



# ASSESS THE KNOWLEDGE ABOUT HYPEREMESIS GRAVIDARUM AMONG PRIMIGRAVIDA MOTHERS

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## ABSTRACT :

Hyperemesis gravidarum (HG) is a pregnancy complication that is characterized by severe nausea, vomiting, weight loss, and possibly dehydration.<sup>[1]</sup> Feeling faint may also occur.<sup>[2]</sup> It is considered more severe than morning sickness.<sup>[2]</sup> Symptoms often get better after the 20th week of pregnancy but may last the entire pregnancy duration.<sup>[2]</sup>

The exact causes of hyperemesis gravidarum are unknown.<sup>[3]</sup> Risk factors include the first pregnancy, multiple pregnancy, obesity, prior or family history of HG, trophoblastic disorder, and a history of eating disorders.<sup>[3][4]</sup> Diagnosis is usually made based on the observed signs and symptoms.<sup>[3]</sup> HG has been technically defined as more than three episodes of vomiting per day such that weight loss of 5% or three kilograms has occurred and ketones are present in the urine.<sup>[3]</sup> Other potential causes of the symptoms should be excluded, including urinary tract infection and an overactive thyroid.<sup>[5]</sup>

There are numerous theories regarding the cause of HG, but the cause remains controversial. It is thought that HG is due to a combination of factors which may vary between women and include genetics.<sup>[11]</sup> Women with family members who had HG are more likely to develop the disease.<sup>[16]</sup>

One factor is an adverse reaction to the hormonal changes of pregnancy, in particular, elevated levels of beta human chorionic gonadotropin ( $\beta$ -hCG).<sup>[17][18]</sup> This theory would also explain why hyperemesis gravidarum is most frequently encountered in the first trimester (often around 8–12 weeks of gestation), as  $\beta$ -hCG levels are highest at that time and decline afterward. Another postulated cause of HG is an increase in maternal levels of estrogens (decreasing intestinal motility and gastric emptying leading to nausea/vomiting)

**KEY WORDS:** Effectiveness, hyperemesis gravidarum, primi gravida Mothers,

## **INTRODUCTION:**

Hyperemesis gravidarum is from the Greek hyper-, meaning excessive, and emesis, meaning vomiting, and the Latin gravidarum, therefore, hyperemesis gravidarum means "excessive vomiting of pregnant women". Dawn, C.S (2004). Factors such as infection with *Helicobacter pylori*, a rise in thyroid hormone production, low age, low body mass index prior to pregnancy, multiple pregnancies, molar pregnancies, and a past history of hyperemesis gravidarum have been associated with the development of HG Summers, A (July 2012). The meals should contain more carbohydrate than fat and acid. Protein-rich meals also decrease symptoms. Lighter snacks, including nuts, dairy products, and beans, are often endorsed. Jewell D, (2000). Drinks that contain electrolytes and other supplements are advised. If certain foods or food preparations trigger nausea, they should be avoided. Jueckstock JK, (2010). The root of ginger, *Zingiber officinale*, has been studied to treat hyperemesis. The effectiveness of ginger is thought to be dependent on its aromatic, carminative, and absorbent characteristics. Vutyavanich T, (2001). Morning sickness and HG seem to have a connection to human chorionic gonadotropin (hCG). This is a hormone created during pregnancy by the placenta. Your body produces a large amount of this hormone at a rapid rate early in pregnancy. These levels can continue to rise throughout your pregnancy.

## **STATEMENT OF THE STUDY**

The Study Was Conducted To Assess The Knowledge About Hyperemesis Gravidarum Among Primigravida Mothers

**Materials and Methods:** The sample of the study comprised of 150 antenatal mothers with hyperemesis gravidarum admitted in maternity ward. Evaluative Research design and convenient sampling technique was adopted for this study.

Description of the tool: It consists of 4 parts

Part I: Demographic data

Part II: Observational check list to assess the general health status of the mother

Part III: Rating scale to identify the improvement in the health status of mother with hyperemesis gravidarum

Part IV: Observation check list of nursing intervention for the mothers with hyperemesis gravidarum

Score Interpretation: The obtained data were interpreted by the following procedure.

$$\text{Score Interpretation} = \frac{\text{Obtained score}}{\text{Total Score}} \times 100$$

Description of health status	Percentage
Mild health deterioration	0-50
Moderate health deterioration	51-74
Severe health deterioration	>75

## Results and discussion:

The study was conducted to determine the effectiveness of nursing care on mothers with hyperemesis gravidarum. The study findings have been discussed in terms of the objectives of theoretical basis and hypothesis. A total number of 150 mothers were selected. Each day, mother was treated on basis of comprehensive nursing intervention protocol. The health statuses of the mother with hyperemesis gravidarum were assessed by using Rating scale.

Social or psychological problems may be associated with this disorder of pregnancy. Women who are affected by this illness should avoid stress and try to get as much rest as possible Niebyl JR(2012).

