

# The Analysis of Nursing Problems in Mothers with Hyperemesis Gravidarum at RS NU Banyuwangi

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## ARTICLE INFO

## ABSTRACT

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Hyperemesis gravidarum is vomiting that occurs in early pregnancy until the gestational age of 20 weeks, where sometimes vomiting occurs so intense and interfere with daily activities. Hyperemesis gravidarum can harm the health of the mother that can cause a weight loss of more than 5% and lead to metabolic disorders. This research is a descriptive retrospective cross-sectional design with data collection on the patient's medical record for a year in 2019. This research was conducted at the HOSPITAL of Nahdlatul Ulama Banyuwangi. In this study found pregnant women with hyperemesis gravidarum based on the age of the mother most of the high experienced by pregnant women in the age group <25 years as many as 30 people (68,2%). Based on the parity of the most high experienced by pregnant women in the group of parity primigravida as many as 30 people (68,2%). Based on the level of education of the mother most of the high experienced by pregnant women who have a high SCHOOL education that is as much as 18 people (40,9%). The results of the statistical test of this study concluded with the results of the test of SPSS version 17 the obtained value of the largest there is on the issue of nursing disorders of fluid balance with the amount of 52,3%, followed by disorders of nutrition with the number of the 31.8%, and the last is hipertermi with the amount of 15.9%. Based on the results of the analysis of nursing assessments of hyperemesis gravidarum cases experienced by pregnant women (research samples), three nursing diagnoses or nursing problems were found including fluid balance disorders, nutritional balance disorders and hyperthermia. The nursing problems experienced by the sample are in accordance with the implementation of the diagnosis according to the IDHS. From the three diagnoses, a priority nursing diagnosis was obtained, namely fluid balance disorders. From nursing diagnoses that appear, interventions that can be performed on pregnant women are adjusted to clinical signs so that the goal to overcome the problems that occur can be achieved.

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## 1. Introduction

Pregnancy is a series of events that begins with conception and will evolve until it becomes a fetus that a term and ends with the process of childbirth. Pregnancy is a natural event for women, women will experience the change in him both physical and psychological<sup>1</sup>. When the phase of pregnancy, some complications could occur, such as nausea to vomiting are commonly perceived by pregnant women. The problem is that the problem is often encountered in early pregnancy<sup>1</sup>. Almost 50% - 90% of the amount of pregnancy is accompanied by nausea to vomiting. There is a study of approximately of pregnant women, only 2% who felt nausea in the morning whereas, and 80% of complaints of persistent throughout the day. There are 8.6 million pregnant women who lose working hours due to the complaints<sup>2</sup>.

In 2011, the incidence of hyperemesis gravidarum in the Province of East Java reached 10-15% of the number of pregnant women as much as 182.8154 people<sup>4</sup>. Hyperemesis gravidarum can be harmful to health, decrease weight by more than 5%, metabolic disorders, and other complications such as dehydration, weakness, and malnutrition<sup>3</sup>. The feeling of nausea is a result of rising levels of estrogen, the rise of the estrogen hormone resulted in the smooth muscle found in the gastrointestinal decreased activity so that the motility of the stomach to decrease and occur emptying of the stomach slows down. Reflexes of the esophagus, reduced motility of the stomach and the high acid secretion of hydrochloride also contribute to the occurrence of nausea to vomiting. This is exacerbated by the presence of other causes that are closely related to psychological factors, spiritual, environmental, and social-cultural<sup>4</sup>. The cause of hyperemesis gravidarum is not yet known with under the age of 24 years old<sup>8</sup>. A serious problem faced by patients with hyperemesis gravidarum is the difficulty of getting fluid intake as well as nutrition also enough energy. This is caused by the pregnant women in the first trimester often experience

nausea and vomiting<sup>5</sup>. This state can also cause their body to lose energy, which makes the body of the expectant mother becomes weak and susceptible to other diseases. It can also cause dehydration, reduction in extracellular fluid and plasma<sup>6</sup>. In addition to dehydration, reduction of sodium and chlorine in the blood and urine can also lead to the concentration of the blood, which causes a decrease in blood flow to the tissues. If not treated immediately, hyperemesis gravidarum can be life-threatening to the mother and the fetus. Some of the symptoms of hyperemesis gravidarum among others, the weight loss of more than 5% compared with pregnancy, malnutrition, dehydration, and the inability to perform everyday activities<sup>3</sup>.

Therefore the treatment should be done immediately. In addition, nurses are also required to be able to assess depth, carefully and thoroughly. So that nurses can provide care services that are right on target in patients with hyperemesis gravidarum<sup>5</sup>. With proper handling and better hope, the problem of hyperemesis gravidarum can be resolved.

## 2. Research Method

The research technique used in this research is the technique of retrospective studies. A retrospective is a method of data collection where the data is the data associated with past data. This study took the data from the previous year i.e. in the year 2019.

