
Original Articles**Deep Relaxation Techniques to Reduce Middle-Level Anxiety in The First Gestational Mother in The Taking-In Phase**Faiqotul Amalia ^{1*}, Ridhoyanti Hidayah ¹¹Departement of Nursing, Faculty of Health Sciences, University of Brawijaya**Article history:**

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amalia.faiqatul181098@gmail.com**Keywords:***Anxiety; Deep Breathing
Relaxation; First Gestational***Page Number:** 60-69**Abstract****Background:** The postpartum period begins when the placenta is born and ends when the uterus returns to its normal state. During the postpartum period, physiological and psychological adaptations occur in the mother. One of the psychological conditions that can appear in postpartum mothers is anxiety. The process of pregnancy, childbirth, and the puerperium may cause anxiety, especially in primiparous mothers. Anxiety not treated immediately can lead to postpartum depression or baby blues syndrome.**Objective:** This research aims to apply nursing care, including assessment, diagnosis, intervention based on evidence-based practice, implementation, and evaluation of nursing**Methods:** The research method used interviews with patients and families and nurses' direct observations in the Visual Analog Scale for Anxiety (VAS-A) to measure anxiety levels. This research design was a case study with primiparous postpartum mothers who were given nursing intervention.**Results:** The patient experienced nursing problems of moderate level of anxiety, postpartum pain, knowledge deficit, and risk of infection. The primary intervention given to the patient is to provide non-pharmacological therapy using deep breathing relaxation techniques to reduce the patient's level of anxiety.**Conclusion:** Based on the results of nursing interventions given, it is explained that there is a decrease in the level of anxiety in patients. Thus, the patient's treatment plan was stopped and continued with self-care at home according to the recommendations given.**INTRODUCTION**

The incidence of postpartum maternal anxiety is still high in various countries such as Portugal (18.2%), Bangladesh (29%), Hong Kong (54%), and Pakistan (70%) (Agustin and Septiyana, 2018), while in Indonesia who experience anxiety by (28.7%). The level of anxiety that occurs in primiparous mothers reaches 83.4% for severe anxiety and 16.6% for moderate anxiety. Meanwhile, the incidence of anxiety in multiparous mothers reached 7% for severe anxiety, 71.5% for moderate anxiety and 21.5% for mild anxiety (Istiqomah, 2021).

The postpartum period begins when the placenta is born and ends when the uterus returns to its normal state. During the postpartum period, physiological and psychological adaptations occur in the mother. However, not all mothers can pass this phase well (Istiqomah, 2021). Psychological disorders that can appear in postpartum mothers such as anxiety and stress.

The process of pregnancy, childbirth, and the puerperium may cause anxiety, especially in primiparous mothers. A primiparous mother who experienced childbirth for the first time tended to experience higher anxiety compared to multiparous mothers (Nurbaeti et al., 2013). This is because caring for a newborn is something new that will be experienced. If not addressed immediately, anxiety can cause postpartum depression or baby blues syndrome (Rahmawati and Santoso, 2021).

In this process, the mother will experience several changes in herself. One of them is a change in mood, the mother will turn out to be sensitive to psychological stimuli, so it has the potential to cause psychological problems, one of which is anxiety (Liu and Yang, 2021). This anxiety can occur during pregnancy, childbirth, and the puerperium, especially in primiparous mothers.

In addition, pregnancy and childbirth in mothers who are too young or in their teens have several risks. Risks usually arise because they are not ready physically or psychologically. Psychologically, adolescents are generally not ready to carry out their role as mothers, so that will arise such as mental tension and confusion about the changing social roles of a teenage girl then becoming pregnant and becoming a mother (Yunita, Mahpolah and Wulandari, 2013).

Nursing problems that can arise in maternal postpartum conditions include 1. acute pain related to uterine contractions, episiotomy, lacerations, and breast swelling; 2. anxiety related to situational crises; 3. knowledge deficit related to the inability to care for the baby; 4. urinary elimination disorders related to urinary retention due to labour of oedema; 5. Sleep patterns disorders associated with postpartum conditions; and 6. the risk of infection is evidenced by invasive procedures (SDKI, 2018).

