

The Effectiveness of Leaflets in Reducing Anxiety During Pregnancy

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ABSTRACT

During pregnancy, changes occur due to pregnancy hormones that can cause physical discomfort in pregnant women. Continuous physical discomfort will lead to anxiety in pregnant women. The Covid-19 pandemic has caused an increase in anxiety among pregnant women. The fear of something that could happen to them and their child is one of the anxieties faced by pregnant women. The limited healthcare services during the Covid-19 pandemic are also a concern for pregnant women. The aim of this study is to determine the effectiveness of leaflet media in reducing anxiety levels in pregnant women during the Covid-19 pandemic. Method: This study is quantitative in nature. The design used is quasi-experimental. The data analysis used is bivariate analysis with paired t-test. Results: The results of the study show that the anxiety level of pregnant women before education using leaflet media was mostly in the moderate category, with 21 people (88.0%), and after education using leaflet media, there was a change indicated by the score where the low anxiety level increased to 9 people (29%) and the high anxiety level decreased to 3 people (10.0%). The study found a p-value of $0.000 < 0.005$. Conclusion: It can be concluded that leaflet media is effective in reducing the anxiety level of pregnant women during the Covid-19 pandemic

INTRODUCTION

The COVID-19 pandemic was deemed a public health emergency of international concern by the World Health Organization (WHO) on January 30, 2020. According to data from the Republic of Indonesia's COVID-19 Task Force, as of August 12, 2020, there were 20,388,408 positive COVID-19 patients globally. This figure includes hospitalized positive patients, recovered positive patients, and died positive patients. There are 130,718 COVID-19 positive patients in Indonesia overall, of whom 85,798 have recovered and 5,908 have died. (Wang C. and others, 2020)

The global Covid-19 epidemic has altered human existence. COVID-19 has affected many facets of existence. There have been social constraints and a halt to human activity. Work, education, purchasing and selling, and access to healthcare services have all grown more restricted. Since the pandemic entered Indonesia, it has caused changes in all aspects of life, including social, cultural, and religious orders. The Covid-19 pandemic has also created concerns for everyone. This is due to the restrictions on human activities, fear of contracting the Covid-19 disease, fear of not being able to access healthcare services, and fear of death that could come at any time. (Liu et al., 2020)

One of the groups affected by the COVID-19 pandemic is pregnant women. Pregnancy is a physiological condition experienced by women of reproductive age. During the pregnancy process, changes occur due to pregnancy hormones. These changes impact both the physical and psychological conditions of pregnant women. The physical changes that occur in pregnant women cause physical discomfort. Continuous physical discomfort will lead to anxiety in pregnant women. Pregnancy is a physiological condition experienced by women of reproductive age. These changes are influenced by the presence of pregnancy hormones. One of the effects felt is mood changes. The discomfort and mood changes experienced by pregnant women can also lead to the emergence of anxiety in pregnant women. Anxiety can negatively impact the health of pregnant mothers. The risk factors for anxiety during pregnancy are generally similar to those for non-pregnant individuals, including adverse childhood experiences. A history of mental disorders in parents and low socioeconomic status are also risks that elevate anxiety. The prevalence of anxiety and depressive symptoms during pregnancy ranges from 10-25%. Increased symptoms of depression and anxiety are associated with a higher incidence of preterm births and postpartum depression (Siregar et al., 2021). Anxiety is a feeling of worry, nervousness about something. The Covid-19 pandemic has made individuals vulnerable to experiencing severe anxiety. This includes the anxiety felt by pregnant mothers. Research results indicate that pregnant women are vulnerable to anxiety between 15-23% compared to 3-5% for general anxiety symptoms. Based on the analysis from several studies, there has been an increase in anxiety among pregnant women during the COVID pandemic. Pregnant women are prone to feelings of worry about what will happen to them and their children. Other factors that influence this include the presence or absence of support from husbands, family, and healthcare

workers in helping to reduce their risk perceptions, which trigger discomfort and lead to anxiety. The level of anxiety in mothers increases, and the feelings of discomfort in pregnant mothers, which should normally be benign, become perceived as abnormal due to the COVID-19 pandemic. Mothers feel unsafe and uncomfortable in facing their pregnancies. Although there are already media and information sources from various backgrounds, a pregnant woman still requires special attention or specific information that can explain in detail and thoroughly so that panic or anxiety during pregnancy in this COVID-19 pandemic can be adequately addressed. (Tantona M, 2020). The aim of this research is to determine whether leaflet media is effective in reducing.

