

Conference Paper

Knowledge Levels About Dietary Hyperemesis Gravidarum in First Trimester Pregnant Women at a University Gynecology Polyclinic

Ririn Harini, Tunjung Werdi Parwati*, Ollyvia Freeska Dwi Marta

Department of Nursing, University of Muhammadiyah Malang, Campus II Jalan Bendungan Sutami 188-A, Malang, East Java, Indonesia

ORCIDTunjung Werdi Parwati: <https://orcid.org/0000-0001-9064-2530>**Abstract.**

Knowledge about nutrition in pregnant women affects the health of their babies. The level of knowledge of mothers is influenced by experience, educational factors, the social environment, facilities and infrastructure, as well as the degree of counseling they receive. A hyperemesis gravidarum diet for pregnant women in the first trimester is very important for the health of the fetus. When pregnant women lack appropriate nutrition, it can result in abnormal fetal development. This study used descriptive methods. Data collection was through a questionnaire on the level of knowledge of hyperemesis gravidarum diet in first trimester pregnant women at the Gynecology Department of Muhammadiyah University Hospital in Malang. The research sample consisted of 50 respondents recruited through purposive sampling. The characteristics of the women were: average age = 29 years, primigravidas = 29 women (58%), college = 30 (60%), housewives = 15 (30%), and level of knowledge of diet hyperemesis = 28 (56%). Education was a predisposing factor. The results showed that the knowledge level of hyperemesis gravidarum diet in the first trimester pregnant women was in the good category. This may have been because these women all had a college level of education.

Keywords: knowledge level, hyperemesis gravidarum diet, first trimesterCorresponding Author: Tunjung Werdi Parwati; email: werditunjung@gmail.com**Published** 15 September 2022

Publishing services provided by Knowledge E

© Ririn Harini et al. This article is distributed under the terms of the [Creative Commons Attribution License](#), which permits unrestricted use and redistribution provided that the original author and source are credited.

Selection and Peer-review under the responsibility of the ICMEDH Conference Committee.

1. INTRODUCTION

Pregnant women are one of the groups that are vulnerable to nutritional problems. This is related to the process of fetal growth and the growth of various organs of the body to support the pregnancy process [1]. Mothers or prospective mothers are a vulnerable group, because they need adequate nutrition so that their nutritional and health status must be maintained in order to give birth to healthy babies.

The knowledge of a pregnant woman is very influential on the importance of maintaining the nutritional intake consumed during pregnancy, so that the nutritional status

OPEN ACCESS

of the mother is properly and normally maintained, in other words the quality of the baby born is very dependent on the nutritional state of the mother before and during pregnancy [2] [3]. Low nutritional status and wrong eating patterns in pregnant women can lead to nutritional disorders, among others, anemia, less weight gain in pregnant women and impaired fetal growth.

Pregnant women, especially the first trimester, will experience hormonal and physical changes that occur during pregnancy and will affect their food consumption patterns[4]. Usually this occurs in the first trimester of pregnancy which begins at the 9th to 10th week of pregnancy, gets worse at the 11th to the 13th week and lasts until the 14th week.[5].

Pregnant women in the first trimester will cause various kinds of complaints, one of which is nausea and vomiting which is usually called hyperemesis gravidarum. [4]. Hyperemesis gravidarum is excessive nausea and vomiting that can interfere with daily activities and can even endanger life. Hyperemesis gravidarum which is a complication of nausea and vomiting can cause dehydration and electrolyte imbalance with hypochloremic alkalosis. To reduce the frequency of nausea and vomiting, an appropriate hyperemesis gravidarum diet is needed and also having smaller amounts of food and fluids more often can help to prevent hyperemesis gravidarum [6] [7].

The importance of the hyperemesis gravidarum diet according to Mustar & Indriyani, 2020 Indonesian Health Demographic Survey (IDHS) in 2016 was 228/100,000 women pregnant, 26% of whom experienced hyperemesis gravidarum. In 2017 the number of pregnant women was 359/100,000 women, and who experienced hyperemesis gravidarum was estimated at 32%. Meanwhile, in 2018 the number of pregnant women was 375/100,000 women and those who experienced hyperemesis gravidarum were estimated at 35%.[8]. Pregnant women who have good knowledge about the hyperemesis gravidarum diet are expected to have a good understanding and be able to deal with problems appropriately to reduce the frequency of nausea and vomiting during pregnancy in the first trimester.

