

Article

The Effect Of Using Leaflet Media To Reduce Anxiety In Pregnant Women In Trimester III During The Covid-19 Pandemic In The Andalas Health Center

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SUBMISSION TRACK

Received: 14 November 2021
Final Revision: 26 November 2021
Available Online: 27 Desember 2021

KEYWORDS

Anxiety, Pregnancy, Covid-19, Leaflet

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A B S T R A C T

Anxiety in pregnant women can arise, especially in the third trimester of pregnancy until delivery, where during this period pregnant women feel anxious about various things such as anxiety about the baby's birth process and the pain they feel. Covid-19 causes pregnant women to be very anxious about their pregnancy and also with the rules for preparing for childbirth. The purpose of this study was to determine the effect of using leaflet media on the level of anxiety in third-trimester pregnant women during the Covid-19 pandemic at the Andalas Health Center, Padang City. The type of research used is quasi-experimental with a control group pretest-posttest design. In this research design, the experimental group received education using leaflet media, while the control group was given conventional-based education (without using media). The results of The p-value is 0.000, so it can be concluded that there is a difference in anxiety before and after being given health education. The provision of health education interventions about childbirth can reduce anxiety scores in third-trimester pregnant women.

I. INTRODUCTION

Anxiety can be felt by everyone if they experience pressure and deep feelings that cause psychiatric problems and can develop in the long term (Shodiqoh, 2014). Anxiety disorders are one of the most common psychiatric disorders. According to a report by The National Comorbidity Study, one in four people meets the diagnostic criteria for at least one anxiety disorder. Anxiety disorders are also more common in women (30.5%) than men (19.2%), (Sadock, 2015). Symptoms of anxiety that arise are different for each individual. Symptoms of anxiety can include restlessness, dizziness, heart palpitations, tremors, and so on. One source of anxiety stressors is pregnancy, especially for pregnant women who are mentally unstable (Usman, 2016). In general, a mother who experiences pregnancy for the first time will feel happy and have a higher curiosity about her changes and fetal

development. But at the same time, there is also a feeling of anxiety in pregnant women (Shodiqoh, 2014).

A study conducted by Astria (2009) showed that anxiety was more experienced in pregnant women (first pregnancy) as much as 66.2% compared to anxiety in multigravida pregnant women as much as 42.2% (Novitasari, 2013). The anxiety of pregnant women can arise, especially in the third trimester of pregnancy until delivery, where during this period pregnant women feel anxious about various things such as normal or abnormal birth of the baby, pain that will be felt, and so on (Usman, 2016).

During the Covid-19 (Corona Virus Disease) pandemic, pregnant women feel increasingly anxious, especially for third-trimester pregnant women who are about to give birth. Mother's anxiety is based on how this virus spreads, namely through droplets when sneezing, coughing, or talking. Pregnancy checks during the pandemic can be carried out online and offline. In the first trimester of pregnancy, it is done at least once, when the gestational age enters 11 weeks. The second trimester is also recommended only once when the gestational age is above 16 weeks. Unlike the first and second trimester examinations, the Ministry of Health recommends that pregnant women be examined at least twice in the third trimester. This period of pregnancy is very vital in determining the smooth delivery process. So online consultation is not recommended because of limitations in the examination.

Based on the initial survey that the researchers carried out, the 9 pregnant women that the researchers met said they were very worried about their pregnancy now and when they were about to give birth later due to the current Covid-19 condition and the rules for preparing for childbirth. This condition is coupled with the very limited midwifery care provided by the midwife. This is caused by the inconvenience of midwives and pregnant women to linger in counseling or health education. Therefore, it is necessary to carry out antenatal counseling with a variety of educational media.

Based on research conducted by Catarina, et al (2012) proved that the use of leaflets when providing health information affects the anxiety of pregnant women in the third trimester. Leaflets are the media most often used by health workers in conveying information to patients. The advantages of leaflets are that they are durable, contain material accompanied by pictures so that they are interesting, short, and clear, the sentences used are simple, making them easier to understand (Notoatmodjo 2010). Based on the background of the problem above, the study aims to examine the effect of using leaflet media to reduce anxiety in third-trimester pregnant women during the Covid-19 pandemic at the Andalas Health Center, Padang City.

II. METHODS

This research is quantitative, using a quasi-experimental method. According to Nursalam (2008), this study aims to determine the causal relationship of research variables without using random techniques for selecting respondents. The research design used a pre and post-test design without control (Dharma, 2011). The sample at the time of the study was observed first before treatment, then given treatment the sample was observed again (Hidayat, 2008). This design was carried out to measure the treatment (intervention) by comparing the results of changes before the intervention and before the intervention. This design is done by giving a pre-test (initial observation before being given an intervention, after that an intervention is given, then a post-test (final observation) is carried out (Santoso, 2010). The research was carried out in July – October 2021. It was carried out in the Andalas Health Center Work Area, Padang City. Purposive sampling is a sampling technique by selecting a sample among the population by what the researcher wants (objectives/problems in the study) so that the sample can represent previously known population characteristics (Nursalam, 2014). Samples were taken of 17 pregnant women in the work area of the Andalas Health Center.

