It occurs due to insufficient production of insulin by the body.	Lecture cum Discussion	Listening	Booklet	What is mean by gestational diabetes?
1 min	list the risk factors of gestational diabetes mellitus	**RISK FACTORS** ✓ Positive family history of diabetes ✓ History of still birth ✓ Unexpected perinatal loss				

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
		✓ Obesity ✓ Age over 30 years ✓ Hypertension ✓ Polyhydramnios . ✓ Inadequate metabolic control ✓ Five or more previous pregnancies	Discussion	Discussing	Booklet	
1 min	identify the signs and symptoms of gestational diabetes mellitus	**SIGNS AND SYMPTOMS** ❖ Increased thirst ❖ Increased urination ❖ Weight loss in spite of increased appetite ❖ Fatigue, nausea, vomiting ❖ Infections including bladder vagina and skin ❖ A fetus larger than the normal for the state of pregnancy on prenatal examination. WARNING SIGNS:	Lecturing	Listening	Booklet	What are the signs and symptoms of gestational diabetes mellitus
1 min	describe the diagnosis of gestational diabetes mellitus	✓ Vision defect ✓ Increased tiredness ✓ Incresed urine output and thirst **DIAGNOSIS** • Fasting and post prandial blood sugar estimation. • Glucose Challenge Test	Lecture cum discussion	Discussing	Booklet	what are the test used to diagnosis gestational diabetes mellitus?

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
1min 5 Min	understand the prevention of gestational diabetes mellitus explain the management of Gestational diabetes mellitus	• Confirmation is to be done by testing a second fasting morning specimen of urine acetone . • Glucose tolerance test. • Ultrasonography PREVENTION: ➢ Weight management ➢ Diet ➢ Exercise **MANAGEMENT:** ➢ Antenatal supervision. ➢ Peroidic checkup of blood glucose level. ➢ Every women should check her blood glucose level. ➢ Maintaining the Fasting blood glucose level less than 95 mgs/dl. ➢ Special diet: The diet change will involve increased fiber intake ,fat restriction and elimination of concentrated sweets. ➢ Regular exercises,	Lecture cum Discussion	Lecturing	Booklet	What is the diet to be followed in gestational diabetes mellitus?

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
		➢ Insulin therapy (if needed) only when the blood sugar is not controlled through restricted diet and regular exercises.				
1 min	enumerate the complications of gestational diabetes mellitus	**COMPLICATIONS** **MATERNAL:** ✓ Abortion ✓ Preterm labour ✓ Infection ✓ Pre- eclampsia ✓ Maternal distress ✓ Excess amniotic fluid ✓ Prolongation of labour ✓ Failing lactation ✓ Perineal injuries ✓ Risk for mother developing diabetes in future **FETAL** ✓ Congenital abnormalities like heart diseases ✓ Birth Injuries ✓ Hypoglycemia ✓ Respiratory distress	Lecture cum Discussion	Discussing	Booklet	What are the complications to mother due to gestational diabetes?

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
1 min	state the meaning of multiple pregnancy	**IV. MULTIPLE PREGNANCY** **MEANING** It means development of two or more fetus in pregnant uterus.	Lecture cum discussion	Discussing	Booklet	What is meant by multiple pregnancy?
1 min	list the risk factors of multiple pregnancy	**RISK FACTORS** ➢ Heredity ➢ Older age ➢ High parity ➢ Race ➢ Assisted reproductive technology	Discussion	Discussing	Booklet	What are the risk factors of multiple pregnancy?
1 min	identify the signs and symptoms of multiple pregnancy	**SIGNS AND SYMPTOMS** ❖ Uterus is larger than expected date of pregnancy ❖ Increased morning sickness ❖ Increased appetite ❖ Excessive weight gain ❖ Fetal movement felt in different parts of abdomen at the same time	Explaining	Listening	Booklet	What are the signs and symptoms of multiple pregnancy?

TIME	SPECIFIC OBJECTIVE	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
1 min	describe the diagnosis of multiple pregnancy	**DIAGNOSIS** • Ultrasonography • Physical examination,by inspection and palpation • Blood testing • Alfa feto protein level	Lecturing	Listening	Booklet	How will you diagnose the multiple pregnancy?
2 Min	explain the management of multiple pregnancy	**MANAGEMENT** ↓ Increased nutrition: Mothers carrying two or more futures need more calories, protein, and other nutrients, including iron. Higher weight gain is also recommended. ↓ More frequent parental visits ↓ Increased rest ↓ Fetal growth assessment ↓ Maternal and fetal testing ↓ Tocolytics (if preterm labour) ↓ Cervical encirclage (for incompetent uterus) ↓ Supplementary therapy: Iron therapy to be increased to the extent of 60-80 mg/dl.	Lecture cum discussion	Discussing	Booklet	What are the management for multiple pregnancy?

TIME	SPECIFIC OBJECTIVES	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY	AV AIDS	EVALUATION
1 min	enumerate the complications of multiple pregnancy	**COMPLICATIONS** **MATERNAL** ✓ Nausea and vomiting occurs with increased frequency and severity ✓ Pre -eclampia, Anemia ✓ Abnormal amount of amniotic fluid ✓ Increased operative interference ✓ Bleeding ✓ Early rupture of membrane. ✓ Prolonged labour **FETAL** ✓ Birth defect ✓ Premature birth ✓ Growth problem ✓ Intra uterine death or still birth ✓ Fetal anomalies ✓ Asphyxia	Lecture cum discussion	Discussing	Booklet	What are complication of multiple pregnancy?
1 min		**CONCLUSION** Despite not every mother pregnant will have complications but knowing complications on risks during pregnant can assist, handles prevent complication occur.				

SCORING KEY

QUESTION NUMBER	ANSWER	SCORE
I.ANEMIA		
1	c	1
2	b	1
3	c	1
4	a	1
5	b	1
6	a	1
7	a	1
8	b	1
II.PRE-ECLAMPSIA		
1	c	1
2	b	1
3	c	1
4	c	1
5	b	1
6	c	1
7	a	1
8	b	1

III.GESTATIONAL DIABETES MELLITUS	ANSWER	SCORE
1	b	1
2	c	1
3	a	1
4	b	1
5	c	1
6	a	1
7	c	1
IV.MULTIPLE PREGNANCY		
1	a	1
2	b	1
3	a	1
4	b	1
5	a	1
6	a	1
7	c	1

விபரங்களை தொகுப்பதற்குரிய கருவி

பகுதி-அ
கருவி-1: தனிநபர் அடிப்படை தகவல்கள்

மாதிரி எண்:

1) வயது (ஆண்டுகளில்)

    அ) 20க்கும் குறைவு ☐

    ஆ) 20-28 வயது ☐

    இ) 28க்கும் அதிகம் ☐

2) மதம்

    அ) இந்து ☐

    ஆ) முஸ்லிம் ☐

    இ) கிறிஸ்தவர் ☐

3) குடும்ப வகைபாடு

    அ) தனிக்குடும்பம் ☐

    ஆ) கூட்டுக்குடும்பம் ☐

4) கல்வித்தகுதி

    அ) ஆரம்பக் கல்வி ☐

    ஆ) இடைநிலைக் கல்வி ☐

    இ) உயர்நிலைக்கல்வி ☐

    ஈ) பட்டதாரி ☐

5) தொழில்

    அ) குடும்பத் தலைவி ☐

    ஆ) அரசுப்பணி ☐

    இ) தனியார் பணி ☐

    ஈ) சொந்த வேலை ☐

6) குடும்ப மாத வருமானம்

    அ) ரூ.10000க்கும் குறைவு ☐

    ஆ) ரூ.10001 முதல் 20000/- ☐

    இ) ரூ.20001க்கு மேல் ☐

பகுதி-ஆ
கருவி-2: பேறுத்தன்மை பற்றிய விபரங்கள்

7) திருமணத்தின்போது வயது (ஆண்டுகளில்) ....

8) கடைசி மாதவிடாய் காலம் ....

9) குழந்தை பிறப்பினை எதிர்பார்க்கும் நாள் ....

10) பேறுத்தன்மை பற்றிய குறியீடு ஜி.பி.எல்.ஏ ....

11) முதல் குழந்தை பிறப்பின்போது வயது ....

12) முன் கர்ப்பகால உடல்நிலை ....

பகுதி-இ

கருவி-3: திட்டமிட்ட வினாத்தாள் அதிக பாதிப்பிற்குரிய கர்ப்பங்கள் பற்றிய வினாக்கள் கொண்டது. இது பிரிவு அ, ஆ, இ மற்றும் ஈ கொண்டது

பகுதி-அ: இரத்தசோகை குறித்த வினாக்கள்

1) இரத்த சோகை என்றால் என்ன?

    அ) இரத்தத்தில் ஹீமோகுளோபின் அளவு அதிகமாதல் ☐

    ஆ) இரத்தத்தில் ஹீமோகுளோபின் அளவு சராசரியாயிருத்தல் ☐

    இ) இரத்தத்தில் ஹீமோகுளோபின் அளவு குறைதல் ☐

2) பெண்களில் சரியான ஹீமோகுளோபின் அளவு என்ன?

    அ) 10-11 கி/டெசி.லி ☐

    ஆ) 11-16 கி/ டெசி.லி ☐

    இ) 16 கி/ டெசி.லி க்கும் அதிகம் ☐

3) கர்ப்பிணி பெண்ணில் இரத்த சோகை ஏற்படக் காரணம் என்ன?

    அ) முந்தைய கர்ப்பகாலத்தில் இரத்த சோகை ☐

    ஆ) இரத்த சோகை கொண்ட வரலாறு ☐

    இ) கர்ப்பகாலத்தில் அதிகமான இரும்புச்சத்து தேவை ☐

4) பின்வருவனவற்றில் எந்த அறிகுறி இரத்த சோகை இருப்பதை குறிப்பிடுகின்றது?

    அ) வெளிரி காணப்படுதல், களைப்பு, மூச்சுவிடுதலில் சிரமம் ☐

    ஆ) தலைவலி, வாந்தி பேதி ☐

    இ) இரத்தக் கசிவு, வயிற்று வலி, கால் தசை இறுக்கம் ☐

5) இரத்த சோகையை தடுக்க எந்த உணவுப்பொருட்களை சேர்த்துக்கொள்ள வேண்டும்?

    அ) ஆப்பிள், கொய்யாப்பழம் ☐

    ஆ) பச்சைக் கீரை, காய்கறிகள், பேரீச்சம்பழம் ☐

    இ) கோழிக்கறி, குளிர்பானங்கள் ☐

6) ஏன் கர்ப்பினி பெண் உணவு உண்டபின் தேநீர் அருந்துவதை தவிர்க்க வேண்டும்?

அ) இரும்புச்சத்து உறிஞ்சும் தன்மையை குறைக்கும் ☐

ஆ) இது குமட்டல் மற்றும் வாந்தியை ஏற்படுத்தும் ☐

இ) இது பற்களில் கரையை ஏற்படுத்தும் ☐

7) இரத்த சோகையை தடுக்க எது சரியான நேரம்?

அ) கர்ப்பமடையும் முன்னர் ☐

ஆ) கர்ப்பமடைந்த பின்னர் ☐

இ) கர்ப்பினி பெண்ணில் இரத்த சோகை இருப்பதை கண்டறிந்தபின் ☐

8) சிகிச்சை அளிக்கப்படாத இரத்த சோகையின் விளைவு என்ன?

