

## A Study to Assess the Effectiveness of self Instructional Module on Knowledge Regarding Home Care Management of Hyperemesis Gravidarum among Primi Gravida Mothers in a Selected Community Areas in Dehradun, India

Mrs. M. Jasline

*Professor, department of medical surgical nursing, SGRR University, Dehradun, India*

**ABSTRACT:** Most women experience some type of morning sickness during pregnancy; however some of them have extreme morning sickness called hyperemesis gravidarum. This severe nausea and vomiting may be due to increased hormone levels; however, the exact cause is still unknown. Too much vomiting is harmful because it leads to dehydration and poor weight gain during pregnancy. Proper identification of symptoms and careful management of hyperemesis gravidarum is important to avoid serious complications for the infant or mother.

### OBJECTIVES OF THE STUDY

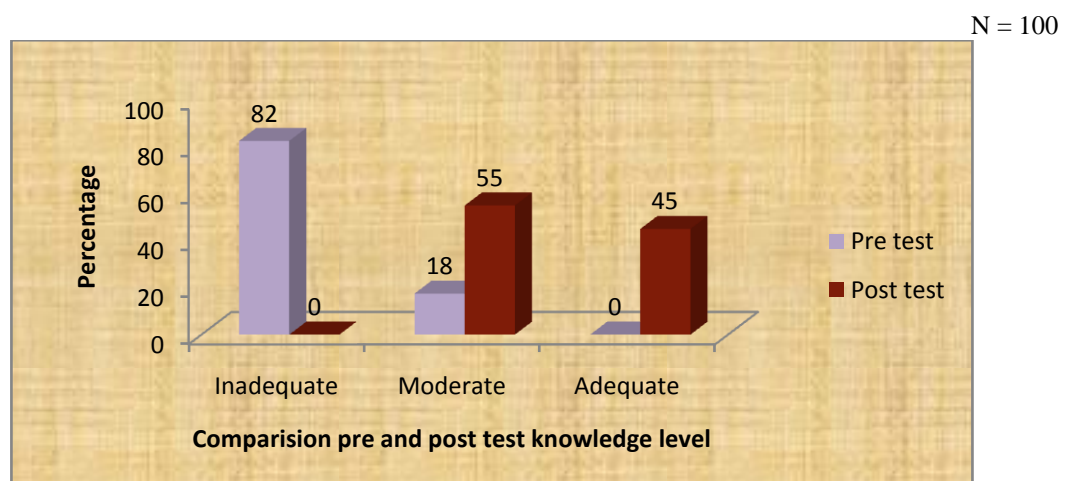
- Assess the existing knowledge of primi gravida mothers regarding home care management of hyperemesis gravidarum
- Administer self instructional module that comprises of information about the home care management of hyperemesis gravidarum
- Assess the post intervention knowledge primi gravida mothers regarding home care management of hyperemesis gravidarum
- Determine the effectiveness of self instructional module regarding home care management and practice of hyperemesis gravidarum.

### METHODS:

The study was conducted at selected community areas of Dehradun. 100 primi gravid mothers were selected by the investigator using random sampling technique, for pre-test, intervention and post-test. The data was collected by using a self administered questionnaire constructed by reviewing the related literature and consultation with experts.

### RESULTS:

The level of knowledge of mothers during the pre-test analysis signifies that 82% of mothers had inadequate knowledge (<50%), 18% had moderate knowledge and none of them had adequate knowledge. During post-test, 55% of the mothers gained moderate knowledge, 45% of the mothers gained adequate knowledge and none of them had inadequate knowledge.



The mean knowledge score in the pre-test (12.3) and post test (21.6) after administering self instructional module revealed that there is a significant increase in the knowledge of primi gravida mothers regarding home care management of hyperemesis gravidarum (Computed “t” value is 20.12(P <0.01 level)).

Domain	Mean	SD	Mean %	Paired 't' value
Pre test	12.3	3.23	41	
Post test	21.6	2.21	72	20.12*
Enhancement	9.3	3.59	31	

\*Significant at 0.01 level

### CONCLUSION:

The present study assessed the effectiveness of a self instructional module regarding home care management of hyperemesis gravidarum among primi gravida mothers. The findings of the study revealed that there was a marked increase in the overall knowledge of primi gravid mothers (post-test mean 21.6 and pre-test mean 12.3) which represents the effectiveness of self instructional module. Thus the researcher concluded that the SIM was effective in improving the knowledge of primi gravida mothers on home care management of hyper emesis gravidarum.

**KEYWORDS:** SIM; Home care management; Hyper emesis gravidarum.

## I. INTRODUCTION

“You cannot achieve environmental security and human development without addressing the basic issues of health and nutrition”.

Motherhood is an inevitable part of a woman’s life. It’s a natural law that a woman should carry her baby in her womb for 9 months and to undergo the process of labour. From the time the mother starts conceiving the baby, it is called pregnancy and the mother elicits describable and undifferentiated changes in the physical and physiological process of life. The mother experiences some signs and symptoms right from the first trimester of pregnancy. As each woman is unique, different mothers experience and present different signs and symptom and it is not a must that all women should have the same manifestations.

