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Research Article

The Influence of Family Support and Maternal Preparedness on Anxiety in Pregnant Women Before Delivery at Bongo Nol Health Center

Febrina Idas Wara [1], Sulistiyah [2]*, Reny Retnaningsih [3]

[1-3] Department of Midwifery, Health Science Faculty, Institut Sains dan Teknologi Kesehatan RS dr. Soepraoen, Indonesia ; e-mail: sulistiyah364@gmail.com

*Corresponding Author : Sulistiyah

Abstract: Anxiety in pregnant women is often characterized by intense fear or panic, and if left unaddressed, it can lead to various complications such as prolonged labor, maternal fatigue, and even labor stall. This study aimed to determine the relationship between family support and maternal preparedness with the anxiety levels of pregnant women prior to childbirth. The research utilized a quantitative design with a cross-sectional approach, conducted in the working area of the Bongo Nol Health Center. The study population consisted of pregnant women in their second and third trimesters (TM II and TM III). A total of 40 pregnant women participated in the study, selected through simple random sampling. Data were collected using questionnaires designed to assess family support, maternal preparedness, and anxiety levels. The results revealed that 20% of the pregnant women who received inadequate family support experienced severe anxiety, with a statistically significant p-value of 0.001. Similarly, 15% of mothers with lower levels of preparedness reported severe anxiety, also with a p-value of 0.001. These findings suggest a significant relationship between both family support and maternal preparedness with anxiety levels in pregnant women prior to delivery. The study concludes that increased family support and maternal readiness can help reduce anxiety levels in pregnant women, particularly in the lead-up to childbirth. Healthcare providers should prioritize interventions to strengthen family involvement and support maternal readiness, especially for women at risk of high anxiety, to improve birth outcomes and maternal well-being. Future research should explore additional factors contributing to anxiety and the effectiveness of targeted interventions for high-risk pregnancies.

Keywords: Childbirth; Family support; Maternal Anxiety

1. Introduction

Breastfeeding is a truly precious gift a mother can give her baby. A low rate of breastfeeding is a threat to a child's growth and development. Babies who aren't breastfed, at least until 6 months of age, are more vulnerable to nutritional deficiencies. According to the World Health Organization (WHO), the 2016 exclusive breastfeeding presentation, obtained through The Global Breastfeeding Scorecard data, showed that out of 194 countries, only 40% of babies were exclusively breastfed, and only 23 countries had exclusive breastfeeding rates above 60 percent. Yet, WHO itself aims for at least 50% exclusive breastfeeding by 2025 (WHO, 2017). Data from the United Nations Children's Fund (UNICEF) indicated that exclusive breastfeeding coverage in 2016 was only 43%. In the Association of Southeast Asian Nations (ASEAN), exclusive breastfeeding is not widely practiced across all countries. Cambodia is the only country in the ASEAN region that has achieved exclusive breastfeeding rates of up to 65%. Thailand has the lowest exclusive breastfeeding rate at 12% (ASEAN, 2016).

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According to the Ministry of Health of the Republic of Indonesia (2021), the presentation of exclusive breastfeeding for infants was 71.58% in 2021. This was an increase from the previous year, but most provinces still had exclusive breastfeeding rates below the national average. Gorontalo was recorded as the province with the lowest percentage at 52.75%, and Bengkulu at 67.08%. Based on Riskesdas (2018), exclusive breastfeeding coverage experienced a decrease from the previous year, from 75.7% to 67.7%. In Mukomuko Regency, exclusive breastfeeding coverage was 65.4%. There are several contributing factors, among others: the busy schedule of mothers who cannot fully accompany their children because they have to work outside the home, easy access to breast milk substitutes or formula milk, and the large number of advertisements or promotions for formula milk as a breast milk substitute.

The low coverage of exclusive breastfeeding can be attributed to the aggressive promotion and provision of formula milk to infants. Formula milk cannot replace colostrum as a baby's first food, making infants more susceptible to diarrhea, septicemia, and meningitis. Babies may also suffer from intolerance to proteins in formula milk, often leading to allergies (Khasanah, 2013).

Mothers' lack of knowledge often leads them to choose formula milk over breastfeeding their babies. For example, if a mother has the flu or a cough, she might fear transmitting the illness to her baby, and thus refuse to breastfeed. However, if a mother stops breastfeeding and switches to formula milk, the risk of the baby contracting illnesses actually increases. This is supported by research conducted by Rombot, Kandou & Ratag (2013) on factors related to formula feeding in infants aged 0-6 months in the Molompar Tomabatu Timur Public Health Center Working Area, Southeast Minahasa. Using data analysis, a p-value of <0.027 was obtained for the knowledge variable, indicating that mothers' knowledge is related to formula feeding in infants aged <6 months (Rombot, 2014).