அ) அதிக இரத்த சர்க்கரை ☐

ஆ) குறைமாத மற்றும் எடை குறைவான குழந்தை ☐

இ) அதிக இரத்த அழுத்தம் ☐

பிரிவு-அ: கர்ப்பகாலத்திற்கு முன் ஏற்படும் வலிப்பு நோய் பற்றிய வினாக்கள்

1) கர்ப்பகால வலிப்பு நோய் என்றால் என்ன?

அ) சராசரி இரத்த அழுத்தத்துடன் கூடிய வீக்கம் காணப்படுதல் ☐

ஆ) குறைவான இரத்த அழுத்தத்துடன் கூடிய வீக்கம் காணப்படுதல் ☐

இ) உயர் இரத்த அழுத்தத்துடன் கூடிய வீக்கம் காணப்படுதல் ☐

2) ஒரு கர்ப்பினிப் பெண்ணின் சராசரியான இரத்த அழுத்தத்தின் அளவு என்ன?

அ) 80-50 மி.மீ. பாதரச அழுத்தம் ☐

ஆ) 120-80 மி.மீ. பாதரச அழுத்தம் ☐

இ) 140-100 மி.மீ. பாதரச அழுத்தம் ☐

3) பொதுவாக எந்த கர்ப்ப காலத்தில் கர்ப்ப கால வலிப்பு நோய் ஏற்படும்?

  அ) 12 வாரத்தில் ☐

  ஆ) 13-20 வது வாரத்தில் ☐

  இ) 20வது வாரத்திற்கு மேல் ☐

4) கர்ப்பகால வலிப்பு நோயில் படுக்கை ஓய்விற்கும் வீக்கத்திற்கும் உள்ள சம்பந்தம் என்ன?

  அ) படுக்கை ஓய்வினால் வீக்கம் அதிகரிக்கிறது ☐

  ஆ) படுக்கை ஓய்வினால் வீக்கம் குறைகிறது ☐

  இ) படுக்கை ஓய்வினால் வீக்கம் அப்படியே இருக்கிறது ☐

5) எந்த நிலையில் ஒரு கர்ப்பிணி பெண் உறங்க வேண்டும்?

  அ) வலதுபுறமாக சரிந்த நிலையில் ☐

  ஆ) இடதுபுறமாக சரிந்த நிலையில் ☐

  இ) மல்லார்ந்த நிலையில் ☐

6) சிசுவின் ஆரோக்கிய நிலையினை எவ்வாறு அறியலாம்?

  அ) இரத்த அழுத்தத்தை பரிசோதிப்பதன் மூலம் ☐

  ஆ) எடையை அளப்பதன் மூலம் ☐

  இ) சிசுவின் அசைவினை வைத்து ☐

7) கர்ப்பகால வலிப்பு நோயின் எச்சரிக்கை அறிகுறிகள் என்ன?

  அ) நெஞ்சு எரிச்சல், மங்கலான பார்வை, கைகால்களில் வீக்கம்
      குறைவான சிறுநீர் வெளியேற்றம் ☐

  ஆ) காய்ச்சல் ☐

  இ) முதுகுவலி ☐

8) சிகிச்சை அளிக்கப்படாத கர்ப்பகால வலிப்பு நோயின் விளைவு என்ன?

  அ) புற்றுநோய் ☐

  ஆ) வலிப்பு ☐

  இ) தைராய்டு ☐

பிரிவு-ஆ: கர்ப்பகால சர்க்கரை நோய் பற்றிய வினாக்கள்

1) கர்ப்ப காலத்தின் சரியான இரத்த சர்க்கரையின் அளவு என்ன?

    அ)   135-155 மி.கி/ டெசி.லி ☐

    ஆ)   80-120 மி.கி/ டெசி.லி ☐

    இ)   50-70 மி.கி/ டெசி.லி ☐

2) பின்வருவனவற்றில் எது கர்ப்பகாலத்தில் சர்க்கரை நோய்க்கான பாதிக்கும் காரணி?

    அ)   இரத்த சம்பந்தப்பட்ட உறவுகளில் திருமணம் ☐

    ஆ)   இரத்தத்தில் குறைந்த அளவு ஹீமோகுளோபின் ☐

    இ)   சர்க்கரை நோய் கொண்ட குடும்ப வரலாறு ☐

3) கர்ப்ப காலத்தில் சர்க்கரை நோய் ஏற்படக் காரணம் என்ன?

    அ)   இன்சுலின் உற்பத்தியின் அளவு குறைவாயிருத்தல் ☐

    ஆ)   பெண்கள் அதிக அளவு இனிப்பை உட்கொள்ளுவதால் ☐

    இ)   உடற்பயிற்சியின்மை ☐

4) கர்ப்பகாலத்தில் சர்க்கரை நோய்க்கான அறிகுறி என்ன?

    அ)   கர்ப்பப்பை வாய்க்குழியில் இரத்தம் கசிதல் ☐

    ஆ)   அதிக தாகம் மற்றும் சிறுநீர் கழிப்பு ☐

    இ)   திடீர் இரத்த அழுத்த உயர்வு ☐

5) கர்ப்ப காலத்தில் சர்க்கரை நோயை எந்த பரிசோதனையை பயன்படுத்தி கண்டுபிடிக்கலாம்?

    அ)   ஹீமோகுளோபின் அளவை அளப்பதன் மூலம் ☐

    ஆ)   இரத்த பிரிவினை பரிசோதிப்பதன் மூலம் ☐

    இ)   வாய்க்குழி குளுகோஸ் தாங்குதிறன் ஆய்வின் மூலம் ☐

6) பின்வருவனவற்றில் எது கர்ப்பகாலத்தில் சர்க்கரை நோயினால் ஏற்படக்கூடிய விளைவு?

    அ)   அளவில் சிறிய குழந்தை ☐

    ஆ)   அதிக இரத்த சர்க்கரையுடன் கூடிய குழந்தை ☐

    இ)   அளவில் பெரிய குழந்தை ☐

7) பின்வருவனவற்றில் எது கர்ப்பகாலத்தில் சர்க்கரை நோயுள்ள பெண்ணிற்கு அளிக்க வேண்டிய சிகிச்சை முறைகள்?

   அ)   சிறந்த உணவு, உடற்பயிற்சி, இன்சுலின் ஊசி ☐

   ஆ)   இன்சுலின் ஊசி மட்டும் ☐

   இ)   போதுமான உணவு மட்டும் ☐

பிரிவு-இ: பல கரு கர்ப்பத்தை பற்றிய வினாக்கள்

1) பல கருவுற்ற கர்ப்பம் என்றால் என்ன?

   அ)   2 அல்லது அதற்கு மேற்பட்ட சிசு கருப்பையில் வளர்தல் ☐

   ஆ)   கருப்பையின் வெளியே சிசு வளர்தல் ☐

   இ)   அடுத்தடுத்த கர்ப்பங்கள் ☐

2) பல கருவுற்ற கர்ப்பத்தின் காரணம் என்ன?

   அ)   இளம் வயதில் கர்ப்பமாதல் ☐

   ஆ)   பாரம்பரியம் ☐

   இ)   உடல் பருமன் ☐

3) பல கருவுற்ற கர்ப்பத்திற்கான அறிகுறி என்ன?

   அ)   சிசுவின் அசைவை வயிற்றின் வெவ்வேறு பகுதிகளில் ஒரே சமயத்தில் உணருதல் ☐

   ஆ)   உயர் இரத்த அழுத்த மற்றும் உயர் இரத்த சர்க்கரை ☐

   இ)   வெளிப்புற கர்ப்பம் ☐

4) பல கருவுற்ற கர்ப்பத்தை எம்முறையை பயன்படுத்தி கண்டறியலாம்?

   அ)   இரத்த சர்க்கரையின் அளவினை பரிசோதிப்பதன் மூலம் ☐

   ஆ)   ஸ்கேன் பரிசோதனை மூலம் ☐

   இ)   சிறுநீர் பரிசோதனையின் மூலம் ☐

5) பல கருவுற்ற கர்ப்பத்தில் குழந்தை பிறப்பிற்கு பின்பு குழந்தைகளுக்கு கொடுக்க வேண்டிய உணவு என்ன?

   அ)   எல்லா குழந்தைகளுக்கும் தாய்ப்பால் ☐

   ஆ)   லேக்டோஜன் ☐

   இ)   ஒரு குழந்தைக்கு தாய்ப்பாலும், மற்ற குழந்தைகளுக்கு பசும்பாலும் ☐

6) பல கருவுற்ற கர்ப்பத்தில் கர்ப்பிணி பெண்ணின் உணவு தேவை என்ன?

அ) அதிக கலோரி, அதிக புரதம், அதிக இரும்புச் சத்து ☐

ஆ) குறைந்த கொழுப்பு, குறைந்த புரதம் ☐

இ) அதிக கொழுப்பு, அதிக புரதம் ☐

7) பல கருவுற்ற தன்மையினால் சிசுவிற்கு உண்டாகும் பாதிப்பு என்ன?

அ) அதிக எடையுள்ள குழந்தை ☐

ஆ) நோய் தொற்றுள்ள குழந்தை ☐

இ) குறைமாத பிரசவம் ☐

அதிக பாதிப்பிற்குரிய கர்ப்பம் பற்றிய பாடத்திட்டம்

பாடத்திட்டம்

தலைப்பு	:	அதிக பாதிப்பிற்குரிய கர்ப்பம்
காலம்	:	30 நிமிடங்கள்
குழு	:	8-28 வாரங்களில் உள்ள கர்ப்பிணி பெண்கள்
இடம்	:	கர்ப்பிணி பெண்கள் புறநோயாளிகள் பிரிவு, மகப்பேறு மருத்துவமனை, எழும்பூர்
கற்பிக்கும் முறை	:	விரிவுடையாற்றலும், கலந்துரையாடலும்
கற்பிக்கும் மொழி	:	தமிழ்
துணைக் கருவி	:	புத்தகக் குறிப்பேடு
ஆயவாளர் பெயர்	:	ஜெ.தனலெட்சுமி, முதுநிலை இரண்டாமாண்டு மாணவி

பொதுவான நோக்கம்

கற்பித்தலின் முடிவில் குழு அதிக பாதிப்பிற்குரிய கர்ப்பத்தை பற்றிய அறிவினையும், அதன் அறிகுறிகளை எவ்வாறு ஆரம்பத்திலேயே கண்டறிவது என்பதையும், அதன் விளைவுகளை எவ்வாறு தடுக்க வேண்டும் என்பதையும் மற்றும் நிஜ வாழ்க்கையில் எவ்வாறு உபயோகப்படுத்த வேண்டும் என்பதையும் அறிய முடியும்.

