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## DESCRIPTION OF SLEEP QUALITY IN PREGNANCY AT MIDWIFERY HEALTH CARE MARGAJAYA CENTER OF LAMPUNG 2024

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## $A B S \overline{T R A C T}$

Sleep quality is an individual's ability to stay asleep and to get the right amount of sleep. According to the World Health Organization (WHO), the global prevalence of insomnia, which is a sleep disorder and sleep quality, in pregnant women throughout the world is 41.8%. The aim of the research is to determine the description of sleep quality in pregnant women at the Independent Midwife Practice in Margaiava. Central Lampung.

This type of research is descriptive with a cross-sectional design. The population of this study was 112 pregnant women with a sample size of 88 respondents. The sampling technique uses purposive sampling.

The subjective sleep quality of pregnant women was in the very good category for 15 respondents (17.04%), quite good for 25 (28.40%), quite bad for 25 (28.40%), and very bad for 23 respondents (26.16%). Sleep duration > 7 hours 18 respondents (20.45%), sleep duration 6-7 hours 22 respondents (25%), sleep duration 5-6 hours 28 respondents (31.81%), and sleep duration <5 hours 20 respondents (22.74%)

The majority of pregnant women in this study had quite good subjective sleep quality with an average sleep duration of 5-6 hours. It is hoped that PMB can provide promotive and preventive education. So, pregnant women can pay more attention to the condition of their pregnancy. Also, it can provide additional information for subsequent research in conducting similar research involving other variables.

### INTRODUCTION

Sleep quality is an individual's ability to stay asleep and get the right amount of sleep. Good quality sleep will be characterized by sleeping peacefully, feeling fresh in the morning and feeling enthusiastic about doing activities. (Agustian, 2017). According to the World Health Organization (WHO), the global prevalence of insomnia, which is a sleep disorder and affects the quality of sleep in pregnant women throughout the world, is 41.8%. The prevalence of insomnia in pregnant women in Asia is estimated at 48.2%, Africa 57.1%, America 24.1%, and Europe 25.1%. (WHO, 2021) The prevalence of sleep disorders that cause poor sleep quality in pregnant women in Indonesia in 2022 is 234,980/100,000 live births. The incidence of sleep disorders or insomnia which causes poor sleep quality in pregnant women in 2021 is 35.4%. Meanwhile, in Central Lampung district, the rate of sleep disorders or insomnia is 24.3%. (Lampung Health Office, 2021).

The third trimester of pregnancy in mothers causes changes both physiologically, psychologically and socially. When gestational age increases, discomfort will also occur in pregnant women, one of which is disturbed sleep patterns. Sleep pattern disturbances in pregnant women are often felt during the second and third trimesters of pregnancy, this occurs due to changes in physiological and psychological conditions. (Smyka et al., 2020).

The sleep quality of pregnant women is influenced by environmental factors, psychological and physical changes in the mother that make it difficult for the mother to sleep. However, many mothers experience sleep disorders but do not pay attention to what is causing the problem. Decreased sleep quality in pregnant women causes the body's organ detoxification process to stop, especially at night. This effect causes a decline in the health condition of pregnant women, emotional outbursts, lack of enthusiasm for activities, inhibiting hormonal function, depression and stress which can have a negative impact on the fetus. Apart from that, the stress experienced by pregnant women will affect the development of the baby's brain. Children born to pregnant women who experience excessive stress during pregnancy trigger deviant behavior later in life (Hani, 2016).

Pregnant women with poor sleep quality can increase their chances of giving birth by Caesarean section and prolonged labor by 20%. Several studies also document that sleep quality during pregnancy is related to IUGR (Intrauterine Growth Restriction), premature birth and asphyxia. Low sleep quality is also associated with maternal complications during pregnancy such as preeclampsia and gestational diabetes (Takelle et al, 2022).

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Research by Wardani et al 2018 shows that poor sleep quality during pregnancy causes several problems, namely moderate anxiety (46.7%), severe anxiety (23.3%). Anxiety levels affect the sleep quality of third trimester primigravid pregnant women. The lower the anxiety level of third trimester primigravida pregnant women, the better the quality of their sleep. (Hartanti Wisnu Wardani et al. 2018)

Furthermore, previous research by Xianglong 2017 shows that poor sleep quality during pregnancy is influenced by various factors such as age, low socioeconomic status, trimester of pregnancy, higher education, place of residence, parity, smoking and sleep duration of less than 7 hours (Xianglong Xu, 2017).