Based on these problems, the role of nurses is very important in providing nursing care to patients with psychological problems in young primiparous mothers. Nursing care holistically and based on evidence-based practice is expected to improve the quality of health and patient independence in managing their health and prevent the emergence of advanced health problems in young primiparous mothers.

METHODS

Study Design

The study design was descriptive study with case study approach.

Settings

The research was conducted at Dau Health Center starting November 17, 2021.

Research subject

The research subject in this study was one of the postpartum patients being treated at Dau Health Center.

Instruments

The instrument used in data collection for this case study was the maternity nursing assessment format for postpartum conditions.

Data collection

Data was collected by interviewing and observing patients and their families. Patients are given nursing interventions for 1x24 hours starting November 17, 2021. After the intervention for one day, the achievement of the outcome criteria set in the nursing care plan is evaluated to determine whether the nursing problem is fully resolved, partially, or not resolved so that nurse can determine further interventions for patient care.

Data Analysis

The data analysis carried out in this study was in the form of describing the results of implementing nursing actions in the form of deep relaxation techniques in reducing middle-level anxiety.

Ethical Consideration

The implementation of this research has received approval from the head of the Dau Health Center.

RESULTS***Case Study***

Mrs. F, 17 years old, came to the IGD dau health center on november 17, 2021, at 16.00 wib, complaining of a tight stomach and more frequent and stronger contractions. Mrs. F performed per-vaginal delivery with a gestational age of 40-41 weeks and a routine antenatal examination history. When delivering the baby, the client could not push firmly and correctly, so the labor process took longer. The duration of labor from the complete opening (21.00 west indonesian time (wit) until the baby is born 22.45 wit) is one hour and 45 minutes.

At fifteen to eleven at night, the baby was born without spontaneous crying because it was too long or around 45 minutes in the birth canal. After the baby was dried, the umbilical cord was clamped and cut, the baby's face was cleaned, and the immediately given resuscitation with tactile stimulation on the baby's feet and rubbing on the back. The baby immediately cried loudly and got newborn care by nurses.

The mother's vital signs were blood pressure 140/90mmHg, pulse 100x/minute, axilla temperature 36.4°C, respiratory rate 28x/minute, body weight 53 kg, body length 147 cm, upper arm circumference 25 cm. After the delivery process is complete, the mother looks anxious and confused about how to take care of the baby at home. Because the mother had her first birth, she also had no experience caring for babies. The mother also complained of perineal pain due to a grade 1 perineal rupture.

The anxiety level assessment conducted on Mrs. F included several aspects. The first psychological assessment obtained data that the mother looked worried and confused. Second, the physiological assessment found that the mother looked tense and spoke faster. Third, the assessment of behavior and emotions obtained data that the mother looked anxious, and the visual analog scale for anxiety (vas-a) was 4 points. From the results of the vas-a assessment, it can be concluded that the mother was at a mild-moderate level of anxiety.

DISCUSSION

Assessment Analysis

Nursing assessment is the systematic and ongoing collection and analysis of information about the client. It collects data to obtain essential facts about each patient's condition. The nursing assessment aims to obtain primary data regarding patient needs for care and treatment, health problems experienced by patients, and patient responses to current problems (Ballsy, c.a et al, 2021).

After examining the patient, it was found that Mrs. F., 17 years old female with g0p1a0 obstetric status, currently, the patient is in the postpartum phase with the mother experiencing anxiety. History of routine antenatal care examination, history of the age of menarche at 12 years old, menstrual period 5-6 days, regular menstrual cycle, and no complaints during menstruation. On the results of the physical examination, the vital signs include; blood pressure 140/90mmhg, pulse 100x/minute, axilla temperature 36.4°C, respiratory rate 28x/minute, body weight 53 kg, body length 147 cm, upper arm circumference 25 cm.

Based on the study's results, it was found that the patient data of Mrs. F is 17 years old, and that age is classified as a teenager. Alfya Lailatul Istiqomah (2021) explained that age during pregnancy affects a mother's ability to accept responsibilities (Istiqomah, Viandika and Khoirun Nisa, 2021). This is in line with the results; pregnancy at an immature age can cause fear during pregnancy and childbirth, as well as during puerperium, due to the immaturity of the reproductive organs and not being ready to become a mother.

