



The Effectiveness of Relaxation Massage on Sleep Quality in Pregnant Women at PMB Deliana, Marpoyan Damai District, Pekanbaru City

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Abstract - Hormonal changes, weight gain and changes in body posture are some of the factors that cause back pain that often occurs during pregnancy (Mufdlilah, 2009). In the process of pregnancy, complaints always arise, one of which is very disturbing is the problem of back pain during pregnancy. Back pain during pregnancy is usually experienced by women at certain times during pregnancy, usually in the third trimester of pregnancy. Back pain is common in pregnancy with the reported incidence varying from approximately 50% in the UK and Scandinavia to close to 70% in Australia. The research objective of this study was to determine how relaxation massage affects sleep quality in pregnant women. The research method is The type of research conducted is quasi-experimental (quasi-experimental) which is a research plan that is structured in such a way that it can lead researchers to obtain answers to researchers (Notoatmodjo 2010). The results of the study obtained a p value = 0.000 so that H_0 was rejected, it was concluded that there was an effect of relaxation massage on the quality of sleep for pregnant women ($p < 0.000$), so it could be concluded that there was an effect of relaxation massage given to pregnant women on the quality of sleep of mothers. It is hoped that further research will be able to examine different variables so that they can find out how to improve sleep quality for pregnant women

Keywords: *Relaxing massage, Sleep quality, Pregnant women*

1. Introduction

Pregnancy is the process of meeting and fusion of spermatozoa (seminal cells) with an egg cell (ovum) which produces a zygote. Pregnant women are women who do not get menstruation for more than one month accompanied by other signs of pregnancy. In other words, pregnancy is a condition in which a woman has a growing fetus in her body. Pregnancy in humans lasts for approximately 40 weeks or 9 months, calculated from the beginning of the last menstrual period until delivery (Sari, 2015).

Hormonal changes, weight gain and changes in body posture are some of the factors that cause back pain that often occurs during pregnancy (Mufdlilah, 2009). In the process of pregnancy, complaints always arise, one of which is very disturbing is the problem of back pain during pregnancy. Back pain during pregnancy is usually experienced by women at certain times during pregnancy, usually in the third trimester of pregnancy. Back pain is common in pregnancy with the reported incidence varying from approximately 50% in the UK and Scandinavia to close to 70% in Australia. Mantle reported that 16% of women studied complained of severe back pain and 36% in the study of Ostgaard et al. 1991 reported the presence of significant back pain.

Selye's stress theory explains that the physiological effectiveness of massage is an integrated response originating from the hypothalamus that leads to an increase or decrease in arousal from the central nervous system. Back massage can produce endomorphine by reducing muscle tension, which is the opposite of the stress response. Studies show that massage can help solve problems such as anxiety, depression, stress, pain and insomnia by reducing muscle tension (Richards, 2009).

Pregnancy massage has a positive effect on pregnant women by lowering the hormone cortisol to reduce stress, norepinephrine to reduce anxiety, serotonin to reduce back and leg pain, low fetal activity, so that the quality of sleep of pregnant women increases, and the rate of premature babies is low. Field et



al, 2010). However, systematic massage in pregnant women should also not be done if complications arise during pregnancy, especially when there is an increase in the uterus (Mufdlilah, 2009).

According to Law No. 4 of 2019 concerning midwifery, midwives have a role in carrying out health services as midwifery service providers, midwifery service managers, extension workers and counselors for clients, educators, mentors, and clinical facilitators, driving community participation and empowering women, as well as researchers. Midwifery services provided by Midwives are based on knowledge and competence in the field of Midwifery which is developed according to the client's needs.

From the above background, the researcher is interested in conducting a study entitled "The Effectiveness of Relaxation Massage on Sleep Quality in Pregnant Women in PMB Deliana, Marpoyan Damai District, Pekanbaru City".

2. Tables

This research was carried out on October 3-17, 2020 at PMB Deliana, Pekanbaru City. The population in this study were pregnant women at PMB Deliana Pekanbaru City who visited in October 2020. The sampling in this study used a non-random sampling technique using purposive sampling.

Data processing is done by editing, coding, entry and tabulating methods. Univariate analysis is carried out to explain or describe the characteristics of each variable studied (Notoadmojo, 2013). The analysis of this study was to determine the score of sleep quality before and after a relaxing massage. To test whether or not there is the effectiveness of relaxation massage. on sleep quality in third trimester pregnant women at PMB Deliana Pekanbaru City. The test used is the Dependent T test with the interpretation of the results if the p value <0.05, it means that there is an effect of relaxing massage. on the quality of sleep of pregnant women, if $p > 0.05$, it means that there is no effect of relaxation massage. on the quality of sleep of pregnant women

2.1 Univariate Results

- a. Sleep Quality of Pregnant Women Before doing Relaxation Massage.

