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Research Article

The Effect of Prenatal Yoga and the Administration of Peppermint Aromatherapy in Reducing III Trimester Discomfort in Pregnant Women at the Walantaka Health Center in Serang City HIV and AIDS

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Abstract

Aims: To determine the effect of prenatal yoga and administration of peppermint aromatherapy in reducing third trimester discomfort in pregnant women at the Walantaka Public Health Center, Serang City

Methods: This quasi-experimental design study used a one group pretest-posttest design approach. Samples were collected using quota sampling totaling 36 pregnant women in the third trimester.

Results: The average before giving prenatal yoga and giving peppermint aromatherapy third trimester discomfort to pregnant women was 10.33 and the average after being given prenatal yoga and giving peppermint aromatherapy third trimester discomfort to pregnant women was reduced by 7.53.

Conclusion: The effect of prenatal yoga and administration of peppermint aromatherapy in reducing third trimester discomfort in pregnant women at the Walantaka Public Health Center Serang City (p.value 0.000). It is hoped that the results of this study can be used as information material to be conveyed to pregnant women patients to be able to do prenatal yoga and give peppermint aromatherapy in reducing the discomfort of the third trimester.

Keywords:

Yoga, peppermint, pregnant

INTRODUCTION

Pregnancy is a developmental process in the fetus that can cause discomfort and impair daily activities for the mother (1). According to the Ministry of Health of the Republic of Indonesia, there will be around 5,221,784 pregnant women in Indonesia in 2020. Pregnancy brings about a number of physiological changes, including changes in the digestive and respiratory systems, followed by the urinary tract, musculoskeletal, and circulatory systems (2).

During the adaptation process, mothers often experience discomfort even though they are physiological, but it is still necessary to provide prevention and treatment

regarding some discomforts for pregnant women entering the third trimester such as back pain around 70% (3). According to research conducted (4), around 70% of pregnant women often experience low back pain (LBP) which may occur at the beginning of the trimester, and peaks when entering the second and third trimesters (5).

The last three months of a pregnancy are referred to as the third trimester. Both the physical and mental changes that occur during pregnancy can be unsettling for the expectant mother. Dyspnea is one of the physical symptoms that can appear in the third trimester of pregnancy. Two) a rise in the volume of urine passed. Back discomfort, number 3. The fourth is a bowel obstruction. V) spider veins; 5). One psychological shift is

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the increased preparedness of the parents to welcome a new kid. 2) A mother's worry for her and her child's safety. To be afraid of suffering (3). 4) Nerves about acting irrationally or losing composure during labor (6).

Pregnancy-related changes in body posture, weight increase, and ligament rearrangement are some of the factors that can impact the frequency with which women report experiencing back discomfort. Warm baths, hot compresses, deep breathing exercises, music therapy, aromatherapy, relaxation, massage, position adjustments, and yoga are only some of the non-pharmaceutical approaches to pain management (7). Physical discomfort, fetal movement, and bloating can all make it difficult for pregnant women to get comfortable enough to sleep or go about their daily routines. It is more challenging to find a comfortable position (6).

Having someone to lean on during the third trimester of pregnancy is crucial for the mother's health and well-being. As a form of self-care, yoga can help expectant mothers feel better during their pregnancies, aid in labor, and get mentally ready for the challenges of parenthood in the years immediately following childbirth (8).

Keeping a healthy, strong, and active body is only one of the many physical and mental benefits of yoga for pregnant women. Improves equilibrium and decreases back discomfort. c) Practice deep breathing exercises. d) convenient for sleeping because it promotes physical calm. e) Practice opening and closing your pelvis to get ready for labor. f) develop an intimate relationship with the infant. f) Meet up with other moms-to-be. h) lower the probability of pregnancy-related problems. Reduces blood pressure, or i. Keep your weight steady (4).

According to prior research, after 4x prenatal care yoga training over the course of 4 consecutive weeks, respondents reported feeling less discomfort. This was especially true for those who had experienced back pain throughout

pregnancy. in the number of 15 (46.9%) (9). Meanwhile, some studies have found that pregnant women who consistently practice yoga had less complaints throughout the third trimester than those who don't (10).

The Indonesian Ministry of Health reports that there were 5,324,562 pregnant women in the country in 2018. Central Java saw a staggering 590,9894 expectant mothers (11). There has been an upward trend in the percentage of pregnant women who receive prenatal care in Indonesia between 2006-2019, and in 2019, this number reached 88.54%, surpassing the 80% goal set by the Ministry of Health's 2019 Strategic Plan (Rienstra). It is up to 97.13% in Central Java. There are challenges to delivering maternity care, such as ensuring that all the components of quality service are met at each visit.

Interviews conducted with 10 pregnant women in their third trimester at the Walantaka Public Health Center in Serang City revealed the following: 6 respondents complained of aches in the back and legs; 2 respondents said they had difficulty sleeping and often woke up during the night to use the restroom; and 2 respondents reported no major changes in their physical health. Two of the respondents in the BAK study reported that they are frequently roused from sleep in the middle of the night by their children's hypersalivation, which makes the mother feel like she is about to choke. Ten out of ten respondents agreed that these complaints significantly reduce the quality of life for pregnant women in their third trimester.