The majority of pregnant women experience some type of morning sickness (70 - 80%). Recent studies show that at least 60,000 cases of extreme morning sickness called hyperemesis gravidarum (HG) are reported by those who treated in a hospital but the numbers are expected to be much higher than this since many women are treated at home or by outpatient care with their health care provider. It is believed that this severe nausea is caused by a rise in hormone levels; however, the absolute cause is still unknown. They symptoms of HG usually appear between 4-6 weeks of pregnancy and may peak between 9-13 weeks. Most women receive some relief between weeks 14-20, although up to 20% of women may require care for hyperemesis throughout the rest of their pregnancy. There is no known prevention of Hyperemesis gravidarum but you can take comfort in knowing that there are ways to manage it.<sup>1</sup>

Since each woman is different and each pregnancy is different, the severity of nausea and vomiting of pregnancy (NVP) will vary from woman to woman. Among the pregnant ladies with nausea and vomiting during pregnancy, the intensity and the effect of the nausea and vomiting can be varied. In up to 20% of the ladies with nausea and vomiting, the intensity can be very high and can be explained intolerable. Hyperemesis gravidarum is a severe and intractable form of nausea and vomiting in pregnancy. It is a diagnosis of exclusion and may result in weight loss; nutritional deficiencies; and abnormalities in fluids, electrolyte levels, and acid-base balance. The peak incidence is at 8-12 weeks of pregnancy, and symptoms usually resolve by week 20 in all but 10% of patients. Uncomplicated nausea and vomiting of pregnancy is generally associated with a lower rate of miscarriage, but hyperemesis gravidarum may affect the health and well-being of both the pregnant woman and the fetus. Mild cases are treated with dietary changes, rest and antacids. More severe cases often require a stay in the hospital so that the mother can receive fluid and nutrition through an intravenous line (IV). Do not take any medications to solve this problem without first consulting your health care provider.

Morning sickness is common among pregnant women. Fortunately, for the majority it's a temporary and minor nuisance. For others, though, the term is a real misnomer. For them, sickness can occur at any time of the day and may continue throughout the course of the pregnancy .For women with hyperemesis gravidarum, the problem is even worse - and potentially dangerous. These women would readily settle for normal morning sickness - their vomiting is so severe no food or liquid can be kept down. Unlike most morning sickness, hyperemesis gravidarum usually persists past the first trimester (third) of pregnancy. It typically subsides by week 21 of pregnancy, but can last much longer.<sup>2</sup>

In the early stages, many women with hyperemesis gravidarum will be advised to rest, eat bite-size pieces of dry toast or crackers before getting out of bed, and have frequent, small meals. Fried or spicy foods, or smells that trigger symptoms of nausea and vomiting, are best avoided. Some women benefit from eating ginger

or foods containing ginger, such as ginger biscuits and crystallised ginger, or drinking ginger herbal tea. Acupressure may help: press a finger or thumb against the inside of the wrist or wear an elastic wristband with a plastic button sewn into it. A doctor may recommend anti-nausea medication. When symptoms are severe, admission to hospital may be needed for observation and to treat dehydration with intravenous fluids. This usually only means a few days in hospital.<sup>2</sup>

Nearly all women have some nausea or vomiting, or "morning sickness," particularly during the first 3 months of pregnancy. The cause of nausea and vomiting during pregnancy is believed to be rapidly rising blood levels of a hormone called HCG (human chorionic gonadotropin), which is released by the placenta. Nausea and vomiting usually peaks between 2 and 12 weeks of pregnancy and goes away by the second half of pregnancy. With proper identification of symptoms and careful follow-up, this condition rarely presents serious complications for the infant or mother. Too much vomiting is harmful because it leads to dehydration and poor weight gain during pregnancy. Social or psychological problems may be associated with this disorder of pregnancy. If such problems exist, they need to be identified and addressed appropriately.

Usually the nausea and vomiting during pregnancy does not create complications but should be treated well before it changes into a dangerous form which needs hospitalization and prompt treatment.

### Need for the study

The incidence of hyperemesis gravidarum is more nowadays. Current studies show that up to 90% of pregnant women experience nausea and vomiting. When prolonged or severe, this is known as hyperemesis gravidarum (HG), which can, in individual cases, be life threatening. Hyperemesis gravidarum is a common problem for an obstetrician. Though nausea and vomiting are quite common in pregnancy, hyperemesis is found in 0-20% of the pregnant women.<sup>3</sup>

Treatment strategies range from outpatient dietary advice and antiemetic drugs to hospitalization and intravenous (IV) fluid replacement in persistent or severe cases. Alternative methods, such as acupuncture, are not yet evidence based but sometimes have a therapeutic effect. In most cases, the condition is self limiting and subsides by around 20 weeks gestation. More severe forms require medical intervention once other organic causes of nausea and vomiting have been excluded. In addition, a psychosomatic approach is often helpful. In view of its potential complexity, general practitioners and obstetricians should be well informed about HG and therapy should be multimodal.<sup>4</sup>

A study was conducted under the Department of Pathology, Wellington School of Medicine to compare the incidence of hyperemesis gravidarum among Pacific Islanders living in Wellington with nonspecific Islanders and to investigate some properties of the disorder. The samples were women admitted to Wellington Women's Hospital for hyperemesis gravidarum over a 5-year period. The study states that the proportion of hyperemesis gravidarum patients who were Pacific Islanders was significantly increased when compared to their proportion in a control group ( $p < 0.01$ ). The difference remained significant when the hyperemesis patients were divided into less and more severe. The study concluded that the incidence of hyperemesis gravidarum is significantly increased among Pacific Island women living in Wellington and is often associated with abnormalities of thyroid function test results.<sup>5</sup>

According to an article published by med India based on the results of a study, women born in India and Sri Lanka are three times more likely to suffer from extreme nausea and vomiting called hyper emesis gravidarum during pregnancy. The data was collected from Norwegian Institute of Public Health and compared Indian and Sri Lankan women with ethnic Norwegians. Extreme nausea and vomiting, called hyperemesis gravidarum varies among pregnant women from different countries. Due to dehydration, loss of important electrolytes, malnutrition and weight loss, hyperemesis gravidarum could be life threatening for mother and baby, if left untreated. The study reported that 90 per cent women experienced some degree of nausea and vomiting during pregnancies while only 0.5 to two per cent had hyperemesis gravidarum. The data collected from the medical birth registry of Norway, 9, 00,000 first-time pregnancies registered in the medical birth registry of Norway over a 40-year period. 300 cases of hyperemesis gravidarum were recorded out of 9, 00,000 pregnancies, giving an overall prevalence of 0.89 per cent. The report also said that mothers born in India and Sri Lanka had the highest prevalence of hyperemesis gravidarum, followed by those born in Africa and Pakistan by 3.2 per cent, 3.1 per cent and 2.1 per cent, respectively.<sup>6</sup>

