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Heca Journal of Applied Sciences

Vol. 2, No. 2, 2024

The Emotional Journey: An Exploration of Women's Pre-Birth Anxieties

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Article History

Received 14 April 2024
Revised 10 June 2024
Accepted 19 June 2024
Available Online 25 June 2024

Keywords:
Anxiety
Fear
Multigravida
Prenatal
Exploratory study

Abstract

Pregnancy is an important period in a woman's life, but it is often accompanied by worries and fears that cause birth anxiety. Anxiety generally varies in intensity from mild to severe. Anxiety has a negative impact on the health of the mother and fetus, and it causes many women to refuse to give birth naturally. This study aims to explore the psychological and emotional dimensions of pregnant mothers' levels of anxiety toward childbirth, identifying the various concerns and factors that cause anxiety. The research design was non-experimental exploratory descriptive, conducted from May to June 2022. Respondents consist of multigravida women with a gestational age of 36–40 weeks (third trimester). The sample was chosen using purposive sampling. The data collection process uses a questionnaire in the form of semi-structured questions. The level of anxiety for multigravida women is moderate anxiety (36.0%), severe anxiety (32.0%), mild anxiety (24.0%), and 4.0% each with severe anxiety and not anxiety. The aspects found are generally feared to have a cesarean delivery (28.0%) and worry about the baby's condition (20.0%). Factors that cause anxiety are generally the condition of the baby (24.0%), illness suffered by the mother (12.0%), and negative experiences about childbirth (12.0%). Multigravida women generally experience various anxieties during labor, which are caused by various factors that influence them. There are aspects of anxiety that are different from previous studies. Screening for anxiety symptoms and education during the antenatal period are necessary.

1. Introduction

Pregnancy is an important period in a woman's life [1]. During this period, various changes will occur, both physical, emotional, physiological, biochemical, and immunological [2, 3]. The process can cause anxiety in some women. Anxiety about pregnancy and childbirth can include a variety of fears and concerns. This phenomenon generally varies in intensity from mild to severe [4]. According to research in 34 countries, the average prevalence of anxiety during pregnancy was 18.2% (1st trimester), 19.1% (2nd trimester), and increased to 24.6% in the 3rd trimester [5].

Previous research has identified several factors that influence the rate of prenatal anxiety in women, such as

the age of the mother, poor education, knowledge about childbirth [5–7], social support from husbands and families, concerns about fetal complications and abnormalities [8, 9], mother's health condition, choice of place of delivery, and experience of painful births [10, 11].

In this context, it is important to understand that anxiety during pregnancy has a negative impact on the health of mother and child, with potential long-term health implications such as behavioral developmental disorders and physical growth in children throughout their lives; [12–14]. Anxiety also has a negative impact on the duration of delivery (delayed delivery), increased use of epidural analgesia, bleeding, and the shift of birth plans from home to hospital [8]. Another study found that 24% of pregnant women who experience anxiety are at risk of increasing the severity of pain and decreasing pain tolerance [15]. As a result of the anxiety, the mother refused to give birth normally [16, 17].

Therefore, early identification of anxiety during pregnancy is needed, and effective intervention by healthcare providers is developed to increase knowledge of birth preparation for zero-parents and create a positive birth experience for multiparous [2, 8, 18] by providing full support to women to express and integrate their feelings, experiences, and expectations, as well as regaining confidence in health care providers [19].

Despite some literature on anxiety measures in childbirth, measurements with the "Faces Anxiety Scale (FAS)" by McKinley et al. [20] are still rarely used. Researchers generally use written questionnaire-based measuring tools. Unfortunately, it is estimated that two-thirds of patients have difficulty reading written questionnaires [21, 22].

FAS is a scale consisting of one item with five possible responses, ranging from neutral faces to faces showing extreme fear (Figure 1) [20]. Human faces are said to be able to express a variety of emotional expressions, such as joy, anger, and anxiety. These faces were depicted by a graphic artist expressing fear, accompanied by detailed explanations of the changes in facial muscles that occurred as the intensity of fear increased [23]. Jones et al. found that the face scale measurement properties were sufficient in terms of validity of content, construction, and criteria. This scale is suggested for use in non-diagnostic emergency monitoring to support treatment [22].