Based on a preliminary study conducted by researchers in September 2019 at the Gynecology Polyclinic at the University of Muhammadiyah Malang, approximately 10 first trimester pregnant women who experienced nausea and vomiting who visited for a pregnancy check-up found 6 (60%) mothers said that after every meal they immediately vomited and vomited. 4 (40%) mothers said that every morning they woke up vomiting and smelled the smell of food which was very pungent and immediately vomited.

From the description above, researchers are interested in conducting research on "Identification of Knowledge Levels About Dietary Hyperemesis Gravidarum in First

Trimester Pregnant Women at Gynecology Polyclinic, University of Muhammadiyah Malang”. The general purpose of this study was to find out how to identify the level of knowledge about the diet of hyperemesis gravidarum in first trimester pregnant women at the Gynecology Polyclinic, University of Muhammadiyah Malang.

2. METHOD

The research that will be used by the researcher is a non-experimental descriptive research method using a questionnaire. The variable studied in this study was the level of knowledge of the diet of hyperemesis gravidarum in first trimester pregnant women.

3. RESULT AND DISCUSSION

The results of the study are divided into two parts, namely the identification of the characteristics of first trimester pregnant women which include: age, pregnancy history, last education and occupation. And the identification of the knowledge level of hyperemesis gravidarum diet which contains about the level of knowledge of the hyperemesis gravidarum diet in first trimester pregnant women at the Gynecology Poly Hospital of Muhammadiyah University of Malang.

Presentation of research results obtained sample characteristics data which includes: Identity, age, pregnancy history, last education and occupation. The samples obtained were from first trimester pregnant women who had their pregnancy checked at the Gynecology Polyclinic of the University of Muhammadiyah Malang.

TABLE 1: Demographic Characteristics of Respondents.

Sample Characteristics	Category	mean	Standard Deviation
Age		29	5.055
		F	%
Pregnancy History			
	Primigravida	29	58
	multigravida	21	42
Education			
	senior High School College	20 30	40 60
Work			
	IRT civil servant Private entrepreneur	15 10 15 10	30 20 30 20

Based on Table 5.1 regarding the demographic characteristics of the respondents as many as 50 first trimester pregnant women in this study, it can be concluded that the average age is 29 years and the standard deviation is 5.055, the majority of participants with a history of primigravida pregnancy are 29 pregnant women (58%) with a college graduate education background. 30 pregnant women (60%), while in the occupational background of the participants were dominated by housewives and the private sector, the same number of 15 pregnant women (30%).

From the results of the analysis, it was found that the level of participants' knowledge of the hyperemesis gravidarum diet in first trimester pregnant women who checked their pregnancy at the Gynecology Polyclinic of the University of Muhammadiyah Malang, showed a good level of education at a priority number of 28 (56%), while those with less education were only 2 (4%) participants.

The characteristics of first trimester pregnant women measured in this study included age, pregnancy history, education and occupation. This is in line with the research of M. Iqbal, 2016 that age is one of the risk factors that cannot be avoided, not a little literature states that nausea and vomiting or hyperemesis gravidarum is more common in women at a young age and generally occurs in women aged <20 years, maternal age has a close influence on the development of reproductive organs, this is related to accepting conception and supporting fetal development. The characteristics of the pregnancy history state that primigravida has the most respondents, this shows that this is in accordance with Erisma's research,

The last educational characteristics of university respondents have a large number, this shows that higher education tends to pay attention to their health. This is in line with the research of M. Iqbal, 2016 that low education will cause a person to experience stress, where stress and anxiety occur due to lack of information obtained by that person.

The characteristics of housewives show the number of fathers and the same number of private workers, this shows that housewives spend more time at home and have a lot of rest time compared to working mothers so that housewives have more time to pay more attention to nutrition for her pregnancy. Research conducted by Erisma, 2017 that working mothers often find problems both between fellow workers or with superiors, and work can also drain time and thoughts so that it can affect the mother's psychology. However, this is not in accordance with research conducted by M. Iqbal, 2017 which states that pregnant women who do not work (IRT) because of their low social level which causes pregnant women to care less about the health of themselves and their babies,

Identification of Dietary Knowledge Levels of Hyperemesis Gravidarum in First Trimester Pregnant Women at Gynecology Polyclinic, University of Muhammadiyah Malang

Based on the research, respondents' knowledge about hyperemesis gravidarum diet is in good category. According to Notoatmodjo, 2010[9] Knowledge about knowledge is formed from the results of a person's sensing of an object. Knowledge is very important in shaping one's actions, one of which is knowledge of pregnant women about nutrition in pregnancy and the formation of knowledge is influenced by education, occupation, age, environment and socio-culture. Maternal knowledge can contribute both to maternal and fetal health [10] [11] [12] [13]. Knowledge of a good mother can be a motivation in behavior in her life.

