

ANALYSIS OF ANXIETY LEVEL AND EXERCISE IN PREGNANCY WITH SLEEP QUALITY IN PREGNANT WOMEN IN THE III TRIMESTER

Herlinda¹, Sari Widyaningsih², Ade Elvina³, Tariza⁴

¹Prodi D3 Kebidanan, Sekolah Tinggi Ilmu Kesehatan Sapta Bakti, Bengkulu
^{2,3,4}Prodi S1 Kebidanan, Sekolah Tinggi Ilmu Kesehatan Sapta Bakti, Bengkulu
Email correspondence : herlinda14@gmail.com

ABSTRAK : ANALISIS TINGKAT KECEMASAN DAN OLAHRAGA PADA KEHAMILAN DENGAN KUALITAS TIDUR PADA IBU HAMIL TRIMESTER III

Masalah: Kebutuhan istirahat tidur apabila belum terpenuhi akan berpengaruh terhadap kesehatan janin. Ibu hamil memerlukan sekitar delapan jam untuk tidur di malam hari, selain itu tidur siang juga dibutuhkan oleh ibu hamil ketika memasuki trimester II dan III semakin banyak keluhan-keluhan yang dirasakan ibu sehingga mengganggu istirahat pada waktu tidur. Tujuan: Penelitian ini dilakukan agar diketahuinya hubungan tingkat kecemasan dan senam hamil dengan kualitas tidur ibu hamil trimester III di Wilayah Kerja Puskesmas Pajar Bulan Kabupaten Seluma. Metode: Jenis penelitian adalah analitik menggunakan cross sectional design, dengan total sampling sebanyak 50 ibu hamil TM III. Menggunakan data primer, diolah secara univariat dan bivariat dengan analisis uji chi square. Hasil: Hasil penelitian diketahui 56,9% ibu hamil TM III dengan kualitas tidur baik, 68,0% ibu hamil TM III mengalami cemas, 70,0% ibu hamil TM III tidak senam hamil, ada hubungan tingkat kecemasan dengan kualitas tidur ibu hamil trimester III (p value = 0,006) dan ada hubungan senam hamil dengan kualitas tidur ibu hamil trimester III (p value = 0,002). Kesimpulan: Ada hubungan tingkat kecemasan dengan kualitas tidur ibu hamil trimester III di Wilayah Kerja Puskesmas Pajar Bulan Kabupaten Seluma, dengan p value = 0,006 dan Ada hubungan senam hamil dengan kualitas tidur ibu hamil trimester III di Wilayah Kerja Puskesmas Pajar Bulan Kabupaten Seluma, dengan p value = 0,002. Saran: Hasil penelitian ini hendaknya menjadi acuan bagi petugas Puskesmas Pajar Bulan khususnya bagi program KIA agar meningkatkan edukasi kepada ibu hamil TM III terkait berbagai hal mengenai kehamilan dan persiapan persalinan dengan melibatkan suami atau orang terdekat.

Kata Kunci : Kualitas Tidur, Tingkat Kecemasan, Senam Hamil.

ABSTRACT

Background: If the need for sleep rest is not met, it will affect the health of the fetus. Pregnant women need around eight hours of sleep at night. Apart from that, pregnant women also need naps when they enter the second and third trimesters. The more complaints the mother experiences, the more it interferes with her rest at bedtime. Objective: This research was conducted to determine the relationship between anxiety levels and pregnancy exercise with the sleep quality of pregnant women in the third trimester in the Pajar Bulan Community Health Center Working Area, Seluma Regency. Method: The type of research was analytical using a cross sectional design, with a total sampling of 50 TM III pregnant women. Using primary data, processed univariately and bivariately with chi square test analysis. Results: The results of the study showed that 56.9% of pregnant women in TM III had good sleep quality, 68.0% of pregnant women in TM III experienced anxiety, 70.0% of pregnant women in TM III did not exercise during pregnancy, there is a relationship between the level of anxiety and the quality of sleep of pregnant women in the third trimester. (p value = 0.006) and there is a relationship between pregnancy exercise and the sleep quality of pregnant women in the third trimester (p value = 0.002). Conclusion: There is a relationship between anxiety levels and the sleep quality of third trimester pregnant women in the Pajar Bulan Community Health Center Working Area, Seluma Regency, with p value = 0.006. There is a relationship between pregnancy exercise and the sleep quality of pregnant women in the third trimester in the Pajar Bulan Health Center Working Area, Seluma Regency, with p value = 0.002. Suggestion: The results of this research should be a reference for Pajar Bulan Community Health Center officers, especially for the KIA program, to increase education for TM III pregnant women regarding various matters regarding pregnancy and preparation for childbirth by involving their husbands or those closest to them.