சிறப்பு நோக்கங்கள்

கர்ப்பிணி பெண்கள் கீழ்க்கண்ட திறன்களைப் பெறுவர்

1. அதிக பாதிப்பிற்குரிய கர்ப்பம் என்பதன் பொருள் யாது என்பதைக் கண்டறிவர்

2. அதிக பாதிப்பிற்குரிய கர்ப்பத்திற்கான காரணங்களை பட்டியலிடுவர்

3. அதிக பாதிப்பிற்குரிய கர்ப்பத்திற்கான அடையாளங்கள் அறிகுறிகள் இவற்றைக் கண்டறிவர்

4. அதிக பாதிப்பிற்குரிய கர்ப்பத்திற்கான கண்டறியும் முறையை வரையறுப்பர்

5. அதிக பாதிப்பிற்குரிய கர்ப்பத்தினை தடுக்கும் முறையை புரிந்துகொள்வர்

6. அதிக பாதிப்பிற்குரிய கர்ப்பத்திற்கான சிகிச்சை முறையை விவரிப்பர்

7. அதிக பாதிப்பிற்குரிய கர்ப்பத்தினுடைய விளைவுகளை பட்டியலிடுவர்

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
1 நிமிடம்	ஆராய்ச்சியாளர் காரியத்திட்டத்தின் தலைப்பினை அறிமுகப்படுத்துதல்	**முன்னுரை :** அனைத்து கர்ப்பங்களும், பிரசவங்களும் பாதிப்பிற்குரிய விஷயங்கள். இருப்பினும் ஒரு சில வகைகளில், தாய் மற்றும் சேய்யிற்கு அதிக விளைவுகள் ஏற்பட வாய்ப்புள்ளது. ஏறத்தாழ **20-30%** கர்ப்பங்கள் இந்த வகையை சார்ந்தது. மகப்பேற்று நிலையை உயர்த்த வேண்டுமெனில், மேற்கண்ட குழுமம் முதலில் கண்டறியப்பட்டு சிகிச்சை அளிக்கப்பட வேண்டும்.	அறிமுகப்படுத்துதல்	கவனித்தல்	புத்தகக் குறிப்பேடு	
1 நிமிடம்	கற்றுக்கொள்பவர்கள் அதிக பாதிப்பிற்குரிய கர்ப்பம் என்பதன் பொருள் யாது என்பதைக் கண்டறிவர்	**அதிக பாதிப்பிற்குரிய கர்ப்பத்தின் அர்த்தம் :** கர்ப்ப காலத்தில் பல வகையான நோய்கள் மற்றும் காரணங்கள் தாய் மற்றும் சேய்யிற்கு பாதிப்பினை ஏற்படுத்துகிறது. இவ்வகை கர்ப்பங்கள் அதிக பாதிப்பிற்குரியவை என கருதப்படுகிறது. சில அதிக பிரச்சனைக்குரிய கர்ப்பங்கள் ● இரத்த சோகை ● கர்ப்பகால வலிப்பு நோய் ● கர்ப்பகால சர்க்கரை நோய் ● பல கருவுற்ற தன்மை	அதன் அர்த்தத்தை விவரித்தல்	கலந்துரையாடல்	புத்தகக் குறிப்பேடு	அதிக பாதிப்பிற்குரிய கர்ப்பம் என்றால் என்ன?

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
1 நிமிடம்	கற்றுக்கொள்பவர்கள் இரத்த சோகை என்பதன் பொருள் யாது என்பதைக் கண்டறிவர்	**இரத்த சோகை** **அர்த்தம் :** ● இரத்த சோகை உலகத்தில் அதிலும் குறிப்பாக கர்ப்பிணிப் பெண்களில் என்பது பொதுவான பிரச்சனை. இந்நிலையில் ஹீமோகுளோபின் அளவு குறைவாக காணப்படும். அதாவது அதன் அளவு 11கி/டெசி.லி–க்கும் குறைவு. ● ஹீமோகுளோபின் என்பது இரத்தத்தில் உள்ள ஒரு சிவப்பனு ஆகும். இதன் முதன்மை வேலை உடலில் அனைத்து உறுப்புகளுக்கும் ஆக்ஸிஜனை எடுத்து செல்வதாகும். ● சராசரியான ஹீமோகுளோபின் அளவு 11–16 கி/டெசி லி. ● பொதுவாக **80%** இரும்புச்சத்து குறைவினால் ஏற்படுகிறது.	கலந்துரையாடல்	கலந்துரையாடல்	புத்தகக் குறிப்பேடு	கர்ப்பிணி பெண்ணின் ஹீமோகுளோபின் அளவு என்ன?
1 நிமிடம்	கற்றுக்கொள்பவர் இரத்த சோகை காரணங்களை பட்டியலிடுவர்	● அதிகப்படியான இரும்பு சத்து தேவை ● குறைவாக உணவு உட்கொள்ளுதல் ● உடல் அலைச்சல் ● கர்ப்பத்திற்கு முன்புள்ள உடல்நிலை ● இரத்த இழப்பு ● குறைந்த இடைவெளியில் அடிக்கடி கர்ப்பமாதல்	விவரித்தல்	கவனித்தல்	புத்தகக் குறிப்பேடு	இரத்த சோகைக்கான காரணங்களை குறிப்பிடுக?

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
2 நிமிடம்	கற்றுக்கொள்பவர்கள் இரத்த சோகை அடையாளங்கள் அறிகுறிகள் இவற்றைக் கண்டறிவர்	**அறிகுறிகள்** ● வெளிரிக் காணப்படுதல் குறிப்பாக கீழ் இமையின் உட்புறம், நகங்கள், நாக்கு, தோல் மற்றும் உள்ளங்கை. ● களைப்பு ● மூச்சுவிடுதலில் சிரமம் ● அதிகப் படியான இதய துடிப்பு ● தலைச்சுற்றல் ● சோம்பல் ● கவனம் செலுத்தலில் சிரமம் ● எடை இழப்பு ● தீவிர இரத்த சோகையின் கரண்டி வடிவில் நகங்கள். **எச்சரிக்கை அறிகுறிகள்** ● உள்ளங்கை மற்றும் கீழ் இமையின் உட்புறம் வெளிரி காணப்படுதல். ● சுவாசம் ஒரு நிமிடத்திற்கு 30க்கும் அதிகமாக இருத்தல். ● அதிகமான களைப்பு ஓய்வு நேரத்திலும் மூச்சுவிடுவதில் சிரமம்	விவரித்தல் விவரித்தல்	கவனித்தல் கவனித்தல்	புத்தகக் குறிப்பேடு	இரத்த சோகையை எவ்வாறு கண்டறியலாம?
2 நிமிடம்	கற்றுக்கொள்பவர்கள் கண்டறியும் முறையை வரையறுப்பர்	**கண்டறியும் முறைகள்** ● நோய்கள் உடல் அறிகுறிகள் ஆராய்வதன் மூலம் ● அளவை மதிப்பிடுதலின் மூலம் ● இரத்தப் பொருள் இணையும் திறன் மூலம்	கலந்துரையாடல்	கலந்துரையாடல்	புத்தகக் குறிப்பேடு	இரத்தசோகை கண்டறியும் முறைகளை குறிப்பிடுக?

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
2 நிமிடம்	கற்றுக் கொள்பவர்கள் இரத்த சோகை தடுக்கும் முறையை புரிந்துகொள்வர்	**தடுக்கும் முறைகள்** ● இரத்த சோகையை தடுக்க கர்ப்பகாலத்திற்கு முன்பே ஆரம்பிக்க வேண்டும். ● ஆரம்ப கர்ப்பகால பரிசோதனை ● ஹீமோகுளோபினின் அளவு குறைவினை ஆரம்பத்திலேயே கண்டறிதல் ● அடிக்கடி குழந்தைப்பேற்றினை தவிர்ப்பதன் மூலம் (குறைந்த பட்ச இடைவெளி 2 வருடங்கள்) ● இணை இரும்பு சத்து சிகிச்சை சத்தான உணவு வகைகளுடன் இணை இரும்பு சத்தும் தேவையானது. நாடாப்புளு தாக்குதலை தவிர்க்க பாதங்களை செருப்புகள் பயன்படுத்தி பாதுகாக்க வேண்டும். ● கர்ப்பகாலத்தில் தேவையான மொத்த இரும்பு சத்து 1000 மி.கி. ஆகும். புரதச் சத்து மற்றும் இரும்புசத்து அதிகமுள்ள உணவு வகைகளை உட்கொள்ளுதல் அவையாவன நிலக்கடலை, பீன்ஸ், அடர் பச்சை காய்கறிகள், கல்லீரல், பால், முட்டை, வெங்காயம் மற்றும் பேரீட்சைப் பழம்.	கலந்துரையடால்	கலந்துரையாடல்	புத்தக குறிப்பேடு	புரதம் மற்றும் இரும்புச் சத்து அதிகம் கொண்ட உணவு வகைகள் யாவை?

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
		• மருத்துவரின் அறிவுப்படி தினசரி இரும்புச்சத்து மற்றும் போலிக் அளவு மாத்திரையை உட்கொள்ளுதல் அனைத்து கர்ப்பிணிப் பெண்களும் இவ்வகை மாத்திரைகளை 4வது மாதம் முதற்கொண்டு உட்கொள்ள வேண்டும். • உணவு உண்டப்பின் தேநீர் அருந்தக்கூடாது. ஏனெனில் உணவுடன் தேநீர் அருந்தும் போது தேநீரில் உள்ள ஒரு வகை பொருள் இரும்புச்சத்து உறிஞ்சும் தன்மையை தடுக்கிறது. • மலேரியா, இரத்தம் மற்றும் சிறுநீர்குழாய் சம்மந்தப்பட்ட நோய்களுக்கான சிகிச்சை	கலந்துரையாடல்	புத்தகக் குறிப்பு		
2 நிமிடம்	கற்றுக் கொள்பவர்கள் சிகிச்சை முறைகளை விவரிப்பர்	<u>**சிகிச்சை முறைகள் :**</u> • உணவு அதிக புரதம், இரும்புச்சத்து மற்றும் வைட்டமின் கொண்ட சமச்சீர் உணவு • பசியினை தூண்டவும், செறித்தலை அதிகரிக்கவும் பெப்சின் அதிகம் கொண்டு தயாரிக்கப்பட்ட பொருட்கள் • உயர் எதிர் பொருளை பயன்படுத்தி குறைந்தபட்ச கிருமி தாக்குதலையும் இல்லாமல் செய்தல். • இரத்தசோகை ஏற்படுத்தல் காரணிகளுக்கு சிகிச்சை • இரும்புச் சத்துள்ள மருந்துகள்: வாய் வழி இரும்புச்சத்து மாத்திரை மற்றும் ஊசி மூலம் இரும்புச்சத்து ஏற்றுதல். • உட்கொள்ளும்போது வயிற்று எரிச்சல், வாந்தி, கருப்பு நிற மலம் போன்ற பின்விளைவுகள் ஏற்படலாம். இவை சில நாட்களில் சரியாகிவிடும். • இரத்தம் செலுத்துதல்	சிகிச்சை முறைகளை விவரித்தல்	கவனித்தல்	புத்தகக் குறிப்பேடு	இரும்புச்சத்து மாத்திரையின் பக்க விளைவுகள் என்ன?

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
1 நிமிடம்	கற்றுக் கொள்பவர்கள் இரத்த சோகை விளைவுகளை பட்டியலிடுவர்	**விளைவுகள்** **தாயிற்கு:** ● நோய்தொற்று ● கர்ப்ப கால இரத்த அழுத்த நோய் ● கர்ப்பப்பை சுருங்காமை ● இதயக்கோளாறு ● அதிக இரத்தப்போக்கு ● மகப்பேறுக்குப்பின் நோய்தொற்று ● கர்ப்பை சரிவர சுருங்காமை ● தாய்ப்பால் சுரத்தலில் குறைபாடு ● நுரையீரல் இரத்தக்குழாயில் அடைப்பு **சேய்க்கு :** ● சிசுவின் வளர்ச்சி குறைபாடு ● குறைமாத பிறப்பு ● குறைவான பிறப்பு எடை	கலந்துரையாடல்	கலந்துரையாடல்	புத்தகக் குறிப்பேடு	இரத்த சோகையினால் சிசுவிற்கு உண்டாகும் பாதிப்பு என்ன?