LITERATURE REVIEW

Anxiety is a response to something that is certainly accompanied by development, change, and new experiences. Anxiety arises because there is something unclear or unknown, leading to feelings of restlessness, worry, or fear. Anxiety disorders are among the psychiatric problems that pregnant women are susceptible to. In the last months of pregnancy, the mother's emotions become increasingly volatile and sometimes uncontrollable. The anxiety experienced by pregnant women approaching childbirth occurs because the mother feels uncertain about her current pregnancy condition, fears for her own safety and the safety of her baby during childbirth, or worries and anxiety due to her inability to fulfill her duties as a mother after her baby is born; pregnant women will feel uncomfortable and see themselves as unattractive.

Sutriningsih's research in 2022 titled 'Factors Associated with Anxiety Levels in Pregnant Women in the Balinggi Health Center's Working Area is a cross-sectional, quantitative study. The population In this research, the goal population consisting of all pregnant women from January to December who are in the working area of Balinggi Health Center, Balinggi District, Parigi Moutong Regency, totaling 291 people. This study employed logistic regression analysis and the Chi-square test with a significance threshold of $p < 0.05$. Pregnant women's knowledge and anxiety levels in the Balinggi Health Center's working area are related, according to the analysis results using the chi-square test, which showed a p value of 0.004 (<0.05) from 75 respondents. The study's findings suggest a connection between expectant women' anxiety levels and their level of knowledge among pregnant mothers in the working area of the Balinggi Health Center, where pregnant mothers with poor knowledge experience severe anxiety more than those with good knowledge. The lack of knowledge in pregnant mothers poses a high risk of anxiety, unlike those with high knowledge about childbirth, as a higher level of knowledge can influence emotional maturity, for example, on how to control anxiety in someone who is not stable, especially with the primigravida status, which is the first experience for pregnant mothers.

Another study conducted by Merlis Simon (2018) from the analysis of the chi-square test obtained a p -value of $0.006 < 0.05$, meaning that there is a significant relationship between the level of knowledge and the level of anxiety in pregnant mothers. This indicates that a lack of knowledge in pregnant

mothers will lead to a high risk of anxiety, in contrast to pregnant mothers with high knowledge about childbirth, as a person's high knowledge will influence their emotional maturity, for example, how to manage anxiety for someone who is not stable, especially with the status of primigravida which is a first experience for pregnant mothers. The research by Meti Patimah in 2017 examined the relationship between knowledge about complaints during the first trimester of pregnancy and their management with anxiety in primigravida women in the first trimester, using a cross-sectional approach. The subjects of this study were primigravida pregnant women in the working area of PKM Tamansari, Tasikmalaya City, amounting to 30 individuals obtained randomly. The research findings showed that the knowledge of pregnant women fell into the 'poor' category at 83.3%, while the anxiety level of pregnant women was categorized as anxious at 83.3%. The analysis yielded a p-value of 0.022 ($\alpha = 0.05$), leading to the acceptance of H_a . Thus, it can be concluded that there is a relationship between knowledge about complaints during the first trimester of pregnancy and their management with anxiety in primigravida women in the first trimester.

METHODOLOGY

This research includes quasi-experimental research, because the researcher is not able to control all relevant external variables. This study's pretest and posttest are administered to a single group (one group pretest - posttest design). Thirty-one first-trimester pregnant women make up the study's population.

The study's sample size consisted of 31 pregnant women due to the use of complete sampling. The form of intervention carried out in this study is providing health education about pregnancy. The initial step of this research is to conduct a pre-test with the research instrument, followed by a 7-day health education on pregnancy for the respondents. After 7 days, a post-test will be conducted with the same research instrument on the respondents, after which a discussion session from the counseling is held. The Paired T-test will be used to assess the collected data. From May to August 2022, the study was carried out in the Depok II Health Center's Working Area in Sleman, Yogyakarta.

RESULTS

Mother's Anxiety Levels Before and After Education Using Leaflet Media
The research results on the level of anxiety of mothers before the education was conducted using leaflets are outlined in the table below:

Table 1. Mother's Anxiety Levels Before Education Using Leaflet Media.

