

The Effect of Pregnant Women's Class on Primigravida Mother's Anxiety in Pegajahan Puskesmas, Pegajahan District, Serdang Bedagai Regency in 2022

Isyos Sari Sembiring¹, Halimatun Sakdiyah², Pristiwanti³ Susanti⁴, Arifah⁵, Surya Dani⁶
^{1,2,3,4,5,6}STIKes Mitra Husada Medan, Nort Sumatera, Indonesia

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ABSTRACT

High population growth causes a population explosion. These physical changes cause psychological and emotional conditions to become unstable so that it fosters constant worries until the end of her pregnancy. According to Mansur (2018), almost 80% of pregnant women experience disappointment, refusal, anxiety, anxiety, depression and moodiness and the incidence of mental disorders by 15% occurs in primigravida mothers in the first trimester. Worries and anxiety in pregnant women if not treated seriously will have a bad impact and influence. Poor health and mental health during pregnancy can have a lasting impact on the quality of life for the mother and the cognitive development of her child (Arini et al, 2018). Emotional disturbances in pregnant women will affect the behavior of maintaining health during pregnancy, such as being lazy to eat, lazy to take a bath, sleep disturbances and fatigue (Andriana, 2017). Aprilia's research (2018) also proves that the effects of stress can increase the risk of miscarriage, preeclampsia, impaired fetal growth, premature birth and postnatal developmental delays and reduce the mother's immune response.

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Corresponding Author:

Isyos Sari Sembiring
STIKes Mitra Husada Medan
Jl. Pintu Air IV Jl. Ps. VIII No.Kel, Kwala Bekala, Kec. Medan Johor, Kota Medan, Sumatera Utara 20142,
Indonesia
Email: sari.sembiring9@gmail.com

INTRODUCTION

Factors that affect anxiety in pregnant women include lack of information about illness, family support, financial adequacy, stress from the environment, high frequency of nausea and vomiting (physical health factors of pregnant women), attitudes towards pregnancy and the ability to master pregnancy, the adjustment process. themselves about pregnancy both physically and psychosocially, as well as information about the frightening experience of childbirth (Andriana, 2019).

Kerry and Marie (2019) conducted a prospective study to observe maternal anxiety during the transition to parenthood. The study used the STAI measuring instrument with 100 pregnant women in Australia as respondents. The results obtained were 21% of pregnant women experienced temporary anxiety disorders, 24% of respondents had basic anxiety, and 7% experienced depression.

Another study conducted by Rico in 2019 in Spain on the analysis of the relationship between maternal anxiety and pregnancy in 174 pregnant women and obtained the results that the level of anxiety in pregnant women is higher than the average level of the general population.

The class for pregnant women is a study group for pregnant women with a maximum number of 10 participants who will study together, discuss, and share experiences about maternal and child health (MCH) thoroughly and systematically and can be carried out on a scheduled basis 4 times.

Classes for pregnant women are facilitated by midwives or health workers using a class package for pregnant women, namely the MCH handbook, flip chart (back sheet), guidelines for implementing classes for pregnant women and the guide for class facilitators for pregnant women. The learning materials delivered in the implementation of the pregnant women class are the health of pregnant women, maternity, postpartum as well as newborn care and physical activity of pregnant women (Kemenkes, 2019).

The pregnant women class program in Indonesia started in 2010 and the implementation at the Pegajahan Health Center began in 2012. One of the expected results from the implementation of the pregnant women class is the understanding, changes in attitudes, and behavior of pregnant women so that pregnant women can live their pregnancies in peace and comfortable to avoid physical and mental illness and childbirth can take place normally which in turn contributes to a decrease in maternal mortality.