With a good level of knowledge about hyperemesis gravidarum diet, this is because the respondent's last education is academic/college in the first place. According to Iqbal, 2016 education is a predisposing factor that exists in individuals as well as knowledge and attitudes towards health for pregnant women. Low education will cause a person to experience stress, where the stress and anxiety that occurs is due to the lack of information that the person gets.

Limitations: Some respondents were a little confused in doing the questionnaire, so the researcher needed to explain the purpose of the questionnaire. As long as researchers are looking for respondents and distributing questionnaires during a pandemic, this limits researchers from interacting for too long, so there are some respondents who get less than optimal information.

4. CONCLUSION

The characteristics of first trimester pregnant women in terms of age, education and occupation are categorized as good and ready to accept pregnancy so that they are able to overcome hyperemesis gravidarum. The results of the identification of the knowledge level of hyperemesis gravidarum diet in first trimester pregnant women at the Gynecology Polyclinic of the University of Muhammadiyah Malang. From the results of the study showed that most of the respondents had a good level of knowledge.

References

- [1] H. Hariani and S. Nani, "DENGAN STATUS GIZI IBU HAMIL DI RUMAH SAKIT KHUSUS.," p. 2014.

- [2] G.G. Woldeamanuel, T.G. Geta, T.P. Mohammed, M.B. Shuba, and T.A. Bafa, "Effect of nutritional status of pregnant women on birth weight of newborns at Butajira Referral Hospital, Butajira, Ethiopia.," *SAGE open medicine*. vol. 7, pp. 2050312119827096–2050312119827096, 2019.
- [3] J.L. Morrison and T.R.H. Regnault, "Nutrition in Pregnancy: Optimising Maternal Diet and Fetal Adaptations to Altered Nutrient Supply.," *Nutrients*. vol. 8, no. 6, p. 342, 2016.
- [4] Ayu, "Efektifitas Pemberian Jahe Hangat Dalam Mengurangi Frekuensi Mual Muntah Pada Ibu Hamil Trimester I," (2017).
- [5] K. Gunawan, M. P. S. K, and O. Dwiana, "Diagnosis dan Tata Laksana Hiperemesis Gravidarum.," *Journal Indonesian Medical Association*. vol. 61, no. 11, pp. 458–464, 2011.
- [6] L.J. Wegrzyniak, J.T. Repke, and S.H. Ural, "Treatment of hyperemesis gravidarum.," *Reviews in obstetrics & gynecology*. vol. 5, no. 2, pp. 78–84, 2012.
- [7] S.R. Crozier, H.M. Inskip, K.M. Godfrey, C. Cooper, S.M. Robinson, and S.W.S.S. Group, "Nausea and vomiting in early pregnancy: Effects on food intake and diet quality.," *Maternal & child nutrition*. vol. 13, no. 4, p. e12389, 2017.
- [8] Menkes RI, *Penggunaan Obat Rasional yang Harus Dipahami Masyarakat. Kementerian Kesehatan Republik Indonesia.*, 2018.
- [9] S. Notoatmojo, *Metodologi Penelitian Kesehatan. Rineka Cipta*, Jakarta, 2011.
- [10] R. Ita, "Pengetahuan Ibu Hamil Tentang Gizi Dalam Kehamilan Di Puskesmas Poasia Kota Kendari Sulawesi Tenggara.," p. 2017.
- [11] G. Esposito, R. Ambrosio, F. Napolitano, and G. Di Giuseppe, "Women's Knowledge, Attitudes and Behavior about Maternal Risk Factors in Pregnancy.," *PloS one*. vol. 10, no. 12, pp. e0145873–e0145873, 2015.
- [12] E.S. Kaaya, J. Ko, and E. Luhanga, "Maternal knowledge-seeking behavior among pregnant women in Tanzania.," *Women's Health*. vol. 17, p. 2021.
- [13] H. Aiga, V.D. Nguyen, C.D. Nguyen, T.T.T. Nguyen, and L.T.P. Nguyen, "Knowledge, attitude and practices: assessing maternal and child health care handbook intervention in Vietnam.," *BMC Public Health*. vol. 16, no. 1, p. 129, 2016.