The sampling technique was consecutive sampling, where all subjects who were met sequentially and met the inclusion criteria were included in the study until the required number of samples was met. Researchers will meet third-trimester pregnant women who meet the inclusion criteria directly / collect mothers directly or door to door with the help of cadres.

The instrument that will be used in this research is a questionnaire consisting of two parts. The first part is the respondent's characteristic data (third-trimester pregnant women) consisting of name/initials, age, educational status, employment status, economic status, and living environment status. The second part is the HRS-A (Hamilton Rating Scale for Anxiety) questionnaire consisting of 14 questions which are groups of anxiety symptoms..

III. RESULT

Univariate Analysis

Table 1. Characteristics of Respondents

Characteristic	Total	Percentage (%)
Age		
< 20 Tahun	2	11,8
20-35 Tahun	15	88,2
Educational background		
SD	0	0
SMP	3	17,6
SMA	14	82,4
Gestational age		
28	2	11,8
29	3	17,6
30	1	5,9
32	2	11,8
33	1	5,9
34	1	5,9
36	3	17,6
37	3	17,6
38	1	5,9

Table 1 shows that the age of the most respondents was in the 20-35 years category as many as 15 people (88.2%), the education level of the most respondents was high school level with a total of 14 people (82.4%) and the lowest gestational age was 28 weeks as many as 2 people (11.8%) and the highest gestational age was 38 weeks as many as 1 person.

Table. 2 The results of Average Anxiety of Pregnant Women in Third Trimester Based On Age

Age	n	Average Anxiety Score
<20	2	26,50
20-35	15	22,00
>35	0	0

Table 2 shows the average anxiety of pregnant women in the third trimester is highest, namely at age <20, which is 26.50, while at the age of 20-35 it is smaller at 22.00. Maternal age determines the physiological and psychological status of the mother during pregnancy until the time of delivery. At the ideal age (20-35 years) subjective maturity occurs which affects the health status of the mother. Cognitive and affective maturity make the two perfect combinations to create coping or varying to

deal with stressors. Ideally, mothers aged 20-35 years easily cope with stressors because of their natural potential (effective coping) to overcome anxiety. Ages <20 and >35 years allow conflicts of two personality elements as a stressor.

Bivariate Analysis.

Table. 3 The results of the Average Anxiety of Respondents Before and After Interventions are Given

	N	Min-Max	Mean	SD	95% Confidence Interval for Mean	
					Lower	Upper
Pre	17	17-28	22,53	3,223	20,87	24,19
Post	17	13-26	19,41	3,554	17,58	21,24

The average anxiety score before being given the intervention was 22.53 with a minimum score of 17 and a maximum score of 28. After the intervention, anxiety decreased to 19.41 with a minimum score of 13 and a maximum value of 26. The difference in the average anxiety score before intervention and after an intervention is 3.12.

Table. 4 Analysis of the Difference in Average Pregnancy Anxiety in the Third Trimester Before and After Health Education on Childbirth

	N	Mean	SD	t	df	Sig. (2-tailed)	Eta-Squared
<i>Pretest - Posttest</i>	17	3,118	1,054	12,199	16	0,000	0,90

The analysis test in this study was a paired t-test with an alpha error rate of 0.05. The mean value before and after being given health education about childbirth was 3.118 with a standard deviation of 1.054. The t value is used to see the level of significance, if $t_{\text{count}} > t_{\text{table}}$ then the research results are meaningful. The t-count value is compared with the t-table in df (16) then it is found that $t_{\text{count}} > t_{\text{table}}$, this proves that the research is meaningful. The p-value of the data above is 0.000, this means it is smaller than the value of 0.05 ($p < 0.05$), it can be concluded that there is a difference in anxiety before and after being given health education. Based on the formula for calculating the Eta Squared value which aims to determine how much effect the health education has given, the Eta Squared value in this study is 0.90. The standard value of the Eta Squared calculation for the paired t-test is if the Eta Squared value is 0.01 = small effect, 0.06 = sufficient effect and 0.14 = large effect (Pallant, 2011). So it can be concluded that the effectiveness of health education with lecture method has a major effect in reducing the anxiety of pregnant women.

IV. DISCUSSION

A. Average Anxiety of Third Trimester Pregnant Women by Age

Maternal age determines the physiological and psychological status of the mother during pregnancy until the time of delivery. At the ideal age (20-35 years) subjective maturity occurs which affects the health status of the mother. Cognitive and affective maturity make the two perfect combinations to create coping or varying to deal with stressors. Ideally, mothers aged 20-35 years easily cope with stressors because of their natural potential (effective coping) to overcome anxiety. Ages <20 and >35 years allow conflicts of two personality elements as a stressor. The situation that describes the actual condition of the mother (full of risk) is very different from what the mother expects. The gap between reality and fear of realizing expectations easily triggers anxiety in pregnant women (Hidayat & Sumarni, 2013).