RESEARCH METHOD

Before data analysis, the collected data was processed with the following steps:

a. *Editing*

Editing This study was conducted to assess the suitability of the results of the planned research and the completeness of the filling, errors in filling out, and the clarity of filling out the questionnaire that had been carried out.

b. *coding*

The results of the research that have been filled in by the researcher are coded, converting the answers into numbers so that they can be processed by computer.

c. *Entry data*

A process of entering data into a computer for further data analysis using a computer program.

d. *Cleaning data*

The data that has been entered into the computer program is cleaned so that all the data that has been obtained is free from errors before data analysis is carried out.

The type of research used with a quantitative approach is because the research data is in the form of numbers and the analysis uses statistics. The study used a quasi-experimental design with a non-equivalent control group design approach, namely this design was almost the same as the pre-test post-test design with control group, only in this design the experimental group and control group were not chosen randomly. After processing the data, then the data is analyzed as follows:

a. *Univariate Analysis*

Univariate analysis aims to explain or describe the characteristics of each variable in the study. Univariate descriptive analysis in this study will be carried out on each research variable, including the characteristics of respondents (age, education and occupation), as well as the level of anxiety of primigravida mothers in the experimental group and the control group.

b. *Bivariate Analysis*

Bivariate analysis is an analysis carried out to see the relationship between the two variables (which includes the implementation of classes for pregnant women and anxiety in primigravida mothers. Before statistical tests are carried out, data normality tests are carried out. Normality test is a test carried out with the aim of assessing the distribution of data in a group of data or variables, whether the distribution of the data is normally distributed or not.

As for in this study using the normality test of this data using the Shapiro Wilk test because it is adjusted for a small research sample. In practice, researchers can use computer-based applications (Amri, 2018).

RESULTS AND DISCUSSIONS

This research was carried out in the working area of the Pegajahan Health Center, Pegajahan District, Serdang Bedagai Regency in 2022 as many as 34 primigravida mothers. The description of the distribution of respondents' can be seen in table 4.1.

Table 1 General Characteristics of Research Subjects in Both Groups at Pegajahan Health Center, Pegajahan District, Serdang Bedagai Regency in 2022

No.	Characteristics of Respondents	Group			
		Maternity class		Control	
		Total (n)	Percentage (%)	Total (n)	Percentage (%)
1.	Age				
	<20	1	2,94	3	8,82
	20-30	31	91,18	31	91,18
	31-35	2	5,89	0	0
	Total	34	100.0	34	100.0
2.	Education				
	Middle Education	30	88,24	32	94,11
	Higher Education	4	11,76	2	5,88
	Total	34	100.0	34	100.0
3.	Work				
	Work	5	14,71	9	26,47
	Doesn't Work	29	85,29	25	73,53
	Total	34	100.0	34	100.0

Based on table 4.1, the results of the study show that the the frequency distribution of the age of the experimental group and the control group was between the ages of 19 to 34 years, most of which were at the age of 20 to 30 years, which was 91.18%. The distribution of the frequency of work of the respondents were mostly pregnant women who did not work, in the experimental group it was 85.29% while in the control group it was 73.53%. Based on education, most of them have secondary education in the experimental group, which is 88.24% while in the control group it is 94.11%.

The level of anxiety of respondents in the experimental group

Table 2. Respondents' Anxiety Levels in the Experimental Group

Anxiety Level	Pre test		Post test	
	Total (n)	Percentage (%)	Total (n)	Percentage (%)
Low (<40)	0	0	31	91,18
Middle (40-60)	33	97,06	3	8,82
High (>60)	1	2,94	0	0
Total	34	100.0	34	100.0

Based on the table above, it shows that the respondents in the class group of pregnant women (experiments) who have done the pre-test, obtained the most results at the moderate level of anxiety, namely 33 (97.06%) with an average value of 49.12 which means in the level of anxiety currently. While in the group after the post-test, the highest results were obtained at a low anxiety level of 31 (91.18%) with an average value of 38.12 which means a mild level of anxiety.

