

# A Combination Of Acupressure Techniques At The Pericardium Point 6 And Peppermint Aromatherapy Can Reduce Nausea In Mothers With Grade 1 Hyperemesis Gravidarum 1

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**Abstract.** Hyperemesis gravidarum is a pregnancy that experiences excessive nausea and vomiting which can cause malnutrition and dehydration, thus impacting on fetal injury problems. To overcome nausea, a combination of acupressure is needed at the pericardium point PC 6 and peppermint aromatherapy. The purpose of this writing is to reduce nausea by using acupressure techniques at the pericardium 6 point and a combination of peppermint aromatherapy. This study uses a descriptive design with a case study approach on pregnant women with grade 1 Hyperemesis Gravidarum. The location of the case study was at Hermina Jatinegara Hospital on May 1-3, 2025. The assessment revealed the patient complaining of persistent nausea, decreased appetite, and weight loss. The primary nursing concern was nutritional deficit. Nursing interventions included nutritional management using acupressure techniques on pericardial point 6 and a combination of peppermint aromatherapy. Evaluation over 3 days, conducted twice a day, found a decrease in nausea, indicated by an increase in appetite from 2-3 spoons to ¾ portion. Recommendations for nurses are expected to provide non-pharmacological therapy using acupressure techniques at pericardium point 6 and a combination of peppermint aromatherapy used in patients with grade 1 Hyperemesis Gravidarum to reduce nausea.

**Key words:** Acupressure & Aromatherapy, Hyperemesis Gravidarum Grade 1, Nausea

## INTRODUCTION

The majority of pregnant women in developing countries, particularly in Asia, fail to meet their calorie, protein, and prenatal vitamin needs, resulting in less than ideal birth outcomes. The causes identified include pregnancy complications such as hyperemesis gravidarum (excessive nausea and vomiting) and hypertension (Kaur, S., *et al.*, 2019) In early pregnancy, approximately 80% of women experience morning sickness, or nausea and vomiting, which is quite common. Approximately 1% experience hyperemesis gravidarum, a condition characterized by nausea and vomiting that gradually worsens. Excessive nausea and vomiting can lead to severe dehydration and weight loss, which can be detrimental to the developing fetus in the womb (Edgren, 2020).

Hyperemesis gravidarum according to The International Statistical Classification of Disease and Related Health Problems (ICD-9), is defined as persistent and excessive vomiting that begins before the end of the 22nd week of pregnancy. According to the World Health Organization (WHO), the prevalence of hyperemesis gravidarum among all pregnancies worldwide was approximately 12.5% in 2013 (Munir, R., & Yusnia, 2022). In Indonesia, this figure is slightly higher, with hyperemesis gravidarum affecting 14.8% of all pregnant women (Wardani, P. K., & Umar, 2023).

Hyperemesis gravidarum affects both the fetus and the mother. Dehydration and malnutrition are the main complications caused by hyperemesis gravidarum. Hyperemesis gravidarum can have many impacts on the mother, including neurological problems, gastric ulcers, esophageal rupture (Mallory-Weiss syndrome), jaundice, liver failure, convulsions, unconsciousness, hypoprothrombinemia due to vitamin K deficiency, kidney failure, and even death are common consequences for the mother. Impacts on the fetus when the mother experiences hyperemesis gravidarum include low birth weight, intrauterine growth restriction, preterm delivery, lower Apgar scores, and fetal and neonatal death (Parihar, S., & Singh, 2019).

Erlina Darmayanti, (2024) study found a relationship between nutritional status, diet, and anxiety and hyperemesis gravidarum. There is no clear definition of how frequent nausea and vomiting can be considered hyperemesis gravidarum. Frequent nausea and vomiting can be considered hyperemesis gravidarum if the symptoms are so severe that they disrupt the mother's general well-being and daily

activities. In stage I, persistent vomiting affects the patient's general condition: the mother feels weak, has no appetite, loses weight, and experiences epigastric pain. The pulse rate increases to around 100 beats per day, systolic blood pressure drops, skin moisture decreases, the tongue dries out, and the eyes become sunken (Nuraeni, R., & Wianti, 2018).

According to (W. Tanjung & Wari, 2020), ways to overcome nausea and vomiting apart from pharmacological therapy can also be done through non-pharmacological therapy, namely acupressure at the Pericardium 6 (PC6) point, which is one of the Chinese treatments recommended for hyperemesis sufferers. According to (Akmila et al, 2024), by using pressure techniques, acupressure can stimulate acupuncture points, or acupressure points, on the body. In acupressure, pressure is used instead of needle insertion to increase blood flow and vital energy throughout the body.

According to research conducted by (T.Rihiantoro, C. Oktavia, 2018) Inhaling peppermint aromatherapy is an effective way to reduce nausea and vomiting. In Yantina's (2018) study, peppermint essential oil was found to be the best remedy for digestive problems. It has been shown to have antispasmodic and therapeutic qualities for nausea, indigestion, flatulence, diarrhea, and constipation. It is also effective in treating migraines, headaches, and fainting. The aim of this study was to determine whether the combination of Pericardial Acupressure Technique 6 and Peppermint Aromatherapy could reduce nausea in pregnant women with grade 1 Hyperemesis Gravidarum at Hospital.