Keywords : Anxiety Level, Pregnancy Exercise, Sleep Quality,.

INTRODUCTION

Pregnancy is the most awaited thing for all married women. Pregnancy is a condition of physical, psychological and social change. During pregnancy, almost all women do not meet their sleep needs optimally. As pregnancy progresses, complaints will appear such as back pain, difficulty breathing, poor sleep, frequent urination, stomach contractions, swollen ankles, leg cramps and many other complaints. The growth of a fetus that is so enlarged can put pressure on the mother's bladder, resulting in limited bladder capacity so that the mother often wants to urinate, this can disrupt the mother's rest, including sleep time (Dewi et al., 2021).

The prevalence of sleep quality disorders or insomnia in pregnant women in Indonesia is still quite high, namely 64%, it is reported that the prevalence increases to 83.5% after 8 months of pregnancy and can increase pregnancy complaints such as headaches, dizziness, lack of enthusiasm, activity disorders and emotional disorders. The third trimester of pregnancy in mothers causes changes both physiologically, psychologically and socially (RI Ministry of Health, 2022).

The impact of disturbed sleep patterns if it occurs for a long time during pregnancy is that there are concerns that the baby will be born with a low birth weight (LBW), unbalanced neurological development, premature birth and weakening of the baby's immune system. Apart from that, sleep disorders also cause depression and stress which affect the fetus. Mild stress causes the fetus to increase its heart rate, but heavy and prolonged stress will make the fetus more hyperactive. Disturbances in sleep patterns in pregnant women can also increase prolonged labor which leads to delivery by caesarean section (Endang Y, 2021).

If the need for sleep rest is not met, it will affect the health of the fetus. Pregnant women need around eight hours of sleep at night. Apart from that, pregnant women also need naps when they enter the second and third trimesters. The more complaints the mother experiences, the more it interferes with her rest at bedtime. The period that requires special attention is during the third trimester because this is the time when fetal growth and development increases drastically, causing pregnant women to find it difficult to sleep. An increase in the height of the arterial fundus accompanied by an enlarged stomach places the weight of the body more forward (Setiawati et al., 2022).

The causes of disturbed sleep patterns in Indonesian midwifery and nursing care diagnosis standards include environmental obstacles (for

example environmental humidity, environmental temperature, lighting, noise, unpleasant odors, monitoring/examination/action schedules), lack of sleep control, lack of privacy, physical restraint, lack of sleeping companions and unfamiliarity with sleeping equipment (Rosliana D, 2021).

During each pregnancy, the mother will experience several changes, both physical changes and psychological changes that are quite specific as a reaction to what she felt during pregnancy. The psychological changes experienced by pregnant women are more caused by excessive anxiety, worry and fear for no reason, which ultimately leads to depression so that the quality of sleep is disturbed. This stressful condition causes the body's muscles to tighten, especially the muscles in the birth canal which become stiff and hard, thus disrupting the process of opening the birth canal. Apart from that, pregnant women who experience sleep disorders will be slower to deal with stimuli and have difficulty concentrating (Rosliana D, 2021).

Anxiety is a natural emotional disorder characterized by feelings of deep fear or worry and the cause is unclear. Anxiety during pregnancy increases the risk of delayed motor development and reduces the health of pregnant women and babies. Anxiety in pregnant women that occurs continuously will increase the risk of emotional imbalance in the mother after giving birth. Anxiety is also associated with post-partum depression (PPD) and mental disorders that occur in a person due to experiencing a traumatic event or Post Traumatic Stress (PTS) and cause weak bonding with the baby. Pregnant women will also experience sleep disorders which will affect poor sleep quality. Psychological disorders such as anxiety make it increasingly difficult for mothers to sleep (Setiawati et al., 2022).

