



**THE EFFECT OF HEALTH EDUCATION ON THE KNOWLEDGE OF
PREGNANT WOMEN IN THE HANDLING OF EMESIS GRAVIDARUM**

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ABSTRACT

Emesis gravidarum is a natural thing and is often found in pregnancy, especially in the first trimester pregnancy usually occurs 6 weeks after the first day of the last menstrual period and lasts approximately 10 weeks due to an increase in the levels of estrogen and progesterone hormones produced by Human Chorionic Gonadotropin (HCG) in the serum from the placenta, but in cases it can continue until the second and third trimester of pregnancy. Objective to determine the influence of health education on the knowledge of pregnant women in the treatment of emesis gravidarum in the Working Area of the Batujaya Health Center, Karawang Regency. Quasi experimental research design one group pre-post test design. The sample in this study was 39 pregnant women in the first trimester who experienced emesis gravidarum. Technique of using Proportional Accidental Sampling. The questionnaire in this study has been tested for validity and reliability. Data analysis using descriptive statistics and paired t-test. Results: Showing the average value of knowledge before and after the intervention was 21.23 to 27.56. The results of the statistical test using the paired t-test obtained a value of p value = 0.000, meaning that there is an influence of health education on the knowledge of pregnant women in the treatment of emesis gravidarum. There is an effect of health education on the knowledge of pregnant women in the treatment of emesis gravidarum in the Working Area of the Batujaya Health Center, Karawang Regency.

Keywords: emesis gravidarum; health education; knowledge; pregnant women

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INTRODUCTION

Pregnancy is a physiological and natural process that occurs in women starting from conception to the birth of the fetus. Pregnancy is counted starting from the first day of the last menstruation. The length of pregnancy from the beginning of conception to the birth of the baby is 40 weeks or 280 days. There are three parts to pregnancy, including the first trimester from conception to three months/12 weeks, the second trimester from four months to six months and the third trimester starting from 7 months to 9 months (Harahap, 2020). During pregnancy, mothers experience physical, social and emotional changes in the family environment. Any pregnancy can also develop into a problem or complication at any time. That's why pregnant women need monitoring during their pregnancy. Hormonal changes in women occur during pregnancy, namely an increase in the hormones progesterone, and estrogen, resulting in placental HCG or (Human Chorionic Gonadotropine). This can cause complaints that will be experienced by pregnant women, one of which is emesis gravidarum. The problem in the first trimester is the feeling of nausea and vomiting due to increased estrogen levels (Harahap, 2020). Nausea (nausea) and vomiting (emesis gravidarum) are normal and often found in pregnancy, especially in the first trimester of pregnancy caused by an increase in the levels of the hormones estrogen and progesterone produced by the Human Chorionic Gonadotropin (HCG) in the serum of the placenta. Emesis gravidarum usually occurs 6 weeks after the last first day and lasts approximately 10 weeks, but in some cases it

can continue until the second and third trimester of pregnancy. Around 50-90% of pregnant women experience complaints of nausea and vomiting. These complaints are usually accompanied by hypersalivation, headaches, bloating, and a feeling of weakness in the body. These complaints are generally known as "morning sickness" (Haridawati, 2020).

Emesis gravidarum in pregnant women that occurs continuously can cause dehydration and even weight loss in pregnant women. If not handled appropriately and quickly, it will have bad consequences for pregnant women and fetuses, and can even cause the death of pregnant women and fetuses. Emesis gravidarum in pregnant women can have various impacts, one of which is a decrease in appetite which results in a change in the balance of electrolytes, namely potassium, calcium and sodium, causing changes in the body's metabolism. The impact on the fetus is that the fetus will lack nutrients and fluids needed by the body, this can cause the baby to be born with low birth weight and the growth and development process is disrupted (Wardani, 2019). Based on the Millennium Development Goals (MDGs) target in 2020, namely AKI 230 per 100,000 live births and AKB 24 per 1000 live births, it shows that AKI and AKB in Indonesia in 2020 MGDs are then followed by the Sustainable Development Goals (SDGs), one of the SDGs targets is to reduce AKI to less than 102 per 100,000 live births and AKB 12 per 1000 live births by 2030 (WHO, 2021). According to the World Health Organization (WHO), the incidence rate of emesis gravidarum reaches 14% of all pregnant women in the world (WHO, 2021). According to data from the Ministry of Health in 2020, the number of maternal deaths reached 4,627 people, an increase of 10.25% compared to the previous year of only 4,197 people. The causes of maternal mortality last year were caused by bleeding (28.29%), hypertension (23%), and circulatory system disorders (4.94%).

