The Effect of Giving Hand Massage Therapy and Ginger Herbal Drink on Pregnant Women with Nausea and Vomiting In the 1st Trimester

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ARTICLE INFORMATION

Received: November 15, 2021
Revised: January 12, 2022
Accepted: May 20, 2022
Available Online: June 15, 2022

Abstract

Nausea and vomiting are some of the discomforts of pregnancy that can interfere and cause complications. Non-pharmacological therapies that can be developed to reduce nausea and vomiting are hand massage and the provision of herbal drinks. The purpose of this study was to determine the effect of giving hand massage therapy and ginger herbal drink to pregnant women with 1st trimester nausea and vomiting. The type of method used was quasi-experimental with a pre-posttest design. The total respondents are 60 people. The instrument used is Pregnancy-Unique Quantification of Emesis/Nausea (PUQE). The analysis uses the Wilcoxon. The results showed that the intervention was effective as seen from the difference in the decrease in the intensity of nausea and vomiting in pregnant women and the p value 0.000 < from the alpha value (0.05). The conclusion is that there is a significant effect between those who are given Hand Massage Therapy and Consumption of herbal drinks with those who are not given treatment on the discomfort of nausea and vomiting in pregnant women. Based on the research above, hand massage and herbal drink therapy can be applied as a treatment for nausea and vomiting in pregnant women.

Keyword: hand massage, herbal drink, nausea and vomiting, pregnancy

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1. Introduction

Continuity of Care (COC) or what is called continuous care is a preventive measure and anticipate problems in an effort to handle complications or maternal care during pregnancy, childbirth and the postpartum period. Antenatal care (ANC) is the first step of COC, with optimal ANC it is hoped that the quality of life of pregnant women and babies can run better. One of the factors that can affect the quality of life of pregnant women is...
 marriage, as a result of physiological and psychological changes in body systems. Nausea and vomiting one of the earliest in pregnancy and mostly in the third trimester. Nausea and vomiting are the result of changes in the endocrine system due to the increase in the Chorionic Gonadrophin Hormone (hCG) during pregnancy. In addition, another theory states that nausea and vomiting are the result of hormones in the smooth muscle of the stomach, especially the effect on the motility of the upper gastrointestinal tract which results in gastric emptying of the stomach. Handling Nausea and vomiting that is not immediate can result in intra uterine growth restriction, intra uterine fetal date and congenital abnormalities. While the impact on the mother is dehydration, acid-base disorders, and potassium deficiency. About 50% - 80% of pregnant women experience nausea and vomiting. In Indonesia, pregnant women with complaints of nausea and vomiting are 14.8% with a division of 60-80% occurring in primigravida and 40-60% occurring in multigravida. While in West Java 13% of pregnant women experience nausea and vomiting from all pregnancies. Nausea and vomiting care in pregnancy can be done pharmacologically and non-pharmacologically. Existing and applied care by midwives is limited to pharmacological care. In fact, human beings, in this case, pregnant women, are bio-psycho-socio-cultural and spiritual beings, so apart from a pharmacological approach, it is hoped that other approaches can be developed that can meet the aforementioned bio-psycho-socio-cultural and spiritual needs. During the Covid-19 pandemic where people are afraid and worried about coming to health facilities such as the Independent Midwife Practice (PMB), the need for the nature of pregnant women from a psycho side, its fulfillment is limited. To meet these needs, especially the handling of nausea and vomiting, namely the provision of massage therapy or massage, one of which is in the hand area or hand massage because psychologically pregnant women need attention and relaxation. This Hand Massage is able to produce nerves (A-Beta) which contain tactile and receptors in the hands and skin layers. Then these receptors send messages to the central nervous system to close the entrance to the sender of nausea and vomiting messages. Therefore, the brain does not receive the message of nausea and vomiting. In addition, from a cultural point of view, the use of herbal ingredients that are beneficial and provide antiemetic and antioxidant effects, namely by giving ginger and honey, has the same effect as massage. Ginger honey plays a role in increasing intestinal peristalsis. This provision is a combination in anticipating nausea and vomiting that is carried out both internally and externally so that it is expected to obtain maximum results. Hand massage therapy and the provision of ginger is expected to be a solution in empowering the community, especially pregnant women to overcome complaints of nausea and vomiting so that their quality of life can be achieved optimally. So the purpose of this study was to determine the effect of giving massage and ginger herbal therapy to pregnant women with nausea and vomiting.