Education is also an important factor influencing a mother's mindset in determining beneficial or unfavorable actions. A highly educated person will be more receptive to reasons for exclusive breastfeeding because their mindset is more realistic compared to those with a low education level. However, this proves that education alone cannot be a factor for behavioral change, as many other factors, such as occupation, also play a role (Oktoval, 2017).

Occupation is also considered one of the factors causing mothers to give formula milk to their babies. This is supported by research conducted by Oktoval titled "Analysis of Factors Related to Formula Feeding in Infants Aged 0-6 Months," which states that working respondents are at a 1.408 times higher risk of giving formula milk to infants aged 0-6 months compared to non-working respondents. The mother's employment status influences the practice of formula feeding in infants aged 0-6 months. Statistical test results yielded a p-value

(0.005 < α 0.05), meaning there is a relationship between respondents' occupation and formula feeding in infants aged 0-6 months. The odds ratio (OR = 1.408) means that working respondents are 1.408 times more likely to give formula milk to infants aged 0-6 months compared to non-working respondents (Oktoval, 2017)..

2. Research Methods

This study is a quantitative research with a cross-sectional approach, where data is collected simultaneously. The population for this study consists of pregnant women in their second and third trimesters within the working area of Bongo Nol Public Health Center. The sample size for this research is 40 individuals, randomly selected from each class using a simple random sampling method. Data analysis will be performed using the Chi-Square statistical test ($p<0.05$).

3. Results and Discussion

3.1 Family Support

Based on the research findings, the majority of respondents (47.5%) had sufficient family support, followed by (27.5%) for respondents with poor family support, and (25%) for those with good family support. This research aligns with Sinambela's study (2020) on the Relationship between Family Support and Anxiety Levels in Pregnant Women Facing Labor. Sinambela's study found that the lowest percentage was for good family support (30%) compared to poor family support (70%).

Similar research conducted at Riga Stradins University, Latvia, stated that the majority of respondents (62.5%), whose first pregnancy was planned in the second trimester and was fully physiological, felt sufficiently supported by their family and husband. Pregnancy is one of the most important periods in a woman's life as it brings many changes, not only physically but also socially and psychologically. The presence of family can provide support that makes the mother feel safer through the transitional period approaching labor (Deklava, Liana, et al, 2015).

Other research aligning with this study, conducted by Sari (2019) at Mlati II Public Health Center Yogyakarta, showed that the percentage of good family support (42.86%) was lower than the poor family support category (57.14%). This study also concluded that the much-needed support for mothers approaching labor can be in the form of emotional, informational, and appraisal support. However, these results do not align with research conducted at Maluk District Public Health Center, Tangerang, which stated that out of 50 respondents, more pregnant women received good family support (70%) compared to those who received poor/insufficient family support (30%) (Zuhrotunida, 2017).

The presence of family providing support is very important for mothers during the labor process. Family involvement during pregnancy and labor can have a positive impact (Henderson, 2010). The function of a complete family, specifically its internal function, is good in providing psychosocial protection and support to family members, and the family also serves as a source of love and recognition (Zuhrotunida, 2017).

Based on the researcher's observations, family support for pregnant women approaching labor is crucial. The support provided by the family can increase the mother's confidence as labor approaches, making her feel comfortable and free from negative thoughts that cause anxiety. If the family provides full support, such as continuous presence when the mother needs it, the pregnant mother will feel more confident and happier during her pregnancy. Additionally, providing information, appraisal support, or emotional support, evidenced by the family giving information about pregnancy and the birth process, can help the mother avoid anxiety.

3.2 Maternal Preparedness

Based on the research findings, poor preparedness was (17.5%), compared to mothers with sufficient preparedness (45%) and good preparedness (37.5%). These results align with Husnul's research (2018), which indicated that in her study conducted in the working area of Deket Public Health Center, Lamongan Regency, almost all mothers (85.7%) were unprepared for labor compared to mothers who were prepared (14.3%).

Other research aligning with this study is Yanuwarita's research (2017) at Jetis I Public Health Center, Bantul, Yogyakarta, which found that 56.5% of respondents were in the category of no preparedness for labor, and 43.5% of respondents were in the category of having preparedness. Preparedness is a state of being ready to prepare for something.

Furthermore, similar research conducted in Africa stated that the majority (63.8%) of respondents felt unprepared for their delivery day and agreed that danger signs could occur during pregnancy, labor, and the postpartum period, while 36.2% felt confident that they had good preparedness to go through their delivery day. Respondents also stated that they knew the danger signs during pregnancy and how to address them if they occurred (Kalso, 2014). Research that does not align with the above is a study conducted by Chatrine (2020), which found more mothers in the prepared category (83.5%) and the less prepared category (16.2%). This likely occurred because the husband's support for the mother was very good, making the mother feel prepared to go through her labor process.