Based on research conducted by Heitmann et al, (2021) stated that 9113 pregnant women in 5 European states, America and Australia stated that 73.5% of pregnant women experienced emesis gravidarum during pregnancy. In Indonesia, as many as 50-75% of pregnant women experience nausea and vomiting in the first trimester of pregnancy (Ministry of Health of the Republic of Indonesia, 2021). Based on the 2021 Indonesian Health Demographic Survey (SDKI), the prevalence of vomiting and not wanting to eat reaches 3% of the number of pregnant women. In Indonesia in 2021, there are 5,324,107 pregnant women in Indonesia, as many as 50% - 75% of pregnant women experience nausea and vomiting in the first trimester (Ministry of Health of the Republic of Indonesia, 2021). Based on the 2021 Indonesian Health Demographic Survey (SDKI), the number of incidences of hyperemesis gravidarum reaches 12.5% of the total number of pregnancies, nausea and vomiting can interfere and create fluid imbalances in kidney and liver tissues, resulting in necrosis. About 60 to 80% of primigravids and 40 to 60 percent of multigravida experience nausea and vomiting, but these symptoms are more severe in only 1 in 1,000 pregnancies. Data on hyperemesis gravidarum cases with an incidence rate of 3% of all pregnancies that occur in pregnant women, especially in pregnant women in the first trimester. 1-2% of hyperemesis gravidarum cases cause pregnant women to be managed by inpatient treatment

According to Retrowati's research, (2019) entitled Factors that affect the occurrence of emesis gravidarum in the first trimester of pregnancy at the Pantai Amal Health Center, said emesis gravidarum is a common complaint submitted in young pregnancies. It occurs due to an increase in the hormones estrogen, progesterone, and the release of the placental chorionic hormone gonadotropine, causing the onset of dizziness, nausea and vomiting, especially in the first trimester. In general, emesis gravidarum can be overcome by street treatment, but some cannot overcome it, thus interfering with daily life and causing a lack of .According to Lawrence Green, (1984) in Notoatmodjo, (2014) said that health education is any form of

combination of health education and interventions related to economics, politics, and organizations, which are designed to facilitate behavioral changes and environments that are conducive to health. According to the research of Janaria et al, (2017) entitled the relationship between knowledge and attitudes of pregnant women and the incidence of hyperemesis gravidarum at the Puuwatu Health Center, Kendari City, stated that knowledge can be obtained directly or through counseling both individuals and groups with a p value of 0.14. To increase health knowledge, it is necessary to provide counseling that aims to achieve behavioral changes for individuals, families and communities in fostering and maintaining healthy lives and playing an active role in efforts to realize optimal health degrees.

According to the research of Habibi et al, (2018) entitled The relationship between the level of knowledge of pregnant women about emesis gravidarum and efforts to prevent hyperemesis at BPS Wahyuningsih Wonosari Gunung Kidul, stated a p value of 0.000. This shows that the direction of the relationship between the level of knowledge and efforts to prevent hyperemesis gravidarum is positive, meaning that the higher the level of knowledge, the better the prevention efforts and the lower the level of knowledge, the less efforts will be made to prevent hyperemesis gravidarum. Based on a preliminary study conducted in January 2024 in the Batujaya Health Center Work Area, there were 135 pregnant women in the first trimester, 86 (63.7%) of pregnant women experienced emesis gravidarum (nausea and vomiting) and those who experienced continuous nausea and vomiting became hyperemesis gravidarum. There were 17 (12.7%) pregnant women and 32 (23.7%) pregnant women who did not experience emesis gravidarum. Based on the initial data collection by means of interviews and questions and answers with pregnant women who experience emesis gravidarum from the data of 15 pregnant women, 6 (40%) pregnant women with good knowledge in handling emesis gravidarum and 9 (60%) pregnant women with less knowledge in handling emesis gravidarum were obtained. From the above description, it can be concluded that the average pregnant woman has less knowledge in handling emesis gravidarum so that there are 9 mothers who experience hyperemesis gravidarum, while pregnant women in the first trimester are the initial stage of fetal growth and development and are in dire need of requiring optimal nutritional input, mothers need to be given health counseling regarding the treatment of emesis gravidarum so that dehydration or hyperemesis gravidarum does not occur in mothers. The purpose of this study is to influence health education on the knowledge of pregnant women in the treatment of emesis gravidarum in the Working Area of the Batujaya Health Center, Karawang Regency.

METHOD

This research method is quantitative descriptive analysis with a quasi-experimental design of one group pre-post test design. The population in this study is pregnant women in the first trimester with emesis gravidarum as many as 86 pregnant women. The sample in this study was 39 respondents using the Proportional Accidental Sampling technique. The variables of this study are independent variable health education and dependent variable knowledge. Data analysis using descriptive statistics and paired t-test.