2. Method
This study uses a quasi-experimental approach with a pretest and posttest group design approach. The sample was divided into 2 groups, namely the treatment group and the control group with double blinds. The number of samples is 30 respondents for each group so that the total respondents are 60 people. Sampling was done using Randomized Controlled Clinical Trials (RCT). This research involves 3 parties, namely the first party is the researcher as the data processor, the second party is the observer and the third party is the intervention provider. The first party and the second party did not know which respondents were included in the treatment group or the control group. The way of giving the intervention is that the treatment group will get nausea and
vomiting care by giving hand massage and ginger honey while the control group is given pyridoxine (B6). Involved in this research. If they have agreed to be involved, then the respondent is asked by a third party to choose what intervention to accept (hand massage and ginger honey, or tablet B6) without the second party knowing. The hand massage intervention was carried out by the patient as a respondent and the honey ginger was given by the researcher in the form of ready-to-eat packaging. One package contains 0.20gr of powdered ginger. After the respondent began to receive intervention, then the second party as the observator started the observation until the fifth day using the nausea and vomiting assessment instrument. The instrument used is Pregnancy-Unique Quantification Of Emesis/Nausea (PUQE), which is an assessment of the quantity of nausea and vomiting that aims to avoid subjectivity to the discomfort of nausea and vomiting felt by respondents. The instrument used was tested for validity using biserial points and reliability using KR 20. The completed instrument was then submitted to a 3rd party for data processing. This research conducted in. The subjects in this study were fulfilling the inclusion and exclusion criteria. The inclusion criteria are experiencing nausea and vomiting discomfort, 1st trimester, not included in high risk pregnancy, not having metabolic and digestive problems, not using other pharmacological therapies to reduce nausea and vomiting, being cooperative and able to communicate both verbally and non-verbally. As for the exclusion criteria, pregnant women who experience nausea and vomiting who are undergoing treatment and the results of the assessment are at the level of severe nausea and vomiting require referral. Before doing the research, and the ethical test is carried out with number ethical approval Nomor : 60/KEP. 01/UNISA-BANDUNG/V/2021

3. Results and Discussion

Based on research conducted on 60 respondents with a comparison of 30 control groups and 30 intervention groups, the following results were obtained:

Table 1 Frequency distribution of the intensity of nausea and vomiting in pregnant women who were given treatment

<table>
<thead>
<tr>
<th>category</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>light</td>
<td>22</td>
<td>70.0</td>
</tr>
<tr>
<td>medium</td>
<td>8</td>
<td>26.7</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Based on the table above, the intensity of nausea and vomiting in pregnant women who were given treatment more than half 22 (70.0%) experienced mild nausea and vomiting, a small portion 8 (26.7%) experienced moderate nausea and vomiting and a small portion 1 (3.3%) experienced severe nausea and vomiting.

Table 2 Frequency distribution of the intensity of nausea and vomiting in pregnant women who were not treated

<table>
<thead>
<tr>
<th>category</th>
<th>F</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>light</td>
<td>1</td>
<td>0.0</td>
</tr>
<tr>
<td>medium</td>
<td>29</td>
<td>30.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Based on the table above, the intensity of nausea and vomiting in pregnant women who were not treated more than half of 29 (70.0%) experienced moderate nausea and vomiting, and a small portion of 1 (30.0%) experienced moderate nausea and vomiting.
Table 3. The Effect of Hand Massage Therapy and Herbal Drinks Ginger Honey on Reduction of Nausea and Vomiting in Pregnancy

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Standar deviasi</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>The difference in the decrease in the intensity of nausea and vomiting</td>
<td>2.700</td>
<td>0.46609</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Difference in increasing intensity of nausea and vomiting</td>
<td>1.333</td>
<td>0.54667</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difference in increasing intensity of nausea and vomiting</td>
<td>0.54667</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of data processing found that there was a difference in the decrease in the intensity of nausea in pregnant women given by Hand Massage Therapy and Herbal Honey Ginger Drink. The average decline is 14.00. seen from the average in the control group is 2.7000 with a standard deviation of 0.46609 and the average in the intervention group is 1.3333 with a standard deviation of 0.54667. Statistical test results obtained a p-value 0.000 < from alpha value (0.05), meaning that there is a significant effect between those given Hand Massage Therapy and Ginger Honey Herbal Drinks and those not given on the intensity of nausea and vomiting in pregnant.