		F	Percent	Valid Percent	Cumulative Percent
Valid	low	4	12.0	18.9	18.9
	Currently	21	69.1	69.1	88.0
	Height	6	18.9	12.0	100.0
	Total	31	100.0	100.0	

According to the above data, pregnant women's anxiety levels before education using leaflet media is in the moderate category, with 21 people (88.0%).

Table 2. Anxiety Level of Mothers After Education Using Leaflet Media

		F	Percent	Valid Precent	Cumulative Precent
Valid	low	9	29	29	29
	Currently	19	61	61	90
	Height	3	10	10	100.0
	Total	31	100.0	100.0	

From the table above, it is known that the level of anxiety in pregnant women after education using leaflet media showed a change indicated by the results where the low anxiety score increased to 9 people (29%).³ The impact of leaflet media on pregnant women's anxiety levels during the COVID-19 pandemic. The following table displays the findings of a study on the impact of leaflet media on pregnant women's anxiety levels during the COVID-19 pandemic:

Table 3. Paired T-Test.

		Paired Differences							
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of Difference		t	df	Sig. (2-tailed)
					Lower	Upper			
Pair 1	Pretest - Posttest	-2.234	5.558	.422	-3.068	-1.401	-5.289	174	0.000

With a p value of 0.000 ($\alpha < 0.05$) from the statistical test utilizing the paired t-test, H_0 is rejected while H_a is approved. This indicates that pregnant women's average anxiety levels before and after receiving information through leaflet media differ. This indicates that leaflet media is effective in reducing pregnant women's anxiety levels during the COVID-19 epidemic.

DISCUSSION

The high number of pregnant women experiencing anxiety is because the respondents in this study are first-time mothers who have limited information at the beginning of their pregnancy and lack experience, leading to anxiety about their pregnancy. Mothers who do not experience anxiety during pregnancy often have high knowledge about their pregnancy, frequently seek information related to their pregnancy, and are generally individuals who do not easily feel anxious or are able to manage their worries or anxieties in their own way. Actions that can be taken to reduce anxiety levels in pregnant women

include providing information about pregnancy care. One method for delivering information is by using leaflets. A leaflet is a small sheet of paper that contains printed messages to be disseminated to the public with the aim of providing information about a particular topic.

Changes in hormone levels in the body are typically the source of anxiety during pregnancy. The amounts of substances in the brain that are involved in controlling emotions can be impacted by changes in hormone levels during pregnancy. This explains why expectant mothers frequently experience anxiety, restlessness, and worry. The incidence of anxiety symptoms (59%) rose beyond the threshold score based on earlier pre-COVID-19 cohort studies that evaluated symptoms in pregnant women with comparable demographic profiles, according to a research by Wang et al. According to a survey conducted among Chinese people at the start of the COVID-19 pandemic, 29% of them had moderate to severe anxiety. The higher prevalence of anxiety symptoms in this group of high-risk pregnant women suggests that pregnant women may be especially concerned about the outbreak's psychological effects. Pregnant women must therefore be given specialized information to help them manage their discomfort and anxiety until both the mother and the unborn child are in a healthy state. According to a survey conducted among Chinese people at the start of the COVID-19 pandemic, 29% of them had moderate to severe anxiety. The higher prevalence of anxiety symptoms in this group of high-risk pregnant women suggests that pregnant women may be especially concerned about the outbreak's psychological effects. Pregnant women must therefore be given specialized information to help them manage their discomfort and anxiety until both the mother and the unborn child are in a healthy state.

Anxiety over the inability to undergo due to the appearance of numerous symptoms and other illnesses or discomforts during pregnancy that should be normal but might become abnormal, pregnant women are experiencing worry as a result of not receiving sufficient prenatal care screenings during this pandemic. Therefore, education for pregnant women is necessary. Education is crucial in order to give pregnant women the information and awareness they need to better manage their anxiety and learn how to keep themselves and their unborn children healthy throughout the COVID-19 pandemic.

CONCLUSIONS

According to the research's findings and analysis, leaflet media can effectively lower pregnant women's anxiety levels during the COVID-19 pandemic.

RECOMMENDATIONS

Suggestions and recommendations for future researchers are to use other educational media to conduct research to measure the anxiety levels of pregnant women.

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