Labor is the culmination of all preparations made by a pregnant mother. A pregnant mother's preparedness in facing the labor process is the final process that needs to be prepared before labor (Rosyidah, 2017). These preparations include physical and mental readiness, covering the mother's health condition, physiological changes during pregnancy until approaching labor, nutritional needs during pregnancy, and efforts to plan labor preparations and prevent complications, including signs of labor complications (Depkes, 2020).

Based on the researcher's observations, preparedness is the most important factor to consider after support in facing labor. Preparedness can be divided into two, namely physical and psychological preparedness. Physical preparedness can be met by mothers attending antenatal classes in their respective areas. In these classes, mothers will be physically and mentally prepared, both through exercises and additional information about anticipating complications. A mother may feel fear of pain and physical danger that will arise during childbirth, so self-preparedness from the mother herself is necessary.

3.3 Anxiety Level

Based on the research findings, the majority of respondents (77.5%) experienced moderate anxiety, and 22.5% experienced severe anxiety. Similar research results were also shown in Rahimah's study (2015) at Pelita Hati General Clinic, Banguntapan Bantul, with the research results showing that the majority of respondents experienced moderate anxiety (36.1%), followed by those who experienced mild anxiety (22.2%) and severe anxiety (16.7%).

Other research aligning with this study is Rahmita's research (2017) at Tamanlarea Public Health Center, Makassar, where the respondents were primigravida mothers in their third trimester. The research results stated that the majority of respondents experienced moderate anxiety (29.7%) compared to respondents who experienced severe anxiety (13.5%).

Furthermore, similar research conducted by Deklava, Liana, et al (2015) involving 150 adult women stated that the majority of respondents, 72.1% of pregnant women, experienced moderate anxiety compared to 23.1% who experienced severe anxiety. The study also stated that anxiety is a normal response to threat or danger and a part of normal human experience, but it can become a mental health problem if the response is excessive, lasts more than three weeks, and interferes with daily life. This anxiety usually describes the unpleasant feeling experienced when confronted with certain situations, demands, or objects or events.

However, this research is not in line with the above research. The research conducted by Hashim (2018) stated that based on the anxiety level of pregnant women, the majority of respondents experienced mild anxiety, namely 84.5% (60 respondents), compared to 14.1% (10 respondents) with moderate anxiety and 1.4% (1 respondent) with severe anxiety. This may occur because primigravida mothers actively prepare themselves for labor, but often mothers cannot eliminate feelings of worry and fear during the labor process.

Mild and moderate maternal anxiety can be seen from the mother's changes in focusing attention on important matters while neglecting others; in other words, the mother's focus is poor, her body feels weak, she is easily irritable, her concentration decreases, and she often thinks negatively. This mild and moderate anxiety will narrow the mother's perceptual field and require special attention. If left unchecked, it can become severe anxiety, making the mother feel that something is different and threatening (Videbeck, 2012).

3.4 Relationship between Family Support and Anxiety Levels in Pregnant Women Approaching Labor

Based on the research findings, respondents with severe anxiety were more numerous among those with poor family support (20%) compared to respondents with good family support (2.5%). Meanwhile, respondents experiencing mild and moderate anxiety were more numerous among those with sufficient family support (47.5%) and good family support (22.5%) compared to respondents with poor family support (7.5%). The Chi-square statistical test showed a p-value = 0.000 ($p \leqslant 0.05$), meaning there is a significant relationship between family support and the mother's anxiety level in facing labor in the Bongo Nol Public Health Center working area. This is because the emotional relationship between the mother and her immediate family, which is consistent, and the presence of family support will influence the mother's anxiety during labor (Fisher et al., 2013).

Similar research conducted by Sinambela (2020) stated that respondents experiencing severe anxiety were more numerous among those with poor family support (50%) compared to good family support (6.7%), and respondents experiencing mild and moderate anxiety received more good family support (23.3%) compared to respondents who received poor family support (20%). Data analysis results showed a p-value = 0.02 with $\alpha = 0.05$ (p-value < α), so Ha is accepted and H0 is rejected, indicating a relationship between family support and anxiety levels in pregnant women.

This research also aligns with Zuhrotunida's research (2017), which found that more respondents with poor family support experienced anxiety (38%) compared to respondents with good family support (5%). The statistical test result was $p = 0.000 < 0.05$, meaning there is a relationship between family support and anxiety in pregnant women facing labor. In this research, the researcher also believes that support greatly influences whether a pregnant mother feels anxious or not as labor approaches.