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
1 நிமிடம்	கற்றுக் கொள்பவர்கள் கர்ப்பகால வலிப்பு பொருள் யாது என்பதைக் கண்டறிவர்	**அர்த்தம்:** கர்ப்பிணிப்பெண்ணில் சரியான இரத்த அழுத்தத்தின் அளவு 120/80 மிமீ பாதரச அழுத்தம். கர்ப்பகால வலிப்பு நோய் என்பது உயர் இரத்த அழுத்தம் அதாவது 140/90 மிமீ. பாதரச அழுத்தம் அல்லது அதற்கு அதிகமாகவும், சிறுநீரில் புரதம் உடன் வீக்கம் மற்றும் வீக்கமற்ற நிலை ஆகும். இது குறிப்பாக கர்ப்பகாலத்தில் 20வது வாரத்திற்கு மேல் ஏற்படும்.	விவரித்தல்	கவனித்தல்	புத்தகக் குறிப்பேடு	கர்ப்பகால வலிப்பு நோய் என்றால் என்ன?
1 நிமிடம்	கற்றுக்கொள்பவர்கள் கர்ப்பகால வலிப்பு நோய் பாதிக்கும் காரணிகளை பட்டியலிடுவர்	**பாதிக்கும் காரணிகள்:** ● கர்ப்பகால வலிப்பு நோய் கொண்ட சரித்திரம் இருக்கும் ● நஞ்சுக்கொடி காரணிகள் ● அதிகமான நஞ்சுக்கொடியின் அளவு ● நஞ்சுக்கொடியின் இடமாற்றம் ● சிறுநீரகத்தில் ஏதேனும் நோயிந்தால் ● 20 வயதிற்கு முன் கர்ப்பமாதல் ● 30 வயதிக்குபின் கர்ப்பமாதல் ● உடல் பருமன் ● உயர் இரத்த அழுத்தம் கொண்ட குடும்ப சரித்திரம் ● மன அழுத்தம் ● முன்பே உள்ள சர்க்கரை நோய்	விவரித்தல்	கவனித்தல்	புத்தக குறிப்பேடு	

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
1 நிமிடம்	கற்றுக்கொள்பவர்கள் கர்ப்பகால வலிப்பு நோயிற்கான ஆரம்ப அறிகுறிகளை கண்டறிவர்	**ஆரம்ப அறிகுறிகள் :** ● உயர் இரத்த அழுத்தம் 140/90 மீ.மீ. பாதரச அழுத்தம் அல்லது அதற்கு மேல் ● வீக்கம் 12 மணி நேர ஓய்விற்கு பின்பும் முட்டியில் வீக்கம் தொடர்ந்து காணப்படுதல் விரல் மோதிரம் இறுகி காணப்படுதல். ● வீக்கத்தை அழுத்தும் போது 2 மி.மீ. க்கு உள்ளே சென்றால் அது மிதமான வீக்கம், 4 மிமீ க்கு உள்ளே சென்றால் அது நடுத்தர வீக்கம் 6 மி.மீக்கு உள்ளே சென்றால் அது மோசமான நிலை 10 மி.மீ க்கு உள்ளே சென்றால் அது மிக மோசமான நிலை. ● எடை அதிகரிப்பு கர்ப்பகாலத்தில் சராசரி எடை அதிகரிப்பு 10 முதல் 12 கிலோ ஆகும். ஆனால் கர்ப்பகால வலிப்பு நோயில் எடை அதிகரிப்பு மாதத்திற்கு 2 கிலோவிற்கு மேல் இருக்கும்.	கலந்துரையாடல்	கலந்துரையாடல்	புத்தக குறிப்பேடு	கர்ப்பகாலத்தில் தாய்க்கு சராசரியாக எவ்வளவு எடை அதிகரிக்க வேண்டும்?

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
1 நிமிடம்	கற்றுக்கொள்பவர்கள் கர்ப்பகால வலிப்பு நோயிற்கான தீவிர நிலையில் உள்ள அறிகுறிகளை கண்டறிவர்	**தீவிர நிலையில் அறிகுறிகள்** • தீவிர தொடர் உயர் இரத்த அழுத்தம் இரத்த அழுத்தத்தின் அளவு 160/110 மி.மீ பாதரச அழுத்தம் அல்லது அதற்கு அதிகமாக இருக்கும். • வீக்கம், முகம், கைகள், வயிற்றுப் பகுதி, பெண்ணினப்பெருக்க உறுப்பின் வெளிப்பகுதி, முதுகுப்புறப்பின் பகுதி, பாதம் மற்றும் மற்ற உடல் பகுதிகளில் காணப்படும். • விரைவான எடை அதிகரிப்பு • 24 மணிநேர சிறுநீரில் புரதம் காணப்படுதல். அதாவது 30 கிராம்/டெசி.லி. • தலை வலி முன்புற அல்லது பின்புறம் • நிம்மதியற்ற உறக்கம் • குறைவான சிறுநீர் வெளியேற்றம் 24 மணிநேரத்தில் சிறுநீர் வெறியேற்றம் 400 மி.லி க்கும் குறைவாக இருக்கும் • வயிற்றுவலியுடன் கூடிய வாந்தி • மங்கலான பார்வை • குறைவான சிசு அசைவு	கலந்துரையாடல்	கலந்துரையாடல்	புத்தக குறிப்பேடு	தீவிர கர்ப்ப கால வலிப்பு நோயின் அறிகுறிகளை கூறுக?

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
		எச்சரிக்கை அறிகுறிகள் ● தாங்கமுடியாத தலைவலி ● பார்வை குறைபாடு ● குறைவான சிறுநீர் வெளியேற்றம் ● மேல் வயிற்று வலி ● கால் மற்றும் முகத்தில் வீக்கம்	விவரித்தல்	கவனித்தல்		
1 நிமிடம்	கற்றுக்கொள்பவர்கள் கர்ப்பகால வலிப்பு நோயினை கண்டறியும் முறையை வரையறுப்பர்	● இரத்த அழுத்தத்தை அளப்பதன் மூலம் ● 24 மணி நேர சிறுநீர் வெளியேற்றம் ● தாயின் எடையை அளப்பதன் மூலம் ● புரதத்திற்கான சிறுநீர் ஆய்வு சிசுவின் ஆரோக்கிய நிலையை கண்காணிப்பதன் மூலம் ● தினசரி சிசு உதைக்கும் எண்ணிக்கையை கணக்கிடுதல். ● மீயொலி கதிர் சிதறல் (ஸ்கேன்)	விவரித்தல்	கவனித்தல்	புத்தக குறிப்பேடு	கர்ப்பகால வலிப்பு நோய் கண்டறியும் முறைகளை கூறுக?

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
1 நிமிடம்	கற்றுக்கொள்பவர்கள் கர்ப்பகால வலிப்பு நோயினை தடுக்கும் முறையை பற்றி புரிந்துகொள்வர்	**தடுக்கும் முறைகள்:** ● கர்ப்பகால வலிப்பு நோயை முழுமையாக தடுக்க முடியாது. பின்வருவனவற்றை பயன்படுத்த பாதிப்புக்குள்ளானவர்களை பாதிப்பிலிருந்து தடுக்கவோ அல்லது ஆரம்ப நிலையிலே கண்டுபிடிக்கவோ முடியும். ● தொடர் கர்ப்பகால பரிசோதனை முதல் 6 மாதங்களுக்கு மாதம் ஒரு முறையும், 7வது 8வது மாதங்களில் 15 நாட்களுக்கு ஒருமுறையும், அதற்கு பின் ஒவ்வொரு வாரமும் பரிசோதனைக்கு செல்ல வேண்டும். பாதிப்புக்குள்ளவர்கள் குறைந்தது 10 பரிசோதனையாவது செய்ய வேண்டும். ● போதுமான ஓய்வு 20 வது வாரத்தின் தொடக்கத்திலிருந்த 8–12 மணி நேர உறக்கம். இதில் 2 மணி நேரம் பிற்பகலிலும், 8–10 மணி நேரம் இரவிலும் உறங்க வேண்டும். ● உணவு வகைகள், புரதச்சத்து நிறைந்த உணவுப் பொருட்கள் ● கண்டறியும் ஆய்வு டாப்ளர் கொண்டு மதிப்பிடுதல்	கலந்துரையாடல்	கலந்துரையாடல்	புத்தக குறிப்பேடு	ஒரு கர்ப்பிணி பெண் எவ்வளவு நேரம் உறங்கலாம்.

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
		• ரோல் ஓவர் ஆய்வு– இதனை கர்ப்பகாலத்தில் 28–32 வாரங்களில் செய்ய வேண்டும். முதலில் தாயினை இடது புறமாக சாய்நத நிலையில் படுக்குமாறு செய்து இரத்த அழுத்தத்தினை பரிசோதிக்க வேண்டும். பின்பு திரும்ப செய்து மீண்டும் பரிசோதிக்க வேண்டும். அப்போது டயஸ்டோலிக் அழுத்தம் 20 மி.மீ. பாதரச அழுத்தத்தற்கு அதிகமாக இருந்தால் அது கர்ப்பகால வலிப்பு நோய் இருப்பதற்கு சாதகமான நிலையாகும்.	கலந்துரையாடல்	கலந்துரையாடல்	புத்தகக் குறிப்பேடு	கர்ப்பகால வலிப்பு நோய் உள்ள பெண் குறைந்தது எத்தனை முறை பரிசோதனைக்கு வர வேண்டும்?
2 நிமிடம்	கற்றுக்கொள்பவர்கள் கர்ப்பகால வலிப்பு நோயிற்கான சிகிச்சை முறையை விவரிப்பர்	**சிகிச்சையின் முறைகள்** • போதுமான ஓய்வு : உறங்கும்போது இடதுபுறமாக சாய்ந்த நிலையில் படுக்க வேண்டும். • உணவுகள் புரதம் நிறைந்த உணவு (பொதுவாக 100 கி/நாள்) • உப்புசத்தினை அதிகமாகவோ அல்லது தவிர்க்கவோ கூடாது. • மொத்த கலோரி சராசரியாக 1600 கலோரி/நாள். • தொடர் இரத்த அழுத்த பரிசோதனை • தொடர் எடை அளப்பு • ஆய்வக பரிசோதனை குறிப்பாக, சிறுநீரில் சர்க்கரை மற்றும் புரதத்திற்கான ஆய்வு மற்றும் இரத்த பரிசோதனை • கர்ப்பக்கால வலிப்பு நோய்க்கான அறிகுறிகளை கண்காணித்தல் • அதிகப்படியான உடலியக்கத்தை தவிர்த்தல்	சிகிச்சை முறைகளை விவரித்தல்	கவனித்தல்	புத்தக குறிப்பேடு	

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
		• மன அழுத்தம் மற்றும் பயத்தை குறைத்தல்– புத்தகத்தை படிப்பதன் மூலம் தொலைக்காட்சியை பார்ப்பதன் மூலமும் மன அழுத்தத்தை குறைக்கலாம். • தினமும் குழந்தை உதைக்கும் எண்ணிக்கையை கணக்கிடுதல்– காலை 10 மணியிலிருந்து கணக்கெடுப்பு ஆரம்பிக்க வேண்டும். 10 அசைவாவது 1 நாளில் தெரிய வேண்டும். தொடர் 2 நாட்களில் 12 நேரத்தில் 10 அசைவிற்கும் குறைவாகவோ அல்லது அசைவற்ற நிலையையோ உணர்ந்தால் மருத்துவரிடம் தெரிவிக்க வேண்டும். • உயர் இரத்த அழுத்தத்திற்கான மருந்துகள்	விவரித்தல்	கவனித்தல்		

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
1 நிமிடம்	கற்றுக்கொள்பவர்கள் கர்ப்பகால வலிப்பு நோயின் விளைவுகளை பட்டியலிடுவர்	**விளைவுகள்** **தாயிற்கு** ● குறைவான சிறுநீர் வெளியேற்றம் அல்லது சீறுநீர் வெளியேற்றமின்மை ● எதிர்பராத இரத்தக்கசிவு ● நோய்தொற்று ● பார்வை குறைவு அல்லது பார்வை இழப்பு ● இரத்தசோகை ● கல்லீரல் நாளச்சுரப்பி அளவு அதிகரித்தல் ● தட்டணுக்களின் அளவு குறைதல் ● வலிப்பு. **சேயக்கு:** ● கருப்பையில் சிசுவின் வளர்ச்சி குறைபாடு ● குறை பிரசவம் ● கர்ப்பையிலே சிசுவின் இறப்பு ● மூச்சு திணறல்	விவரித்தல்	கவனித்தல்	புத்த குறிப்பேடு	கர்ப்பகால வலிப்பு நோயின் விளைவுகளை குறிப்பிடுக?

