The Effect of Giving Pre-birth Counseling to the Anxiety Level of Third-trimester-Pregnant Mother

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ABSTRACT

Aim: This research aims to determine the effect of pre-birth counseling on women's anxiety during the third trimester of pregnancy at Umbulharjo I Primary Health Center.

Methods: This quantitative type of research used the pre-experiment method within Group Pretest-Posttest Design. Twenty people were used as a sample in this study, and they were the respondents who met the inclusion and exclusion criteria. The Accidental Sampling technique was used to take the sample.

Results: This study found that 80% of the third-trimester-pregnant women experienced anxiety before the intervention, and there was a decrease in the anxiety of 25% after being given intervention. It was proven by the results of the p-value 0.011<0.05, meaning there is a positive effect of giving pre-birth counseling to lower the anxiety level of third-trimester-pregnant women. Thus, midwives are suggested to provide pre-birth counseling for pregnant women in Antenatal Care services.

Keywords: third-trimester pregnancy, Anxiety

INTRODUCTION

One of the Sustainable Development Goals (SDGs) programs in the health sector is to ensure a healthy life and promote well-being for all ages. One goal is to reduce the maternal mortality rate to less than 70 per 100.000 live births in 2030. From 1991 until 2007, the Maternal Mortality Rate (MMR) showed a declining trend. However, in 2012 the MMR showed a significant increase, namely 359 maternal mortality per 100,000 live births, and returned to decrease to 305 maternal mortality per 100,000 live births [1]. One of the Government Programs to lower the MMR is by improving the health services for pregnant women. Assessment of the implementation of maternal health services can be done by looking at the coverage of K1 and K4. The coverage of K4 in Yogyakarta in 2015 has exceeded the target of 92.59% [2]. Excessive feelings of fear and anxiety felt by pregnant mothers can lead to stress [3]. These feelings of fear include fear of labor, fear that no one will accompany her during labor, fear that labor is done at night, afraid that midwives who assist in labor are not in place, afraid that her baby will die in the womb, and fear that babies born with disabilities [4]. Anxiety could affect the process of delivering the baby, such as weakening the mother's straining power to inhibit the labor process. It can cause a time-consuming labor process [5]. This prolonged labor is hazardous and can cause fetal distress. If this condition is allowed, then the maternal mortality and morbidity rates will increase [6].

METHOD

This quantitative type of research used the pre-experiment method with the One Group Pretest-Posttest Design. This study was started by distributing the pre-test questionnaire to the respondent followed by giving the pre-birth counseling. After seven days of the intervention, the posttest questioner is distributed. The subject used in this study was every mother in the third trimester of pregnancy who visit Umbulharjo I Primary Health Center. The samples were 20 people who met the inclusion and exclusion criteria. The Accidental Sampling technique was used to take the sample. The statistical assessment used the Wilcoxon test was taken.

RESULTS

Respondent Characteristic Figures:

According to the results of research on the age of respondents in Table 1, it can be seen that the majority of the respondents in this study were in the 26-30 age range, with a total of 10 respondents (50%). The majority of respondents in this study had high school education, with 11 people (55%) (Table 2).

Table	1.	Frequency	Distribution	of	the	Characteristic	of	third-
trimest	erp	pregnant wo	men based o	n A	ges			

Ages	Ν	(%)
20-25	6	30
26-30	10	50
31-35	4	20
Total	20	100

 Table 2. Frequency Distribution of the Characteristic of thirdtrimester pregnant women based on Education Level

Education Level	Ν	(%)
College	7	35
High School	11	55
Middle School	2	10
Total	20	100

Based on the research results on the employment of the respondents (Table 3), it can be seen that the majority of respondents were unemployed, with a total of 12 respondents (60%).

Table 3. Frequency Distribution of the Characteristic of thirdtrimester pregnant women based on Employment

Employment	Ν	%
Employed	8	40
Unemployed	12	60
Total	20	100

Univariate Analysis: Table 4 shows that 80% of the respondents (16 out of 20) felt anxious before the counseling was given. Furthermore, after the respondents had pre-birth counseling, there was a significant decrease in the number of the respondents who felt anxious, namely only 5 out of 20 people or 25%.

 Table 4. Frequency Distribution of anxiety Level of Pregnant

 WomenBefore and After given the Pre-birth Counseling.

Anxiety	Pre-test		Post-test	
Category	F	%	F	%
Anxious	16	80%	5	25%
Calm	4	20%	15	75%

Bivariate Analysis: Based on Table 5, it can be seen that the p-value was 0.011(p-value <0.05), it can be concluded that Ho was rejected and Ha was approved. Thus, pre-birth counseling was influenced by third-trimester pregnant women's anxiety level Umbulharjo I Primary Health Center.

