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**Utilization of Lemon Aromatherapy and *Wrist Band*
Accupressure at Pericardium 6 on Nausea and Vomiting in
Pregnant Women: Literature Review**

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ABSTRACT

Introduction: nausea and vomiting or commonly known as "morning sickness" is a common physiological reaction in pregnant women in the first trimester. The cause of hyperemesis gravidarum is currently unknown and is multifactorial. Untreated nausea and vomiting will result in hyperemesis gravidarum which has an impact on the mother and fetus. To reduce nausea and vomiting, non-pharmacological methods can be used. Non-pharmacological methods are therapies without chemical drugs but instead use lemon aromatherapy and wrist band acupressure. **Method:** Literature review sourced from 12 research articles published in 2019-2024 and taken from Google Scholar and Pubmed; **Results:** Based on the results of 12 journal articles studied and the author's analysis, it was found that there was an effect of lemon aromatherapy and acupressure bracelets on reducing nausea and vomiting in pregnant women; **Conclusion:** Evaluation of lemon aromatherapy and acupressure bracelets is needed to increase knowledge in dealing with nausea and vomiting in pregnant women. Factors related to the evaluation of lemon aromatherapy and acupressure bracelets in overcoming nausea and vomiting in pregnant women are: understanding the techniques in applying complementary therapy to be effective and the duration of application of the wrist band acupressure at Pericardium 6 which affects the efficacy of acupressure.

Keywords: -

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Introduction

During the first trimester pregnancy , symptoms nausea and vomiting or often known as "morning sickness" is reaction common physiological . During pregnancy , nausea and vomiting happen Because improvement HCG and estrogen hormones in body . Nausea and vomiting are the most common symptoms experienced by pregnant women in the first trimester. This problem usually occurs in the morning, but can occur at any time. Nausea and vomiting usually occur in the first trimester of pregnancy, more than 5 to 14 weeks after conception (Pertiwi et al., 2024) .

Reason hyperemesis gravidarum during This Not yet known in a way definite and multifactorial . It is suspected existence disturbance hormonal balance such as p- hCG , estrogen, and progesterone , thyroxine , cortisol . Nausea vomit or hyperemesis gravidarum can cause various complications that is fail kidney acute , Mallory-Weiss tear , esophageal rupture, Wernicke encephalopathy pneumothorax , hemorrhage intracranial fetus , baby premature , heavy baby born low , vasospasm artery cerebral , as well as burden psychological (Fadila et al., 2022) .

Although nausea and vomiting (emesis gravidarum) are limited to the first trimester of pregnancy, a small number of cases continue until delivery. Nausea and vomiting (emesis gravidarum) are accompanied by an increased risk of maternal stress. Symptoms of nausea and vomiting range from mild to severe, with hyperemesis gravidarum at the most severe end of the scale. Hyperemesis gravidarum is characterized by excessive nausea and vomiting that results in nutritional and electrolysis disorders that require hospitalization. In addition, women who experience prolonged nausea and vomiting during pregnancy are at higher risk of experiencing symptoms such as postpartum depression, and women who

experience excessive nausea and vomiting are at higher risk of giving birth to babies with low birth weight (LBW) (Jannah et al., 2021) .

Nauseous vomit can overcome with do 2 ways , namely pharmacology and non-pharmacology . Non -pharmacology therapy Lemon aromatherapy and PC6 acupressure showed comparable efficacy in reducing nausea and vomiting symptoms (Nahdiana et al., 2023) . Lemon aromatherapy can reduce nausea and vomiting because it contains limonene. Limonene is the main component in the chemical compound of lemon aromatherapy which can inhibit the action of prostaglandins so that it can reduce pain, control cyclooxygenase I and II, prevent prostaglandin activity and reduce pain including nausea and vomiting (Fitri & Yuliaswati, 2023) .

Aromatherapy has been shown to have a positive effect, when pregnant women who experience nausea and vomiting and inhale lemon aromatherapy, pregnant women will feel the difference between before and after using lemon aromatherapy. This is because when essential oils are inhaled, molecules enter the nasal cavity, thereby stimulating the limbic system in the brain. The limbic system can directly affect emotions and memory, the hypothalamus, the pituitary gland, the part of the body that regulates heart rate, hormonal balance and stress (Jannah et al., 2021) . Some research abroad shows that bracelet acupressure at point P6 is effective in to ease nausea and vomiting in mothers pregnant . There is no effect reported side effects in study This (Nafiah et al., 2022) . Other studies also show that use bracelet P6 acupressure can prevent nauseous vomiting in mother pregnant seen from decline score nausea and vomiting in mothers pregnant (Yılmaz et al., 2023) .

Based on a number of study previous has prove influence as well as effectiveness use lemon aromatherapy and acupressure p6 for

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overcome nausea and vomiting in mothers pregnant . Needed evaluation from a number of study the use enhance and strengthen information as well as maximize implementation use lemon aromatherapy and p6 acupressure in overcome nausea and vomiting in mothers pregnant . Bracelet P6 acupressure can reduce nausea and vomiting in a way effective shown with decline frequency and duration nausea and vomiting (Lepcha et al., 2020) .

Research Method

Design study or methods applied in writing This use literature review method , namely A good literature search from international or abroad and national or domestic . Literature review study is style used For collect related data and sources with A subject or theme certain that is obtained from various type source that is from journals , internet, books and libraries others . In research This is secondary data used is originate from results researches from researcher previously . Data that has been obtained quick explained in a way easy written digested by the reader later .