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
1 நிமிடம்	கற்றுக்கொள்பவர்கள் கர்ப்பகால சர்க்கரை நோய் என்பதன் பொருள் யாது என்பதைக் கண்டறிவர்	**அர்த்தம் :** கர்ப்பகால சர்க்கரை நோய் என்பது கர்ப்பகாலத்தின் போது இரத்தச்சர்க்கரையின் அளவு அதிகமாக காணப்படுதல் ஆகும். சரியான இரத்த சர்க்கரையின் அளவு 80–120 மிகி/டெசி.லி. ஆகும். இது உடலில் இன்சுலின் குறைபாட்டினால் ஏற்படுகிறது.	கலந்துரையாடல்	கலந்துரையாடல்	புத்தக குறிப்பேடு	கர்ப்பகால சர்க்கரை நோய் என்றால் என்ன?
1 நிமிடம்	கற்றுக்கொள்பவர்கள் கர்ப்பகால சர்க்கரை நோய் பதிக்கும காரணிகளை பட்டியலிடுவர்	**பாதிக்கும் காரணிகள்** ● இரத்த சர்க்கரை கொண்ட குடும்ப சரித்திரம் ● பிறப்பன் போது குழந்தை இறப்பு சரித்திரம் ● காரணமில்லாத சிசு இழப்பு ● உடல் பருமன் ● 30 வயதிற்கு மேல் கர்ப்பமாதல் ● உயர் இரத்த அழுத்தம் ● அதிகப்படியான கருப்பை திரவத்தின் அளவு ● பற்றாகுறையான வளர்சிதை மாற்றம் ● 5 அல்லது அதற்கு மேற்பட்ட கர்ப்பங்கள்	விவரித்தல்	கவனித்தல்	புத்தக குறிப்பேடு	கர்ப்பகால சர்க்கரை நோயின் அறிகுறிகளை கூறுக?

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
1 நிமிடம்	கற்றுக்கொள்பவர்கள் கர்ப்பகால சர்க்கரை நோயிற்கான அறிகுறிகளை கண்டறிவர்	**அறிகுறிகள்** ● அதிகப்படியான தாகம் ● அதிகப்படியான சிறுநீர் வெளியேற்றம் ● அதிகப்படியான பசி இருப்பினும் எடை இழப்பு ● களைப்பு, குமட்டல், வாந்தி ● சிறுநீர்ப்பை, பெண்ணினப்பெருக்க உறுப்பின் வெளிப்பகுதி மற்றும் தோலில் நோய்தொற்று பரிசோதனையின் சிசுவின் அளவு சராசரி அளவினை அதிகமாக இருக்கும். **எச்சரிக்கை அறிகுறிகள்** ● பார்வை கோளாறு ● அதிகமான களைப்பு ● அதிகமான சிறுநீர் வெளியேற்றம் மற்றும் தாகம்	விவரித்தல்	கவனித்தல்	புத்தக குறிப்பேடு	கர்ப்பகால சர்க்கரை நோயின் அறிகுறிகளை கூறுக?
1 நிமிடம்	கற்றுக் கொள்பவர்கள் கர்ப்பகால சர்க்கரை நோயினை கண்டறியும் முறையை வரையறுப்பர்	**கண்டறியும் முறைகள்:** ● பாஸ்டிங் மற்றும் போஸ்பிராண்டியல் இரத்த சர்க்கரை அளவு பரிசோதித்தல். ● குளுகோஸ் தாங்கு திறன் ஆய்வு ● அசிட்டோன் இருப்பதற்கான சிறுநீர் பரிசோதனை ● மீயொலி வரைவு (ஸ்கேன்)	கலந்துரையாடல்	கலந்துரையடால்	புத்தகக் குறியீட்டு	கர்ப்கால சர்க்கரை நோயினை கண்டறியும் முறைகள் என்ன?

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
1 நிமிடம்	கற்றுக்கொள்பவர்கள் கர்ப்பகால சர்க்கரை நோயை தடுக்கும் முறையை புரிந்துகொள்வர்	**தடுப்பு முறைகள்** ● எடை குறைப்பு ● உணவு முறை மாற்றம் ● உடற்பயிற்சி	விவரித்தல்	கவனித்தல்	புத்தகக் குறியீட்டு	
2 நிமிடம்	கற்றுக்கொள்பவர்கள் கர்ப்பகால சர்க்கரை சிகிச்சை முறையை விவரிப்பர்	**சிகிச்சை முறைகள் :** ● கர்ப்பகால மேற்பார்வை ● குறிப்பிட்ட கால இடைவெளியில் இரத்த சர்க்கரையின் அளவை பரிசோதிப்பது ● அனைத்து கர்ப்பிணி பெண்களும் இரத்த சர்க்கரையின் அளவை பரிசோதிக்க வேண்டும். ஃபாஸ்டிங் இரத்த சர்க்கரையின் அளவை 95மிகி/டெசிலி அளவுக்கு குறைவாக வைத்துக்கொள்ள வேண்டும். ● சிறந்த உணவு வகைகள் அதிகப்படியான நார்சத்தினை உட்கொள்ள வேண்டும். கொழுப்பு மற்றும் அடர் சுவைமிக்க இனிப்பு பண்டங்களை தவிர்க்க வேண்டும். ● தினசரி உடற்பயிற்சி ● இன்சுலின் (தேவைப்பட்டால்)	விவரித்தல்	கவனித்தல்	புத்தகக் குறியீட்டு	கர்ப்பக்கால சர்க்கரை நோயில் கடைபிடிக்க வேண்டிய உணவு வகைகள் என்னென்ன?

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
1 நிமிடம்	கற்றுக்கொள்பவர்கள் கர்ப்பகால சர்க்கரை நோயின் விளைவுகளை பட்டியலிடுவர்	**விளைவுகள்** **தாயிற்கு** • கருச்சிதைவு • குறைமாத பிரசவம் • நோய் தொற்று • கர்ப்பகால வலிப்பு நோய் • அதிகப்படியான கருப்பை திரவம் • நீண்ட நேர பிரசவம் • தாய்ப்பால் சுரத்தலின் அளவு குறைவாக காணப்படுதல் • பெண்ணினப்பெருக்க உறுப்பில் காயங்கள் • எதிர் காலத்தில் தாயிற்கு சர்க்கரை நோய் ஏற்பட வாய்ப்பு **சேய்யிற்கு :** • இதய நோய் போன்ற பிறவிக் கோளாறு • பிறப்புக் காயங்கள் • இரத்தச் சர்க்கரையின் அளவு குறைந்து காணப்படுதல் • மூச்சுத்திணறல்	விவரித்தல்	கவனித்தல்	புத்தகக் குறிப்பேடு	கர்ப்பகால சர்க்கரை நோயினால் தாயிற்கு ஏற்படும விளைவுகள் என்ன?

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
1 நிமிடம்	கற்றுக்கொள்பவர்கள் பல கருவுற்றத் தன்மை என்பதன் பொருளை அறிவர்	**அர்த்தம் :** பல கருவுற்ற தன்மை என்றால் இரண்டு அல்லது அதற்கு மேற்பட்ட சிசு கருப்பையில் வளர்வது ஆகும்.	கலந்துரையாடல்	கலந்துரையாடல்	புத்தகக் குறிப்பேடு	பல கருவுற்ற தன்மை என்றால் என்ன?
1 நிமிடம்	கற்றுக்கொள்பவர்கள் பல கருவுற்ற தன்மைக்கான பாதிக்கும் காரணிகளை பட்டியலிடுவர்	**பாதிக்கும் காரணிகள்:** ● பாரம்பரியம் ● முதிர்ச்சிப் பருவம் ● அதிக குழந்தைப்பிறப்பு ● இனம் ● செயற்கைமுறை கருத்தரிப்பு	விவரித்தல்	கவனித்தல்	புத்தக குறிப்பேடு	பல கருவுற்ற தன்மையை உண்டாக்கும் காரணிகள் என்ன?
1 நிமிடம்	கற்றுக்கொள்பவர்கள் பல கருவுற்ற தன்மைக்கான அறிகுறிகளை கண்டறிவர்	**அறிகுறிகள்:** ● கர்ப்பப்பை அளவு தேவையான கர்ப்பங்காலத்தை விட பெரியதாக இருத்தல். ● அதிகப்படியான குமட்டல் மற்றும் வாந்தி ● அதிகப்படியான பசி ● அதிகப்படியான எடை உயர்வு ● வயிற்றுப்பகுதியில் ஒரே சமயத்தில் வெவ்வேறு பகுதியில் குழந்தை அசைவினை உணர்தல்	கலந்துரையாடல்	கலந்துரையாடல்	புத்தக குறிப்பேடு	பல கருவுற்ற தன்மையின் அறிகுறிகள் என்ன?

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
1 நிமிடம்	கற்றுக்கொள்பவர்கள் பல கருவுற்ற தன்மையினை கண்டறியும் முறையை வரையறுப்பர்	**கண்டறியும் முறைகள்:** ● மீயொலி வரைவு ● உடல் பரிசோதனை ● இரத்த பரிசோதனை ● ஆல்பா பீட்டா புரதத்தின் அளவு	விவரித்தல்	கவனித்தல்	புத்தக பதிவேடு	பல கருவுற்ற தன்மையை கண்டறியும் முறைகளை கூறுக?
2 நிமிடம்	கற்றுக்கொள்பவர்கள் பல கருவுற்ற தன்மைக்கான சிகிச்சை முறையை விவரிப்பர்	**சிகிச்சை முறைகள் :** ● அதிகப்படியான சத்துணவு அதிக கலோரி, புரதம் மற்றும் இரும்புச் சத்து முக்கியம் ● அடிக்கடி முன்பேறுக்கால பரிசோதனை ● அதிகப்படியான ஓய்வு ● சிசுவின் வளர்ச்சியை கண்காணித்தல் ● தாய் மற்றும் சிசு நலப்பரிசோதனை ● டோகோலைட்டிக்ஸ் (குறைமாத பிரசவமாயிருப்பின்) ● சர்வீகல் என்சர்க்கலேஜ் (தாங்குதிறனற்ற கர்ப்பப்பையிருந்தால்) ● இணை இரும்புச்சத்து சிகிச்சை 60–80 மி.கி/டெ.சி.லி அளவுக்கு இரும்புச்சத்து உயர்த்த வேண்டும்.	கலந்துரையாடல்	கலந்துரையாடல்	புத்தக குறிப்பேடு	கல கருவுற்ற தன்மையின் சிகிச்சை முறைகளை குறிப்பிடுக?