Based on the results of a preliminary study conducted at the Margajaya Independent Midwife Practice, Central Lampung, the number of ANCs for the period from January to March 2023 was 112 mothers with the classification of Trimester I pregnancies being 32 (23.5%) mothers, TM II pregnancies 38 (31.1%) mothers and the third trimester of pregnancy were 42 (45.4%) mothers. From the results of interviews with pregnant women in the third trimester, they said they experienced sleep disturbances. The mothers said they had difficulty going back to sleep if they woke up at night, felt sleepy but found it difficult to start sleeping so the quality of sleep was poor.

### **METODE**

This research uses a cross-sectional research method with this research design aiming to describe the quality of sleep in pregnant women with the Independent Practice of Midwives in Margajaya, Central Lampung. The population in this study was 112 pregnant women in 2023 at the Margajaya Independent Midwife Practice, Central Lampung. The sampling technique in this research used purposive sampling. The population size is 112 respondents who meet the criteria and the confidence level taken is 0.05, so the sample size that will be studied in this research is 88 respondents. In this study, a research instrument was used in the form of the PSQI (Pitssburg Sleep Quality Index) questionnaire.

### **RESULTS**

The results of the study were that there were 67 respondents (76.1%) of pregnant women of healthy reproductive age and 21 respondents of risky reproductive age (23.9%). Then the parity of primigravida mothers was 40 respondents (45.5%), the parity of multigravida mothers was 45 respondents (51.5%), and the parity of grandemultigravida mothers was 3 respondents (10.2%). In this study, it was also possible to identify respondents based on gestational age, namely 7 respondents (8.0%) of pregnant women in the first trimester of pregnancy, 21 respondents in the second trimester (23.8%), and 60 respondents in the third trimester (68.2%). Furthermore, based on the education level of the respondents, it can be seen that 8 respondents (9.1%) had a primary education level, 71 respondents (80.7%) had a secondary education level, and 9 respondents (10.2%) had a higher education level. Next, based on the mother's employment status, it was found that pregnant women with formal employment status were 35 respondents (39.8%) and pregnant women with informal employment status were 53 respondents (60.2%).

Then, based on the research results, it can be seen that the subjective sleep quality of pregnant women is in the very good category for 15 respondents (17.04%), quite good for 25

respondents (28.40%), quite bad for 25 respondents (28.40%), and very bad for 23 respondents (26.16%). The results of further research, based on sleep duration, showed that sleep duration was > 7 hours for 18 respondents (20.45%), sleep duration was 6-7 hours for 22 respondents (25%), sleep duration was 5-6 hours for 28 respondents (31.81%), and sleep duration <5 hours as many as 20 respondents (22.74%).

### Tables

Table 1. Frequency Distribution of Maternal Age, Parity, Education Level, Employment Status, Gestational Age, and Sleep Quality of Pregnant Women

| No | Karakteristik              | n  | %     |
|----|----------------------------|----|-------|
| 1  | Mother Age                 |    |       |
|    | 1. Healty Reproduction     | 67 | 76.1  |
|    | 2. Risk Reproduction       | 21 | 23.9  |
|    | Total                      | 88 | 100   |
| 2  | Usia Kehamilan             |    |       |
|    | 1. Trimester I             | 7  | 8     |
|    | 2. Trimester II            | 21 | 23.8  |
|    | 3. Trimester III           | 60 | 68.2  |
|    | Total                      | 88 | 100   |
| 3  | Paritas Ibu                |    |       |
|    | 1. Primigravida            | 40 | 45.5  |
|    | 2. Multigravida            | 45 | 51.1  |
|    | 3. Grandemultigravida      | 3  | 3.4   |
|    | Total                      | 88 | 100   |
| 4  | Education                  |    |       |
|    | 1. Basic Education         | 8  | 9.1   |
|    | 2. Middle Education        | 71 | 80.7  |
|    | 3. Higher Education        | 9  | 10.2  |
|    | Total                      | 88 | 100   |
| 5  | Work                       |    |       |
|    | 1. Formal Working          | 35 | 39.8  |
|    | 2. Informal Working        | 53 | 60.2  |
|    | Total                      | 88 | 100   |
| 6  | Subjektif Quality of Sleep |    |       |
|    | 1. Excellent               | 15 | 17.04 |
|    | 2. Good                    | 25 | 28.40 |
|    | 3. Poor                    | 25 | 28.40 |
|    | 4. Very Poor               | 23 | 26.16 |
|    | Total                      | 88 | 100   |
| 7  | Sleep of Duration          |    |       |
|    | 1. Duration >7 jam         | 18 | 20.45 |
|    | 2. Duration 6-7 jam        | 22 | 25    |
|    | 3. Duration 5-6 jam        | 28 | 31.81 |
|    | 4. Duration <5jam          | 20 | 22.74 |
|    | Total                      | 88 | 100   |