However, the application of the FAS scale to pregnant and nursing women is still limited and not widely documented [21, 22]. Surucu et al. recently conducted a study to measure the influence of music on childbirth anxiety using the FAS and State-Trait Anxiety Inventory (STAI). The experiment involved playing Acemasiran mode (traditional Turkish music) for 3 hours (20 minutes listening, 10 minutes breaks) for the experimental group. The level of anxiety was assessed 30 minutes after the music session using the STAI and FAS scales. The results indicated minimal differences that the anxiousness decreased in STAI scale groups, and although no significant difference was found with the FAS, there was a decreasing tendency in the experimental group [24].

This study tries to use the FAS scale to identify the level of anxiety of pregnant mothers because it is easier, faster and does not require cognitive abilities or the ability to concentrate on expressing their fears. Research has found that a variety of depressed feelings that women experience during pregnancy hinder disclosure of information [21, 22]

The study aims to explore the psychological and emotional dimensions of pregnant mothers' levels of anxiety toward childbirth, identifying the various concerns and factors that cause anxiety. Some literature mentions that pregnancy-related anxiety is multidimensional, and the important aspects of what is concerned appear to be different [22]. Therefore, it is important to do emergency identification during perinatal. All this time, screening for anxiety during pregnancy is limited and still underestimated, never even done [4, 25, 26]. One study mentioned that some pregnant women are at risk of developing mental disorders because the symptoms are not diagnosed if they don't pass it on themselves [4]. Currently, there is little research exploring women's views on the various pre-birth concerns [12, 26]. It is important to develop methods to identify a variety of women's anxieties during pregnancy and ahead of delivery so that more effective interventions can be developed to reduce the negative impact on mothers and babies.

2. Materials and Methods

2.1. Research Design

This study employs a quantitative, non-experimental, explorative descriptive design. This method was chosen because it was designed to describe phenomena in a descriptive way without manipulating variables (experiments) [27, 28]. The research was conducted from May to June 2022. The respondents were pregnant mothers aged 36–40 weeks (trimester III) who visited a health facility and had given birth. Sample selection is the purposeful sampling of 25 people. The sampling technique is quota-sampled, taking into account pre-determined criteria, considering the level of homogeneity, time constraints, and the limitation of the number of subjects visiting the research site.

Figure 1. Face Anxiety Scale by McKinley [20].

2.2. Sampling Procedure

Earlier, the researchers asked for permission, then informed the respondents about the purposes, mechanisms, and methods of the research and asked permission to record the interview process with audio. Data confidentiality is guaranteed, and research subjects are given full autonomy to withdraw from research at any time.

2.3. Data Collection

The data collection process was conducted with a face-to-face interview lasting an average of 10–15 minutes and guided by a series of semi-structured questions developed by researchers. The main objective of this interview is to identify and analyze various factors in situations that may play an important role in a wider area of the problem [28]. The interviewer has the freedom to ask additional questions that are relevant based on the respondent's responses. The interviews are conducted in person by the researchers face-to-face so that the interviewer can see the respondent's verbal expression in expressing his feelings. In the process of collecting data, the researchers used a tape recorder, a camera, and notebook aids.

The interview guide contains four categories, namely questions about characteristics of respondents such as latest education, employment, pregnancy, history of previous births, and birth plans (Table 1). Next, ask questions about anxiety levels based on the FAS scale. Furthermore, open questions reveal the concerned aspects (and the factors that contribute to the cause of anxiousness. The original tool has been to have good reliability and validity [29, 30].

2.4. Face Anxiety Scale

To determine the level of anxiety, researchers used McKinley's Face Anxiety Scale. Ekman and his colleagues have shown that facial muscle patterns can detect emotions reliably and distinguish between emotions, such as anger versus fear [20, 23]. The FAS consists of five facial selection expressions drawn by a graphic design artist who guides a variety of facial photos expressing changes in facial muscles to fear in detail. The face picture was printed on an 11 x 42 cm delaminating card and then presented to the respondent, and the patient was asked to choose one that showed how much anxiety he felt [20]. Formal permission has not been obtained by email. Figure 1a means no anxiety, Figure 1b is mild anxiety, Figure 1c is moderate anxiety, Figure 1d is severe anxiety, and Figure 1e is panic (Table 2).

