

Conference Paper

Effectiveness of "Paket BerSIH" on Prenatal Distress

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Abstract.

Distress during the prenatal period arises because of the inability of pregnant women to adapt. A comprehensive assessment is needed so that prenatal distress can be immediately intervened. One of them was provided education using various media and packaged in "Paket BerSIH". "Paket BerSIH" contains health education in which there is a variety of information about stress in pregnancy, especially overcoming prenatal distress. The research design used a quasi-experimental pre- and post-test approach with 30 respondents in intervention groups and 30 respondents in control groups. The independent variables researched included "Paket BerSIH" and prenatal distress as the dependent variables. Instruments used include the observation sheet for giving "Paket BerSIH" and prenatal distress questionnaire (PDQ). The bivariate analysis carried out in this study was an independent t-test (unpaired t-test). The results showed that there was a significant difference in the mean of prenatal distress between the control groups and the intervention groups after giving "Paket BerSIH" ($p = 0.001$). Health workers can provide "Paket BerSIH" during ANC, which has been proven to be effective for pregnant women, and pregnant women were expected to take advantage of this package, so that they do not experience long periods of stress during pregnancy.

Keywords: distress, paket BerSIH, prenatal

1. Introduction

Incredible panic shook almost all over the world after the emergence of Covid-19. Pregnant women are no exception, who are the category of people who are most vulnerable to being infected (1). The condition of pregnancy causes a decrease in the immune system due to the mother's body adapting to the baby which is a semi-allogenic tissue. Physiological changes that occur can affect reciprocally on the psychological condition of pregnant women. Womens experience distress during the prenatal period because they are unable to adapt (2).

The results of previous studies found that 50.7% of pregnant women had experienced concerns about their health since the Covid-19 pandemic. These concerns include 66.7%

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of pregnancy conditions and 35% of baby care (3). The results of a study in Canada stated that 31% of pregnant women experienced post-quarantine stress and symptoms of depression appeared. This is in accordance with a study conducted in Wuhan which stated that 53.8% of pregnant women experienced psychological disorders, 17% had severe depression and 29% had anxiety symptoms (4).

The results of previous studies in Indonesia stated that 55.6% of primigravida mothers in Banten Province experienced high distress (5). The stressor of pregnant women increases with the increasing number of Covid-19 cases. As of September 2020, Banten Province ranks 14th out of all provinces in Indonesia, far below DKI Jakarta Province in the first place which is geographically directly adjacent. Banten Province is managing changes from the traditional to the modern era. Currently, there are many migrants and not a few residents who commute to work in Jakarta, so they are very vulnerable to Covid-19 transmission (6).

Children born to mothers who experience high prenatal distress are more likely to have cognitive and behavioral problems due to changes in brain structure and function in infants and children due to the ineffectiveness of mothers during prenatal care (7). Psychologically, the impact of prenatal distress will increase the risk of postpartum depression, as well as prenatal infections and disease rates (8). Prenatal distress can also cause changes in activity patterns, nutritional patterns, sleep patterns, risk of miscarriage, premature delivery, low birth weight and lower Apgar scores at birth (3).

Health services for pregnant women are one of the direct impacts of the Covid-19 pandemic. This is because many pregnant women are afraid and worried about having their pregnancy checked. Many pregnant women don't know how to get pregnant during the Covid-19 pandemic. Therefore, pregnant women need to get information in order to be able to improve coping mechanisms and personal strategies to minimize risk (9). A comprehensive assessment needs to be carried out so that pregnant women who are detected as having prenatal distress can immediately get intervention (5). One of them is by providing health education which is part of health promotion (10).

Health education in overcoming prenatal distress will provide better understanding for pregnant women as well as to prevent stress. A holistic approach during pregnancy is able to reduce the risk factors caused during pregnancy, control when stress occurs and prevent stress (11). Health education that can be provided is in the form of education on handling prenatal distress with various media including animated videos, leaflet, and booklet. Furthermore, this nursing intervention can be packaged in the form of the

Pregnant Mothers Stress Eradication Package (BerSIH). Based on this phenomenon, researchers need to identify the effectiveness of giving “Paket BerSIH” to the level of prenatal distress.