A study was conducted to assess the incidence, etiology and treatment of hyperemesis gravidarum among primigravid mothers in India in 2008. The incidence of hyperemesis gravidarum was found to be approximately 0.5% to 20%, said to be higher in multiple pregnancies. Both the etiology and pathogenesis of hyperemesis gravidarum remain unknown. The review summarizes the current evidence on the etiology and pathogenesis of hyperemesis gravidarum. The potential role of pregnancy-related hormones such as progesterone, estrogen and HCG has been widely studied; however, various other hormones such as leptin, placental growth hormone, prolactin, thyroid and adrenal cortical hormones have been implicated in the etiology of HG. In addition to endocrinological hypotheses, the rationale and evidence considering infectious,

immunological, psychological, metabolic and anatomical causes for HG have been analyzed and recommended the need for more studies regarding the pathogenesis and causes of hyperemesis gravidarum.<sup>7</sup>

Although most cases of hyperemesis gravidarum are self limiting and need only common and regular home care managements, some rare cases needs hospitalization and prompt treatment without which, can result in dehydration and other complications. The different treatment modalities for nausea and vomiting are ginger, oral fluid therapy etc. In case of hospitalization, as dehydration cases are considered, immediate IV fluid therapy should be given to prevent further complications. Antiemetics, vitamins, psychological support and non-pharmacological measures should also be given to the hyperemetic gravidarum patients other than IV fluid therapy in times of need. If treatment is not being available for advanced and complicated cases, it can result in endangering of the life of the mother and or baby.

Serious and long term nausea and vomiting can also result in further complications in pregnant women with hyperemesis gravidarum. This include severe dehydration, mineral imbalances in the body, Transient hyperthyroidism of hyperemesis gravidarum, changes in the gastro intestinal system, damage to the esophageal lining, poor pregnancy outcomes including the immature development of the fetus as a result of poor nutritional intake, and Some biological disturbances found in HG, hepatic cytolysis, electrolyte disturbance, significant weight loss, and ketonuria etc. Psychological disturbance is currently seen as the result of the burden and stress of HG rather than a causal factor. Maternal outcome may be severe in the absence of treatment, but pregnancy outcome seems good, as far as the condition has been adequately controlled. The management of HG includes IV rehydration, thiamine supplementation, antiemetic drugs (doxylamine, metoclopramide and chlorpromazine being the first-line choices), and in severe cases, nasogastric or parenteral nutrition. A psychological support is often necessary.<sup>8</sup>

Although almost above 50% of the hyperemesis gravidarum cases are self limiting and uncomplicated, the increased incidence, recurrence rate, need of treatment in case of emergencies and the risk of complication gives it a dangerous outlook about the condition. As it is self limiting and as the provision of care is crucial, the condition should be diagnosed. So the level of knowledge among the mothers regarding the condition is very important as the mother can confirm the condition if she is well aware of the clinical features and managements of condition.

The present study is therefore intended to reveal the facts regarding the actual level of knowledge of the mothers about the clinical features, causes, and managements of hyperemesis gravidarum and to increase the same by administering a structured teaching plan.

### OBJECTIVES OF THE STUDY

- To assess the pretest knowledge regarding home care management of hyperemesis gravidarum among primi gravida mothers before the self instructional module.
- To assess the posttest knowledge regarding home care management of hyperemesis gravidarum among primigravid mothers after self instructional module
- To determine the effectiveness of self instructional module regarding home care management and practice of hyperemesis gravidarum.

### HYPOTHESIS

**H<sub>1</sub>:** There will be significant difference between pre-test and post test level of knowledge and practice of primi gravida mothers.

### Research Design

The research design selected for the study is one group pre-test and post-test design. The present study intends to describe the knowledge of primi gravida mothers regarding home care management of hyper emesis gravidarium, and identifying the practice and evaluates the effectiveness of self Instructional module in enhancing the knowledge of the study group.

### Variables under study:

#### Dependent Variable:

Dependent variable changes are the response, behaviour outcome that is predicted or explained in research. Changes in the dependent variable are presumed to be caused by the independent variable. In this study the dependent variable are knowledge and practice of primi gravid mothers regarding home care management of hyper emesis gravidarum.

#### Independent Variable:

It is believed to cause or influence the dependent variable which is manipulative. In this study the independent variable is self instructional module on home care management of hyper emesis gravidarum.

#### Setting:

Setting refers to the area where the study is conducted. It is the physical location and condition in which data collection takes place in this study. This study was conducted at selected community area of Dehradun

**Population:**

Population is the entire aggregation of the cases that meet a desired set of criteria. In this present study target population consists of primi gravid mothers in selected community area of Dehradun.

**Sample:**

Sample consists of the subject of the population selected to participate in a research study. In the present study the sample consists of 100 primi gravida mothers.

**Description of the tool:**

A self administered questionnaire to assess the knowledge and practice of primi gravid mothers regarding home care management of hyper emesis gravidarum.

A self instructional module that comprises of information about the home care management of hyperemesis gravidarum

A score of <50 % was inadequate knowledge, a score of 51% to 75% moderate knowledge and >75 was considered as adequate knowledge

**Plan for data analysis:**

The obtained data will be analyzed in terms of the objectives and hypothesis of the study by both descriptive and inferential statistics.

The knowledge of the mothers before and after administration of SIM was analyzed by using mean, standard deviation. The effectiveness of self instructional module will be analyzed by using 't' test. The association between selected demographic variables and knowledge scores will be determined by chi square test. Data will be presented in tables, graphs and diagrams.

