The effectiveness of the application of self-hypnosis and prenatal gentle yoga on emesis gravidarum in the first-trimester pregnant women

Yasi Anggasari¹*, Fauziyatun Nisa¹, Ratna Ariesta Dwi Andriani¹, Yunik Windarti¹

ABSTRACT

Background: Emesis gravidarum is an inconvenience that often occurs in the first trimester of pregnancy. Continuous emission of gravidarum can be bad for the health of pregnant women and the fetus is conceived, so it must be overcome as early as possible, one of which can use non-pharmacological therapy, namely applying self-hypnosis and prenatal gentle yoga to reduce emissions of gravidarum can make pregnant women relax. This study aimed to analyze the application of self-hypnosis with Prenatal Gentle Yoga on emissions of gravidarum in first-trimester pregnant women.

Methods: The design of this study used a Quasi experimental design with a Two group pretest-posttest design without control using purposive sampling. This research was conducted on first-trimester pregnant women who experienced the emission of gravidarum in the PMB Nanik Sidoarjo of 32 pregnant women in the first trimester. The self-hypnosis was carried out every day for approximately 15-30 minutes for 1 week, while prenatal yoga was carried out 3 times a week for 30 minutes. Data collection on the intensity of nausea and vomiting used the Pregnancy Unique Quantification of Emesis and Nausea (PUQE)-24 scoring system questionnaire. Data analysis used an independent T-Test test.

Results: The results of the analysis of this study indicate that the mean difference in the Self Hypnosis treatment group is greater (1.77) than in the Prenatal Gentle Yoga group (1.25), which means that Self Hypnosis is more effective in reducing the intensity of nausea and vomiting in emesis gravidarum versus Prenatal Gentle Yoga.

Conclusion: Therapy Self Hypnosis and Prenatal Gentle Yoga can reduce the emission level of gravidarum in first-trimester pregnant women so that it can be used as an alternative therapy that is easy to apply and has minimal side effects by pregnant women who experience gravidarum emissions.

Keywords: self-hypnosis, Prenatal Yoga, Emesis.


INTRODUCTION

Emesis gravidarum is a discomfort that often occurs in the first trimester of pregnancy. In the first trimester of pregnancy, as many as 75-80% of pregnant women experience feelings of nausea and vomiting, while 50% of them experience nausea and vomiting, while only 25% experience nausea only.¹ According to the World Health Organization, at least 14% of pregnant women experience nausea and vomiting.² Nausea and vomiting usually occur in the morning because it is called morning sickness, but some arise at any time and night with a frequency of vomiting less than 5 times a day. The cause of emesis gravidarum is increased levels of estrogen, progesterone and Chorionic Gonadotropin (HCG) hormone, increased sensitivity to odors, and psychological factors in pregnant women.³ The increase in the hormone progesterone during pregnancy causes a decrease in muscle tone in the digestive tract so that the motility of the entire digestive tract also decreases and gastric emptying takes longer. Usually, after three months, this complaint will subside and disappear by itself.⁴ Symptoms of nausea and vomiting usually occur approximately 6 weeks after the first day of the last menstrual period and last for approximately 10 weeks.

Emissions of gravidarum that occur continuously can have a significant impact on the condition of pregnant women because reduced body fluids make the mother weak, causing the blood to become thick (hemoconcentration) and can slow down blood circulation, which means that oxygen and food consumption to the tissues is disrupted so that it can be dangerous. Maternal health and the development of the fetus it contains.⁵ The most common adverse effects on the fetus due to severe vomiting are premature birth and low birth weight (BBLR).⁶ Emesis gravidarum that is not handled properly can cause hyperemesis gravidarum, which is characterized by dehydration, electrolyte disturbances, or nutrient deficiency, with vomiting scales reaching up to 10 times for 24 hours. This can be bad for the health of pregnant women and the fetus being conceived.⁷ Therefore, emission...
MATERIALS AND METHODS

Materials

This study was conducted on the first trimester pregnant women who experienced emission of gravidarum in the PMB Nanik Sidoarjo 32 pregnant women in the first trimester. The independent variables were Self-hypnosis and prenatal gentle yoga, and the dependent variable was nausea and vomiting in the first trimester of pregnant women. The research question was How is the effectiveness of the application of self-hypnosis with Prenatal Gentle Yoga on emissions gravidarum in first-trimester pregnant women?

Data collection procedures

The design of this study used a Quasy experimental design with a Two group pretest-posttest design without control. Respondents were taken using a purposive sampling technique by determining the inclusion criteria, namely: the subject is a 12-week pregnant woman who experiences nausea and vomiting, is willing to follow a series of therapies given by the researchers will accompany respondents doing for 3 times a week for 30 minutes. The data collection method used in this study refers to previous research with slight modifications. In brief, the stages of data collection are as follows treatment group. Self-hypnosis was carried out every day for approximately 15-30 minutes for 1 week. The first meeting with the respondents measured the intensity of nausea and vomiting (pretest). Self-hypnosis procedures start from setting initial relaxation, relaxation of the eyes, neck and hands, deepening, and peace of mind.