2.5. Data Analysis

The interview result data is processed and entered into the master table and analyzed descriptively with SPSS version 22. For open questions, first, specify the code for each answer based on the category that has been created so that it becomes categorical data, then analyze the descriptive data. Catalog data is presented in the form of numbers and percentages, while numerical data is in the format of averages and standard deviations.

2.6. Ethical Consideration

Written consent was obtained from the subject of the research. They were given information about the purpose of the research, the duration of the involvement, and the use of the results. The data is kept confidential, and the research subject can resign at any time. Data was collected face-to-face.

3. Results and Discussion

3.1. Characteristics of Respondents

Table 1 shows that 92.0% of multigravid women have 2-4 pregnancies, and 8.0% have more than four pregnancies. Overall, 48.0% of respondents are highly educated and 72.0% are household mothers. This is in line with the results of the Long Form Population Census for 2020. The average fertility rate is 2.18, the number of children is two, and the average level of education is secondary education at 31.74% [31].

Similar research conducted in Indonesia found that most respondents had completed Higher Secondary School and were not employed [6]. Additionally, 20% of women planned to give birth via cesarean section. This finding is consistent with data from Basic Health Research [32], which indicates that the proportion of births via cesarean section in Indonesia is 15.3%, exceeding the World Health Organization's (WHO) recommended range of 5-15% [33].

3.2. Anxiety Level

Table 2 shows that the majority of multigravida women experienced moderate anxiety (36.0%), 32.0% experienced severe anxiety, 24.0% experienced mild anxiety, and 4.0% each experienced severe/panic and said they were not anxious, with an average score and standard deviation of 3.08+0.954.

Fears and anxieties here can be categorized as secondary, that is, those that arise after a traumatic or

Table 1. Characteristics of respondents (n=25).

Characteristics of Respondents	Features (Percentage)
Pregnancy to:	
• Multigravida (to 2-4)	23 (92.0%)
• Grande Multigravida (>5)	2 (8.0%)
Birth history:	
• Normal	23 (92.0%)
• Cesarean section	1 (4.0%)
• Abortus	1 (4.0%)
Birth plan:	
• Normal	20 (80.0%)
• Cesarean section	5 (20.0%)
Educational level:	
• Elementary school/junior high school	5 (20.0%)
• Senior High School	8 (32.0%)
• College	12 (48.0%)
Work:	
• Housewife	18 (72.0%)
• Teachers and government employees	2 (8.0%)
• Honorary and private employees	5 (20.0%)

Table 2. Anxiety level based on the Face Anxiety scale (n=25).

Anxiety level	Features (Percentage)	Mean ± SD
Not anxious (1)	1 (4.0%)	
Mild anxiety (2)	6 (24.0%)	
Moderate anxiety (3)	9 (36.0%)	3.08 ± 0.954
Severe anxiety (4)	8 (32.0%)	
Severe/panic (5)	1 (4.0%)	

sad experience of childbirth, whereas the primary concerns arise before birth. The results of this study are similar to previous studies in that 37.5%-47.0% of pregnant mothers experienced anxiety during pregnancy, 5–34% of them during prenatal, 16% during gestation, and 13.9% after childbirth [4]. Anxiety prevalence in Indonesia was around 28.7%; 53.3% of them experienced anxious birth [6].

Higher anxiety was found in primigravida women compared to multigravida [34]. This may be because they are afraid of the unknown, lack experience, and uncertainty about the delivery process. Women with multigravida have the knowledge and experience of previous pregnancies, which can help them feel more prepared and confident [7]. The study's results are shown in Figure 2.

3.3. Aspects of Multigravida Anxiety Before Childbirth

The following is an open question that allows students to express their feelings about what aspects are concerned and feared. The question allows students to express fear and the factors that influence it.

Table 3 shows that there are various expressions of women's concerns and fears in the face of childbirth, such as fear of having to give birth with a cesarean section (28.0%), concern about the condition of the baby (20.0%), fear of not being able to catch up (8.0%), fear of being hospitalized and undergoing procedures in the maternity room (8.0%), fear of experiencing birth pain (8.0%), and concern for the safety of herself and her baby (8.0%). They also fear bleeding and rupture of the birth pathway (4.0%), fears of having complications such as previous births (4.0%), and the threat of high-risk delivery (4.0%). Fear of not getting ready for the baby because of an unplanned pregnancy (4.0%) and 4.0% say they are not afraid of this birth. To be clearer, this can be seen in Figure 2.