**RESULTS****Section 1: Analysis of sample characteristics regarding demographic variables****Demographic variables of primi gravid mothers**

**Table - 1:** This section deals with socio-demographic data of 100 primi gravida mothers with regard to the knowledge regarding home care management of hyper emesis gravidarum in terms of frequency and percentage. Socio-demographic data includes age of the mother, educational status, family history of hyper emesis gravidarum, planned pregnancy, socio- economic status, food habits, source of information on home care management of hyper emesis gravidarum.

n=100			
Sl.no	Demographic Variable	No	%
1	Age of the mother		
	a. 17-21 years	10	10
	b. 22-26 years	17	17
	c. 27-31 years	33	33
	d. 32-36 years	127	27
	e. greater than 36 years	13	13
2	Educational status		
	a. Uneducated	25	25
	b. Primary education	35	35
	c. Secondary education	22	22
	d. Graduate	18	18
3	Income status		
	Less than 5000	25	25
	5001-10,000	27	27
	10,001-15,000	30	30
	Greater than 15,001	18	18
4	Type of pregnancy		
	a. Planned	57	57
	b. Unplanned	43	43
5	Food Habbits		
	a. Vegetarian	45	45

	b.Nonvegetarian	35	35
	c.other	20	20
6	Family History of hyperemesis gravidarum		
	a.Among siblings	25	25
	b.Previous generation in the family tree	35	35
	c.Near Kins	22	22
	d.Nil	18	18
9	Source of information		
	a. Yes, Specify	20	20
	b. No	80	80

Table – 1: Depicts the frequency and percentage distribution of demographic Variables.

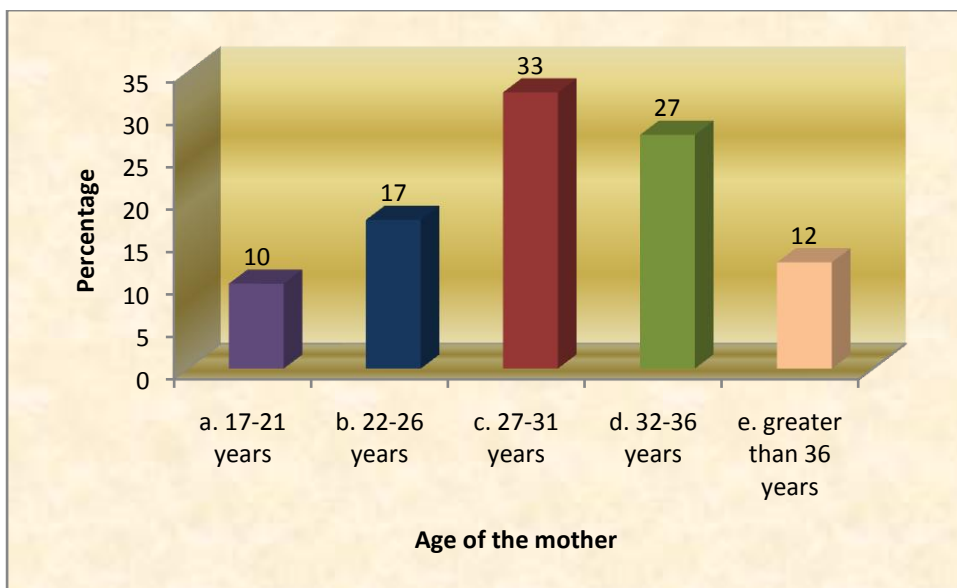


Figure 3: Percentage distribution according to age of the mother.

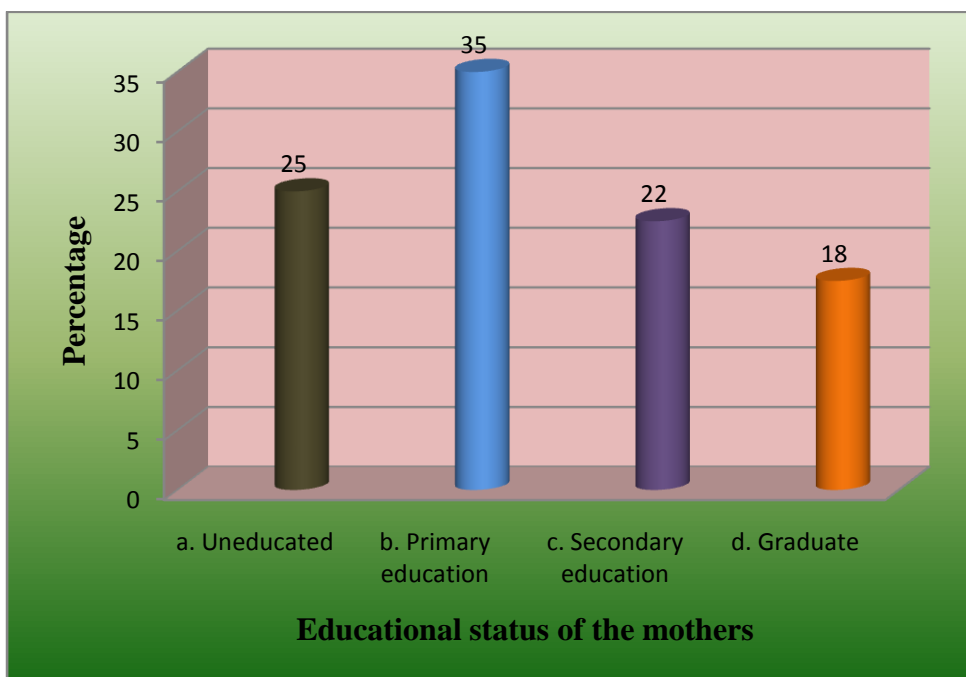


Figure 4: percentage distribution according to the educational status of the mother.