In addition, age can also affect a person's level of knowledge in obtaining information. This study supports previous research by Vilanda Diah Ayu Safitri (2020). Age is one factor that influences the increase of one's knowledge, especially in knowledge about daily baby care (Safitri et al., 2020). Therefore, age greatly affects a woman's readiness to obtain information and care for her baby when she becomes a mother.

In the results of the patient's emotional assessment, it was found that the patient said he was worried about his first birth because he was confused about how to take care of the baby at home. This is in line with research conducted by Syahrianti (2020). Anxiety disorders often occur during

pregnancy and the postpartum period. Parents' anxiety in the process of child care, especially in the early days of the baby's birth, is because mothers have to adapt to new situations that are different from previous habits (Syahrianti et al., 2020).

In addition, parity is also one factor affecting the anxiety level experienced by postpartum mothers. Parity is the number of babies born alive by a woman (Rahmaningtyas et al., 2019). The study found that postpartum mothers with primiparous status, namely mothers who gave birth to live babies for the first time, tended to experience higher anxiety compared to multiparous mothers, namely mothers who gave birth to live babies several times.

Nursing Diagnosis Analysis

Nursing diagnoses are conducted by analyzing data to determine actual or potential problems that can occur according to the patient's condition (Ballsy, c.a, 2021). Based on the results of the study, Mrs. F on November 17, 2021, at the Dau health center, Malang Regency, four nursing diagnoses were obtained, this is:

1. Anxiety (d.0080) related to situational crisis proved by patient complains of worry and looks worried about the current condition.

From the results of the study above, data were obtained according to the signs and symptoms of the diagnosis of anxiety, including the patient feeling confused and worried, the patient looked restless, where the respiratory rate increased (rr = 28x/minute), and the patient's face looked pale.

2. Postpartum pain (d.0077) related to physical injury agents as evidenced by the patient complaining of pain and grimacing, the presence of perineal rupture.

From this study, data were obtained according to the signs and symptoms of pain diagnosis, including the patient complaining of pain in the perineal area and the patient grimacing.

3. Knowledge deficit about self and infant care (d.0111) as evidenced by the lack of exposure to information evidenced by the patient asking about the problems they are facing.

From this study, data were obtained according to the signs and symptoms of the diagnosis of a knowledge deficit, including the patient asking how to do self-care at home and the patient looking restless.

4. Risk of infection (d.0142) proved by damage to tissue integrity (perineal rupture) grade 1.

From this study, it was found that risk factors that can cause infection include post hecting of the perineum, so good and correct wound care is needed to prevent infection in the wound area (IDHS, 2018).

Nursing Intervention Analysis

Planning the main nursing care that will be carried out on Mrs. F with anxiety nursing problems related to situational crises as evidenced by the patient complaining of anxiety and feeling worried about the current condition. The author sets a goal after nursing interventions are carried out for 1x24 hours, it is expected that the patient's anxiety level will decrease according to the criteria for decreased confusion, verbalization of worry due to the condition being faced decreases, anxiety behavior decreases, and tense behavior decreases (SLKI, 2018).

Anxiety nursing intervention plans related to situational crises include: identifying relaxation techniques that have been effectively used, identifying willingness, ability and use of previous techniques, creating a calm environment, using relaxation as a strategy to support other medical actions, teaching deep breathing relaxation techniques to reduce anxiety, demonstrate and practice deep breathing relaxation techniques, and encourage patients to repeat or practice deep breathing relaxation techniques (SIKI, 2018).

The main intervention to deal with anxiety nursing problems in patients is by providing non-pharmacological therapy using deep breathing relaxation techniques to reduce anxiety levels in patients. This is in line with the research by Ike Mardiaty Agustin (2018), which explained how to overcome and control the anxiety experienced by clients by conducting an anxiety implementation strategy such as deep breathing relaxation techniques. This technique CAN REDUCE THE CLIENT'S ANXIETY LEVEL, and the patient is more relaxed (Nurbaiti et al., 2022). In addition to an anxiety implementation strategy, nursing actions: health education is also conducted (Agustin and Septiyana, 2018).