Table 3. The level of anxiety of respondents in the control group

Anxiety Level	Pre test		Post test	
	Total (n)	Percentage (%)	Total (n)	Percentage (%)
Low (<40)	3	8,82	1	2,94
Middle (40-60)	31	91,18	33	97,06
High (>60)	0	0	0	0
Total	34	100.0	34	100.0

From the table above, it shows that the respondents in the group who did not take the class of pregnant women (control) and had a pre-test obtained the highest results at the moderate level of anxiety were 31 (91.18%) with an average value of 47.85 which means in moderate level of anxiety. In the control group after the post-test, the highest results were obtained at the moderate level of anxiety, namely 33 (97.06%) with an average value of 47.44 which means that the level of anxiety is moderate.

Bivariate Analysis

Anxiety of primigravida mothers in the experimental group and the control group The average pre-test and post-test scores of maternal anxiety in both groups can be seen in table 6 as follows

Table 4. Results of the Analysis of Differences in Anxiety of Pregnant Women on the Two

Anxiety Level	N	Mean	SD	Mean Different	CI 95 %	P-value
Pre-test :						
Eksperimen	34	49,12	4,463	1,38	-1,423 -	0,345
Kontrol	34	47,85	5,711		3,952	
Post-test:						
Eksperimen	34	38,12	1,472	-9,294	-11,131	0,0001
Kontrol	34	47,44	4,825		- (-7,456)	

In Table above, it is known that the anxiety pre-test scores in the two groups are almost the same or there is no significant difference ($p = 0.345$). Meanwhile, for the post-test scores in the two groups, there was a significant difference in the level of anxiety in pregnant women between the experimental group and the control group ($p=0.0001$).

Discussion

For the discussion in this study, the two groups did not have a significant difference in the anxiety level of primigravida mothers in the pre-test scores in both the experimental and control groups (p -value 0.345). After being given treatment (post-test), the mean scores of anxiety in the two groups were different. It can be concluded that the results of this study indicate that there is a significant difference in the level of anxiety of primigravida mothers during their pregnancy as evidenced by the results of the comparison test between anxiety scores in the experimental and control groups before and after in both groups showing a p -value of 0.0001. Categorically, in the experimental group (pregnant women class) there was a decrease in the level of anxiety from the category of moderate anxiety to mild anxiety.

The following are the symptoms of anxiety experienced by pregnant women due to the mother's inaccurate perception of pregnancy and childbirth. Labor is perceived as a frightening process and causes excruciating pain or creates fear in pregnant women who have never experienced childbirth. These thoughts will cause an increase in the work of the sympathetic nervous system, in this condition the endocrine system consisting of the adrenal, thyroid, and pituitary glands secretes hormones into the bloodstream to prepare the body for emergency situations, namely the presence of stressors (Fiana, 2018).

Other factors that can affect anxiety are age, occupation and education. Anxiety disorders can occur at any stage of development. Age affects a person's psychology, the older the person the better the level of emotional maturity and ability to deal with various problems. Safe pregnancy and childbirth is the age of 20-30 years, ie at the age of healthy reproduction. A woman who is less than 20 years old may be sexually mature, but not yet emotionally and socially mature. Age also determines the level of anxiety, namely anxiety often occurs in young age groups. The age of pregnant women under 20 years or above 35 years is a high-risk pregnancy age because abnormalities or disturbances in the fetus can occur, so that it can cause anxiety in the pregnant woman. This opinion is in accordance with research which found that anxiety and depression experienced by pregnant women are influenced by the age of the pregnant women themselves. This is also justified in research which states that pregnant women aged 16-20 years have higher stress, compared to mothers aged over 36 years (Murti, 2017).

Someone with a low economic status tends to be more tense and someone with a high economic status tends to be more relaxed. Work is also influential in determining the stressor of a person who has work activities outside the home allows getting a lot of influence from friends and various information and experiences from other people can affect a person's perspective in accepting stressors and overcoming them. Material support given by family members to realize a plan is something that can provide emotional benefits or influence on a person's behavior (Sukandar, 2018).