This sleep disorder increases the risk of high blood pressure during pregnancy fourfold. A study conducted by the University of Pittsburgh School of Medicine shows that poor quality and quantity of sleep will disrupt the body's immune processes. In pregnant women, this will increase the risk of low birth weight, preeclampsia and other health complications (Ministry of Health of the Republic of Indonesia, 2022).

Factors that contribute to maternal death are generally direct causes and indirect causes. The direct causes of maternal death are factors related to complications of pregnancy, childbirth and postpartum such as bleeding 30.3%, hypertension 27.1%, infection 7.3%, prolonged labor and abortion 0% and others 40.8%. Indirect causes of maternal death include maternal deaths caused by non-

obstetric causes. Examples include pregnant women who die from tuberculosis, heart disease, malaria, anemia, and others. This disease is considered to aggravate pregnancy, thereby affecting the optimization of maternal and fetal health and increasing the risk of morbidity and death (Ministry of Health of the Republic of Indonesia, 2022).

Efforts made to increase awareness of the importance of health during pregnancy are through programs organized by the Ministry of Health, namely classes for pregnant women, which include pregnancy exercises in the program. Pregnancy exercises are movement exercises to prepare pregnant women for childbirth, both physically and mentally. Pregnant women who have good stamina will produce smooth deliveries and ideal baby weight so that the risk of complications can be reduced (Ministry of Health of the Republic of Indonesia, 2022).

The benefits of pregnancy exercise include reducing pain during labor, strengthening and maintaining the flexibility of the important muscles of the abdominal wall and pelvic floor, reducing waist and back pain during pregnancy, practicing breathing techniques, improving mood, improving sleep quality, and can reduce stress. , the benefits of pregnancy exercise can also be used to care for the body and reduce the incidence of various disorders due to changes in body posture. Pregnancy exercise training cannot be said to be perfect if its implementation cannot be organized regularly and intensively (Dewi et al., 2021).

Research on sleep quality entitled the relationship between anxiety levels and sleep quality in third trimester primigravida pregnant women at the Pratama Afyah Pekanbaru Clinic, it is known that there is a relationship between anxiety levels and sleep quality in third trimester primigravida pregnant women, of the 54 respondents studied, the majority of respondents experienced quality 46 people (85.2%) had poor sleep (Mardhiyah et al., 2021).

Research entitled the influence of regularity of pregnancy exercise on sleep quality in third trimester pregnant women in Gedangsewu Pare Kediri Village, pregnancy exercise was carried out twice a week for 30 minutes, it was found that all respondents experienced moderate sleep quality (100%) and none experienced moderate sleep quality. Good. The results of the Wilcoxon Sign Rank Test statistical test showed that $p = 0.000$ or $p < 0.01$, meaning there was a significant difference in sleep quality in the pre-test and post-test for pregnant women in the third trimester (Rahayu & Hastuti, 2020).

Based on data from the Bengkulu Provincial Health Service, in 2020 there were 19,529 births, in

2021 there were 20,461 births and in 2022 there were 31,418 pregnant women who had gone through the birth process (Bengkulu Provincial Health Office, 2022). Based on data from the Seluma District Health Service, in 2020 the highest number of postpartum women in Seluma was at the Pajar Bulan Health Center with 345 people, followed by the Ulu Talo Health Center with 295 people and the Dermayu Health Center with 293 people. In 2021, the highest number of postpartum mothers in Seluma was at the Pajar Bulan Community Health Center with 384 people, followed by the Ulu Talo Community Health Center with 292 people and the Dermayu Community Health Center with 269 people (Seluma Regency Health Office, 2022).

Data from the Seluma District Health Service in 2021 shows that of the 22 existing Community Health Centers, it is known that the 3 highest order of visits for pregnant women is at the Pajar Bulan Community Health Center with 201 pregnant women, followed by the Cahaya Negeri Community Health Center with 197 pregnant women and the Gunung Kembang Community Health Center with 36 pregnant women, while in In 2022, it is known that the highest number will be at the Pajar Bulan Health Center with 198 pregnant women, followed by the Kembang Mumpo Health Center with 182 pregnant women and the Sukamerindu Health Center with 39 pregnant women (Seluma Regency Health Office, 2022).