Pregnancy exercise had an average value of 26 and pregnant yoga had an average value of 29 in a previous study (3), showing a statistically significant difference in their effectiveness against low back pain complaints in women in their third trimester of pregnancy. Pregnant women who receive yoga treatment report an average 1.43-point decrease in pain intensity (12).

The yoga movements and peppermint aromatherapy the midwife recommends to help pregnant women deal with third-

trimester discomforts like insomnia, aches, and dizziness are just two examples. The authors take a thesis titled "The effect of prenatal yoga and the administration of peppermint aromatherapy in reducing third-trimester discomfort in pregnant women at the Walantaka Public Health Center, Serang City" as evidence for the need for further study in this area.

METHODS

The study employed a quasi-experimental design with a pre- and post-test for a single group. Quota sampling was used to collect data from a total of 36 women in their third trimester of pregnancy. Third-trimester pregnant women in the intervention group's discomfort was measured using observation sheets and questionnaires.

RESULTS

Table 1. Distribution of the frequency of third trimester discomfort in pregnant women at the Walantaka Public Health Center, Serang City before and after being given prenatal yoga and giving peppermint aromatherapy

third trimester discomfort in pregnant women	Mean	Deviation Standard	Min	Max	Decrease
Pretest	10,33	1,474	8	12	2,8
Posttest	7,53	1,055	6	10	

Table 1 shows that the average value = for third-trimester pregnancy discomfort before prenatal yoga and peppermint aromatherapy was administered was 10.33, with a range of 8 to 12. The mean was determined by administering prenatal yoga and peppermint aromatherapy. 7.53 on a scale where 1 = the lowest possible score and 10 = the highest possible score.

Table 2. The effect of prenatal yoga and administration of peppermint aromatherapy in reducing third trimester discomfort in pregnant women at the Walantaka Public Health Center, Serang City

GROUP	Mean		Deviation Mean	Asymp. Sig. (2-tailed)
	Pretest	Posttest		
Third trimester discomfort in pregnant women	10,33	7,53	2,8	0,000

Asymp derived the findings of the analysis in the perineal wound healing group based on table 2 above. Sig. (2-tailed) (0.000) (0.05), indicating that prenatal yoga and peppermint aromatherapy had an effect on lowering third-trimester discomfort in pregnant women at the Walantaka Public Health Center in Serang City. On average, the mother felt 10.33 degrees of discomfort before receiving prenatal yoga and peppermint aromatherapy, and 7.53 degrees of difficulty after receiving prenatal yoga and peppermint aromatherapy. According to the findings of this study, mothers who practice prenatal yoga and get peppermint aromatherapy can lessen third-trimester discomfort in pregnant women.

DISCUSSION

Distribution of the frequency of third trimester discomfort in pregnant women at the Walantaka Public Health Center, Serang City before and after being given prenatal yoga and giving peppermint aromatherapy

The study found that pregnant women experienced an average of 10.33 more days of discomfort during their third trimester before receiving prenatal yoga and peppermint aromatherapy, and 7.53 fewer days of discomfort after receiving these treatments. Almost all pregnant women in the third trimester reported feeling uncomfortable. However, after 30 minutes of prenatal yoga practiced once a week for a month, pregnant women report feeling less discomfort. Prenatal yoga is an exercise program tailored to the needs of pregnant women. Prenatal yoga focuses mostly on breathing exercises designed to reduce stress during pregnancy. According to (13), yoga is done with deep breathing so as to increase the flow of oxygen to the brain so that it can reduce anxiety, depression, psychological disorders, and pain symptoms including low back pain.

Together, the breathing exercises (pranayama), postures (mudras), meditation (dhyana), and relaxation (savasana) of antenatal yoga and the physical activity (asanas) of postnatal yoga can make for a more comfortable pregnancy and delivery (14). In a study conducted by (9), there was a decrease in complaints among pregnant women after prenatal yoga care, such as lower back pain, from 21 pregnant women to 15 pregnant women.

According to the researcher's assumption, the amount of discomfort experienced by pregnant women can be influenced by several factors, such as gestational age to the activities carried out by pregnant women, so prenatal yoga exercises can be used as an alternative to help reduce discomfort during pregnancy and competent health workers can provide maximum service to mothers pregnant.

The effect of prenatal yoga and administration of peppermint aromatherapy in reducing third trimester discomfort in pregnant women at the Walantaka Public Health Center, Serang City

Prenatal yoga and peppermint aromatherapy were found to be effective in reducing third-trimester discomfort in pregnant women at the Walantaka Public Health Center in Serang City, according to the study's findings, which showed that the analysis results in the perineal wound healing group obtained Asymp. Sig. (2-tailed) (0.000) (0.05).