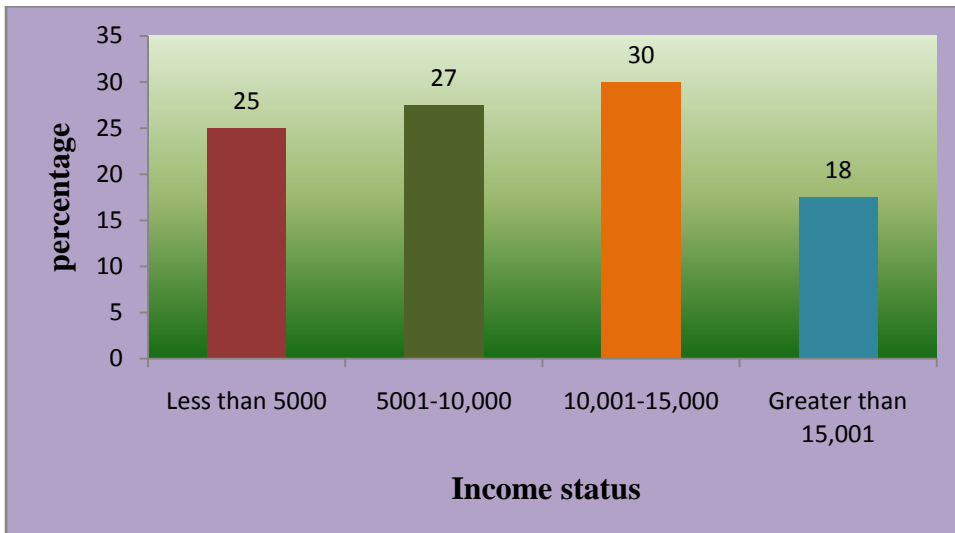


Figure 5: Percentage distribution according to the socio economic history.

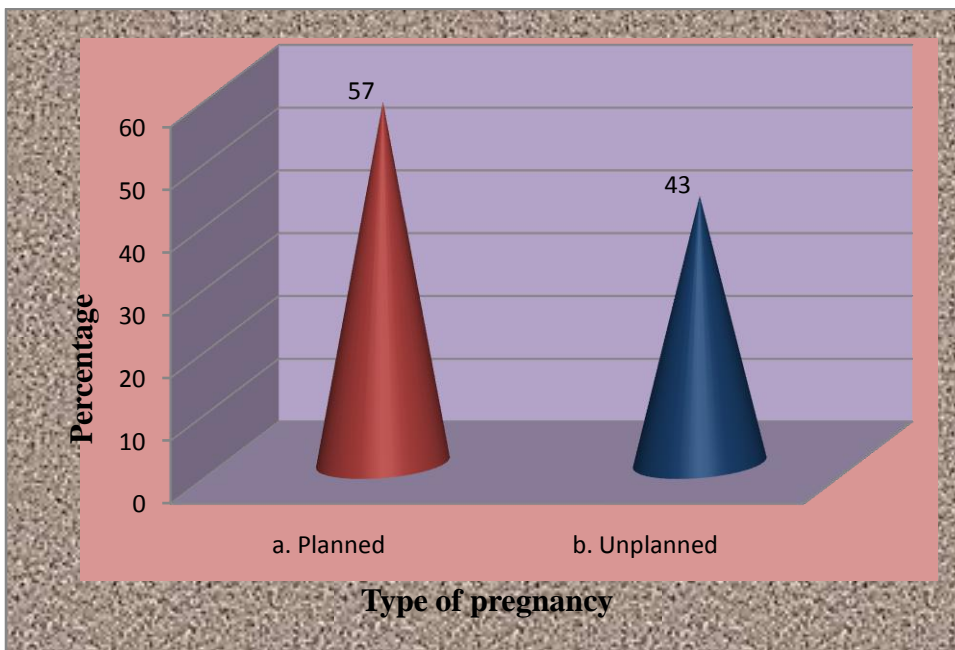


Figure 6: Percentage distribution according to the type of pregnancy.

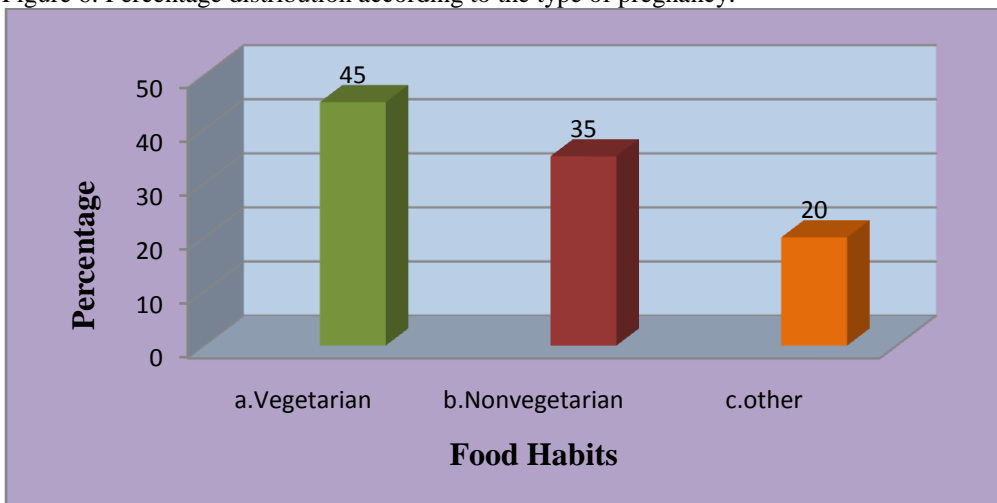


Figure 7: Percentage distribution according to food habits.