## METHODS

This study uses a descriptive case study approach to determine the effect of the pericardial acupressure technique 6 and a combination of peppermint aromatherapy to reduce nausea in pregnant women experiencing grade 1 hyperemesis gravidarum at the hospital. This case study was conducted in the Kamala Room, 6th Floor, Hermina Jatinegara Hospital, and the research time required was 3 days starting from May 1 to May 3, 2025, according to the length of Mrs. R's hospitalization. The author used interview techniques to collect data, conducted observations of respondents studied with inspection, palpation, percussion, and auscultation actions and conducted documentation through Hinai (<https://simrs.herminahospitals.com>) (Achjar *et al.*, 2024) The population in this study were. The inclusion criteria were pregnant women in the first trimester who experience excessive nausea and vomiting, pregnant women who are hospitalized with grade 1 hyperemia gravidarum and willing to be respondents by filling out the informed consent form, while the exclusion criteria. This study obtained a permit from the director of Hospital N0.419/RSHJ/V/2025.

## RESULTS AND DISCUSSION

The assessment revealed that the client was experiencing persistent nausea without vomiting, most recently three times a day ago, with small amounts of blood. As a result of the persistent nausea, she had no appetite at all, consuming only 2-3 spoonfuls of food, and had lost 1 kg of weight. The client appears weak and is unable to perform daily activities. In a study by Susanti & Taqiyah (2021), pregnant women suffering from hyperemesis gravidarum experienced severe nausea and vomiting, which can lead to electrolyte imbalance, dehydration, weakness, weight loss, and nutritional deficiencies. According to data obtained during the assessment, the patient experienced persistent nausea without vomiting, had no appetite at all, consuming only 2-3 spoonfuls, and lost 1 kg of weight.

The nursing diagnosis "Risk for Nutritional Deficit related to Inadequate Intake" secondary to nausea and vomiting was identified by the author as the primary diagnosis. After conducting the assessment, the patient complained of persistent nausea, which resulted in a loss of appetite and a feeling of weakness. In line with the theory of Ratnawati *et al.* (2021) pregnant women with hyperemesis gravidarum disorder, the diagnosis raised is the Risk of Nutritional Deficit related to inadequate intake secondary: nausea and vomiting characterized by weight loss and decreased appetite.

Actions taken on the client in accordance with the diagnosis of Nutritional Deficit Risk related to inadequate intake secondary: nausea-vomiting, namely identifying nutritional status, identifying food allergies and intolerances, arranging the necessary diet, recommending foods that do not stimulate nausea and vomiting, giving small portions of food but often, controlling factors that may increase nausea, teaching how to reduce nausea and vomiting: pericardial acupressure therapy 6 and a

combination of peppermint aromatherapy, collaboration of antiemetic therapy as needed. Several measures can be taken to reduce nausea and vomiting, including administering antiemetic medications and using complementary therapies such as acupressure at pericardium point 6 (Nurfita *et al.*, 2025). According to research by Rahmanindar *et al.* (2021), acupressure at pericardium point 6 is effective in reducing nausea and vomiting in pregnant women with hyperemesis gravidarum. In a study by Nirnasari *et al.* (2023), peppermint aromatherapy was proven effective in reducing nausea and vomiting. The menthol content of 35-45% and menthone (10-30%) in peppermint aromatherapy has antiemetic and antispasmodic properties, inhibiting muscle contractions in the stomach and intestines caused by serotonin and substance P.

The nursing actions carried out by the author to treat persistent nausea were to perform and teach a combination of acupressure at the pericardium 6 point and peppermint aromatherapy. The results obtained after performing this procedure were that the client understood the combination of acupressure on the pericardium 6 point and peppermint aromatherapy. On the first day, the patient only received acupressure on the pericardium 6 point, but the results were insufficient to reduce the patient's nausea. Therefore, the next day, the patient combined it with peppermint aromatherapy. Nausea decreased on the second day of the combination of acupressure on the pericardium 6 point and peppermint aromatherapy. On the third day, nausea was significantly reduced and appetite increased to  $\frac{3}{4}$  portion size. In a study by (Azizah Hasanah, Faridah Hariyani, Novi Pasiriani, 2023), it was shown that the combination of acupressure at the P6 Meridian point and peppermint aromatherapy inhalation had an effect on reducing the frequency of nausea and vomiting in pregnant women in the first trimester.

Evaluation of the client, namely after acupressure technique was performed on the pericardium point 6 and a combination of peppermint aromatherapy for 2x24 hours, the results showed reduced nausea. The evaluation results obtained are in accordance with the research of (Mobarakabadi, S. S., Shahbazzadegan, S., & Ozgoli, 2020) which stated that there was a significant decrease in the frequency, duration, and severity of nausea and vomiting frequency after 2 days of acupressure technique intervention at the pericardium point 6. This is also in line with research by (Usila *et al.*, 2022) that found that administering peppermint aromatherapy to pregnant women can significantly reduce nausea and vomiting.

## CONCLUSION

The assessment found that Mrs. R only experienced continuous nausea without vomiting and there was a decrease in appetite, the patient only ate 2-3 spoons, which caused the patient's weight to decrease from 62 kg to 60 kg. The main diagnosis raised in Mrs. R's case was the Risk of Nutritional Deficit related to inadequate intake, secondary to nausea and vomiting characterized by weight loss and decreased appetite. The planned intervention focuses on reducing nausea by performing acupressure techniques on the pericardium 6 point and a combination of peppermint aromatherapy. The implementation in this case involved acupressure at the pericardium 6 point and a combination of peppermint aromatherapy, which is beneficial for pregnant women in the morning and reduces the frequency and intensity of nausea and vomiting. Evaluation of the case showed that the client no longer had nausea, indicated by the patient being able to eat  $\frac{3}{4}$  of a portion after acupressure technique was performed on the pericardium 6 point and a combination of peppermint aromatherapy for 2 days. This is in line with the research results of (Usila *et al.*, 2022) that giving peppermint aromatherapy to pregnant women can significantly reduce the nausea and vomiting experienced.

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