Table 5. WilcoxonTest Result

	Pre-test andPost-test
Z	-2,556
Asymp. Sig. (2-tailed)	0.011

Analysis: From this study, the obtained p-value was 0.11, which means there was an effect of pre-birth counseling on third-trimester women's anxiety level. A person's knowledge about an object consists of two sides, which are positives and negatives. Eventually, both aspects will define a person's attitude toward a particular object. The more a person knows about positive aspects and objects, it will develop the right perspective. Anxiety is an emotional sickness and a misunderstanding of knowledge; the more knowledge a person understands, the lesser anxiety could be overcome [7]. This is in line with the research carried out by Wahyuni where 30 respondents obtained by Total Sampling method, showing that there is a significant influence of giving health education on the anxiety of thirdtrimester primigravida pregnant mother [8]. The absence of experience about a problem could shape a wrong response or negative attitude towards the issue. Therefore, any efforts to eliminate or overcome the anxiety are needed. Besides, this research also aligns with Cobbett's research stating that there is a correlation between a person's knowledge and the anxiety felt by that person [9]. Hence, health education plays an essential role in controlling the anxiety which resulted from a lack of knowledge about their condition. The influence of counseling on anxiety in this study is also supported by the research conducted by Habibzadeh, indicating that there is an influence of one's knowledge on lowering the anxiety level [10]. This study explained that anxiety is an emotional condition where an individual experiences nervousness or fear of responding to a threat.

The next activation is autonomic, triggering any physical symptoms, including palpitations, tachycardia, and chest pain. Besides, intense anxiety is also associated with decreasing immune response and cardiovascular malfunction, such as heart rate disorders, endothelial dysfunction, and vascular inflammation, which can cause damage to the patient's coronary conditions. Patients undergoing clinical or surgical procedures such as coronary angiography often experience high levels of anxiety. Thus, methods for improving clinical outcomes and identifying appropriate interventions to reduce patient anxiety are too needed. Lack of knowledge about the procedure has a direct impact on their level of anxiety.

Consequently, providing detailed and accurate information regarding the procedure and details of the actions that must be taken before, during, and after the procedure can reduce stress and anxiety. Some studies confirm the effectiveness of giving information about the actions in lowering patients' anxiety levels. In this study, five respondents (25%) felt nervous. This is due to other factors besides providing the information or health education, such as occupation, economic status, and lifestyle. In more detail, 4 out of 5 respondents who felt anxious were career women. Occupation is something that everyone does to make a living. This statement means that there is an element of necessity so that there is a possibility that anxiety comes from the work itself, not from the preparation process for childbirth. This conclusion is in line with Sanne's research saying that one factor that can cause anxiety is occupation [11]. When people work, such as feeling incompetent or pessimistic to give the maximum results, the burden of mind can trigger an individual to feel nervous. From the data obtained in this study, 1 out of 5 respondents who felt anxious was unemployed.

Moreover, her latest education background was junior high school, which relatively low compared to other respondents. It can be concluded that education is also one of the factors that influence the development of anxiety in an individual. According to Bjelland, a low level of education or lack of knowledge could cause people prone to anxiety [12]. This is because the level of education of an individual will affect the ability to think; the higher the education level, the easier it is to reason and capture new information and analyzing new problems. This study also found that one respondent felt calm before being intervened but became anxious after being given the intervention. This is because she cannot process the information she receives appropriately. According to Insel, receiving information by a person begins when the sensory device captures stimuli, then the stimuli are converted into signals that can be understood by the brain and then processed [13]. This is where what is called the process of perception, which is understanding the message that the sensory system has processed. Perceptions generated by each person will vary. The differences in perception will create different stimuli to the brain, affecting the recipient's psychological condition. If the perception is positive, it will positively impact, and vice versa [14].

CONCLUSION

Before pre-birth counseling was given, most respondents (16 people or 80%) felt highly nervous. Fortunately, after the counseling was given, the number of respondents who experienced anxiety was decreased from 16 people to 5 people or only 25%. Thus, it is clear that there is a positive effect of giving pre-birth counseling to lower the third-trimester pregnant mother's anxiety level, proved by the Wilcoxon test result where 0,000 < 0,05. This study's results are expected to guide midwives to create special

counseling programs for pregnant mothers at Maternal and Child Health Services.