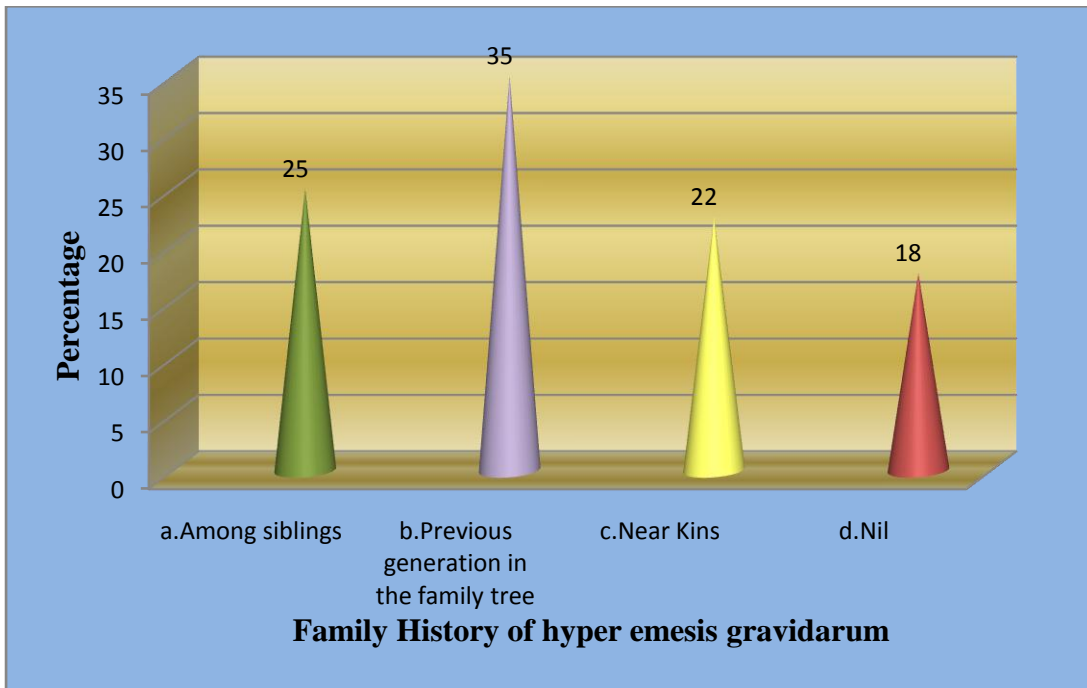


Figure 8: Percentage distribution according to family history of hyper emesis gravidarum.

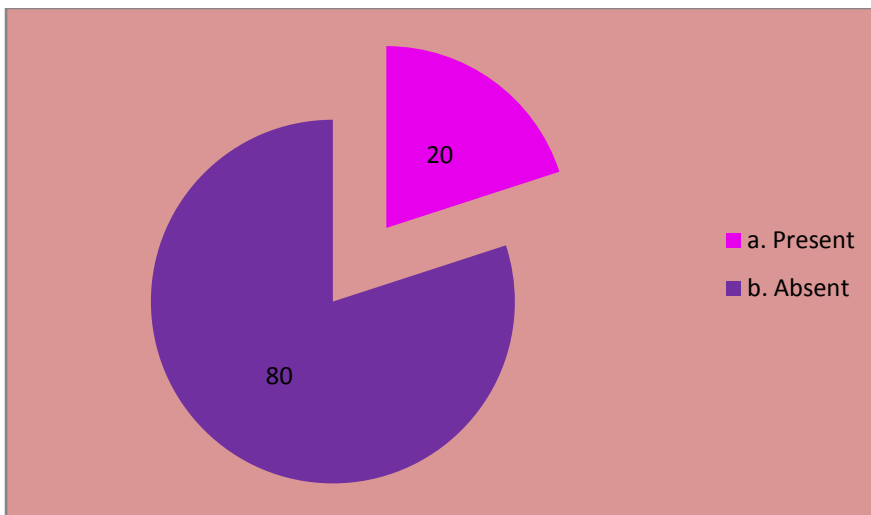


Figure 9: Percentage distribution according to classes on home care management of hyperemesis gravidarum attended before.

**Section II: Knowledge of mothers regarding antenatal care and identifying risk by analysing pre test score.**

Table 2: Percentage and frequency distribution of pre-test level of knowledge of primi gravid mothers on home care management of hyper emesis gravidarum.

n=100

Level of knowledge	Category score	No of Respondents	
		No	%
Inadequate	<50%	82	82
Moderate	50-75%	18	18
Adequate	>75%	0	0.0

The above table depicts the distribution of pre-test level of knowledge of primi gravid mothers on home care management of hyper emesis gravidarum, 82(82%) of subjects have inadequate levels of knowledge where as remaining 18(18%) of the subjects have moderate levels of knowledge.



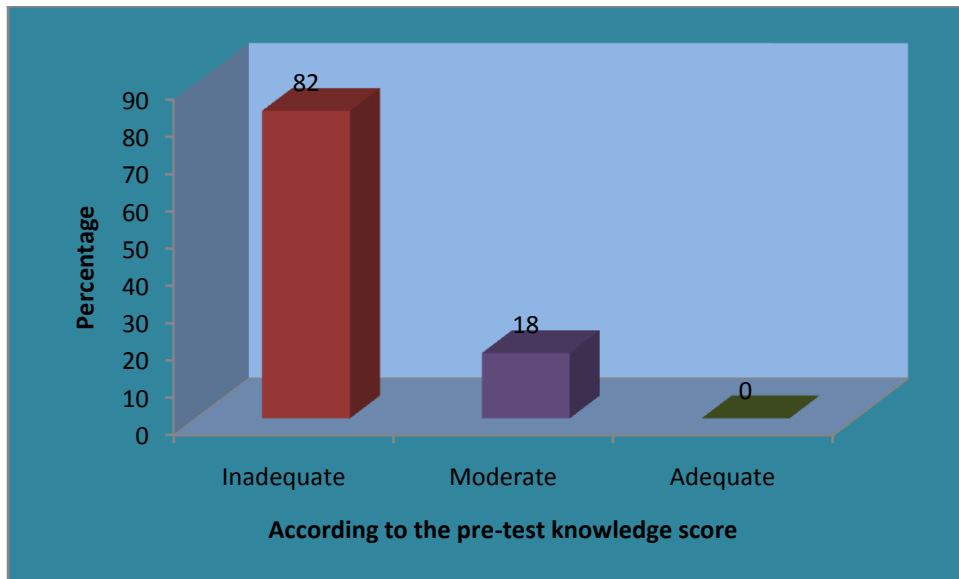


Figure 10: Percentage and frequency distribution of pre-test level of knowledge.