Data obtained from the Pajar Bulan Health Center shows that in 2021 there were 93 visits from pregnant women, in 2022 there were 117 people and during the period from January to October 2023 there were 215 people (Pajar Bulan Health Center, 2023)

An initial survey conducted on 29-31 May 2023 on 10 respondents found that 7 of the respondents said they had never done pregnancy exercises because they didn't know or understand and didn't have time to do it and when asked about worries and anxieties during pregnancy, they said they had anxiety and were thinking about how and what they should do so that their pregnancy would be healthy and the delivery would be smooth, while 3 other respondents had done pregnancy exercises and felt the benefits for their physical recovery during the postpartum period and they said that during this pregnancy they did not feel too anxious again because this is the second and third time of pregnancy.

Considering the importance of the benefits of pregnancy exercise, researchers are interested in finding out more by conducting research entitled "The relationship between anxiety levels and pregnancy exercise with the sleep quality of pregnant women in

the third trimester in the Pajar Bulan Health Center Working Area, Seluma Regency in 2024".

RESEARCH METHODS

This research was conducted from 16 to 22 March 2024, at the Pajar Bulan Health Center, Seluma Regency. The design of this research is to use a cross sectional approach, the population is all third trimester pregnant women in the Pajar Bulan Community Health Center Working Area, Seluma Regency based on reports for the period June 2023, totaling 50 people. Sampling in this research used a total sampling technique, and data collection was carried out using primary data before the researcher conducted an informed consent with the respondent first. After the respondent agreed, the respondent filled out the questionnaire. The questionnaires filled out by respondents were processed univariately and bivariately.

RESEARCH RESULTS

Based on table 1, it is known that of the 50 TM III pregnant women, almost all 41 (82.0%) were aged 20-35 years, almost all 37 (74.0%) were primiparous, most of them 34 (68.0%) had secondary education, and most of 28 (56.0%) were working.

The research results Table 2 showed that of the 50 TM III pregnant women, almost 22 (44.0%) of them had good sleep quality. The good sleep quality of some pregnant women is influenced by the feeling of comfort and security they receive as a result of positive support from their husbands and the environment. From the questionnaire it is known that the form of quality sleep that TM III pregnant women get is that they can sleep up to 7 hours at night, can fall asleep quickly when they are in bed, they sleep from 8 pm and wake up at dawn and also feeling refreshed and satisfied when you wake up in the morning.

Table 1

Description of the Characteristics of Pregnant Women in the Third Trimester in the Working Area of the Pajar Bulan Health Center, Seluma Regency, 2024

Characteristics	Frekuensi (n)	Persentase (%)
Age		
< 2 years	4	8,0
20-35 years	41	82,0
> 35 years	5	10,0
Parity		
Primipara	37	74,0
Multipara	13	26,0

Multigrandepara Education	0	0
Base	3	6,0
Intermediate	34	68,0
High	13	26,0
Work		
Work	28	56,0
Doesn't work	22	44,0

Table 2

Description of the Sleep Quality of Pregnant Women in the Third Trimester in the Working Area of the Pajar Bulan Community Health Center, Seluma Tahin Regency 2024

Sleep Quality	Frekuensi (f)	Persentase (%)
Good	22	44,0
Bad	28	56,0

Research results were also obtained from 50 TM III pregnant women, mostly 28 (56.08%) mothers with poor quality. From the results of the questionnaire, it is known that the poor quality of sleep experienced by TM III pregnant women is that they complain that they often, even almost every night, wake up in the middle of the night, they also complain that it is difficult to start sleeping, which sometimes takes 30 minutes to 1 hour in a new bed. can fall asleep, urinate frequently at night and wake up due to increasingly active fetal movements. This condition of poor quality sleep makes pregnant women feel weak and unenthusiastic every day and even feel feverish and uncomfortable. This complaint, if it continues continuously, will affect the mother's health, especially the health of the unborn fetus.

