Self-Management Effect on Preeclampsia in Pregnant Women at RSI Jemursari Surabaya

R. Khairiyatul Afiyah[1]*, Faridah Umamah[2], Rusdianingseh[3], Fauziyatun Nisa[4] Hurun Ain[5] , Machmudah[6]

[1,2,3,4]*Department of Nursing, Nursing and Midwifery Faculty, Universitas Nahdlatul Ulama Surabaya, 60237, East Java, Indonesia. Email: eer@unusa.ac.id. ORCID: 0000-0002-9416-2646*
[5]*Faculty of Nursing, Universitas Airlangga Surabaya, Nursing Department, Health Polytechnic of the Ministry of Health Malang, Malang, Indonesia*
[6]*Faculty of Nursing and Health Sciences, Muhammadiyah University, Semarang, Indonesia, Faculty of Nursing, Universitas Airlangga Surabaya, Indonesia*

KEYWORDS

Pregnant women, preeclampsia, self management

ABSTRACT

The leading cause of mortality after infection and hemorrhage is preeclampsia. Preeclampsia can develop in a pregnant woman anywhere from the third trimester onwards, or after the 20th week of gestation. Finding out how self-management affects preeclampsia in pregnant women was the goal of this study at RSI Jemursari Surabaya. This study's pre-experimental design makes use of the One-Group Pre-Test and Post-Test methodology. The study's population consisted of sixty-two pregnant women diagnosed with preeclampsia at RSI Jemursari Surabaya. extracted with the use of a sequential non-random sampling procedure. One variable that may be controlled is preeclampsia, while another is self-management. The device used a preeclampsia observation sheet. In order to analyze the data, the Wilcoxon ranks test statistic was used, with a significance threshold of = 0.05. The results obtained from 53 respondents that before being given intervention there were severe preeclampsia (39.6%), mild preeclampsia (49.1%) of respondents, and superimposed (11.3%). 0%), mild preeclampsia (71.7%) and superimposed preeclampsia (11.3%). Analysis of the Wilcoxon ranks test statistical test obtained a significance value of P=0.001 so that H0 is rejected and H1 is accepted. Self Management has an effect on the incidence of preeclampsia, so pregnant women can do it independently and nurses are expected to be able to provide education in health services.

1. Introduction

Preeclampsia is a pathological pregnancy which is a health problem in the third trimester (> 20 weeks) in the mother that can have an impact on the baby it contains. This is related to high morbidity and mortality throughout the world or Indonesia (Utami & Farida Handayani, 2020) . Preeclampsia can be treated or controlled through pharmacological and non-pharmacological therapy as an effort to detect high-risk pregnancies (Wigati et al., 2018). After 20 weeks of gestation, preeclampsia is a pregnancy-specific syndrome marked by hypertension, edema, and proteinuria. It is impacted by a number of risk factors, such as age, parity, gestational age, hypertension, occupation, ANC examination, and obesity (Ekawati et al., 2019). Based on observations that have been made in the field starting from February there is a significant increase in the incidence of preeclampsia (Duley et al., 2006). This is related to visits by pregnant women who experience a decline in checking the condition of themselves and the fetus they are carrying, because in the last 6 months there has been a surge in the new variant of COVID-19 (Pettit & Brown, 2012). So that many pregnant women do not provide health services for reasons of fear of contracting Covid-19, meaning that there are still many pregnant women who are not obedient in doing self- management well for themselves (Iyawa et al., 2021). The findings of an initial investigation that began on January 1, 2022, included information on 62 individuals who had preeclampsia incidence within the previous three months. Preeclampsia affects 0.51% to 38.4% of pregnancies globally, according to data from the World Health Organization (WHO), although it affects 3–10% of pregnancies in Indonesia (Sutiati Bardja, 2020). Preeclampsia was more common in East Java in 2020 26.92% than in 2019 (31.15%), according to the East Java Provincial Health Office (2020). In contrast, preeclampsia was more common in RSI Jemursari Surabaya 13.16% (Sub medical records department, 2022). Preeclampsia, at 26.90%, is the leading cause of maternal death in 2020, according to data from the Ministry of Health of the Republic of Indonesia (2021) (Magee et al., 2022).

According to Christian and Krumwiede (2013), prevention-oriented therapy may be more successful in lowering the maternal mortality rate (MMR) associated with preeclampsia-eclampsia. Antenatal Care (ANC) compliance, which is the primary cause of preeclampsia, is one non-pharmacological management strategy for prevention and early identification of preeclampsia (Rasouli et al., 2019).