REFERENCES

- P. C. Webster, "Indonesia: The midwife and maternal mortality miasma," Can. Med. Assoc. J., vol. 185, no. 2, pp. E95–E96, Feb. 2013, doi: 10.1503/cmaj.109-4347.
- A. Dewi, N. K. Bekti, and S. Supriyatiningsih, "Maternal Mortality Evaluation: A Case Study in Bantul, Yogyakarta," J. Matern. Child Heal., vol. 4, no. 5, pp. 332–340, 2019, doi: 10.26911/thejmch.2019.04.05.07.
- C. J. HOBEL, A. GOLDSTEIN, and E. S. BARRETT, "Psychosocial Stress and Pregnancy Outcome," Clin. Obstet. Gynecol., vol. 51, no. 2, pp. 333–348, Jun. 2008, doi: 10.1097/GRF.0b013e31816f2709.
- S. Alehagen, K. Wijma, and B. Wijma, "Fear during labor," Acta Obstet. Gynecol. Scand., vol. 80, no. 4, pp. 315–320, Apr. 2001, doi: 10.1034/j.1600-0412.2001.080004315.x.
- S. Hamdamian, S. Nazarpour, M. Simbar, S. Hajian, F. Mojab, and A. Talebi, "Effects of aromatherapy with Rosa damascena on nulliparous women's pain and anxiety of labor during first stage of labor," J. Integr. Med., vol. 16, no. 2, pp. 120–125, Mar. 2018, doi: 10.1016/j.joim.2018.02.005.
- M. S. Harrison et al., "A prospective population-based study of maternal, fetal, and neonatal outcomes in the setting of prolonged labor, obstructed labor and failure to progress in low- and middle-income countries," Reprod. Health, vol. 12, no. S2, p. S9, Dec. 2015, doi: 10.1186/1742-4755-12-S2-S9.
- A. Biaggi, S. Conroy, S. Pawlby, and C. M. Pariante, "Identifying the women at risk of antenatal anxiety and depression: A systematic review," J. Affect. Disord., vol. 191, pp. 62–77, Feb. 2016, doi: 10.1016/j.jad.2015.11.014.
- 8. I. Wahyuni, N. Pramono, T. Suherni, and M. N. Widyawati, "Effect of Pregnancy Exercise on Duration of the First And

Second Stage of Labor in Primigravida Mothers During the Third Trimester of Pregnancy," Belitung Nurs. J., vol. 3, no. 6, pp. 765–770, Dec. 2017, doi: 10.33546/bnj.304.

- S. Cobbett and E. Snelgrove-Clarke, "Virtual versus face-toface clinical simulation in relation to student knowledge, anxiety, and self-confidence in maternal-newborn nursing: A randomized controlled trial," Nurse Educ. Today, vol. 45, pp. 179–184, Oct. 2016, doi: 10.1016/j.nedt.2016.08.004.
- H. Habibzadeh, Z. D. Milan, M. Radfar, and A. Cund, "Effects of Peer-Facilitated, Video-Based and Combined Peer-and-Video Education on Anxiety Among Patients Undergoing Coronary Angiography: Randomised controlled trial," Sultan Qaboos Univ. Med. J. [SQUMJ], vol. 18, no. 1, p. 61, Apr. 2018, doi: 10.18295/squmj.2018.18.01.010.
- B. Sanne, A. Mykletun, A. A. Dahl, B. E. Moen, and G. S. Tell, "Occupational Differences in Levels of Anxiety and Depression: The Hordaland Health Study," J. Occup. Environ. Med., vol. 45, no. 6, pp. 628–638, Jun. 2003, doi: 10.1097/01.jom.0000069239.06498.2f.
- I. Bjelland, S. Krokstad, A. Mykletun, A. A. Dahl, G. S. Tell, and K. Tambs, "Does a higher educational level protect against anxiety and depression? The HUNT study," Soc. Sci. Med., vol. 66, no. 6, pp. 1334–1345, Mar. 2008, doi: 10.1016/j.socscimed.2007.12.019.
- T. R. Insel and R. D. Fernald, "HOW THE BRAIN PROCESSES SOCIAL INFORMATION: Searching for the Social Brain," Annu. Rev. Neurosci., vol. 27, no. 1, pp. 697– 722, Jul. 2004, doi: 10.1146/annurev.neuro.27.070203.144148.
- 14. J. Decety and Y. Moriguchi, "The empathic brain and its dysfunction in psychiatric populations: implications for intervention across different clinical conditions," Biopsychosoc. Med., vol. 1, no. 1, p. 22, 2007, doi: 10.1186/1751-0759-1-22.