If the need for sleep rest is not met, it will affect the health of the fetus. Pregnant women need around eight hours of sleep at night. Apart from that, pregnant women also need naps when they enter the second and third trimesters. The more complaints the mother experiences, the more it interferes with her rest at bedtime. The period that requires special attention is during the third trimester because this is the time when fetal growth and development increases drastically, causing pregnant women to find it difficult to sleep. An increase in the height of the arterial fundus accompanied by an enlarged stomach places the weight of the body more forward (Setiawati et al., 2022).

The causes of disturbed sleep patterns in Indonesian midwifery and nursing care diagnosis standards include environmental obstacles (for example environmental humidity, environmental

temperature, lighting, noise, unpleasant odors, monitoring/examination/action schedules), lack of sleep control, lack of privacy, physical restraint, lack of sleeping companions and unfamiliarity with sleeping equipment (Rosliana D, 2021).

Table 3
Description of the Anxiety Level of Pregnant Women in the Third Trimester in the Working Area of the Pajar Bulan Community Health Center, Seluma Tahin Regency 2024

Anxiety Of Pregnant Women	F	%
Worried	34	68,0
Not anxious	16	32,0

The research results showed that of the 50 TM III pregnant women, most of the 34 (68.0%) mothers were anxious. In TM III pregnant women who experience anxiety, it is known that this is caused by traumatic factors, namely trauma from previous pregnancy events which, according to the pregnant mother, leave an impression, making them worry and even afraid of going through the process. Another factor that causes many TM III pregnant women to experience moderate and mild anxiety is parity status where they are pregnant women who are undergoing pregnancy for the first time and will soon face the birth process. Another factor that contributes to increasing levels of anxiety in pregnant women is natural hormonal factors during pregnancy, where the production of the hormones cortisol and estrogen will indirectly increase and these hormones function to influence the body's response to stress both physiologically and psychologically.

Research results were also obtained from 50 TM III pregnant women, almost 16 (32.0%) of the mothers were not anxious. In this group, it is known that a small number of mothers do not experience anxiety which is supported by knowledge and experience of previous pregnancies as well as the pregnancy experiences of those closest to them so that with these provisions pregnant women are able to face the birth process that they will go through later as calmly and comfortably as possible.

Supported by the theory which states that anxiety is a feeling of fear that has no clear cause and is not supported by the existing situation. One source of stressor for women's anxiety is pregnancy. Anxiety in pregnant women can arise, especially in the third trimester of pregnancy until the time of delivery. Pregnant women feel anxious about various things, such as whether the baby is born normally or not, the pain that will be felt. Anxiety also has an

impact on the birthing process, especially in the third trimester, it can result in a decrease in birth weight and an increase in HHA (Hypothalamic Pituitary Adrenal) activity which can cause changes in steroid hormone production and damage to social behavior (Nurul H.B et al., 2023).

Factors associated with anxiety are age, parity, history of miscarriage, education, husband/social support, marital status, gestational age, positive history of mental illness, unplanned pregnancy, comorbid depression. However, age and parity are the main risk factors that can influence anxiety during pregnancy and facing childbirth (Ministry of Health of the Republic of Indonesia, 2022).

Table 4
Description of pregnancy exercise for pregnant women in the third trimester in the Pajar Bulan Health Center Working Area, Seluma Regency in 2024

Pregnancy Exercise	F	%
Dont exercise Pregnant	35	70,0
Pregnancy Exercise	15	30,0

The research results showed that of the 50 TM III pregnant women, the majority of 35 (70.0%) mothers did not exercise during pregnancy. From interviews with respondents, it was discovered that the reasons why TM III pregnant women did not do pregnancy exercise were because the distance between home and the place where the pregnancy exercise was carried out was quite far, so they were lazy to take part in pregnancy exercise activities. Another factor that influences TM III pregnant women not to do pregnancy exercises is the mother's lack of knowledge regarding the benefits of doing pregnancy exercises, therefore pregnant women are lazy to move and choose to just take a leisurely walk closer to the month of delivery. Apart from that, other influencing factors include a history of preterm or premature births and a history of premature rupture of membranes (KPD), which means that pregnant women are not advised to take part in pregnancy exercises by midwives.