Pregnancy is a period of health vulnerability, both the health of the mother who is pregnant and the fetus she contains. Therefore, regular prenatal care (antenatal care) needs to be carried out to be able to detect early abnormalities/disorders/diseases suffered by pregnant women (15). In the third trimester of pregnancy, pregnant women feel more discomfort because it is getting closer to the time of delivery. In this study, mothers felt more comfortable after doing prenatal yoga, including swelling in the feet and hands, difficulty sleeping, difficulty defecating, leg cramps, numbness in the toes, and lower back pain.

Physical exercise according to The American College of Obstetricians and Gynecologists is a modified prenatal gentle yoga for pregnant women (16). Prenatal gentle yoga is a form of yoga that has been adapted for pregnant women by slowing down the pace of the asanas and including pranayama, mudra, meditation, and deep relaxation into the practice (17).

Prenatal yoga is an excellent form of physical exercise because it boosts energy and endurance, alleviates stress and anxiety, enhances the quality of sleep, and decreases the frequency and severity of common pregnancy discomforts like back pain, pelvic pain, and swelling (18). This is in line with the theory put forward by (18), that pregnant yoga can reduce general physical

complaints during pregnancy, such as back pain, pelvic pain, to swelling of body parts.

Yoga is an ideal way to stay in shape during pregnancy because most yoga poses can be easily modified to suit the needs of the pregnant woman and the abilities of the woman during pregnancy, it helps build muscle strength and flexibility, and teaches pregnant women to listen to their bodies (19).

Yoga exercise originated in ancient India 5,000 years ago, (20). Yoga exercise aims to prepare pregnant women to face childbirth smoothly and comfortably (21). The positive effect of yoga exercise is very beneficial for pregnant women, by doing the movements of yoga exercise will be able to reduce stress, anxiety, and back pain throughout pregnancy from the first trimester to the third trimester of pregnancy, yoga exercise can also reduce pain during labor and can shorten the time 2nd stage of labor, (13).

Several studies have shown that peppermint aromatherapy is effective in reducing nausea. JRI 2018 research results state that inhaling peppermint essential oil can be used to reduce fever, nausea, and vomiting, and improve digestion.

One of the aromatherapy that is often used is peppermint (*Mentha Piperita*). Peppermint belongs to the labiate family which has a very high level of fragrance, a cool refreshing aroma, and a deep mentoli smell. Peppermint contains anti-seizure properties and reliable healing for cases of nausea, indigestion, difficulty passing gas, diarrhea, constipation, headaches, and fainting (22). Peppermint aromatherapy contains menthol (35-45%) and menthone (10%-30%) so it can be useful as an antiemetic and antispasmodic in the lining of the stomach and intestines by inhibiting muscle contractions caused by serotonin and other substances (23).

The results of research conducted (24) resulted in a p-value of 0.000 (24), indicating that peppermint essential oil significantly reduced morning sickness in pregnant women. Another study found that women

who had nausea and vomiting during their first trimester of pregnancy and were given a peppermint infusion had fewer episodes of sickness (25). Peppermint provides great benefits for pregnant women in the 1st trimester who experience nausea and vomiting, so it can reduce the discomfort and pregnant women can go through the 1st trimester with comfort.

Aromatherapy, the therapeutic use of essential oils, has been shown to have beneficial effects on both physical and mental health. Various pharmacological effects, such as those of an antibiotic, antiviral, diuretic, vasodilator, sedative, or adrenal stimulant, can be attributed to the various essential oils. The limbic system in the brain is affected by inhaling essential oils because their molecules reach the nasal cavity. The limbic system is a group of brain regions responsible for regulating basic functions like heart rate, blood pressure, stress response, memory, and hormone balance, as well as breathing (26)

According to the researcher's assumptions, puskesmas as a place for providing health services play an important role in carrying out activities in maintaining the health of pregnant women and health workers who play a role in disseminating information to the public, especially to pregnant women regarding prenatal yoga activities.

In addition, pregnant women who are willing to be educated have a very positive influence in achieving equitable health in an area. In this case, it is necessary to have good cooperation between health workers and the community, especially pregnant women so that all activities related to the health of pregnant women can run smoothly and can provide maximum benefits to pregnant women. There needs to be a schedule of routine activities that must be held by the puskesmas related to prenatal yoga exercise and trained officers in providing prenatal yoga exercise material to pregnant women.

CONCLUSION

Pregnant women reported an average of 10.33 out of 100 during their third trimester

of discomfort before receiving prenatal yoga and peppermint aromatherapy; after receiving these treatments, their pain levels decreased to an average of 7.53. At the Walantaka Public Health Center in Serang City, pregnant women reported less discomfort throughout their third trimester after participating in prenatal yoga and receiving peppermint aromatherapy (p0.0001). The purpose of this study is to help pregnant women in Serang City's Walantaka Public Health Center cope with the discomforts of their third trimester by providing information about prenatal yoga and peppermint aromatherapy. The study's findings may be disseminated to the pregnant women who visit the Walantaka Public Health Center in Serang City for prenatal care.

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