### DISCUSSION

The mother's age at the time of pregnancy is one of the factors that can influence the mother's pregnancy process and the condition of the fetus in her womb. Based on table 4.2, it is known that there were 67 respondents (76.1%) of pregnant women of healthy reproductive age and 21 respondents of risky reproductive age (23.8%). Based on the results of research conducted by researchers, it can be seen that the majority of respondents are of healthy reproductive age (20-35 years). This research is in line with Wulandari 2020 research results showing that 83.33% of respondents were aged 20-35 years, because this age is the ideal age so it is considered to have the lowest risk of complications. Reproductive age is the ideal age because it has a low risk of complications because the reproductive organs at that age are more mature. (Desmarinta, et al. 2023)

Risky reproductive age, namely the mother's age of less than 20 years and more than 35 years is the risky age for pregnancy. Based on the results of this research, it is known that a small number of respondents were aged less than 20 years and more than 35 years. The results of this research are in line with research conducted by Sukorini (2017), the results of which show that maternal age is at risk as high as 2 pregnant women (5.5%). Too young and too old can cause complications that can have a negative impact on the health of the mother and baby. (Indonesian Ministry of Health, 2016).

It can also be seen that respondents based on gestational age are pregnant women with 7 respondents (8.0%) in the first trimester, 21 respondents in the second trimester (23.9%), and 60 respondents in the third trimester (68.2%). From the results of research conducted by researchers, it can be seen that the majority of respondents were in the third trimester. The results of this research are in line with the Literature Review Study by Gulton 2020 which explains that in the first research results it was explained that the majority of respondents (52.8%) were pregnant women in the third trimester.

Pregnancy is divided into three trimesters. As the third trimester enters or the gestational age increases, the mother experiences more physical and psychological complaints, as well as complaints of illnesses suffered by the mother, and has a negative impact on the sleep quality of pregnant women. Physiologically, pregnant women in the third trimester of pregnancy include pain in the back of the body, frequent urination at night because the uterus begins to descend into the pelvic cavity and presses on the bladder, which makes the mother always want to pee. Apart from that, the vascularization of the bladder causes muscle tone to decrease and hemodilution occurs. It also causes water metabolism to increase so that urine formation increases and the baby will often kick at night, making it difficult to sleep soundly.

Parity is the number of previous pregnancies that have reached the limit of visibility (viable) and have been born. The next results based on table 4.2 show that the parity of primigravida mothers is 40 respondents (45.5%), the parity of multigravida mothers is 45 respondents (51.5%), and the parity of grandemultigravida mothers is 3 respondents (10.2%). Based on these results, it can be seen that the majority of respondents are multigravida. The results of this research are in line with Wulandari's 2020 research, which showed that in her research, 65.10% of respondents were multigravida.

According to Qudriani & Hidayah (2017), pregnant women with multigravida parity have experience of pregnancy so that mothers know more about the risks that can endanger pregnancy so that mothers can take preventive measures to avoid risks during pregnancy. Multigravida parity is parity that is safe for pregnant women and also during childbirth because mothers with multigravida parity already have experience in dealing with pregnancy and childbirth.

### 4. Education level

Based on the research results in tabek 4.2, it can be seen that the majority of respondents have secondary and higher education levels. The educational level of pregnant women with primary education level was 8 respondents (9.1%), secondary education level was 71 respondents (80.7%), and higher education level was 9 respondents (10.2%). The results of this research are in line with the 2020 Wulandari Research, namely 46% of respondents had higher education. The results of this research are also in line

with the 2022 Rananingrum Research based on education, it is known that almost all respondents had secondary education (SMA), namely 29 people (78.4%).