**Section III: Effectiveness of structured teaching programme on home care management of hyper emesis among primi gravid mothers by comparing the post test score.**

Table-3: Percentage and frequency distribution of post-test level of knowledge of primi gravid mother on home care management of hyper emesis gravidarum.

n=100

Level of knowledge	Category score	No of Respondents	
		No	%
Inadequate	<50%	0	0.0
Moderate	50-75%	55	55.0
Adequate	>75%	45	45.0

The above table depicts the distribution of post-test level of knowledge regarding home care management of hyper emesis gravidarum among primi gravid mothers. 45(45%) has gained adequate knowledge, 55(55%) has gained moderate level of knowledge and none of them had inadequate level of knowledge.

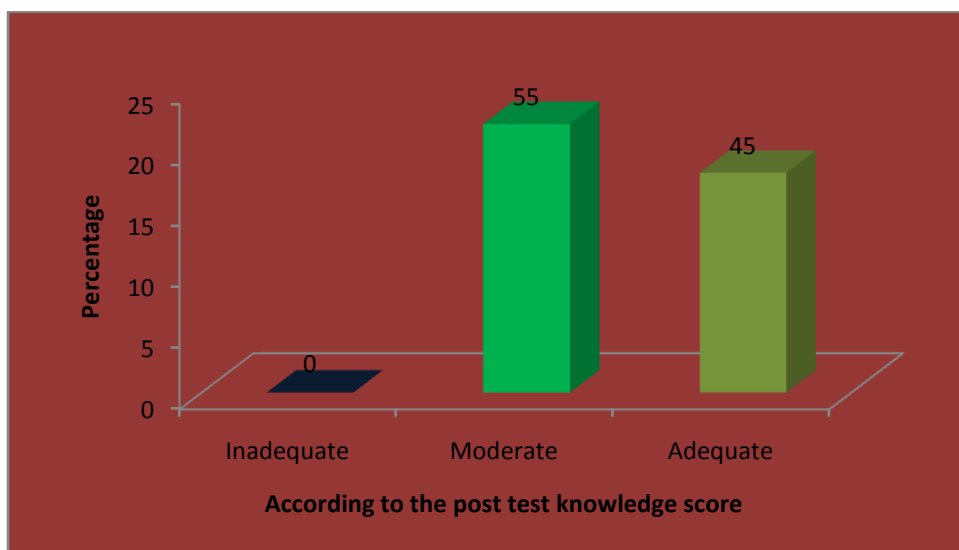


Fig 11: Percentage and frequency distribution of post-test level of knowledge.

**Table-4: Mean, SD and Mean % of Pre and Post test knowledge of mothers on home care management of hyper emesis gravidarum.**

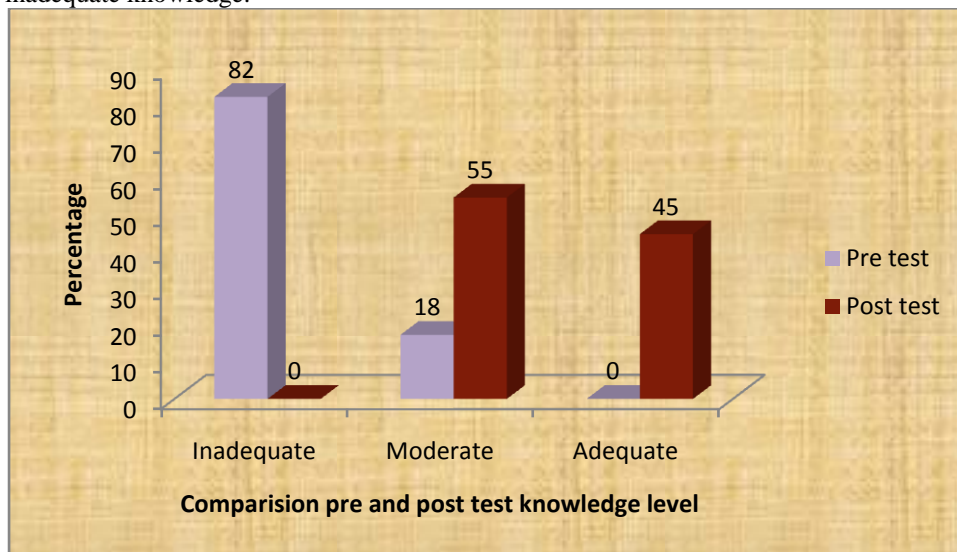
n=100						
Domain	Statements	Max Score	Range	Mean	SD	Mean %
Pre test	30	30	2-16	12.3	3.23	41
Post test	30	30	15-25	21.6	2.21	72

The Data depicts that the knowledge scores in the pre-test mean percentage was 41% and was increased to 72% after administering SIM.

**Table-5: The Comparison of pre and post test level of knowledge of primi gravida mothers on home care management of hyper emesis gravidarum.**

n=100				
Level of knowledge	Pre test		Post test	
	No	%	No	%
Inadequate (<50%)	33	82.5	0	0.0
Moderate (50-75%)	7	17.5	22	55.0
Adequate (>75%)	0	0.0	18	45.0

The above table portrays the level of knowledge of primi gravid mothers during the pre-test and post-test. The data analyzed signifies that 82(82%) of the mothers had inadequate knowledge (<50%), 18(18%) had moderate knowledge and none of them had adequate knowledge during pre-test. During post-test 55(55%) of the mothers gained moderate knowledge, 45(45%) of the mothers gained adequate knowledge and none of them had inadequate knowledge.