Based on education for everyone has a variety of meanings. Education is generally useful in changing mindsets, behavior patterns, and decision-making patterns. A sufficient level of education will make it easier to identify stressors within themselves and from outside themselves. The level of education also affects awareness and understanding of the stimulus. A person's level of education has an effect on responding to something that comes both from within and from without. People who have higher education will give a more rational response than those who are less educated or those who are not educated. Anxiety is a learned response. Thus, low education is a factor supporting the occurrence of anxiety. This is in accordance with the opinion which states that the level of education also determines whether or not a person absorbs or accepts and uses his knowledge. This opinion is supported by several studies which state that anxiety and depression experienced by pregnant women can be influenced by the educational status of the pregnant women (Murti, 2018).

To eliminate anxiety, cooperation between pregnant women and health workers must be instilled and information given to pregnant women during pregnancy. Class for pregnant women is one of the activities in services during pregnancy which aims to prepare themselves during pregnancy, childbirth, postpartum and baby care. One of the activities in the class for pregnant women is physical activity or pregnancy exercise which contains a relaxing effect that can stabilize the emotions of pregnant women (Andi, 2017).

For this reason, the anxiety of primigravida mothers is influenced by the activeness of mothers in attending classes for pregnant women. This can be explained by theories and activities regarding classes for pregnant women. Whereas the class for pregnant women is a means to learn together about health for pregnant women in the form of face-to-face in groups that aims to increase the knowledge and skills of mothers regarding pregnancy, childbirth, postpartum, postnatal family planning, prevention of complications, newborn care and activities physical / exercise for pregnant women. The class for pregnant women is a study group for pregnant women with a maximum number of 10 participants. In this class, pregnant women will study together, discuss, and share experiences about maternal and child health (MCH) thoroughly and systematically and can be carried out on a scheduled and continuous basis. Classes for pregnant women are facilitated by midwives/health workers with the wrong goal of being able to increase knowledge, change attitudes, and behavior of mothers to cope with their pregnancy and to prevent it (Kemenkes, 2018)

CONCLUSION

Based on the results of research and discussion, the authors conclude: The activity of primigravida mothers in attending classes for pregnant women can affect the decrease in anxiety levels in pregnant women from the category of moderate anxiety level to mild anxiety. The characteristics of the experimental group and control group are mostly 20-30 years old, not working, and with secondary education level. The frequency of the age of the experimental group and the control group was between the ages of 19 to 34 years, most of them were at the age of 20 to 30 years, which was 91.18%. The distribution of the frequency of work of the respondents were mostly pregnant women who did not work, in the experimental group it was 85.29% while in the control group it was 73.53%. Based on education, most of them have secondary education in the experimental group, which is 88.24% while in the control group it is 94.11%.

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References

- Andriana, E.2018. Painless Childbirth With the HypnoBirthing Relaxation Method.Jakarta: PT Bhuana Ilmu Populer.
- Andriyani, A.2017. The Effect of Hypnobirthing Class on Anxiet of Pregnant Women at Inpatient Health Center Yogyakarta City. Thesis. Faculty of Medicine, University of Padjadjaran.
- Aprilia Y dan Ritchmond B.2019.Gentle Birth: Give birth comfortably without pain.Jakarta: PT. Gramedia Widiasarana Indonesia.
- Arikunto, S.2019. Research Procedure A Practical Approach.Jakarta: Rineka Cipta.
- Azwar, S.2018. Research Procedure.Yogyakarta: Pustaka Pelajar.
- Dahlan, Sopiudin.2017.Statistics For Medicine and Health.Yogyakarta: Salemba Medika.
- E, Sri. 2016. The Effect of Maternity Class on Primigravida Mother's Anxiety. Puskesmas Wates. Poltekkes Yogyakarta
- Eugenie, dkk.2018. Maternity Classes Have a Positive Effect on Anxiety Levels of Primigravida Mothers Facing Childbirth,Jurnal.
- Gufron, M.N dan Rini, R.S.2018.Teori-Teori Psikologi.Yogyakarta: Ar Ruzz Media