In this study, the independent variable is the nursing problems in pregnant women while the variable dependent is hyperemesis gravidarum. Data collection using sheets of stuffing to fill the data obtained from the medical record. The population of this study was pregnant women who seek treatment in RS Nahdlatul Ulama Banyuwangi. With a total sample of 44 people with purposive sampling technique. This research was conducted at RS Nahdlatul Ulama Banyuwangi over a while August-September 2020. Here are the stages of research conducted by researchers:

- a. A preliminary study is a study conducted to evaluate the feasibility, duration, cost, weaknesses, and design of a study, before being implemented as a full-scale research project, by first applying for permission to the research site.
- b. Data collection is the process of collecting and measuring information about targeted variables in an established system, which then allows collecting data taken from relevant patient medical records (samples) and evaluating results.
- c. Population grouping, Population in this study is pregnant women who seek treatment at Nahdlatul Ulama Banyuwangi Hospital as many as 50 people are then sampled, sample withdrawal using purposive sampling techniques is sampling based on criteria that have been determined by researchers who are included in the inclusion criteria, namely pregnant women who have experienced or are experiencing hyperemesis gravidarum and pregnant women who are examined in the obstetrics of Nahdlat Hospital. ul Ulama in the study period, so the sample in this study is some pregnant women who experience hyperemesis gravid arum in Nahdlatul Ulama Banyuwagi Hospital as many as 44 people.
- d. Data processing, after the data, is collected and arranged then the researchers do data processing with scoring, editing, coding, and tabulating techniques. Researchers use SPSS V17 software to process data
- e. Data analysis in this study, the researchers used chi-square analysis techniques.

## 3. Results, Analysis and Discussion

The results showed that the average pregnant woman who experienced hyperemesis gravidarum was in the first pregnancy and at a risky age such as being too young or too old, the level of knowledge also had an influence in determining nutrition and fluid management by the mother independently. In the study, it was also found that on average there are three nursing problems that often arise which the author will explain below :

TABLE 1.  
FREQUENCY DISTRIBUTION BY AGE OF THE MOTHER AT RS NAHDLATUL ULAMA BANYUWANGI 2020

Age	Frequency	Percentage
<25 Years Old	30	68,2

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26-35 Years Old	12	27,3
36-45 Years Old	2	4,5
Total	44	100

Based on Table 1 obtained data on the frequency of the mother on the basis that the majority of respondents as many as 30 people (68, 2%) with age <25 years. Aged 26-35 years, almost half again as many as 12 people (of 27.3%), and aged 36-45 years as much as 2 respondents (4.5 percent).

TABLE 2  
FREQUENCY DISTRIBUTION BASED ON THE EDUCATION OF THE MOTHER IN RS NAHDLATUL ULAMA BANYUWANGI 2020

Education	Frequency	Percentage
No School	1	2,3
Elementary School	4	9,1
Junior High School	13	29,5
Senior High School	18	40,9
University	8	18,2
Total	44	100

Based on Table 2 above can be seen the frequency of the mother based on the education of almost half of high school-educated as 18 people (40, 9%), as 13 people (29, 5, %) junior high school education and some other small parts as many as 8 people (18.2 percent) educated academy and a small part again as many as 4 people (9, 1%) Elementary School education, as well as 1 person (2, 3%) school.

TABLE 3  
FREQUENCY DISTRIBUTION BASED ON THE PARITY OF THE MOTHER IN RS NAHDLATUL ULAMA BANYUWANGI 2020

Number of pregnancies	Frequency	Percentage
Primigravida	30	68,2
Multigravida	14	31,8
Total	44	100

Based on table 3 it can be seen that the frequency based on the amount of the mother's pregnancy primigravida as many as 30 people (68, 2%), and multigravida as many as 14 people (31, 8%)

TABLE 4  
FREQUENCY DISTRIBUTION BASED ON THE PARITY OF THE MOTHER IN RS NAHDLATUL ULAMA BANYUWANGI 2020

Nursing Promblem	Frequency	Percentage
Disorders of fluid balance	23	52,3
Disorders of Nutrition	14	31,8
Hyperthermia	7	15,9
Total	44	100

Based on Table 4 is known that the percentage of the disorders of fluid balance is more than half the sample as many as 23 people (52, 3%), disorders of nutrition as many as 14 people (31, 8%), and hyperthermia as many as 7 people (15, 9%).

TABLE 5  
FREQUENCY DISTRIBUTION BASED ON THE SCALE OF HYPEREMESIS GRAVIDARUM IN RS NAHDLATUL ULAMA  
BANYUWANGI 2020

<b>The Scale Of Hyperemesis Gravidar</b>	<b>Frequency</b>	<b>Percentage</b>
Lightweight	6	13,6
Medium	16	36,4
Weight	22	50
Total	44	100

Based on Table 5 is known that the percentage of hyperemesis gravidarum with a scale of light as much as 6 people (13, 6%), hyperemesis gravidarum with scale are as many as 16 people (36, 4%), and hyperemesis gravidarum with scale weigh as much as 22 people (50%).