Early treatment of nausea and vomiting of pregnancy may prevent progression to hyperemesis gravidarum. First-line treatment often involves rest and avoidance of sensory stimuli that may act as triggers. Frequent small meals with avoidance of spicy or fatty foods and increasing high-protein snacks are recommended. Susan Renee Wilcox, (2009).

Boback,(maternity and gynaecology care) said that once the nausea and vomiting are under control, try to begin nourishing your body with a diet high in carbohydrates and low in fat.

Acupressure – The pressure point to reduce nausea is located at the middle of the inner wrist, three finger lengths away from the crease of the wrist, and between the two tendons. Locate and press firmly, one wrist at a time for three minutes. Sea bands also help with acupressure and can be found at your local drug store. HER foundation,(2011).

TPN is a nutrient source that may be used in pregnant women who suffer from severe hyperemesis or when there is a lack of absorption of adequate nutrients. Rayburn W, (2010).

Antihistaminic and anti-emetic drugs such as promethazine or prochlorperazine or tri-fluoperazine may be administered twice or thrice daily intra-muscularly. Hydrocortisone 100mg is given in drip in case of severe hypotension. Marie Elizabeth, (2013)

If persistent dehydration, electrolyte loss, and/or weight loss occur despite above therapy, nutrition supplementation by either the parenteral or enteral route is indicated. The standard method has been via total parenteral nutrition (TPN). Dotun A Ogunyemi, (2008).

Table 1: Frequency and Percentage distribution of demographic variables of mothers with hyperemesis gravidarum

S.no	Demographic variables	Frequency	Percentage
1.	Age a. 18-21 yrs. b. 22-25 yrs. c. 26-29 yrs. d. Above 29 yrs.	80 30 20 20	53.33 20 13.33 13.33
2.	Religion a. Hindu b. Christian c. Muslim	100 20 30	67 13.33 20
3.	Educational status a. illiterate b. primary level c. high school level d. graduate	30 30 70 20	20 20 47 13.33
4.	Occupation a. private b. government c. homemaker	40 20 90	26 13.3 60
5.	Family monthly income a. below Rs. 1000 b. Rs. 1001- Rs 3000 c. Rs. 3001- Rs. 5000 d. Above 5000	20 60 30 40	13.33 40 20 27
6.	Type of marriage a. Consanguineous b. Non Consanguineous	40 110	27 73.33
7.	Order of pregnancy a. Primigravida b. Second gravida c. Multigravida	70 50 30	47 33.33 20
8.	Family history of hyperemesis gravidarum a. Yes b. No	70 80	47 13.33
9.	Practice of antenatal check up a. regular b. once in a month c. whenever there is a problem	90 30 30	60 20 20
10.	Maternal health information a. mass media	20	13.33

b. family, relatives	30	20
c. health personnel	100	67

Table:2 Frequency and Percentage distribution of health status on mothers with hyperemesis gravidarum

S.No	HEALTH STATUS	ANTENATAL		POSTNATAL	
		NO	%	NO	%
1.	Mild health deterioration	--	--	90	60
2.	Moderate health deterioration	60	40	60	40
3.	Severe health deterioration	90	60	--	--

Table 2 shows that the immediate assessment of health status of the mothers with hyperemesis gravidarum, out of 150 mothers 90(60%) mothers were in severe deterioration of health status, 60(40%) were in moderate deterioration of health status. At the time of discharge the health status of the mothers were evaluated, out of 150 mothers 90(60%) mothers had attained good improvement in health status, 60(40%) have been in moderate deterioration of health status.

Table: 3 Comparison of Mean and Standard Deviation of assessment and evaluation score of mothers with hyperemesis gravidarum

HEALTH STATUS	MEAN	S.D
ASSESSMENT	34.4	3.32
EVALUATION	22.13	2.12

The final conclusion of the above table reveals that in the assessment mean score was reduced in evaluation level. Similarly the standard deviation value also reduced in the evaluation score when comparing the assessment level. The above table also shows that there was a significant improvement in the health status of mothers with hyperemesis gravidarum. Thus the nursing care on mothers with hyperemesis gravidarum was very effective.

Table: 4 Mean and Standard deviation of improvement score for mothers with hyperemesis gravidarum N=150

HEALTH STATUS	MEAN	STANDARD DEVIATION	T VALUE
Improvement score	22.13	3.32	81.9

\*\*P 0.001 Level of significance

Table 4 shows that improvement score mean with value of 22.13 with standard deviation of 3.32,  $t=81.9$ , implied that there was statistically highly significant improvement in health status. Thus the nursing care on mothers with hyperemesis gravidarum was very effective.

### Conclusion:

The mothers with hyperemesis gravidarum was assessed before the assessment and were observed during and after the treatment. It was found that there is a positive relation between the effectiveness of nursing care among mother with hyperemesis gravidarum.

The midwife may suggest remedies like eating a dry biscuits or cracker with a drink before rising in the morning, avoidance of spicy and pungent odours, eating small and frequent diet helps to maintain the body's blood sugar levels. Myles, (2003)

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