The development of health sciences has contributed to the emergence of various methods for handling gravidarum emissions. Self-hypnosis and prenatal gentle yoga can make pregnant women relax, and another advantage is that it is easier to do and can reduce medical costs. This study aimed to analyze the application of self-hypnosis with Prenatal Gentle Yoga on emissions gravidarum in first-trimester pregnant women.

Research Ethics

The research procedure has received a letter from the ethics committee of the University of Nahdlatul Ulama Surabaya with a letter of decision Number: 222/EC/KEPK/UNUSA/2022

Data analysis

The analysis used in this study was to determine the effectiveness of changes in the intensity of nausea and vomiting in pregnant women in the first trimester before and after the intervention using an independent T-Test. All data obtained will be processed using the SPSS program.

RESULTS

Based on the table below, it can be seen that of the 16 respondents who experienced nausea and vomiting before being given Self Hypnosis treatment, almost all (93.7%) were in the moderate category and after being given Self Hypnosis treatment. Hypnosis was almost entirely in the category of not vomiting (87.5%).

Based on the table below shows that of the 16 respondents who experienced nausea and vomiting before being given Prenatal Gentle Yoga, almost entirely (87.5%) were in the moderate category and after doing Prenatal Gentle Yoga, most (62.5%) were in the mild category.

Based on the table below shows the mean results there is a difference in the average intensity of nausea and vomiting pre and post-application of Self Hypnosis, with the mean result of pre-application of Self Hypnosis 2.9 decreased to mean 1.13 on the results of post application of Self Hypnosis and p-value <0.05 which means the application of Self Hypnosis affects the intensity of nausea vomiting in emesis gravidarum.
The table above shows that the difference in the average intensity of nausea and vomiting pre and post-natal Gentle Yoga implementation with the mean of 2.88 decreased to a mean 1.63 p-values <0.05, which means prenatal Gentle Yoga application affects the intensity of nausea and vomiting in emesis gravidarum.

The table above shows that there is a mean difference between the Self Hypnosis treatment and Prenatal Gentle Yoga where the mean difference in the Self Hypnosis treatment group was greater (1.77) than in the Prenatal Gentle Yoga group (1.25), which showed more decreased intensity of nausea and vomiting in the Self Hypnosis group, which means Self Hypnosis is more effective in reducing the intensity of nausea and vomiting in emesis gravidarum than Prenatal Gentle Yoga.

**DISCUSSION**

Self-hypnosis is one way that can be used to treat nausea and vomiting in pregnant women. Almost all respondents who experienced nausea and vomiting before being given Self Hypnosis treatment (93.7%) were in the moderate category, and after being given p Self Hypnosis treatment was almost entirely in the category of not vomiting (87.5%). From Table 3 above, using the Two-Sample T-Test test, it can be seen that the p-value is <0.05, which means that self-hypnosis affects the intensity of nausea and vomiting. Judging from the mean results, there is an average difference in the intensity of nausea and vomiting of pre and post-self hypnosis, with the mean result of pre-self hypnosis at 2.9 decreasing to a mean of 1.13 on the results of post-self hypnosis. This is in line with the research conducted by Widiastini in 2019 about the effect of applying self-hypnosis on emissions of gravidarum in first-trimester pregnant women with the results of applying self-hypnosis to reduce complaints of gravidarum in first-trimester pregnant women. This is also supported by Burmanajaya’s research that hypnotherapy can reduce gravidarum emissions. Seyda reported in 2022 that adjunctive use of hypnotherapy with patients diagnosed with hyperemesis gravidarum experienced significantly reduced severity of nausea and frequency of vomiting compared to treatment-as-usual alone. In principle, hypnosis is one part of the Human mind control system, namely the ability to control the human mind to control the subconscious mind so that it can control the flow of brain waves, namely by opening the alpha waves of the human brain either as self-hypnosis or applied to clients, both patients for medical and non-medical practitioners. Self-hypnosis will show maximum results if done daily or at least 3-4 a week for 15-30 minutes.