Other studies have also revealed similar things, such as fear of harm to the baby, fear of not being able to cope with pain, fear of endangering herself during the delivery process, fear of unknown causes of childbirth, fear about loss of internal control [30], fear of incompetence to give birth, or fear of unbearable pain during childbirth [29], women's fear of traumatic birth experiences, and stress associated with child-care [5].

One study found that pregnant women feared not having a voice in decision-making. They are not involved during childbirth, are not listened to, and are not informed in decision-making relating to childbirth [10]. There were differences in the results of this study; participants were not concerned about their involvement in decision-making (Table 3). Local cultural factors influence it.

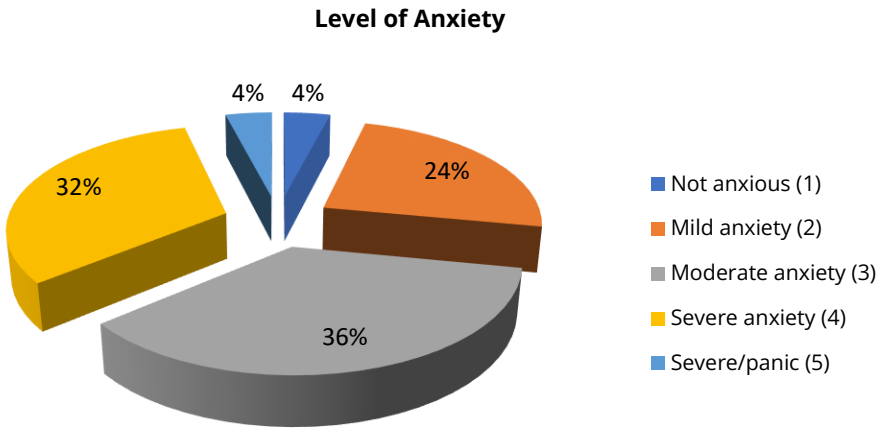

Figure 2. Level of anxiety before giving birth in multigravida.

Table 3. Aspects of multigravida anxiety before childbirth.

Multigravida Concerns and Fears	Features (Percentage)
Fear of surgery (cesarean delivery)	7 (28.0%)
Worried about not being able to push	2 (8.0%)
Fear of bleeding and tearing of the birth canal	1 (4.0%)
Fear of experiencing complications, such as previous births	1 (4.0%)
Afraid of taking high risks	1 (4.0%)
Worried about the baby's condition	5 (20.0%)
Worried that something might happen to here	2 (8.0%)
Not ready to get pregnant	1 (4.0%)
Fear of going to hospital and procedures in the delivery room	1 (4.0%)
Fear of facing labor pain	2 (8.0%)
It's normal, don't be afraid	2 (8.0%)

According to Jefford [35], culture influences women's decisions about childbirth. Lack of autonomy and fear of being alone during childbirth also affect the decision-making process. According to Nurrachmawati [10], it gains freedom in decision-making, including having great authority in determining the location and assistance at birth, although there are still decisions taken jointly with the family and some decisions taken by others. This great authority comes because the husband gives the decision-making responsibility to the wife, although in some cases there are differences of opinion between husband and wife.

One study also found that pregnant women are generally afraid of being left alone in the maternity room [36]. This is due to the different perceptions and attitudes of husbands toward accompanying their wives during childbirth, some of whom argue that "our culture prohibits a husband from attending his wife's birth" and can even "humiliate my virginity" [37]. In this study, this is not the case, as local hospitals allow husbands and families to accompany them during childbirth [38]. This is in accordance with the requirements of the Sharia hospital of the All-Indonesia Health Assembly (MUKISI), namely mahram [39]. Research has proven that family presence during childbirth not only reduces anxiety but can even make the patient more calm and facilitate delivery [37, 40, 41].

3.4. Anxiety Cause Factor

Table 4 shows that the factors contributing to the anxiety of multigravida women are due to the poor condition of the baby (24.0%), such as sunset position, babies with a central strain, and lower fetal weight (Table 4). Similar research also found that fear of harm to the baby is a cause of anxiety in pregnant women. They are generally afraid that the baby is experiencing something bad, even fear of losing the baby [36].