Walking exercises and education on preeclampsia in pregnant women are forms of physical activity that can help diagnose the condition early and reduce the risk of life-threatening complications that could end in maternal mortality (Kodric et al., 2021). In addition to controlling eating habits (Cairns et al., 2018). Self management is an indicator of the success of prevention and non-pharmacological management of preeclampsia so that it can be used as a benchmark that aims to change negative behavior and develop positive behavior (Rich-Edwards et al., 2019). Self Management includes ANC compliance checks, walking exercises, education, and dietary regulation (Moulaei et al., 2021).

Preeclampsia can be prevented by a variety of strategies, such as a low-salt diet or salt withdrawal, calcium supplementation, fish oil supplementation, antihypertensive medications, antioxidants, antithrombic agents, low-dose aspirin, and low-dose aspirin plus heparin, maintaining weight gain, monitoring anticoagulant concentration (ANC) at least four times, stopping pregnancy at 37 weeks or beyond, screening, and education, particularly for primigravida pregnant women under the age of twenty-one. (Wah et al., 2019). It is expected that pregnant women with preeclampsia, especially in the rsi sunsarisari surabaya, can carry out self- management related to several aspects that can reduce the incidence or degree of preeclampsia by giving the package which has never been done by researchers before (Kitt et al., 2022). Given the background information provided, the researcher from RSI Jemursari Surabaya is interested in examining the impact of self-management on preeclampsia in pregnant women.

2. Methodology

Materials

Examine this form of study P r an E experiment, specifically by employing a single group pre- and post-test design strategy in your research design. This research is used to find out and analyze influence *self management* against preeclampsia in pregnant women (Hulloli, P. B., & Venkatesh, G. 2021). This type of design aims to reveal cause and effect by involving a group of subjects.

Data collection procedures

The subject group in this study underwent pre-intervention observation and post-intervention observation. The Independent Variable (Free) self-management and the Dependent Variable (Bound) are the two variables included in this study. 53 pregnant women at RSI Jemursari Surabaya with preeclampsia made up the study's sample, out of the 62 total pregnant women with preeclampsia in the population (Sasaki, T. 2012). The sequential non-random sampling procedure was the sample technique employed. In order to use this sampling technique, subjects who satisfy the study's requirements are selected and given a set amount of time to participate in the investigation (Aydın et al., 2021).

Data analysis

The data will be analyzed using the Spearmen Rank statistical test using the SPSS for Windows program with a level of precision following the processing of the data. The significance level was set at 0.05 and the value of 0.001 was derived using statistical tests using the Wilcoxon signed rank test. Because <, h0 is disproved and h1 is accepted, indicating that self-management has an impact on preeclampsia in expectant mothers.weight increase, four ANC checks minimum, termination of pregnancy at 37 weeks and beyond, screening, and education, particularly for primigravida pregnant women under the age of twenty. (Wiknjosastro, 2005). Researchers have never before examined the possibility of pregnant women with preeclampsia, particularly in the RSI Jemursari Surabaya, engaging in self-management pertaining to many variables that may lower the frequency or severity of preeclampsia. A study on the impact of self-management on preeclampsia in pregnant women at RSI Jemursari Surabaya is of interest to the researcher, given the background information.

3. Results and discussion

Tabel 1. Distribution of the Effect of Giving self-management to preeclampsia in pregnant women

Before (Pre-Test) and After (Post-Test) at RSI Jemursari Surabaya

Blood pressure	Pre		Post	
	n	%	n	%
Severe Preeclampsia	21	39.6	9	17.0
Mild Preeclampsia	26	49.1	38	71.7
Superimposed Preeclampsia	6	11.3	6	11.3
Total	53	100	53	100

Based on table 1 above, it shows that before the intervention was given to 53 respondents, almost half experienced severe preeclampsia by 21 respondents, almost half experienced mild preeclampsia by 26 respondents and a small proportion of superimposed preeclampsia by 6 respondents at RSI Jemursari Surabaya. The stages of preeclampsia are moderate, severe, and eclampsia. According to Stern et al. (2014), this way of thinking refers to the pathophysiological alterations that result from reduced placental perfusion and endothelial cell dysfunction in women with preeclampsia. The uterine spiral arteries often widen during pregnancy, changing from thick-walled muscle vessels to thin blood vessels with a significantly greater diameter. Because of these modifications, vascular arteries are better able to accommodate the increased blood volume that comes with pregnancy (Harris et al., 2014). Based on the data above, respondents before being given self-management of experienced severe, mild preeclampsia and superimposed preeclampsia because self-management was not good due to the level of ANC compliance, activity, level of education and maternal diet during pregnant.

4. Conclusion and future scope

Self-management has an impact on preeclampsia in pregnant women.

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Conflict of interest

The authors declare no competing interests

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