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
1 நிமிடம்	கற்றுக்கொள்பவர்கள் பல கருவுற்று தன்மையின் விளைவுகளை பட்டியலிடுவர்	**விளைவுகள்** **தாயிற்கு :** ● குமட்டல் மற்றும் வாந்தி அதிக முறையும், தீவிரமாகவும் இருக்கும். ● கர்ப்பகால வலிப்பு நோய் மற்றும் இரத்தசோகை ● இயற்கைக்கு புறம்பான கருப்பைத் திரவம் ● அறுவை சிசிச்சைக்கு அதிகப்படியான வாய்ப்பு ● இரத்தப்போக்கு ● பனிக்குடம் முன்னமே உடைதல் ● நீண்ட நேர பிரசவம் **சேய்யிற்கு :** ● பிறவிக் குறைபாடு ● குறை பிரசவம் ● வளர்ச்சிக் குறைபாடு	விவரித்தல்	கவனித்தல்	புத்தக குறிப்பேடு	பல கருவுற்ற தன்மையின் விளைவுகளை குறிப்பிடுக?

நேரம்	குறிக்கோள்	பொருளடக்கம்	ஆராய்ச்சியாளரின் செயல்	கற்றுக் கொள்பவரின் செயல்	ஒலி, ஒளி அமைப்பு	மதிப்பிடுதல்
		• கருப்பையிலேயே சிசுவின் இறப்பு • மூச்சுத்திணறல் • குழந்தைப் பிறப்பின் போது இறத்தல்	விவரித்தல்	கவனித்தல்		
1 நிமிடம்		**முடிவுரை** அனைத்து கர்ப்பிணிப் பெண்களும் பிரச்சனைகளை சந்திப்பதில்லை. ஆனால் பிரச்சனைகளை பற்றி அறிவதன் மூலம் அதன் விளைவுகளை தடுக்க முடியும்.				

வினாவிற்கான விடைகள்

கேள்வி எண்	விடைகள்	மதிப்பெண்
I.இரத்த சோகை		
1	இ	1
2	ஆ	1
3	இ	1
4	அ	1
5	ஆ	1
6	அ	1
7	அ	1
8	ஆ	1
II.கர்ப்பகால வலிப்பு நோய்		
1	இ	1
2	ஆ	1
3	இ	1
4	இ	1
5	ஆ	1
6	இ	1
7	அ	1
8	ஆ	1

III.கர்ப்பகால சர்க்கரை நோய்	விடைகள்	மதிப்பெண்
1	ஆ	1
2	இ	1
3	அ	1
4	ஆ	1
5	இ	1
6	அ	1
7	இ	1
IV.பல கருவுற்ற தன்மை		
1	அ	1
2	ஆ	1
3	அ	1
4	ஆ	1
5	அ	1
6	அ	1
7	இ	1

<div align="center">**PATIENT CONSENT FORM**</div>

TITLE: A Pre-Experimental study To Evaluate The Effectiveness Of Structured Teaching Programme on Knowledge Regarding Early Identification Of High Risk Pregnancy Among Antenatal mothers attending at Institute of Obstetrics and Gynaecology,Chennai-08

Name of the Participant :

Date :

Age/sex :

Name of the Principal Investigator: J. Dhanalakshmi

Name of the Institution :   Institute of Obstetrics and Gynecology

Enrollment No :

Documentation of the Informed Consent: (legal representative can sign if the participant is minor or incompetent)

- I …………………………………………… have read the information in this form (or it has been read to me). I was free to ask any questions and they have been answered. I am over 18 years of age and exercising my free power of choice, hereby give my consent to be included as a participant in the study.

- I have read and understood this consent form and the information provided to me.

- I had the consent document explained in detail to me.

- I have been explained about the nature of my study.

- My rights and responsibilities have been explained to me by the investigator.

- I am aware of the fact that I can option out of the study at any time without having to give any reason and this will not affect my future treatment in this hospital.

- I hereby give permission to the investigator to release the information obtained from me as result of participation in this study to the sponsors, regulatory

authorities, Government agencies and IECI, understand that they are publicly presented.

- I have had my questions answered to my satisfaction.
- I have decided to be in the research study.
- I am aware that if I have any question during this study, I should contact the investigator. By signing this consent form I attest that that the information given in this document has been clearly explained to me and understood by me. I will be given a copy of this consent document.

1. **Name and Signature/thumb impression of the participant (or legal representative if participant incompetent)**

Name_____

Signature_____

Date_____

Name and Signature of the Investigator or her representative obtaining consent:

Name_____

Signature_____

Date_____

<h1 style="text-align:center">INFORMATION TO PARTICIPANTS</h1>

TITLE: A Pre-Experimental study To Evaluate The Effectiveness Of Structured Teaching Programme on Knowledge Regarding Early Identification Of High Risk Pregnancy Among Antenatal mothers attending at Institute of Obstetrics and Gynaecology,Chennai-08

Name of the Participant :

Date :

Age/sex :

Name of the Principal Investigator: J. Dhanalakshmi

Name of the Institution : Institute of Obstetrics and Gynecology

Enrollment No :

You are invited to take part in this research/study/procedures. The information in this document is meant to help you decide whether or not to take part. Please feel free to ask if you have any queries or concerns.

You are being asked to participate in this study being conducted at Institute of Obstetrics and Gynecology, Chennai-08.

What is the purpose of the Research (explain briefly)

This research is conducted to assess **the effectiveness of structured teaching programme on knowledge regarding early identification of high risk pregnancy among antenatal mothers attending at institute of obstetrics and gynaecology,chennai-08**

We have obtained permission from the Institutional Ethical Committee.

Study Design

Pre experimental research design (One group pre-test post-test design)

Study procedure

1. The study will be undertaken after approval from Institutional Ethics Committee.

2. Those who are willing to participate will be enrolled and informed consent will be obtained.

3. Women who fulfill the inclusion criteria and exclusion criteria are selected in the group.

4. The level of awareness about early identification of high risk pregnancy is assessed with structured questionnaire of antenatal mothers with gestational age 8-28 weeks.

5. STP for 30 minutes regarding early identification of high risk pregnancy which includes aspects like meaning, causes, signs and symptoms, diagnosis, prevention, management and complications of high risk pregnancy.

6. After one week period, post-test will be conducted with the same structured pre-test questionnaire for analyzing the effectiveness of STP.

7. The results of the study will be analyzed by using descriptive and inferential statistics.

Possible risks to you-Briefly Mention.

No risks involved.

Possible benefits to you

After finishing the study, investigator will provide information about

- meaning of high risk pregnancies like anemia, pre-eclampsia, gestational diabetes mellitus and multiple pregnancy.
- causes and risks of high risk pregnancy.
- signs and symptoms of high risk pregnancy.
- investigations of high risk pregnancy
- prevention and management of high risk pregnancy.
- complications of high risk pregnancy.

Possible benefits to other people

The result of the research may provide benefit to the society in terms of advancement in medical knowledge and/or early identification of high risk pregnancy in future.

Confidentiality of the information obtained from you

You have the right to confidentiality regarding the privacy of your medical information (personal details, results of physical examinations, investigations, and your medical history). The information from this study, if published in scientific journals or presented at scientific meetings, will not reveal your identity.

Your privacy in the research will be maintained throughout the study in the event of any publication or presentation resulting from research, no personal identity information will be shared.

How will your decision not to participate in the study affect you?

Your decision not to participate in this research study will not affect your daily living activities, medical care or your relationship with investigator or the institution.

Can you decide to stop participating in the study once you start?

The participation in this research is purely voluntary and you have the right to withdraw from this study at any time during the course of the study without giving any reasons. The result of the study will be informed to you at the end of the study.

Signature of the Investigator   Signature of the   Participant

Date: Date:

ஆராய்ச்சி தகவல் தாள்

ஆராய்ச்சி தலைப்பு: அதிக பாதிப்பிற்குரிய கர்ப்பம் பற்றிய பாடத்திட்டத்தினை கற்பித்தலின் மூலம், அதனால் தாய்மார்களுக்கு ஏற்பட்ட அறிவினை கண்டறிதல்.

ஆய்வாளர் பெயர்   :   ஜெ.தனலெட்சுமி

பங்கேற்பாளர் பெயர் :   வயது:

ஆராய்ச்சி சேர்க்கை எண்:   தேதி:

நான் அரசு தாய் சேய் நல மருத்துவமனையின் கர்ப்பிணிகள், வெளிநோயாளிகள் பகுதியில் பரிசோதனைக்காக வரும் தாய்மார்களை திறனாய்வு மேற்கொள்கிறேன்.

அதிக பாதிப்பிற்குரிய கர்ப்பம் பற்றிய பாடத்திட்டத்தினை கர்ப்பிணிகளுக்கு கற்பித்து, அதற்கு முன் உள்ள அறிவினையும், பாடம் கேட்டு தெரிந்து கொண்ட பின் உள்ள அறிவினையும், அறிய போகிறேன்.

இந்த செயல்முறையின் மூலம், கர்ப்பிணி தாய்மார்களுக்கு, அதிக பாதிப்பிற்குரிய கர்ப்பத்தினை, முன்கூட்டியே அறியும் வாய்ப்பு அதிகம் உள்ளது. இம்முறையை தாய்மார்கள் நன்றாக பயன்படுத்திக் கொள்ளலாம்.

தாய்மார்கள் தங்கள் சொந்த விருப்பத்தின் பேரில் ஆராய்ச்சியில் இணைக்கப்படுவர். விருப்பமில்லை என்றால் எந்நேரமும் விலகிக் கொள்ளலாம். இதனால் ஆராய்ச்சிக்கு எந்தவித பாதிப்பும் ஏற்படாது.

முடிவுகளை அல்லது கருத்துக்களை வெளியிடும் போது தங்களின் பெயரையோ அல்லது அடையாளங்களையோ வெளியிட மாட்டேன் என்பதை தெரிவித்துக் கொள்கிறேன்.

ஆராய்ச்சியாளர் கையொப்பம்   **பங்கேற்பாளர் கையொப்பம்**

தேதி:   தேதி :

ஆராய்ச்சி ஒப்புதல் படிவம்

ஆராய்ச்சி தலைப்பு	:	அதிக பாதிப்பிற்குரிய கர்ப்பம் பற்றிய பாடத்திட்டத்தினை கற்பித்தலின் மூலம், அதனால் தாய்மார்களுக்கு ஏற்பட்ட அறிவினைக் கண்டறிதல்
ஆய்வு நடத்தப்படும் இடம்	:	கர்ப்பிணிகள் புறநோயாளிகள் பிரிவு
ஆராய்ச்சியாளர் பெயர்	:	ஜெ.தனலெட்சுமி

பங்குபெறுபவரின் பெயர்   :   வயது:

பங்குபெறுபவரின் புறநோயாளி எண்.   :

இந்த ஆராய்ச்சியின் விவரங்களும் அதன் நோக்கங்களும் முழுமையாக எனக்கு விளக்கப்பட்டது.