In the group that did Prenatal Gentle Yoga, 16 respondents who experienced...
nausea and vomiting before doing Prenatal Gentle Yoga, almost entirely (87.5%) are in the mild category and after doing Prenatal Gentle Yoga, most (62.5%) are in the mild category, then after testing using the One Sample T-Test it can be seen that the p-value is 0.00 < 0.05, which means that doing Prenatal Gentle Yoga can affect the intensity of gravidarum. Judging from the mean results, there is a difference in the average emission intensity of gravidarum pre and post Prenatal Gentle Yoga. The mean result of pre-Prenatal Gentle Yoga was 2.88, decreased to a mean of 1.63 on the result of post-Prenatal Gentle Yoga. This is in line with the research conducted by Musfirowati in 2017 entitled The effectiveness of yogic breathing to the comfort level of first-trimester pregnant mothers, where after doing yoga breathing twice a day, most of the respondents felt comfortable and felt less nausea and vomiting. Heryani reported in 2018 that routine prenatal yoga could be a non-pharmacological treatment solution to overcome gravidarum emissions.

After further research on the effectiveness of the application of self-hypnosis and Prenatal Gentle Yoga on the intensity of nausea and vomiting in emesis gravidarum, it was found that there was a mean difference between self-hypnosis and prenatal gentle yoga where the mean difference before and after treatment group self-hypnosis was greater (1.77) than in the prenatal gentle yoga group (1.25) which showed a greater decrease in the intensity of nausea and vomiting in the self-hypnosis, which means that self-hypnosis was more effective in reducing the intensity of nausea and vomiting in emesis gravidarum compared to Prenatal gentle yoga. The results of the study also support this research, Trivena in 2018 regarding the Differences in the Effect of Hypnotherapy and Vitamin B6 on Reducing the Intensity of Nausea and Vomiting in Severe Emesis Gravidarum.

The dependent variable is decreased intensity of nausea and vomiting. Independent variables are hypnotherapy and vitamin B6. The method used in this study is a quasi-experimental design with a posttest-only design with a control group. Hypnotherapy is more effective than vitamin B6 in overcoming nausea and vomiting in pregnant women with emesis gravidarum.

The results of the above test indicate that doing prenatal yoga can affect the hypothalamus to suppress CRH secretion, which will affect the anterior lobe pituitary gland to suppress the release of the hormone ACTH so that the production of adrenal hormones and cortisol decreases and orders the anterior lobe pituitary gland to secrete endorphins. Yoga will inhibit the increase in sympathetic nerves so that the number of hormones that cause body dysregulation can be reduced. The parasympathetic nervous system gives a signal to affect the release of catecholamines. As a result, there is a decrease in heart rate, breathing rhythm, blood pressure, muscle tension, metabolic rate and the production of hormones that cause anxiety or stress. However, self-hypnosis has a greater effect on decreasing the intensity of nausea and vomiting in mothers with emesis gravidarum. This follows Pietter’s theory in 2012 regarding the factors that cause emesis gravidarum, one of which is the psychological influence of the mother, especially in emotional changes. This change will affect the mother’s mood, namely increased mother’s concern about unattractive physical appearance and so on, feeling easily tired, and decreasing appetite so that nausea and vomiting occur in the mother. Therefore, by instilling positive suggestions for mothers by saying that pregnancy is the most beautiful gift given by God and what is experienced by mothers is a natural thing so that mothers can feel safe and comfortable, which can reduce nausea and vomiting so that self-hypnosis is more effective in overcoming nausea vomiting in emesis gravidarum.

### Table 5. Effectiveness of Self Hypnosis and Prenatal Gentle Yoga on Intensity of Nausea Vomiting in Emesis Gravidarum in PMB Nanik Cholid Area.

<table>
<thead>
<tr>
<th>Measurement</th>
<th>N</th>
<th>Mean</th>
<th>Std.Deviation</th>
<th>T</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Self Hypnosis</td>
<td>16</td>
<td>1.13</td>
<td>342</td>
<td>13,175</td>
<td>15</td>
<td>.000</td>
<td>1.77</td>
</tr>
<tr>
<td>Post-Prenatal Gentle Yoga</td>
<td>16</td>
<td>1.63</td>
<td>.500</td>
<td>13,000</td>
<td>15</td>
<td>.000</td>
<td>1.25</td>
</tr>
</tbody>
</table>

Source: Primary Data 2022

CONCLUSION

Giving self-hypnosis therapy and gentle prenatal yoga can significantly reduce the intensity of nausea and vomiting in pregnant women in the first trimester. Therapy self-hypnosis and prenatal gentle yoga can be used as a non-pharmacological therapy that is safe, effective, can be done alone at home and has minimal side effects, So it is recommended that pregnant women who experience Emesis gravidarum can use self-hypnosis and Prenatal Gentle Yoga as an alternative or complementary therapy to reduce Emesis Gravidarum.
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ETHICAL APPROVAL
The research procedure has received a letter from the ethics committee of the University of Nahdlatul Ulama Surabaya with a letter of decision Number: 222/EC/KEPK/UNUSA/2022.

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AUTHOR CONTRIBUTION
All authors contributed equally to writing this manuscript.

CONFLICT OF INTEREST
The authors declare no conflict of interest in this study.

REFERENCES