Place search article study done with using internet media, namely search done via Google Scholar and Pubmed . At stage beginning search article research on Google Scholar and Pubmed using influence keywords lemon aromatherapy for reduce nausea and vomiting , bracelet p6 acupressure for reduce nauseous vomit Mother pregnant , and nauseous vomiting in mother pregnant 14,415 articles obtained from 2019 to 2024 , will but the one that comes in in criteria inclusion only 15 articles relevant research , then The critical appraisal process resulted in 12 articles being obtained study .

Data analysis is digging and collecting systematic data For upgrade understanding research that is researched and reviewed to produce results useful conclusion . Literature review This For analyze it use method literature that is with method sort and classify the data obtained from results obtained in accordance

criteria inclusion , and then explained One one by one and give conclusion For every the source related what is written in it . Research articles will answer objective research and then entered related theories with article study as well as assumption from researchers were also included .

Results and Discussions

Based on results search literature with use system searches that are in Google Scholar and Pubmed with using keywords influence lemon aromatherapy for reduce nausea and vomiting , bracelet p6 acupressure for reduce nauseous vomit Mother pregnant , and nauseous vomiting in mother pregnant 14,415 articles obtained study then screened based on criteria inclusion that is range time 6 years journal last (2019-2024), type original journal in form fulltext . Journal Indonesian and English English , and journals themed lemon aromatherapy , bracelet p6 acupressure and nausea vomit Mother pregnant . From the results filtering the so article research findings from Google Scholar there are 9 and from Pubmed There are 3 articles , so the total obtained is through filtering is 12 articles .

Nausea and vomiting in pregnancy are usually mild and are a condition that can be controlled according to the condition of each individual. Although this condition usually stops in the first trimester, its symptoms can cause nutritional disorders, dehydration, weakness, weight loss, and electrolyte imbalances, if this is not treated it can result in hyperemesis gravidarum (Maesaroh & Putri, 2019) . Nausea and vomiting are the most common disorders encountered in early pregnancy and are complained of by 50-70% of pregnant women in the first 16 weeks. Approximately 66% of pregnant women in the first trimester experience nausea and 44% experience vomiting (Kresna Wati et al., 2021) . Based on results article research collected and analyzed in accordance with criteria inclusion There are 12 articles research taken originate from in and also



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abroad . All article study discuss influence aromatherapy and bracelets p6 acupressure against decline nauseous vomit Mother pregnant . There are two ways For overcome nauseous vomit Mother pregnant that is lemon aromatherapy and bracelet acupressure p6.

Lemon aromatherapy is an essential oil produced from lemon peel extract (Citrus Lemon) which is often used in aromatherapy . Lemon aromatherapy is a type of aromatherapy that is safe for pregnancy and childbirth. When inhaling aromatic substances or lemon essential oils, it will emit biomolecules, receptor cells in the nose to send impulses directly to the sense of smell in the brain or the limbic system in the brain. The limbic system is closely related to other systems that control memory, emotions, hormones, sex, and heart rate. Immediately the impulse stimulates the release of hormones that can calm and create feelings of calm and affect physical and mental changes in a person so that it can reduce nausea and vomiting experienced by pregnant women in the first trimester (Harahap et al., 2022) .

Acupressure wristband is a product that is applied to the pericardium point 6 (a point to reduce nausea and vomiting). This wristband consists of an elastic band equipped with a protruding and smooth plastic button to apply pressure to the skin at a specific acupressure point. Studies have shown that using an acupressure wristband at the P6 acupressure point can significantly reduce nausea and vomiting in pregnant women (Lepcha et al., 2020) . Nausea and vomiting can be reduced by using an acupressure wristband at the P6 point originate from study Nor Azila Mohd Nafiah, et al in 2022, Melike Punduk Yilmaz in 2023 , and Kessang Lepcha, et al in 2020. Wristband or

Conclusion

Based on results review of 12 articles study can concluded and results the evaluation is nauseous vomit Mother pregnant can reduced

bracelet acupressure applied to point p6 is used for 4 days and 1 week consecutive For lower nauseous vomit Mother pregnant .

Study other namely 8 pieces studies using lemon aromatherapy for reduce nauseous vomiting that comes from from research by Siti Maesaroh , et al. In 2019, Novi Ramini Harahap , et al. 2022 , Princess Kresna Wati, et al. in 2021, Nurhasanah Laili Fitri , et al. 2023 , and Nurul Fadila, et al. in 2022, Muliatul Jannah, et al. 2024 , Rosalia Pertiwi, et al. 2024 , and Siti Maesaroh , et al. 2019. Lemon aromatherapy used in study For overcome nauseous vomit Mother average pregnancy is inhalation with apply it on cotton or tissue for inhaled .

From 12 articles study there is some instruments that have been used For measure decline nauseous vomit in the literature that has been reviewed, including is scale Rhodes index and PUQE scale . From 12 articles research that has been reviewed in the results , there are influence lemon aromatherapy and p6 acupressure wristband against decline nauseous vomiting.

From several article research collected can with drawn conclusion and evaluation that there is significant influence from lemon aromatherapy and wristband acupressure at point p6 against decline nauseous vomiting is indicated with average results duration , frequency , level severity nauseous vomit decrease after usage wrist band acupressure at point p6. However 1 article international related wristband acupressure state that respondent sometimes reject use it because prejudice bad to use and because wrist band no Lots used in society.

use lemon aromatherapy and wrist band acupressure at point p6 due to lemon aromatherapy can give a sense of calm Because release endorphine hormone and wrist band

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acupressure at point p6 can applied for reduce
nauseous vomit Mother pregnant .

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Conflic of Interest

The author's declare that they have no
conflict of interest.

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