Research results were also obtained from 50 TM III pregnant women, almost 15 (30.0%) of whom exercised pregnant. The reason why mothers do pregnancy exercises is that mothers are motivated to restore their body shape to the way it was before pregnancy, which is important so that they can still look attractive. Moreover, they have been given health education regarding the importance of postpartum postpartum exercises to help

psychological and physical organ recovery after giving birth, so that postpartum mothers become

more motivated to do postpartum postpartum exercises.

Table 5
Correlation of Anxiety Level with Sleep Quality of Pregnant Women in the Third Trimester in the Working Area of the Pajar Bulan Health Center, Seluma Regency, 2024

Anxiety Level	Kualitas Tidur				Total		C	P value
	Good		Baik		n	%		
	n	%	n	%				
Worried	10	45,5	24	85,7	34	68,0	0,394	0,006
Not anxious	12	54,5	4	14,3	16	32,0		

The research results showed that of the 50 TM III pregnant women, there were 34 mothers with a high level of anxiety, most of which were 10 (45.5%) mothers with good sleep quality. Even though they feel anxious, this group of pregnant women have good sleep quality. This is supported by the factor of better emotional control for pregnant women, some of them are currently undergoing their second, third or even fourth pregnancies, so because they have experienced this pregnancy, even though they are anxious, they can still get quality sleep.

Of the 34 mothers with high levels of anxiety, almost all 24 (85.7%) mothers had poor sleep quality. The feelings of anxiety experienced by pregnant women in this group are feelings of anxiety about the birth process they will undergo later, especially since this is the first pregnancy for some of them. This anxious response makes pregnant women think about whatever things they are afraid of, which has

an impact on their sleep patterns. Pregnant women find it difficult to fall asleep even though they have been lying in bed for a long time and when they fall asleep they cannot sleep soundly due to frequently waking up at night. This feeling of anxiety arises as a natural effect of the influence of the hormone cortisol produced during pregnancy, where this hormone will influence the body's response to stress, therefore if the production of this hormone increases then the mother will naturally experience anxiety.

According to researchers' assumptions, anxiety is quite related to sleep quality in TM III pregnant women. Feeling anxious, regardless of the cause, will certainly cause discomfort and make it difficult for pregnant women to sleep quickly and soundly. On the other hand, feeling calm and comfortable will provide relaxation to pregnant women and of course will enable mothers to sleep soundly without burdens on their minds.

Table 6
Relationship between Pregnancy Exercise and Sleep Quality of Pregnant Women in the Third Trimester in the Working Area of the Pajar Bulan Health Center, Seluma Regency, 2024

Sleep Quality	Sleep Quality				Total		C	P value
	Good		Bad		n	%		
	n	%	n	%				
Not Exercising	10	45,5	25	89,3	35	70,0	0,429	0,002
Exercise	12	54,5	3	10,7	15	30,0		

The results of the research showed that of the 50 TM III pregnant women, 35 of them did not exercise during pregnancy, a small number of which were 10 (20.0%) mothers with poor sleep quality. This group of mothers did not carry out pregnancy exercise because they did not know about the existence of this pregnancy exercise activity, some of them also reasoned that they did not like and were lazy to do physical activities such as exercise and would only take a leisurely walk around the house near the end of the day. delivery arrives. This poor

sleep quality is seen as a form of less relaxed body and mind in pregnant women in the third trimester, where physiologically the fetus is getting bigger and the stomach and breathing will feel increasingly tight, so that the mother will experience difficulty sleeping as a result of these complaints.

The results of the chi square test show that the value of The results of the Contingency Coefficient test obtained a value of C = 0.429 with p value = 0.001 < 0.05, meaning it is significant, the C value is compared with the Cmax value = = = 0.707

(the m value is the lowest value of the row or column). So the value of $C/C_{max} = 0.429/(0.707) = 0.606$, because this value is between 0.40-0.669, then the relationship closeness category is medium.