Nausea and vomiting is a complaint or complaint in pregnant women that often occurs in early pregnancy or the first trimester, which is around 7-12 weeks of gestation. The cause of nausea and vomiting is due to physiological and psychological changes, an increase in the hormone chorionic gonadotropin and estrogen which is proven to be the cause of nausea and vomiting which is a physiological change in pregnancy. The increase in these hormones causes the muscle tissue in the digestive system to decrease so that it can slow down metabolism in the body which will eventually trigger stomach acid to rise. While the causative factors can be caused by changes in the hormonal system in the body during pregnancy, changes in emotions or moods also change, this will cause stress-related to adaptations that must be done during pregnancy, and this stress can trigger increased stomach acid, so nausea and vomiting occur.

Nausea and vomiting care in pregnancy can be done pharmacologically and non-pharmacologically. The care provided depends on the severity of the nausea and vomiting symptoms. Pharmacologically it can be done by giving antiemetics, antihistamines, anticholinergics, or corticosteroids. However, it would be better for pregnant women to recognize their needs during pregnancy, including in overcoming discomfort due to nausea and vomiting. What is being done is by providing treatment regarding other alternatives that can be done independently, panicking and health care can be done because of existing problems, especially with the existence of a periodic maintenance period because the COVID-19 pandemic also causes access to health facilities. This alternative is called a non-pharmacological approach which is a complement to the main obstetric care, which is routinely given to pregnant women with nausea and vomiting pyridoxine or B6 for the management of their care. But not a few pregnant women who do not feel the reduction in nausea and vomiting after consuming the priridoxin. It is proven that several non-pharmacological therapies that can be done to reduce nausea include diet, emotional support, acupuncture, acupressure, aromatherapy, ginger honey. Non-pharmacological therapy is also non-instructive, non-invasive, inexpensive, simple, effective and without adverse side effects.
This hand massage in addition to inhibiting nausea and vomiting messages to the central nervous system can also make the body react by releasing endorphins due to massage. Endorphins are substances that are produced naturally by the body, work, and have effects like morphine. Hand massage done for 10 minutes 1-2 times can reduce the scale of nausea. [5] Hand massage can be done by pregnant women to be able to do massage at home when nausea and vomiting hit.

Honey and Ginger have benefits for reducing complaints of nausea and vomiting in pregnancy. Some research results show that ginger is also effective in reducing nausea and vomiting in pregnant women in the first trimester of pregnancy and in reducing nausea and vomiting in multigravida mothers [6]. Because ginger contains essential oils, namely gingerols and honey also contains pyridoxine, both of these substances act as anti-chemoreceptors that can stop serotonin, dopamine, astiklon, histamine and neurokinin substances which are the cause of the active vomiting center. [2] Ginger has no side effects on pregnancy and honey is rich in nutrients and enzymes for the nutritional needs of pregnant women.

Based on the discussion of the results of research from researchers and before, of course there is a need for solutions to problems related to nausea and vomiting in pregnant women, especially in the first trimester. Therefore, to overcome this problem, of course, it is necessary to increase the combination of pharmacological and non-pharmacological methods effectively and thoroughly. Non-pharmacological methods in the form of hand massage are expected to be a complement for pregnant women to be able to control nausea and vomiting that is felt suddenly so that later the activities of pregnant women are not disturbed and improve the quality of life during pregnancy and independence.

4. Conclusion
Results Based on research that has been conducted on the Effect of Hand Massage Therapy and Honey Ginger Herbal Drinks in Overcoming Discomfort in First Trimester Pregnant Women during the Covid-19 Pandemic, the following conclusions can be drawn: there is a significant effect in providing massage therapy and hand herbal drinks honey ginger in reducing nausea and vomiting in pregnant women. So it is hoped that this non-complementary therapy that has proven useful can be used as complementary or supportive care in midwifery care to overcome nausea and vomiting.

5. Acknowledgment
In this study, the authors thank those who have helped both materially and spiritually, especially at the Institute for Research and Community Service (LPPM) at Bhakti Kencana University.

6. References
The Effect of Giving 

DOI: 10.30591/siklus.v11i2.3050