RESULT

Table 1.
Knowledge before and after Health Education

Variabel	Skor	N	Min – Maks	Mean	SD
Knowledge	<i>Pre Test</i>	39	17 - 23	21,23	1,630
	<i>Post Test</i>	39	27 - 29	27,56	0,680

The data in the table shows that of 39 pregnant women in the Working Area of the Batujaya Health Center, Karawang Regency, the average knowledge score of pregnant women before health education is 21.23 with a standard deviation of 1.630 while the average knowledge score of pregnant women in health education is 27.56 with a standard deviation of 0.680..

Table 2.
The Influence of Health Education on Knowledge

Skor	N	Mean	SD	t _{hitung}	p value
Pre Test	39	21,23	1,630	21,663	0.000
Posttest	39	27,56	0,680		

Based on the table data, it shows that the average knowledge before being given health education is 21.23 and after it becomes 27.56. The results of the paired T test were obtained with a tcount of 21.663 and a p value of 0.000. This shows that the H_a hypothesis is accepted, meaning that there is an influence of health education on the knowledge of pregnant women in the handling of emesis gravidarum in the Working Area of the Batujaya Health Center, Karawang Regency in 2024.

DISCUSSION

The Effect of Health Education on the Knowledge of Pregnant Women in the First Trimester

Based on the results of this study using the paired T test, a knowledge value of P value of 0.000 was obtained, meaning that health education has an effect on the knowledge of pregnant women in handling emesis gravidarum in the Working Area of the Batujaya Health Center, Karawang Regency in 2024, so that the better the level of knowledge of pregnant women, they will be able to respond positively to emesis According to the results of a research conducted by Witari & Dewianti (2019) entitled The Effect of Providing Self Management Modules on Increasing Knowledge to Reduce Nausea and Vomiting, the results of the study illustrate the increase in knowledge of pregnant women from before and after the administration of the module. The average increase was 14.5 points, which was 59.1 with a standard deviation of 10.85 before treatment, and 73.6 with a standard deviation of 13.87 after treatment. The results of statistical analysis with the Wilcoxon test showed that a total of 34 respondents (85%) experienced an increase in knowledge with a value of $p=0.000$. This proves that there is a significant influence on the provision of self-management modules in increasing the knowledge of pregnant women to reduce nausea and vomiting.

This study is in line with the results of a statistical test conducted by Rosetty et al, (2022) using speaman's rho obtained a P value of $0.010 < 0.05$ which means that there is a relationship between the knowledge of pregnant women in the first trimester and attitudes in overcoming emesis gravidarum at the Lena Barus Binjai Clinic, with a low/weak level of relationship with a value of $r = 0.0360$ which means that the better the level of knowledge of pregnant women, the more they will be able to respond positively to emesis gravidarum. with a positive attitude and vice versa. According to Patimah et al, (2020) stated that nausea and vomiting during pregnancy is an unpleasant feeling and discharge of stomach contents experienced by pregnant women in the early phases of pregnancy. Nausea and vomiting during pregnancy is a pregnancy discomfort that occurs in the first three months of pregnancy and will stop slowly and nausea and vomiting during pregnancy is a pregnancy complaint that is still physiological but if it has occurred often it can result in health problems .

Information related to emesis gravidarum has been provided by health workers, both through print media and direct consultation. The information received by pregnant women is a

stimulus for pregnant women to behave. Adequate information makes pregnant women more aware of the complications of emesis gravidarum by the knowledge or information received, to find out that the information can be understood by pregnant women can be done by measuring knowledge whether the pregnant woman already understands how to prevent the occurrence of emesis gravidarum (Notoadmojo, 2014). A person who has good education, always behaves well because his attitude is also influenced by knowledge, education, beliefs and norms. On the other hand, someone who has low knowledge. Most of them do not behave well, efforts to prevent emesis can be realized by reducing emesis complaints that are often experienced by pregnant women in the 1st trimester so that they do not get worse and become hyperemesis. One way to increase efforts to prevent emesis is to increase knowledge through Leaflet, a counseling focused on pregnant women in the 1st trimester (Mudikah, 2019).

According to the researcher's assumption, there is an influence of health education on the level of knowledge of pregnant women in the first trimester in the management of gravidaraum emisis this is due to the provision of information on the incidence of nausea and vomiting, what are the causes, dangerous signs of nausea and vomiting and its prevention through medical and non-medical treatment that can be done by themselves at home so that with the provision of information, respondents become aware and understanding arises in their respective thoughts that morning sickness and how to treat it.

CONCLUSION

Based on the results of the study entitled The Influence of Health Education on Maternal Knowledge in the Treatment of Emesis Gravidarum in the Working Area of the Batujaya Health Center, Karawang Regency, it can be concluded that: The average score of knowledge of pregnant women before health education is 21.23 while the average knowledge score of pregnant women in health education is 27.56. There is a significant influence of health education on the knowledge of pregnant women in the first trimester in the handling of emesis gravidarum in the Working Area of the Batujaya Health Center, Karawang Regency in 2024.

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