Education is needed to obtain information, for example things that support health so that it can improve the quality of life. The higher the mother's education, the easier it will be for the mother to get information about discomfort during pregnancy and how to deal with it. It influences the mother's response by knowing what to do when experiencing discomfort, so the mother is no longer worried that her discomfort will increase because they already know what to do. should be done. (Rananingrum, 2022)

Based on this research, it can be seen that the maternal employment status is known as 35 respondents (39.8%) of pregnant women with formal employment status and 53 respondents (60.2%) of pregnant women with informal employment status. Informal work includes self-employment without assistance, business assisted by temporary workers, casual workers in agriculture, casual workers in non-agriculture, and unpaid workers. In this study, the majority of pregnant women had informal employment status, namely unpaid workers or wives who worked to help their husbands in carrying out their work and were unpaid/housewives. The results of this research are in line with the 2020 Wulandari Research that the majority of respondents in their research work as housewives, 46%.

Pregnant women should avoid doing work that can cause them to feel very tired and while working, mothers should take time to get enough rest. Pregnant women who have a history of complications in their pregnancies that may recur, such as babies with low birth weight, should minimize their physical work. Pregnant women should take good care of their womb, one of which is by not doing heavy work which can cause the mother to feel tired. During pregnancy, mothers will easily feel tired. Getting enough rest is very good for pregnant women.

Based on the results of research conducted by researchers describing the sleep quality of pregnant women, it was found that the majority had poor sleep quality. Based on the research results, it can be seen that the subjective sleep quality of pregnant women is in the very good category for 15 respondents (17.04%), quite good for 25 respondents (28.40%), quite bad for 25 respondents (28.40%), and very bad for 23 respondents. (26.16%). The results of this study are in line with Palifiana et all's 2018 research results which show that the majority of pregnant women have poor sleep quality, 74.6%, while 25.4% of pregnant women at the Pratama Asih Waluyo Jati Clinic have good sleep quality. , (Palifiana & , Wulandari, 2018).

When the mother's pregnancy has entered the second and third trimesters, the mother's uterus will get bigger and cause the mother's sleeping position to become uncomfortable. Pregnant women need about eight hours of sleep at night, apart from that, pregnant women also need naps during the day. Pregnant women, especially when they have entered the third trimester, need rest such as sitting and relaxing in between carrying out their routine activities. When entering the third trimester, the mother experiences more and more complaints, which interfere with her rest and sleep time.

The impact of lack of quality sleep can be risky for the fetus, pregnancy and during childbirth. Therefore, pregnant women who experience poor sleep quality during pregnancy are advised to receive special monitoring. In the results of Field's research, pregnant women who have poor sleep quality can increase the

mother's blood pressure, increasing the risk of preterm pregnancy and even miscarriage (Tyastuti & Wahyuningsih, 2016).

Based on the research results in table 4.2, it is known that sleep duration > 7 hours was 18 respondents (20.45%), sleep duration was 6-7 hours as many as 22 respondents (25%), sleep duration was 5-6 hours as many as 28 respondents (31.81%), and sleep duration was 5-6 hours. 20 respondents (22.74%) sleep <5 hours. The results of this study are in line with previous research that insufficient sleep duration is defined as sleeping less than 7 hours. Sufficient sleep duration is defined as between 7-9 hours of sleep. Insufficient/excessive sleep duration often occurs during pregnancy. Nearly one in four pregnant women report insufficient sleep duration. Many Hamul mothers don't sleep enough, partly because they lack knowledge about the bad impact this habit has on their health. (Xiangling Xu, et all. 2017)

### **CONCLUSIONS**

- 1. The age of pregnant women of healthy reproductive age was identified as many as 67 respondents (76.1%) and at risk reproductive age as many as 21 respondents (23.9%).
- 2. Identified gestational age, namely 7 respondents (8.0%), 21 respondents (23.8%) in the first trimester of pregnancy, 21 respondents (23.8%), and 60 respondents in the third trimester (68.2%).
- 3. The parity of primigravida mothers was identified by 40 respondents (45.5%), the parity of multigravida mothers by 45 respondents (51.5%), and the parity by grandemultigravida mothers by 3 respondents (10.2%).
- 4. The educational level of pregnant women was identified with primary education level of 8 respondents (9.1%), secondary education level of 71 respondents (80.7%), and higher education level of 9 respondents (10.2%).
- 5. The employment status of mothers with formal employment status was identified as many as 35 respondents (39.8%) and pregnant women with informal employment status as many as 53 respondents (60.2%).
- 6. The subjective sleep quality of pregnant women was identified in the very good category as many as 15 respondents (17.04%), quite good as many as 25 respondents (28.40%), quite bad as many as 25 respondents (28.40%), and very bad as many as 23 respondents (26.16%).

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