In line with the influence of pregnancy exercise on the quality of sleep in pregnant women in the second and third trimesters at the Kema North Minahasa Community Health Center, it was found that 16 pregnant women (100%) had difficulty sleeping when their pregnancy entered the second and third trimesters. The Wilcoxon test result is $p = 0.000$ which means $p < 0.05$, namely H_0 is accepted. The conclusion from the results of this study is that there is an influence of pregnancy exercise on the sleep quality of pregnant women in the second and third trimesters. Pregnancy exercise is carried out 6 times in 21 days with 2 meetings a week every Monday and Saturday (Mongi, 2022).

Supported by research on the analysis of dominant factors that influence the sleep quality of pregnant women in the third trimester at the Pratama Asih Waliyo Jati Clinic, it is known that the p value is 0.009 ($\alpha = 0.05$), which means that there is a significant relationship between pregnancy exercise factors and the sleep quality of pregnant women third trimester (Palifiana, 2021).

According to researchers' assumptions, if pregnancy exercise is done with appropriate and correct movements and done regularly, it will have a relaxing effect on the body. This relaxing effect will help mothers feel comfortable during the rest of their sleep that pregnant women experience. Therefore, midwives are increasingly encouraging classes for pregnant women which include pregnancy exercise activities.

During the research process, there were no significant obstacles encountered by the researcher, only that the researcher had to visit the respondents directly at their homes if they did not come to the Community Health Center in order to fulfill the desired sample. Moreover, if the researcher meets in person, the researcher can collect all the desired data according to the research plan that has been designed.

CONCLUSION

There is a relationship between anxiety levels and the sleep quality of third trimester pregnant women in the Pajar Bulan Community Health Center Working Area, Seluma Regency, with p value = 0.006. There is a relationship between pregnancy exercise and the sleep quality of pregnant women in the third trimester in the Pajar Bulan Health Center Working Area, Seluma Regency, with p value = 0.002.

SUGGESTION

The results of this research should be a reference for Pajar Bulan Community Health Center officers, especially for the KIA program, to increase education for TM III pregnant women regarding various matters regarding pregnancy and preparation for childbirth by involving their husbands or those closest to them

REFERENCES

- Afrianti, D., Astuti, W. W., & Satra Yunola. (2022). *Buku Ajar Asuhan Kehamilan S1 Kebidanan*. Mahakarya Citra Utama.
- Apphrodita, P. (2021). *Hubungan Tingkat Kecemasan Dengan Kualitas Tidur Pada Ibu Hamil Primigravida Trimester III di RS. Aura Syifa Kediri*. Universitas Brawijaya. <http://repository.pkr.ac.id/1748/19/19>. JURNAL.pdf
- Dewi, N., Hardiningsih, Agraeni, S., & Astika, F. (2021). *Bahan Ajar Asuhan Kebidanan Kehamilan*. CV. Jejak (Jejak Publisher).
- Dinkes Kabupaten Seluma. (2022). *Data Kunjungan Ibu Hamil Tahunan Kabupaten Seluma*. Pusdata.
- Dinkes Provinsi Bengkulu. (2022). *Profil Kesehatan Provinsi Bengkulu*. Pusdata.
- Endang Y. (2021). *Buku Ajar Kebutuhan Dasar Manusia*. CV. Rena Cipta Mandiri.
- Fitriani, L., Firawati, & Raehan. (2021). *Buku Ajar Kehamilan; Psikologi Kehamilan*. Deepublish.
- Galaupa, R., Fadillah, A. N., Karomah, I., Hernawati, L., & Tri Wahyuningsih. (2022). *Buku Saku Senam Hamil*. Penerbit NEM.
- Herdiani, T. N., Simatupang, A. U., Studi, P., Stikes, K., Mandiri, T., & Bengkulu, S. (2019). *Pengaruh Senam Hamil terhadap Kualitas Tidur Ibu Hamil Trimester III di Wilayah Kerja Puskesmas Ratu Agung Kota Bengkulu*. *Journal for Quality in Women's Health* |, 2(1), 26–35. <https://doi.org/10.30994/jqwh.v2i1.23>
- Idaningsih, A., I, I., & Wahyu, Y. (2020). *Psikologi Kebidanan*. CV. Ru.
- Kemendes RI. (2022). *Profil Kesehatan Indonesia 2021*. In [Pusdatin.Kemendes.Go.Id](http://pusdatin.kemendes.go.id).
- Kusumawati, W., Jayanti, Y. D., & Fundi Khrisna. (2019). *Bugar Dengan Senam Hamil*. Zifatama Jawara.
- Kusumawati, Y., Dewi, F. S. tetra, & Widuyawati. (2020). *Buku Panduan Kesehatan Mental Ibu Hamil*. UGM Press.
- Legawati. (2022). *Asuhan Persalinan dan Bayi Baru Lahir*. Winneka Media.