Table 1
Distribution of Sleep Quality of Pregnant Women Before Relaxation Massage

Relaxation Massage	Frequency(N)	Percentage (%)
15	2	5.7
14	2	5.7
13	2	5.7
11	9	25.7
10	7	20.1
9	11	31.4
7	2	5.7
Total	35	100 0.0

Based on table 1 above, the majority of the sleep quality of pregnant women before Relaxation Massage is 10, which is 7 people (20.1%)

- b. Sleep Quality for Pregnant Women After Relaxation Massage

Table 2
Distribution of Sleep Quality for Pregnant Women After Doing Relaxation Massage

Sleep Quality	Frequency(N)	Percentage (%)
7	3	8.5
6	7	24.5
5	10	28.6
4	15	42.9
Total	35	100 0.0

Based on table 2 above, the majority of the sleep quality of pregnant women after doing a relaxing massage is 4, which is 15 people (42.9%)

2.2 Bivariate analysis results

Table 3.
Paired Sample Statistics

	N	mean	Std. Deviation	Std.error mean	P.Value
Before given	35	4.63	1,723	0.301	0.000
After being given		5.90	1.234	0.268	

Based on table 3 paired samples statistics, the results show that the average sleep quality in pregnant women in the first measurement is 4.63 (poor quality), while the average sleep quality in mothers in the second measurement is 4.90 (good quality).

In the statistical test, obtained p value = 0.000 so that Ho is rejected, it is concluded that there is an effect of relaxation massage on the sleep quality of pregnant women (p <0.000).

3. Analysis

Analysis of the difference in sleep quality before (Pre-Test) and After (PostTest) doing Relaxation Massage, it was found that the average sleep quality for pregnant women in the first measurement was 5.63 (poor quality), while the average sleep quality for pregnant women in the first measurement was 5.63. the second measurement is 4.90 (good quality). In the statistical test, obtained p value = 0.000 so that Ho is rejected, it is concluded that there is an effect of Relaxation Massage on the sleep quality of pregnant women (p <0.000).

Relaxation Massage is a holistic therapy that begins with breathing relaxation and then prays to God for the well-being of the body, mind and spirit, followed by bringing up a sense of caring, loving and loving mother massager sincerely. Because Relaxation Massage will have a relaxing effect on pregnant women which can affect the increase in the duration of sleep of pregnant women. Relaxation exercises on Relaxation Massage Physiologically will cause a relaxing effect that involves the parasympathetic nerves in the central nervous system. Where one of the functions of the parasympathetic nerves is to reduce the production of the hormone adrenaline or epinephrine (stress hormone) and increase the secretion of the hormone noradrenaline or norepinephrine (relaxing hormone) so that there is a decrease in anxiety and tension in pregnant women which causes pregnant women to become more relaxed and calm. other than that Relaxation Massage will help the mother in a relaxed state due to the formation of endorphins which provide a calming effect. Thus, it is easy for pregnant women to sleep with good quality with the provisions Relaxation Massage done regularly to get optimal results.

Physiologically, sleep complaints experienced by pregnant women are caused by fetal growth and fetal movement which can suppress the bladder so that it can increase the frequency of urination, the body burden is getting heavier so that it can change the structure of the spine so that pregnant women can feel discomfort in the waist area. also in the extremities which sometimes pregnant women like to experience cramps. This condition can also cause psychological changes in pregnant women, sometimes the physical changes they experience can cause anxiety and worry when facing childbirth, this can sometimes affect the quality of sleep of pregnant women. (Hidayat & Uliyah, 2015).

Improving sleep quality can be done in many ways, including pharmacological and non-pharmacological techniques. Pharmacological method is a common therapy given. But not in pregnant women, because it has the potential to increase the risk for the fetus. Therefore, the choice of using non-pharmacological methods is more appropriate, because its use has less side effects compared to pharmacological methods. One of the non-pharmacological techniques that can be given to overcome sleep difficulties in pregnant women is relaxation techniques such as massage Relaxation Massage, yoga, progressive muscle relaxation, music therapy, meditation, swimming (Harahap et al., 2010).

4. Conclusion

The conclusion of the effectiveness of Relaxation Massage on sleep quality in pregnant women at PMB Deliana obtained m results The majority of sleep quality of pregnant women before Relaxation Massage is 9, which is 11 people (31.4%), the majority of sleep quality of pregnant women after Relaxation Massage is 4, which is 15 people (42.9%), the result is that the average sleep quality in pregnant women in the first measurement is 5.63 (poor quality), while the average quality of sleep in pregnant women in the

second measurement is 4.90 (good quality). In the statistical test, obtained p value = 0.000 so that H_0 is rejected, it is concluded that there is an effect of Loving Massage on the sleep quality of pregnant women ($p < 0.000$).

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