Similar research was also conducted in Latvia using the Pearson Chi-square test to identify whether there was a relationship between anxiety and pregnancy, age, education level, marital status, pregnancy planning, number of pregnancies, and family support. The results showed a number of statistically significant differences for high anxiety levels, especially for pregnant women experiencing loneliness. The fact of sufficient support from extended family and husband/partner showed statistical test results (Chi-square = 12.71, df = 4, p = 0.01) - high anxiety levels were specific to women who did not have a husband/partner (Deklava, Liana, et al, 2015).

Anxiety levels are caused by several factors, one of which is family support. Every pregnant mother who is about to give birth, especially for the first time, will experience severe anxiety. The presence of family providing support is very important for the mother during the labor process. Family involvement during pregnancy and labor brings positive impacts that are useful for her and her child's development. Support that brings positive impact is physical

and emotional support. This support includes several aspects such as rubbing the mother's back, holding her hand, maintaining eye contact, being accompanied by friendly people, and not going through the labor process alone (Henderson, 2010).

Based on the researcher's observations, many factors influence maternal anxiety, one of which is family support. Pregnant women who receive family support will be more confident in facing their labor and can reduce the level of anxiety felt. Family can make the mother more comfortable and feel safe while going through her labor process. The family referred to includes husband, family or other relatives, parents, and in-laws. In the current research, there are still respondents who receive good support but still experience severe anxiety. This can occur due to factors other than family support, namely education level, age, and history of complications during pregnancy.

3.5 Relationship between Maternal Preparedness and Anxiety Levels in Pregnant Women Approaching Labor

Based on the research findings, respondents with poor preparedness (15%) were more numerous in the severe anxiety level compared to respondents who experienced mild and moderate anxiety (2.5%). Meanwhile, respondents experiencing mild and moderate anxiety were more numerous in the sufficient preparedness group (40%) compared to respondents who experienced poor preparedness (2.5%). The Chi-square statistical test showed a p-value = 0.000 ($p \leqslant 0.05$), meaning there is a significant relationship between Maternal Preparedness and the mother's anxiety level in facing labor in the Bongo Nol working area.

This research is similar to Bedah's research (2016) in Ethiopia on assessing respondents' knowledge about birth preparedness and complication readiness. It found that respondents who had sufficient preparedness (84.7%) were better prepared for their delivery and ready to face complications than those with poor preparedness (45.4%). From the control group, it was reported that maternal preparedness had an influence on preparedness to face complications (P<.0001).

Aligning research conducted by Wildan (2016) found that among 53 pregnant women respondents at Panembahan Senopati Hospital, Bantul, the highest number of respondents experienced moderate anxiety (41.5%) compared to those with mild anxiety (30.3%). This was influenced by internal maternal factors, one of which was the mother's physical unpreparedness for labor. This physical unpreparedness often causes symptoms such as headaches, body aches, muscle tension, fatigue, and heart palpitations. Therefore, the husband's involvement in the mother's preparedness for childbirth and the readiness of the mother and family for potential complications is necessary to reduce the occurrence of danger during the labor process (Baraki, Z, 2019).

Maternal unpreparedness for labor is one of the factors contributing to high maternal mortality rates (MMR) and infant mortality rates (IMR). Preparedness for labor encompasses everything a pregnant mother prepares for the arrival of her child. This preparedness can

include preparations for psychological and physiological changes, danger signs, and how to handle them initially. Additionally, some things mothers must prepare for before labor include avoiding panic and fear, and remaining calm. Unpreparedness makes pregnant mothers anxious about what will happen during labor. With good preparedness, mothers will avoid worrying about their labor. However, this preparedness is influenced by a mother's income, which affects birth preparations within a family (Fitriani, 2011).

Based on the researcher's observations, pregnant mothers who experience good and sufficient preparedness will feel more confident in going through their labor process and can face all possible complications that may occur at any time. One activity that can train maternal preparedness is antenatal classes because by attending these classes, pregnant mothers gain knowledge, skills, and motivation related to awareness for improving maternal and infant health. A mother might feel fear of pain and physical danger that will arise during childbirth, so self-preparedness from the mother herself is necessary.

4. Conclusions

Based on the data analysis, the researcher can draw several conclusions from the study, as follows:

The majority of pregnant women experienced moderate anxiety as they approached labor. Most pregnant women received sufficient family support from their immediate family as they neared childbirth. Only a small proportion of pregnant women experienced poor preparedness as they approached labor. There is a significant relationship between family support and the anxiety levels of pregnant women nearing childbirth. There is a significant relationship between maternal preparedness and the anxiety levels of pregnant women nearing childbirth.

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