- Mardhiyah, H., Yanti, & Yan Sartika. (2021). Hubungan Tingkat Kecemasan Dengan Kualitas Tidur Pada Ibu Hamil Primigravida Trimester III Di Klinik Pratama Afiyah Pekanbaru. <http://repository.pkr.ac.id/1748/19/19.JURNAL.pdf>
- Mongi, T. (2022). Pengaruh senam hamil terhadap kualitas tidur pada ibu hamil trimester II dan III di Puskesmas Kema Minahasa Utara. *J Kedokt Kom Tropik*. 2022;10(2):441-448 *, 10(2), 441–448.
- Munir, R., Kusmiati, M., Zakiah, L., Lestari, F., & Anisa Fitri. (2023). Buku Ajar Asuhan Kebidanan Kehamilan. Penerbit Lakeisha.
- Notoatmodjo. (2020). Pendidikan dan Ilmu Perilaku Kesehatan. Rineka Putra.
- Puskesmas Pajar Bulan. (2023). Data Kunjungan Tahunan Ibu Hamil Di Puskesmas Pajar Bulan Seluma. Pusdata.
- Rahayu, D. T., & Hastuti, N. H. (2020). Pengaruh Keteraturan Senam Hamil terhadap Kualitas Tidur pada Ibu Hamil Trimester III di Desa Gedangsewupare Kediri. *Jurnal Kebidanan Midwiferia*, 34. <https://doi.org/10.21070/mid.v4i2.2052>
- Rahmasita, S. A., Mahardika, A., & Jumsa, M. R. (2021). Pengaruh Tingkat Kecemasan Terhadap Kualitas Tidur Ibu Hamil Trimester III di Puskesmas Tanjung Karang Mataram. *Smart Society Empowerment Journal*, 1(3), 81. <https://doi.org/10.20961/ssej.v1i3.56071>
- Rhomadona, Hidayah, A., Widayanti, W., Kusumastuti, & Evy Ernawati. (2023). Buku Ajar Asuhan Kebidanan Komplementer Pada Ibu Nifas. CV. Mahakarya Citra Utama.
- Riadinni, A. (2020). Hubungan Senam Hamil Dengan Rasa Nyaman Tidur. *Jurnal Keperawatan Widya Gantari Indonesia*, 4(1), 1–8.
- Roslina D. (2021). Teknik Relaksasi Lima Jari Terhadap Kualitas Tidur Pasien. CV. Budi Utama.
- Rusmita E. (2022). Senam Ibu Hamil Terhadap Kesiapan Fisik dan Psikologis Dalam Menghadapi Persalinan. CV. Azka Pustaka.
- Sabatina, E. C. (2021). Tingkat Kecemasan Berhubungan dengan Kualitas Tidur Ibu Hamil Trimester III. *Jurnal Kebidanan Malakbi*, 2(2), 52. <https://doi.org/10.33490/b.v2i2.459>
- Setiawati, Retnosari, E., & Nila Clarasari Mahalia Putri. (2022). Buku Ajar Konsep Holistik Massage. CV. Literasi Nusantara Abadi.
- Tanjung, M. . (2019). Ilmu Kebidanan Fisiologi. EGC.
- Wawan K, & A, A. (2021). Metodolog Penelitian Kesehatan dan Keperawatan. CV. Rumah Pustaka.
- Yanti, E. M., & Wirastri C. (2021). Kecemasan Ibu Hamil Trimester III. Penerbit NEM.
- Yusnidar, & Isriani S. (2020). Buku Ajar Psikologi Kebidanan. LPPI Palopo.