எனக்கு விளக்கப்பட்ட விஷயங்களை நான் புரிந்து கொண்டு நான் எனது சம்மதத்தை தெரிவிக்கிறேன்.

இந்த ஆராய்ச்சியில் பிறரின் நிர்பந்தமின்றி நான் எனது சொந்த விருப்பத்தின் பேரில் பங்கு கொள்கிறேன். மற்றும் நான் இந்த ஆராய்ச்சியிலிருந்து எந்த நேரமும் பின்வாங்கலாம் என்பதையும் அதனால் எவ்வித பாதிப்பும் ஏற்படாது என்பதையும் புரிந்து கொண்டேன்.

இந்த ஆராய்சியின் தகவல்களை வெளியிட சம்மதிக்கிறேன். அப்படி வெளியிடும் போது என் அடையாளம் வெளிவராது என்பதை அறிவேன்.

நான் இந்த ஆராய்ச்சிக்கு என்னுடைய முழு ஒப்புதலை அளிக்கிறேன். எனக்கு இந்த ஒப்புதல் கடிதத்தின் நகல் கொடுக்கப்பட்டது.

ஆராய்ச்சியாளர் கையொப்பம்   பங்கேற்பாளர் கையொப்பம்

தேதி:   தேதி:

demographic profile						obstetrical data		
age	religion	family type	education	Job	income	age at marriage	GPLA	age at first child birth
3	3	2	2	1	2	28	PRIMI	
2	1	2	4	1	2	28	PRIMI	
2	1	2	4	1	1	23	G2AI	
2	1	1	2	1	2	26	G2P1L1A0	23
2	1	2	2	1	1	21	G3P1L1A1	23
2	1	2	4	1	1	21	PRIMI	
2	1	2	4	1	1	25	PRIMI	
2	1	2	3	1	1	21	G2P1L1A0	24
2	1	2	5	1	1	22	PRIMI	
2	1	1	2	1	1	18	PRIMI	
2	1	2	4	1	1	25	PRIMI	
2	1	1	5	1	2	23	PRIMI	
2	1	1	5	4	2	20	G2P1L1A0	22
2	1	1	3	1	1	19	G2P1L1A0	21
2	1	2	3	1	1	18	PRIMI	
2	1	2	4	1	1	18	G2P1L1A0	20
2	1	1	2	1	1	19	PRIMI	
2	1	1	5	1	2	19	PRIMI	
2	1	1	4	1	1	19	G2P1L1A0	20
2	2	1	3	1	1	19	G3P1L0A1	21
2	1	1	3	1	2	19	PRIMI	
2	1	2	2	1	1	22	G2P1L1A0	23
2	1	2	5	1	2	24	PRIMI	
2	1	2	5	1	1	19	PRIMI	
2	1	2	5	1	2	23	PRIMI	
2	1	2	2	1	2	24	PRIMI	
2	1	2	4	1	1	20	G2P1L1A0	22
2	1	2	4	4	1	26	PRIMI	
2	2	1	2	1	2	21	G2P1L1A0	22
3	1	2	4	1	1	24	G2P1L1A0	25
2	1	1	5	3	1	22	G2P1L1A0	24
2	3	1	5	1	2	22	PRIMI	
3	1	1	3	1	1	26	PRIMI	
3	1	1	2	1	1	36	PRIMI	
2	1	2	3	1	2	20	PRIMI	
3	3	2	4	1	1	26	G2P1L1A0	28
2	1	2	4	1	1	19	PRIMI	
2	1	2	5	1	1	21	PRIMI	
2	1	2	2	1	1	20	G2P1L1A0	22
2	2	2	2	1	1	18	G2P1L1A0	21
2	1	2	4	1	1	18	G2P1L1A0	24
3	1	1	5	1	2	24	G2P1L1A0	28
2	1	2	4	1	1	21	G5P1L0A3	24
2	1	1	5	1	2	23	G2P1L1A0	24
2	1	1	3	1	1	25	PRIMI	
2	1	1	4	1	2	26	G2P1L1A0	27
2	1	2	5	1	2	25	PRIMI	
2	1	2	4	3	2	25	PRIMI	
3	1	1	4	1	2	25	G4P2L2A1	30
2	1	1	3	4	1	21	G2P1L1A0	22

age	religion	family type	education	Job	income	age at marriage	GPLA	age at first child birth
2	1	2	3	1	1	23	PRIMI	
1	1	1	4	1	2	19	PRIMI	
2	1	2	2	1	1	23	PRIMI	
3	1	2	4	1	1	25	G3P1L1A1	28
2	1	2	4	1	1	19	PRIMI	
3	1	2	2	1	1	21	PRIMI	
2	1	2	3	1	1	24	G2P1L1A0	25
2	1	1	4	1	2	25	PRIMI	
2	1	2	4	2	2	22	G2P1L1A0	24
2	1	1	5	1	2	23	G2P1L1A0	25

PRE-TEST SCORE

anemia								pre-eclampsia								GDM							multiple gestation						
0	0	0	0	0	0	0	1	0	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	0
0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0
1	0	1	1	0	0	0	1	0	1	1	0	1	1	0	0	0	1	0	1	0	0	0	0	1	0	1	0	1	0
0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0
0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	1	1	0	0	0
1	0	1	1	1	1	0	1	0	1	0	0	0	1	1	1	1	0	1	1	0	0	1	0	0	0	1	1	1	0
1	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	1	0	0	1	0	1	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	0	1	1	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	1	1	0
1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	1	1	1	0	0	1	0	0
1	0	1	1	1	0	0	0	1	1	0	1	0	0	1	0	1	1	1	1	0	0	1	0	0	0	0	1	0	0
1	0	0	1	1	0	0	0	1	1	0	0	1	1	1	0	0	1	1	0	1	0	1	1	0	1	0	1	1	0
0	0	1	1	1	1	0	1	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
1	0	1	1	1	0	0	0	1	1	0	0	1	1	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
1	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	1
0	0	0	0	1	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0
1	0	1	1	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	1	1	1	0	1	0	0
0	0	1	1	1	0	0	1	1	1	1	0	0	1	0	0	1	0	0	0	1	0	1	0	0	0	0	0	1	0
1	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	1	0	0	0	0	1	1	0
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1	1	0	1	1	0	0	0	0	1	0	0	1	0	0	0	1	1	1	1	0	0	0	1	0	0	0	1	0	0
1	0	1	0	0	0	0	1	0	1	0	0	1	1	0	1	0	1	0	1	0	0	0	1	0	1	0	0	1	0
1	1	1	0	0	0	0	1	0	1	1	0	0	0	1	1	1	1	0	0	0	0	1	0	0	1	0	1	1	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	1	0	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1	0	0	0	1	1	1	1	1	0	1	1
0	0	1	0	1	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
1	0	0	1	1	1	1	1	0	1	0	0	1	1	0	0	1	1	1	1	0	0	0	0	0	0	0	1	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	1	0
0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	1	1	0	1	0
0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	1	0	1	1	0	0	1	1	0	1
1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	0	0	1	1	1	0	1	1	0	1	1	1	1	1
1	1	1	0	1	0	1	1	1	1	0	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	1	0	0

anemia								pre-eclampsia								GDM							multiple gestation						
1	1	1	1	1	0	1	0	1	0	0	1	1	1	0	1	0	1	0	0	0	1	0	0	0	0	1	0	0	1
0	0	1	1	1	0	0	1	0	1	1	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	1	0	0
0	0	0	0	1	1	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
0	0	0	1	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	1	1	1	0	0
1	1	1	0	1	0	1	0	0	1	1	0	1	1	0	0	1	1	1	1	1	0	0	0	0	0	1	1	1	1
1	0	1	1	1	1	1	0	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1	0
0	0	1	1	1	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	0	1	1	1
1	0	1	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	1	1	1	1	1	1	0
1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
1	0	0	1	1	1	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0
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0	0	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	1	1	1	0	0	0	0	0	0	1	0	0	0
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POST-TEST

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anemia							pre eclampsia							GDM							multiple gestation						
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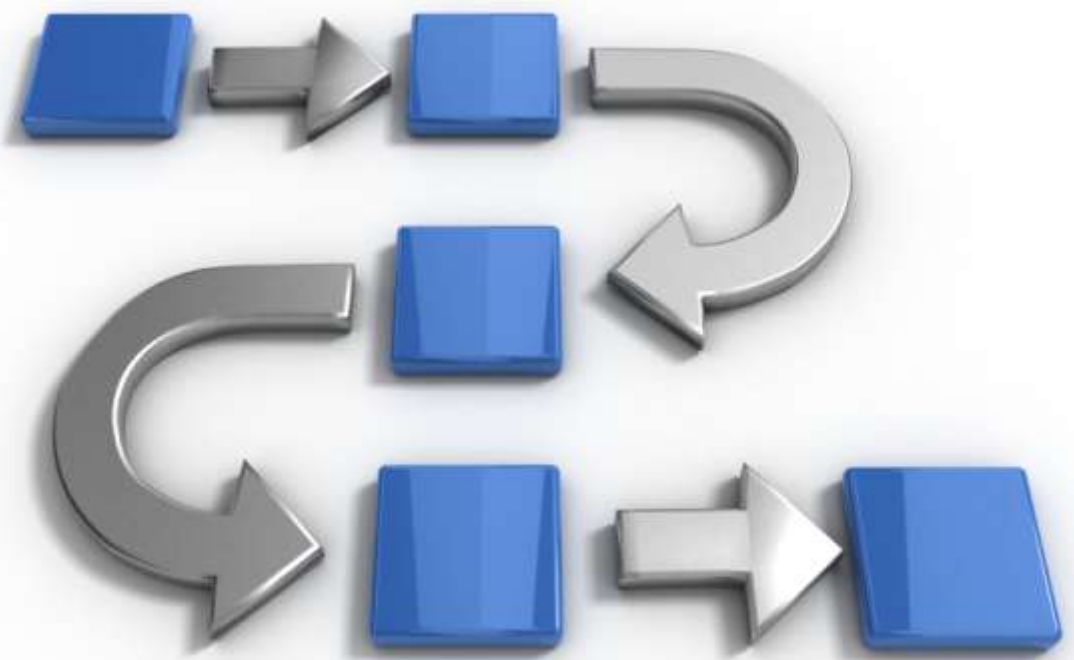# Chapter - I
Introduction