Deep breathing relaxation therapy is used to treat anxiety in patients by providing additional coping in dealing with postpartum emotional conditions. This needs to be done so that the patient is not at an advanced stage which can cause the patient to experience the postpartum blues. With this therapy, it is hoped that it can improve nursing problems: anxiety in patients and improve the patient's quality of life.

Nursing Implementation Analysis

Nursing implementation conducted in Mrs. F includes identifying relaxation techniques that have been effectively used, creating a calm and uninterrupted environment with comfortable lighting and room temperature, and explaining to patients how to carry out deep breathing relaxation therapy (goals, benefits, limitations, and types of deep breathing relaxation), providing appropriate positions for relaxation. Make the patient comfortable, encourage patients to relax and feel the sensation of relaxation, teach deep breathing relaxation techniques to patients to reduce anxiety levels, repeat and practice relaxation techniques, perform demonstrations and deep breathing relaxation exercises as taught. The main action to deal with nursing problems: anxiety in patients is to provide non-pharmacological therapy using deep breathing relaxation techniques to reduce anxiety levels in patients.

The deep breathing relaxation technique is one of the efforts that can reduce the level of anxiety. This study's results align with research by Henik Istikhomah (2017). Treating with deep breathing techniques greatly decreases anxiety levels after being treated for 15 minutes (Istikhomah and Murwati, 2017). Relaxation is an action to reduce muscle tension so as not to cause anxiety by resting or relaxing the muscles of the body.

Deep breathing relaxation techniques can stimulate the body to release the hormone serotonin. This hormone plays an important role in regulating and controlling mood, sleep, anxiety, sexuality, and appetite. A relaxed brain will stimulate the body to produce these hormones to change moods and reduce anxiety levels in a person.

This mechanism and regularity in breathing can relax the mind and body. In addition, the deep breathing relaxation technique is an exercise that is easy to apply and can also be done independently and continuously at home if anxiety arises again.

So that the implementation of nursing in Mrs. F has been conducted based on evidence-based practice in overcoming nursing problems: anxiety by providing intervention for 1x24 hours, it is expected that nursing problems will be fully resolved in accordance with the outcome criteria.

Nursing Evaluation Analysis

Evaluation is the final stage of nursing care by assessing the results and processes in implementing nursing care that has been provided (Ballsy, C.A et al., 2021). At this stage, the nurse will write down the patient's response to the nursing action given to the patient and evaluate the effectiveness of the nursing action. The evaluation was conducted on Mrs. F in accordance with the implementation results given for 1x24 hours. The evaluation results on nursing problems: anxiety was resolved after nursing actions were conducted for 1x24 hours. Mrs. F said he was more relaxed than before and understood how to properly do deep breathing relaxation techniques. The follow-up plan for nursing interventions is to encourage the patient to repeat the deep breathing relaxation technique until he feels calm.

LIMITATION

There is no limitation.

CONCLUSION

Based on the results and discussion above, it can be concluded that the nursing problem: postpartum pain was partially resolved, and anxiety and knowledge deficit were partially resolved. This is evidenced by the criteria for postpartum pain results, which show pain complaints decreased

from a scale of 6 to a scale of 4 and non-verbal responses in the form of grimacing in patients decreased. On the criteria for anxiety, results showed verbalization of confusion, feelings of worry, agitated behavior, and decreased tension, marked by the patient looking more relaxed, and calm than before the nursing intervention was given. Meanwhile, the criteria for the knowledge deficit result showed that knowledge about a topic increased, indicated by the mother having understood the education that had been given and being able to apply the correct breastfeeding technique. Based on the intervention results for 1x24 hours for all nursing problems, the authors conclude that the patient's condition has improved compared to the previous condition. Thus, the patient's treatment plan is stopped, and continued self-care at home according to the recommendations.

AUTHOR CONTRIBUTION

Faiqotul Amalia: Conceptualization, methodology, writing-review and editing, writing-original draft supervision, visualization, and project administration.

Ridhoyanti Hidayah: Software, validation, formal analysis, investigation, resources, data duration and funding acquisition.

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CONFLICT OF INTEREST

There is no conflict of interest this research.

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