Other cause factors are anxiety about the diseases that the mother suffered, such as hypertension and gastritis (12.0%) (Table 4). Dempsey's findings [9] indicate that the diagnosis of fetal abnormalities in the womb, uncertainty about diagnosis or prognosis, anticipation of the course

Table 4. Factors causing anxiety against childbirth.

Factors Causing Anxiety Against Childbirth	Features (Percentage)
The disease my mother suffered.	3 (12.0%)
Negative experience of childbirth	3 (12.0%)
Too often, giving birth	2 (8.0%)
The baby's condition is like sunset placement—a central strap.	6 (24.0%)
Worried about the safety of the mother and baby	3 (12.0%)
Unplanned pregnancy	1 (8.0%)
Feeling uncomfortable due to the physiological pregnancy	2 (8.0%)
Feeling uncomfortable in the hospital.	1 (4.0%)
Afraid of the hospital neighborhood.	2 (8.0%)
Don't be afraid, because you're ready.	2 (8.0%)

of neonatal disease, and fear of the death of the fetus or neonate increase the risk of anxiety, depression, and traumatic stress among prospective parents.

Other factors include poor experience in previous births (12.0%), such as pain in childbirth, bleeding, and prolonged delivery, as well as feelings of discomfort due to physiological complaints before delivery (8.0%) and fear of medical action (8%), Other worrying factors were too frequent births (8,0%), unplanned pregnancies (4,0%), and fear of the hospital environment (4%). Similar research has found that 80.7% of the primary cause of anxiety is fear of childbirth pain [2]. Birth is considered an unpleasant experience for women due to severe pain [42]. The pains of childbirth depicted are not similar to other pains; these pains are more severe and unbearable [43]. When pain occurs, epinephrine is released and triggers increased systemic vascular resistance, thereby reducing utero perfusion of the placenta, decreasing uterine activity, and prolonging labor, as well as adversely affecting the mother and fetal health [42]. Therefore, screening for anxiety symptoms, such as aspects of prenatal anxieties and fears, is essential to providing psychological support in health care [3].

4. Conclusions

The study found that most multigravida women experience moderate to severe anxiety. The aspects of concern are generally almost the same, but there are differences due to cultural and regulatory factors in health care. Various factors contribute to an increase in prenatal anxiety. Therefore, health workers need to give special attention through anxiety screening in pregnant mothers' classes and multidisciplinary collaboration with psychologists for follow-up. The development of more varied measuring instruments is also important to support rapid screening.

For future research, it is recommended to increase the number of diverse samples, compare the FAS with other scales, conduct longitudinal studies to understand the change of anxiety, and explore further the influence of local cultural and regulatory factors. Besides, evidence-based intervention tests with collaboration between health workers and psychologists are also crucial to the importance of dealing with prenatal anxiety for the health of mothers and babies.

Author Contributions: Conceptualization, L.S., H.K., H.H., M.Y., and S.S.; methodology, L.S., H.K., H.H., M.Y., and S.S.; software, L.S., H.K., H.H., M.Y., and S.S.; validation, H.K., H.H., and M.Y.; formal analysis, L.S., H.K., H.H., M.Y., and S.S.; investigation, L.S. and S.S; resources, L.S.; data curation, H.K., H.H., and M.Y.; writing—original draft preparation, L.S.; writing—review and editing, H.K., H.H., and M.Y.; visualization, L.S.; supervision, H.K., H.H., and M.Y.; project administration, H.K.; funding acquisition, L.S. All authors have read and agreed to the published version of the manuscript.

Funding: The first author received a scholarship from the Health Ministry of the Indonesia Republic.

Ethical Clearance: The ethical approval was obtained from the Institutional Review Board, the Health Research Ethics Commission, Faculty of Medicine, General Hospital Dr. Zainoel Abidin, Shia University of Kuala Banda Aceh, through letter No. 291/EA/FK-RSUDZA/2021 dated September 20, 2021.

Informed Consent Statement: Written informed consent was obtained from all subjects involved in this research prior to the data collection process.

Data Availability Statement: Data is available upon limited request.

Acknowledgments: The authors would like to thank the Government Hospital of Aceh for contributing to this research, including the Ethics Committee, the Nursing Police officers, and all the participants who have provided information in accordance with this research topic.

Conflicts of Interest: All the authors declare that no conflicts of interest.

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