**Figure 12: Percentage and frequency distribution of comparison between pre-test and post-test level of knowledge on antenatal care and identifying risk among antenatal mother**

**Table – 6: Effectiveness of SIM in terms of gaining knowledge.**

Paired “t” test value of pre – test and post test

n=100				
Domain	Mean	SD	Mean %	Paired 't' value
Pre test	12.3	3.23	41	20.12**
Post test	21.6	2.21	72	
Enhancement	9.3	3.59	31	

\*\*Significant at 1% level (i.e., 0.01 level)

The data on table shows the mean knowledge score in the pre-test 12.3 and was increased to 21.6 after administering SIM. To determine the significant difference between the two tests, hypothesis was formulated and tested during paired “t” test. The level of significance was set at 0.01 level. The stated hypothesis H<sub>1</sub>, which states that there will be significant difference in the knowledge scores on home care management on hyper emesis gravidarum in the post-test knowledge scores than the pre-test knowledge scores among mothers after the administration of SIM. Computed “t” value is 20.12(P <0.01 level) hence H<sub>1</sub> is accepted. These findings showed that SIM was effective in enhancing the knowledge on home care management of hyper emesis gravidarum among primi gravida mothers.

#### IV. DISCUSSION

This chapter deals with discussion part, according to the results obtained from statistical analysis, based on the data of the study, the reviewed literature, and the hypothesis which was selected for the study. Self Instructional Module is an effective teaching strategy and should be encouraged. The pre-test was prepared with the aim of analysing the pre existing knowledge of mothers regarding homecare management of hyper emesis gravidarum during pregnancy, so that they can incorporate aspects of care in their daily practice. The sample consists of 100 primi gravid mothers. Convenient sampling technique was used. The finding of the study has been discussed with reference to the objectives and hypothesis.

The present study employed one group pre-test post-test Quazi-experimental design.

The findings have been discussed under the following headings:

- ◆ Description of demographic characteristics.
- ◆ Assessment of the pre-test knowledge score of the subjects.
- ◆ Analyze the effectiveness of the SIM by comparing the post-test knowledge score of subjects with the pre-test knowledge scores.

##### **Characteristics of the demographic variables.**

Characteristics of the demographic variables, described in terms of their frequency and percentage distribution, showed that the subject wise distribution according to their age group showed the maximum number of samples 32(32%) belongs to 27-31 years while minimum number 10(10%) `17-21 years, the others 12(12%) belong to above 36 years, 18(18%) belong to 22-26 years and 28(28%) belong to 32-36 years. With respect to the educational status of the mother, majority 35(35%) of the samples had completed primary school education, 25(25%) were uneducated, 22(22%) had secondary education while the minority 18(18%) were graduates. In relation to the income status, majority 30(30%) of parents belonged to the income range of 10,001-15,000, while a minority 18(18%) of parents recorded the range of more than 15,001, 27(27%) recorded 5001-10,000 and 25(25%) recorded in the range less than 5000 With respect to type of pregnancy, the majority 57(57%) were planned pregnancy, whereas 43(43%) were unplanned. In regard to the food habits of the mother, majority 45(45%) of them were vegetarians, while minority 20(20%) were consuming mixed diet, and 35(35%) were non vegetarians. In relation to the classes on home care management on hyper emesis gravidarum attended before, majority of them 32(80%) had not attended any form of education programme while a minority 20(20%) showed exposure to education programme.

##### **The first objective was to assess the existing knowledge of primi gravida mothers regarding home care management of hyper emesis gravidarum in terms of pre-test.**

The pre-test shows that 82(82%) of the subjects were having inadequate level of knowledge 18(18%) has moderate level of knowledge and none of them had adequate knowledge regarding home care management of hyper emesis gravidarum. The mean score for overall knowledge of the mothers was 12.3 with standard deviation of 3.23. This shows that subjects have inadequate knowledge on home care management of hyper emesis gravidarum.

This indicated that the knowledge of mothers, was inadequate regarding the home care management of hyper emesis gravidarum and it was necessary for the investigator to improve the knowledge of subjects by giving specific information on home care management care, which would enable them to improve their knowledge.

##### **Assess the post test knowledge of primi gravida mothers on home care management of hyper emesis gravidarum.**

The analysis of overall knowledge of subjects during post-test revealed that the majority of 55(55%) mothers had moderate knowledge, 45(45%) had adequate knowledge and none of them have inadequate knowledge on home care management. The obtained post-test value 21.6 was higher than the pre-test value 12.3. The mean difference between pre-test and post-test was 9.3 and the obtained paired “t” value was 20.12 which were highly significant at df 39 at 0.01 level.

### Evaluate the effectiveness of SIM on home care management of hyper emesis gravidarum, by comparing pre-test and post-test knowledge score.

The comparison of mean for knowledge variables of mothers in pre-test and post-test showed that the mean post-test score were higher than mean pre-test knowledge scores. The computed “t” test values in all variables were significant at 0.01 level. The report shows that structured questionnaire was most valuable tool in delivering the essential information about home care management of hyper emesis gravidarum during pregnancy.

So the hypothesis H1 as stated “there will be significant increase in the level of knowledge of primi gravida mothers regarding home care management of hyper emesis gravidarum after the SIM is

## V. CONCLUSION

The present study assessed the effectiveness of self instructional module on home care management of hyperemesis gravidarum among primi gravida mothers. The findings of the study revealed that there was a marked increase in the overall knowledge scores of post test mean 21.6 and pre-test mean 12.3 which represents the effectiveness of self instructional module. The calculated value was found to be 12.12 which were highly significant at 0.01 levels. Thus the SIM was effective in improving the knowledge on home care management of hyperemesis gravidarum among primi gravida mothers. On the basis of finding, the researcher concluded that the SIM was successful in improving the knowledge.

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