Chapter-II
Review of Literature

Chapter - III
Research
Methodology

Chapter -IV

Data Analysis

&

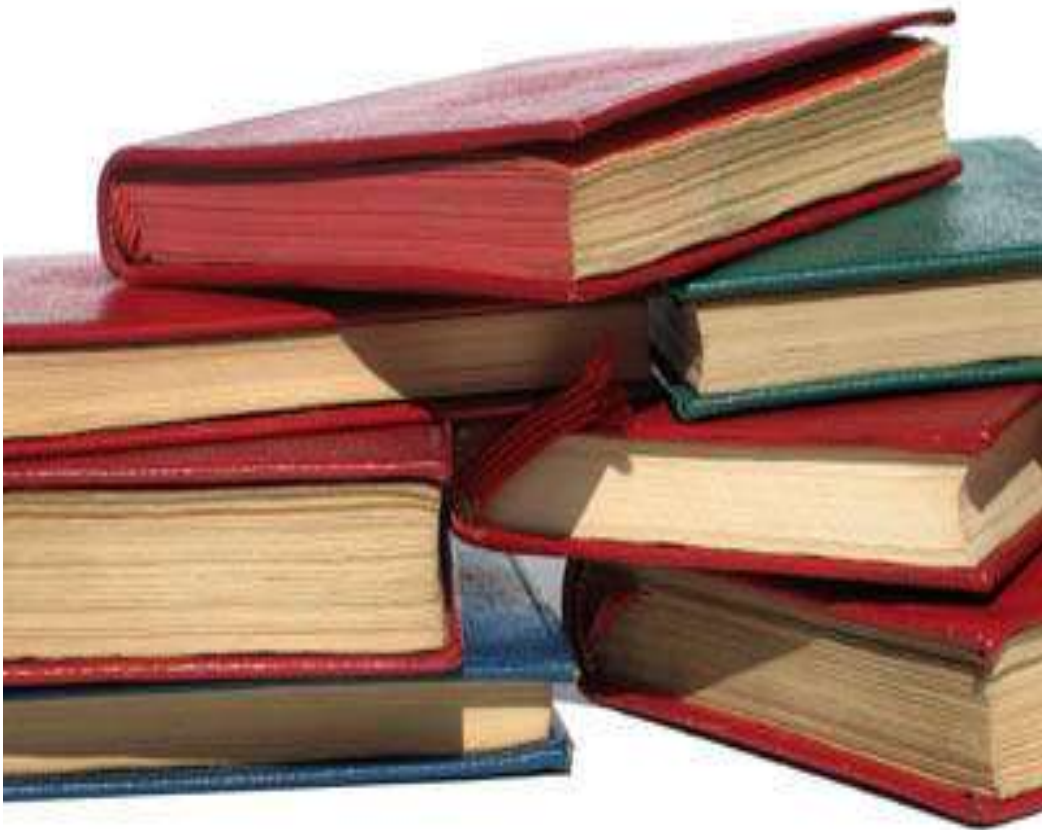# Interpretation

Chapter -V
Summary

Chapter-VI
Discussion

Chapter -VII
Conclusion & Recommendation

Reference

Appendices

Sub: Training MSc nursing II year- obstetrics & Gynecological nursing – clinical practice .Dissertation, Practical examination and Lecture training in IOG & Government hospital for   women & children. Egmore. Chennai, 08 dated: 31.03.2017 for the period from   20/11/2016 to 17/12/2016 Permission. Orders issued.

Ref: letter dated   20/11/2016 of the Head of Department. O & G Nursing, college of nursing. Madras Medical college, Chennai - 3.

****

As per the letter reference cited, the following the M.Sc II years students of Madras Medical College, chennai -3 are permitted to undergo the clinical experience, lectures classes. University practical examination and also to carry out dissertation work in IOG & Government hospital for   women & children. Egmore. Chennai- 8 for the period from 20 /11/2016 to 17/12/2016 under the guidance of the Assistant Professor of O & G mentioned against their names.

S.No	Name of the students	Name of the Assistant professor of O & G of this hospital.
1	Mrs. Alagirisamy anitha	Dr. kavitha
2	Mrs. R. Bama	Dr. sumathi
3	Mrs. J. Dhanalakshmi	Dr. A. vijayalakshmi
4	Ms. B. Hemalatha	Dr. P. Priyadharshini.
5	Ms. R. Revathi	Dr. R.Sridevi
6	Mrs. P. Savitha	Dr. sadhana.
7	Mrs. Shanthi Grace	Dr.chandrakala
8	Mrs. Subbulakshmi	Dr. K. Priyadharshini.

Director and superintendent

director and Superintendent
Institute of Obstetrics and
Gynaecology and Govt. Hospital
for Women and Children.
EGMORE. MADRAS-8.

To

The individuals concerned

Copy to

Dr. A. vijayalakshmi Assistant Professor of O & G, IOG and Government Hospital for women and Children, Egmore. Chennai- 8.

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool constructed by Ms. J.Dhanalakshmi, M.Sc.,(Nursing) II year, College of Nursing, Madras Medical College which is to be used in her study titled, **"A Study to Evaluate The Effectiveness Of Structured Teaching Programme on Knowledge Regarding Early Identification Of High risk Pregnancy Among Antenatal Mothers Attending At Institute of Obstetrics and Gynecology, Egmore, Chennai-08"** has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.

Signature with seal

PROF. Dr. ROSALINE RACHEL, M.Sc., (N), Ph.D.,(N)
PRINCIPAL
MMM COLLEGE OF NURSING
No.131, SAKTHI NAGAR,
NOLAMBUR, CHENNAI - 600 095.

Name: Dr. Rosaline Rachel Msc(N). phd(n).

Designation: Principal.

College: MMM college of Nursing.

Place: Chennai.

Date: 7.11.06.

INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE, CHENNAI 600 003

CERTIFICATE OF APPROVAL

To
J.Dhanalakshmi
I Year M.Sc.(Nursing) Student
College of Nursing
Madras Medical College
Chennai 600 003

Dear J.Dhanalakshmi,

The Institutional Ethics Committee has considered your request and approved your study titled **"A PRE-EXPERIMENTAL STUDY IN EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING EARLY IDENTIFICATION OF HIGH RISK PREGNANCY AMONG ANTENATAL MOTHERS ATTENDING AT INSTITUTE OF OBSTETRICS AND GYNAECOLOGY, CHENNAI 600 008 " NO. 19072016.**

The following members of Ethics Committee were present in the meeting hold on **12.07.2016** conducted at Madras Medical College, Chennai 3

1.Prof. C. Rajendran, MD.	Chairperson
2.Prof. Isaac Christian Moses,MD.,Dean(FAC)MMC ,Ch-3	Deputy Chairperson
3.Prof. Sudha Seshayyan, MD., Vice Principal, MMC.Ch- 3.	Member Secretary
4.Prof. B.Vasanthi,MD.,Prof of Pharmacology, MMC,	Member
5.Prof. P.Raghumani.MS., Professor of Surgery, Inst. of surgery	Member
6.Prof. Md Ali, MD.,DM., Prof & HOD of MGE, MMC,Ch-3.	Member
7.Prof. Baby Vasumathi.,MD, Director. Inst. of O&G,	Member
8.Prof. K.Ramadevi.,MD, Director, Inst of Bio-Chemistry, MMC,	Member
9.Prof. R.Padmavathy,MD., Professor, Inst.of Pathology, MMC,Ch	Member
10.Prof.S.Tito, MD, Director, Inst.of Inter Med, Ch-3.	Member
11.Tmt.J.Rajalakshmi, Junior Administrative Officer,MMC,Ch	Layperson
12.Thiru.S.Govindasamy., B.A.B.L., High Court, Chennai-1	Lawyer
13.Tmt.ArnoldSaulina, MA., MSW.,	Social Scientist

We approve the proposal to be conducted in its presented form.

The Institutional Ethics Committee expects to be informed about the progress of the study and SAE occurring in the course of the study, any changes in the protocol and patients information/informed consent and asks to be provided a copy of the final report.

Member Secretary

MEMBER SECRETARY
INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE
CHENNAI-600 003

Lr. No. Ho (S)/ con. mmc, dt. 19.11.16.

21.11.16   To Rmo/Armo

From

J. Dhanalakshmi,

M.Sc., (N) II year,

College of Nursing,

Madras Medical College,

Chennai -03.

To

The Director,

Institute of Obstetrics and Gynecology Hospital for Women and Children,

Egmore,

Chennai -08.

Through

Principal,

College of Nursing, Madras Medical College, Chennai -03.

Respected Sir/Madam,

Sub: Requesting permission to conduct research at Institute of Obstetrics and

Gynecology Hospital for Women and Children. Chennai -08.

I, M.Sc., Nursing II year student have to conduct the research study for the fulfillment of M.Sc.,(N) Programme. My topic is "A Pre-Experimental study to assess the effectiveness of Structured teaching programme on early identification of high risk pregnancy among antenatal mothers attending at Institute of Obstetrics and Gynecology" from 20-11-2016 to 18-12-2016. I assure that I will not disturb the routine activities of the OPD.

With due respect, I request your good self to kindly permit me to conduct this research study.

Forwarded

Thanking you,

Yours sincerely,

19/11/16

DR. V. KUMARI, M.Sc(N).,Ph.D.,
PRINCIPAL
COLLEGE OF NURSING
MADRAS MEDICAL COLLEGE
CHENNAI - 600 003.

21/11/16
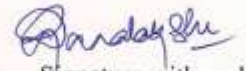
(J. Dhanalakshmi)

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool constructed by Ms. J.Dhanalakshmi, M.Sc., (Nursing) II year, College of Nursing, Madras Medical College which is to be used in her study titled, "**A Pre-Experimental study To Evaluate The Effectiveness Of Structured Teaching Programme on Knowledge Regarding Early Identification Of High Risk Pregnancy Among Antenatal mothers attending at Institute of Obstetrics and Gynaecology,Chennai-08**" has been validated by the undersigned. The suggestion and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.

Signature with Seal 27/7/17

Assistant Surgeon
I.O.G. & Government Hospital
For Women and Children
Egmore, Chennai-8.

Name: Dr. A·VIJAYALAKSHMI

Designation: Asst professor

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool constructed by Ms. J.Dhanalakshmi, M.Sc.,(Nursing) II year, College of Nursing, Madras Medical College which is to be used in her study titled, **"A Study to Evaluate The Effectiveness Of Structured Teaching Programme on Knowledge Regarding Early Identification Of High risk Pregnancy Among Antenatal Mothers Attending At Institute of Obstetrics and Gynecology, Egmore, Chennai-08"** has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.

Signature with seal

Name: DHANALAKSHMI. V

Designation: READER

College: APPOLLO COLLEGE OF NURSING

Place: CHENNAI

Date: 9/11/16

CERTIFICATE FOR ENGLISH EDITING

TO WHOM SO EVER IT MAY CONCERN

This is to certify that the dissertation topic "A Pre-Experimental study to Evaluate the Effectiveness of Structured Teaching Programme on Knowledge Regarding Early Identification of High risk Pregnancy Among Antenatal mothers attending at Institute of Obstetrics and Gynaecology, Chennai-08" done by Mrs.J.Dhanalakshmi, M.Sc Nursing II year, college of Nursing, Madras Medical College, Chennai-03, has been edited for English language appropriateness.

Place: Chennai

Date: 31.07.2017

M. Dhanalakshmi
Signature

M. DHANALAKSHMI, M.A., M Phil
Asst. Professor
Dept. of English
Madras Medical College
Chennai - 600 003

CERTIFICATE OF TAMIL EDITING

TO WHOM SO EVER IT MAY CONCERN

This is to certify that the dissertation topic **"A Pre-Experimental study to Evaluate the Effectiveness of Structured Teaching Programme on Knowledge Regarding Early Identification of High risk Pregnancy Among Antenatal mothers attending at Institute of Obstetrics and Gynaecology, Chennai-08"** done by **Ms.J.Dhanalakshmi,** M.Sc Nursing II year, college of Nursing, Madras Medical College, Chennai-03, has been   edited for Tamil   language appropriateness.

Place: Malaireddiyur

Date : - 7. 7. 2017

Date :

signature 7/7/17

சி. நாகராஜ், M.A., B.Ed
பட்டதாரி ஆசிரியர் (தமிழ்)
அரசு உயர்நிலைப்பள்ளி
மலைரெட்டியூர்-635 701, வே.மா