2. Methods

2.1. Study design

The research design used was a quasi-experimental approach, with a pre and posttest approach in the intervention group and the control group. This study provides treatment to the intervention group by giving the “Paket BerSIH” to pregnant women. The effectiveness of the treatment was seen in the difference in the mean level of prenatal distress between the intervention group and the control group. The independent variables studied included pregnant women who were given the “Paket BerSIH” and the level of prenatal distress as the dependent variable.

2.2. Sample

This research was conducted in the Kramatwatu Health Centre in Serang Regency - Banten. A total of 60 pregnant women were included in this study consisting of 30 respondents intervention groups and 30 respondents control groups. The sampling technique was carried out using consecutive sampling with the criteria of gestational age < 36 weeks, willing to be a respondent, being cooperative, no history of comorbidities and other pathological conditions and the condition of the fetus in the womb having no defects or abnormalities.

2.3. Instrument

The instruments used included the observation sheet for giving the “Paket BerSIH” and the Prenatal Distress Questionnaire (PDQ) from Lobel, Cannella, Graham, DeVinent, Schneider, & Meyer which consisted of seventeen questions containing concerns about physical and emotional changes, relationships with other people, childbirth and body image. These concerns are often experienced by pregnant women, so this questionnaire can be a good alternative choice. The scale used is a Likert scale with a value range of 0-2 (12).

2.4. Data Collection

Researchers have made correspondence for permission to use this questionnaire. The questionnaire has also been translated through the official English language institute by the previous researcher. This questionnaire was used to measure the level of prenatal distress in Serang City and has been declared valid and reliable (5). The research began by giving PDQ questionnaires to all respondents from both the control group and the intervention group. After that, the control group was sent home and the intervention group remained in place to be given education about stress management using powerpoints and leaflets as well as being taught some relaxation techniques in dealing with stress during pregnancy. Before the intervention group went home, they were provided with a booklet and included in the whatsapp group. The intervention group was given treatment for 14 days and every day the researchers sent an animated video with a duration of 3-5 minutes containing material on handling stress during pregnancy and motivation for mothers not to stress during pregnancy. In addition, every day the researchers also asked for a video of the mother while studying the booklet given. After 14 days, the intervention group and the control group were pooled to complete the Return PDQ questionnaire.

2.5. Data analysis

Data Analysis used univariate and bivariate. Univariate analysis describes the level of prenatal distress before and after the intervention and then presented in a frequency distribution table. Bivariate analysis was carried out computerized. Prior to bivariate analysis, the data were tested for normality to determine whether the data distribution was normal or not. In this study, the data normality test was used in the form of Kolmogorov-Smirnov. The bivariate analysis carried out in this study was an independent t-test (unpaired t-test) because the research design used was a pre-test and post-test with control group design with numerical and categorical data. An independent t-test (unpaired t-test) was used to prove the formulated hypothesis whether there was a difference in the level of prenatal distress in the intervention group and the control group after administration of the “Paket BerSIH” in the intervention group.

3. Results

In table 1, it is known that the average frequency of prenatal distress levels before the “Paket BerSIH” was given to the intervention group was 7.59 with a standard deviation of 2.241, while in the control group, the average frequency of prenatal distress was 8.44 with a standard deviation of 2.124. The results of the Levine test analysis on the frequency of prenatal distress levels obtained p value = 0.127 so that there was no difference in variance and no significant difference in the average frequency of prenatal distress levels between the intervention group and the control group before being given the “Paket BerSIH”.

TABLE 1: Differences in the Frequency of Prenatal Distress Levels between the Control Group and the Intervention Group Before Giving the “Paket BerSIH” (n=60).