TABLE 6  
CROSS TABULATION

<b>Nursing Problem</b>	<b>The Scale of Hyperemesis Gravidarum</b>			
	<b>Light weight</b>	<b>Medium</b>	<b>Weight</b>	<b>Total</b>
	N	N	N	N
Disorders of fluid balance	2	6	15	23
Disorders of Nutrition	4	5	5	14
Hyperthermia	0	5	2	7
Total	6	16	22	44

Based on the results of table 1.6 the data obtained nursing problems and the scale of hyperemesis gravidarum in a cross-tabulation that the nursing problem of balance disorders of fluid balance in hyperemesis scale light as much as 2 people (4.5 percent), while for the scale are as many as 6 people ( 13,6%) and scale weighing a total of 15 people (34,1%). While the issue of nursing disorders of nutrition in hyperemesis scale light as many as 4 people (9, 1%), while for scale moderate and severe as many as 5 people (11.4 percent). Different from the problem of nursing hyperthermia are found only on the scale of being as much as 5 people (11.4 percent) and scale the weight as much as 2 people (4.5 percent).

#### 4. Discussions

##### Nursing Problems

Based on Table 4 is known that the percentage of the disorders of fluid balance is more than half the sample as many as 23 people (52, 3%), disorders of nutrition as many as 14 people (31, 8%), and hyperthermia as many as 7 people (15, 9%). Disorders of fluid balance are the condition where we lose fluid and electrolytes extracellular number (isotonic)<sup>7</sup>. The fulfillment of fluid needed to replace the lost fluids. It is adjusted by the fluid requirements of the patient<sup>7</sup>. Hyperemesis gravidarum can also cause problems such as disorders of nutrition. Where the individual is not able to meet the needs of its nutrients caused by nausea and vomiting<sup>8</sup>. In addition to the two Nursing problems above, there are also Nursing problems that arise due to the presence of both the Nursing problem. The nursing problem that often arises is hyperthermia. Where hyperthermia can be caused because the mother is dehydrated. While understanding hyperthermia is an increase in body temperature above the normal threshold<sup>6</sup>. On hyperemesis gravidarum, this often happens, and how to overcome them is to immediately lower his body temperature to provide therapeutic compress, put the liquid per oral or parenteral to reduce dehydration also collaborate with physicians to therapy pharmacologic.

##### Hyperemesis Gravidarum

Based on Table 1.5 is known that the percentage of hyperemesis gravidarum with a scale of light as much as 6 people (13, 6%), hyperemesis gravidarum with scale are as many as 16 people (36, 4%), and hyperemesis gravidarum with scale weigh as much as 22 people (50%). Hyperemesis gravidarum is divided into 3 scales<sup>9</sup>:

- a) Lightweight
- b) Medium
- c) Weight

##### Correlation between Variables

Based on the results of table cross-tabulation of the data obtained Nursing problems and the scale of hyperemesis gravidarum in the cross-tabulation, namely the problem of Nursing disorders of fluid balance in hyperemesis scale light as much as 2 people (4.5 percent), while for the scale are as many as 6 people (13, 6%) and scale weighing a total of 15 people (34, 1%). While the issue of Nursing disorders of nutrition in hyperemesis scale light as many as 4 people (9, 1%), while for the medium-scale and weigh as much as 5 people (11.4 percent). Different from the problem of Nursing hyperthermia are found only on the scale of being as much as 5 people (11.4 percent) and scale the weight as much as 2 people (4.5 percent).

Based on the chi-square statistical test results obtained  $p = 0,000 < 0,005$  which means that the third issue of Nursing namely disorders of fluid balance, disorders of the fulfillment of nutrition, and hyperthermia have a significant correlation to hyperemesis gravidarum, this is evidenced also by the frequent appearance of such diagnoses in the medical record of the patient. In line with research conducted by Sundry Rizky Yusniar 2020 in Samarinda, also Dio 2020 in Aceh, states that there are two Nursing problems that arise due to hiperemesis gravidarum, namely disorders of fluid balance and disorders of nutrition. It is caused by nausea and vomiting excessive mother, make mom a fluid loss in the amount of the lot. It was also influential on the input of nutrients is reduced caused by nausea and vomiting so that the food that is swallowed will be vomiting right back<sup>10,11</sup>.

While in theory and line with the research Sundry Rizky Yusniar 2020 in Samarinda stated that hyperthermia also often be a problem in mothers with hyperemesis gravidarum caused by dehydration<sup>10</sup>.

#### 5. Conclusion

Based on the results of the analysis of nursing assessments of hyperemesis gravidarum cases experienced by pregnant women (research samples), three nursing diagnoses or nursing problems were found including fluid balance disorders, nutritional balance disorders and hyperthermia. The

nursing problems experienced by the sample are in accordance with the implementation of the diagnosis according to the IDHS. From the three diagnoses, a priority nursing diagnosis was obtained, namely fluid balance disorders. From nursing diagnoses that appear, interventions that can be performed on pregnant women are adjusted to clinical signs so that the goal to overcome the problems that occur can be achieved.

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