B. Respondents' Anxiety Before being given the Leaflet Giving Intervention

Pregnancy and childbirth are one part of the life cycle that must be lived by humans from birth to death. And every change that occurs is a stressor in life (Detiana, 2010). The older the gestational age, the attention and thoughts of pregnant women begin to focus on something that is considered the climax, so that the anxiety and fear experienced by pregnant women will be intensified before delivery (Resmaniasih, 2014).

This study used third trimester pregnant women as respondents. The third trimester is often referred to as the waiting, waiting and alert period because pregnant women are impatient to wait for the birth of their baby, prepare for birth and focus on the presence of the baby. Third trimester pregnant women often feel anxious because of the fear of giving birth and worries about the child to be born. The third trimester is a time of active preparation for the birth of a baby and the condition of the baby being born (Detiana, 2010).

Anxiety of pregnant women before giving leaflets in this study obtained an average result of anxiety that is 22.53. Anxiety in pregnant women is due to the mother's inaccurate perception of the delivery process. Childbirth is perceived as a frightening process and causes excruciating pain. This makes pregnant women feel great anxiety before the birth of their baby (Ilmiasih &

Susanti, 2010). A mother-to-be with her first child is a new journey marked by various physical and psychological changes, resulting in various psychological problems. Pregnancy with the first child is a stage of disequilibrium or an imbalance in a woman's personality where a woman who is faced with new tasks and roles becomes a mother. Events that have never been experienced by pregnant will cause anxiety, fear, anxiety, tension mixed with anxiety (Detiana, 2010).

C. Respondents' Anxiety After being given the Leaflet Giving Intervention

This study found that there were differences in the anxiety of pregnant women in the third trimester before and after being given leaflets. The average result of anxiety for pregnant women in the third trimester after giving leaflets is 19.41. The average results of the respondents' anxiety decreased after the intervention. This is in accordance with the results of research by Indasari et al (2014) in the working area of the Mongolato Public Health Center, Gorontalo Regency by taking a sample of 13 pregnant women in the third trimester, namely after being given health education, the anxiety of pregnant women decreased. The decrease in anxiety of pregnant women where from 8 people with severe anxiety and 5 people with moderate anxiety. From 8 people with severe anxiety after being given health education, 3 people with moderate anxiety, 1 person with no anxiety and 4 people with mild anxiety. Then 5 people with moderate anxiety became mild anxiety, and 0 severe anxiety.

In accordance with the Dick-Read method, to replace anxiety and fear about the unknown through understanding and belief, one of them is by providing information about labor and delivery. In general, pregnant women do not have an idea about the events that will be experienced at the end of their pregnancy when childbirth occurs, so this causes maternal anxiety in facing childbirth (Bobak, Lowdermilk & Jensen, 2005).

D. Effect of Leaflet Media on Third Trimester Pregnancy Anxiety

To overcome or reduce the level of maternal anxiety in facing childbirth, it is necessary to provide information in the form of counseling carried out by health workers, especially about childbirth so that mothers are better prepared to face the delivery period (Indasari et al, 2014). Research conducted by Rohmah (2013) on 30 respondents using a non-probability sampling method, namely total sampling, showed that there was a significant effect before and after the health education intervention was given. The p value of value is $0.000 < 0.05$ with a significance of 0.000, so H_0 is rejected. This means that there is an effect of health education on the anxiety of pregnant women in the third trimester of childbirth readiness at BPS Mulyani Purwogondo Kalinyamatan Jepara.

Data were analyzed using statistical paired t-test, based on the results of this test, the value of $t_{count} > t_{table}$. Based on this analysis, it can be concluded that there is an effect of providing health education on anxiety scores in third trimester pregnant women in the Andalas Health Center work area.

V. CONCLUSION

The third trimester pregnant women at the Andalas Health Center who were the sample generally experienced anxiety before being given health education through leaflet media. The highest average anxiety of pregnant women in the third trimester is at age <20 , which is 26.50, while at the age of 20-35 it is smaller at 22.00. The anxiety score of pregnant women in the third trimester before the intervention was highest, namely 28 and the lowest was 17, with an

average anxiety score of 22.53. The anxiety score of pregnant women in the third trimester after the intervention was highest, namely 26 and the lowest was 13, with an average anxiety score of 19.41. The results of this study are that there are differences in anxiety scores in pregnant women after being given the intervention. The provision of health education interventions about childbirth can reduce anxiety scores in third trimester pregnant women.

Suggestion For health services, it is hoped that they can further modify the way in providing health education to pregnant women. For Further Researchers, It is hoped that the control group can be used so that it can further test the effectiveness of the intervention carried out, or examine other interventions that may have an effect on reducing the anxiety of pregnant women

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