Variable	Intervention Group (n=30)		Control Group (n=30)		95% CI	p
	Mean	SD	Mean	SD		
Frequency of Prenatal Distress Levels	7,59	2,241	8,44	2,124	0,247-1,935	0,127

Table 2 shows that the average frequency of prenatal distress levels before being given the “Paket BerSIH” in the intervention group was 7.59 with a standard deviation of 2.241, while after being given the “Paket BerSIH”, the average frequency of prenatal distress levels was 4.81 with a standard deviation of 1.958. The results of the statistical test paired t test obtained p value = 0.001 so it can be concluded that there is a difference in the frequency of prenatal distress levels before and after the administration of the “Paket BerSIH” in the intervention group.

TABLE 2: Differences in the Frequency of Prenatal Distress Levels Before and After Giving the “Paket BerSIH” to the Intervention Group (n=30).

	Frequency of Prenatal Distress Levels			p
	Mean	SD	95% CI	
Before After	7,59 4,81	2,241 1,958	2,142-3,421	0,001

In table 3, it is known that the difference in the average frequency of prenatal distress levels before and after the intervention in the intervention group is lower than the control group, which is 4.41. The results of further analysis concluded that there was a significant difference in the mean frequency of prenatal distress between the control group and the intervention group after being given the “Paket BerSIH” with $p < 0.05$.

TABLE 3: Differences in the Mean Frequency of Prenatal Distress Levels between the Intervention Group and the Control Group (n=60).

Group	Frequency of Prenatal Distress Levels		95%CI	p
	Mean	SD		
Control	9,22	4,81	3,460-5,353	0,001
Intervention	1,827	1,958		

4. Discussion

Based on the results of the study, there were still a small number of pregnant women before being given the “Paket BerSIH” who had a high level of prenatal distress. This could be due to the lack of information about integrated ANC services. Pregnant women are generally more prepared to deal with physical changes than psychological ones. In Indonesia, the majority of health workers and family members pay more attention to the physical condition of pregnant women and their fetuses. In fact, the birth process is influenced by passage, passanger and power factors, psychological factors also determine the success of childbirth (13).

One of the factors that influence a person’s knowledge is exposure to information. Information that is easily available is very helpful in accelerating someone to acquire new knowledge. Pregnant women should get comprehensive information from health workers regarding pregnancy, childbirth and the postpartum period, especially on the psychological aspects. Health education acts as a form of effort to increase one’s knowledge and abilities through learning activities or instructions with the aim of changing or influencing human attitudes and behavior so that they can participate in these activities (14).

Health Education which is packaged in a package called the “Paket BerSIH” is carried out to reduce the level of prenatal distress. Pregnant women who receive the “Paket BerSIH” will gain new knowledge about stress management during pregnancy so that their knowledge increases, which is supported by the results of research that there is a significant difference in the frequency of prenatal distress levels before and after the administration of the “Paket BerSIH”. The results of this study indicate a change in the average frequency of lower prenatal distress levels after the administration of the “Paket BerSIH”.

This research reinforces the importance of comprehensive psychosocial assessment. Nurses and other health workers should be more involved in assessing the occurrence of prenatal distress since the first antenatal visit. Related data can be collected by

officers through a comprehensive psychosocial assessment format so that pregnant women who are detected as experiencing prenatal distress can immediately receive intervention in the form of the “Paket BerSIH”. Nurses also have a big role in encouraging and motivating pregnant women and husbands to make antenatal visits to get various information.

Mothers who get a “Paket BerSIH” will always feel rich in information about stress during pregnancy. So that mothers can anticipate long stress and complications that can occur in psychological aspects such as depression and even psychosis.

5. Conclusion

Based on the results of the study, it can be concluded that there is a significant difference in the frequency of prenatal distress levels before and after the administration of the “Paket BerSIH”. The results of this study recommend the need for a deeper study related to psychosocial aspects of pregnant women since the first antenatal visit. Related data can be collected by officers through a comprehensive psychosocial assessment format so that pregnant women who are detected as experiencing prenatal distress can be given intervention in the form of the “Paket BerSIH”.

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7. Conflict of Interest

The authors have no conflicts of interest to declare.

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