



**THE EFFECT OF HEALTH EDUCATION WITH “BUHARTI” PACKAGE MEDIA
(HIGH RISK PREGNANT WOMEN BOOKLET) ON PREGNANT WOMEN'S
READINESS IN FACING LABOR**

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ABSTRACT

High-risk pregnancy is a pregnancy process that has a higher and greater risk than normal pregnancy in general. Health education for pregnant women with high risk is very important to be given in perinatal care. The purpose of this study was to determine the effect of health education with the Bu harti package media (Booklet for High-Risk Pregnant Women) on the readiness of pregnant women in facing childbirth. The specific purpose of this study was to identify the characteristics of high-risk pregnant women. This type of research is a quantitative study with a quasi-experimental design using a quasi-experimental research design. The sampling technique was purposive sampling, namely pregnant women with high risk who visited the Imogiri I Health Center as many as 60 people. The research instruments used were the Demographic Data questionnaire, and the Birth Preparedness and Complication Readiness (BPCR) questionnaire regarding childbirth readiness. The media used to provide health education was the high-risk pregnant women booklet package. The results showed that there was a significant influence on health education media booklet package for high-risk pregnant women “Bu Harti” with the readiness of pregnant women to face childbirth (Significance 0.001 <0.0005). The conclusion of this study is that there is a significant influence of providing education using the “Bu Harti” package on childbirth readiness at Puskesmas Imogiri I.

Keywords: booklet; education; high-risk pregnant women; preparation for childbirth

INTRODUCTION

Pregnancy is one of the important events in the lives of all mothers. One of the main health problems related to pregnancy is high-risk pregnancy (Alkema L, et al, 2016) High-risk pregnancy is a pregnancy process that has a higher and greater risk than normal pregnancy in general (Hutahean S, 2021). These risks are in the form of complications that can threaten the health or life of both the fetus and the mother and can occur before or after birth (Alves C, et al, 2019). Risk factors that often occur during pregnancy and postpartum are anemia, hypertension, and diabetes mellitus which can affect the growth and development of the fetus and can also threaten the life of the mother. In addition, pregnant women with HIV positive, multiple pregnancies, pregnancies that are too old or too young, biological factors, social factors such as age, parity, obstetric history are also high-risk pregnancies that affect health during pregnancy (Vaghela, et al, 2019)

High-risk pregnancy can cause various health problems for both the mother and the fetus during the perinatal period. Medical problems that occur in high-risk pregnant women include premature birth, bleeding during pregnancy, placental problems, kidney damage, and premature rupture of membranes (Munch, et al 2020) High-risk pregnant women with various health problems can also affect the mother's psychological response, which can interfere with women's emotions (Issacs N and Anipatan, 2020). Pregnant women will have complex feelings about their pregnancy and experience increased anxiety (Daglis, 2018). Pregnant

women also feel afraid, sad, guilty, sometimes even frustrated during their pregnancy. Medical or psychological problems that occur during pregnancy can also contribute significantly to the development of pregnant women at risk. These high-risk pregnant women also contribute to the Maternal Mortality Rate (Damor and Metha, 2021)

The results of the 2015 Inter-Census Population Survey (SUPAS) showed that the maternal mortality rate was three times higher than the MDGs target. In 2021, there were 7,389 deaths in Indonesia. This number shows an increase compared to 2020 of 4,627 deaths. Based on the cause, most maternal deaths in 2021 were related to COVID-19 as many as 2,982 cases, bleeding as many as 1,330 cases, and hypertension in pregnancy as many as 1,077 cases. Following other causes such as pregnant women with heart disease, infections, metabolic disorders, circulatory system disorders, and abortions (Ministry of Health, 2022). Based on the health profile of Bantul Regency in 2021, it was found that the Maternal Mortality Rate in 2020 increased compared to 2019. The Maternal Mortality Rate in 2020 was 20 cases, while in 2019 there were 13 cases. Based on the results of the Maternal Perinatal Audit, it was concluded that maternal deaths in 2020 were caused by 2 cases of bleeding, 4 cases of hypertension in pregnancy, 5 cases of circulatory system disorders, 2 cases of infection, and 6 cases of others.

Based on the results of a preliminary study at the Imogiri 1 Health Center as of November 16, 2022, it was found that there were 51 high-risk pregnant women. These high-risk pregnancies are caused by several factors such as pregnant women with a history of CS, pregnant women with DM, hypertension, pregnancy spacing <2 years, age > 35 years, age <20, anemia, recurrent abortion, asthma, poor obstetric history, history of preeclampsia, and reactive HbSAg (WHO, 2021). Imogiri I Health Center has implemented pregnancy classes for both high-risk and non-risk pregnant women. However, the implementation of education is usually only carried out through lectures. Based on research, providing health education or education using media has the result of increasing the knowledge of high-risk pregnant women, and can also improve the attitudes of high-risk pregnant women (Widarta, 2015).

Booklets are one form of media. The use of booklets in providing explanations will make it easier for respondents to understand the material presented. Booklets are chosen as a medium for providing health education because booklets can provide more detailed information, are easy to carry so they can be studied at any time and are more interesting. Several studies have shown that the use of booklets as a medium for health education can increase knowledge. Based on this description, in this study the author wants to know about the effect of health education with the Buharti package media (Booklet for High-Risk Pregnant Women) on the readiness of pregnant women in facing childbirth. This study generally aims to determine the effect of health education with the Buharti package media (Booklet for High-Risk Pregnant Women) on the readiness of pregnant women in facing childbirth. The specific objectives of this study are to 1) identify the characteristics of high-risk pregnant women (age, occupation, education, family income, weight, height, parity, gestational age, history of IUFD, comorbidities, number of ANC visits, pregnancy spacing); 2) describe the readiness of high-risk pregnant women before and after being given health education with the "Buharti" package media; 3) analyze the effect of health education with the "Buharti" package media on the readiness to face childbirth of high-risk pregnant women.

METHOD

The type of research used in this study is quasi-experimental. This study aims to analyze the effect of health education treatment with the "Buharti" package media seen from the differences in the readiness of high-risk pregnant women for childbirth before and after being

given treatment. In this study, two measurements were carried out, namely before the intervention (pre-test) and after the intervention (post-test). The study was conducted in the work area of the Imogiri I Health Center. The activity was carried out on Saturday, October 12, 2024 at the Imogiri I Health Center meeting building. The event was held starting at 08.00 and ending at 11.30. There were 60 high-risk pregnant women who participated in this study. At the beginning of the activity, participants were given a questionnaire to determine the readiness of childbirth in high-risk pregnant women. Then participants were given health education with booklet media. Continued with a question and answer session and participants were given post-test questions with the same questionnaire. The subjects of this study were all high-risk pregnant women in their first, second, and third trimesters of pregnancy in the Imogiri I Health Center working area and undergoing examination at the Health Center with a total of 60 respondents. There were 30 respondents for each group. The sampling technique used purposive sampling with the inclusion criteria in this study were: High-risk pregnant women who underwent examination at the Imogiri I Health Center and were in the Imogiri I Working Area, High-risk pregnant women in their first, second, and third trimesters of pregnancy, willing to be research respondents, able to read and write. The exclusion criteria in this study were high-risk pregnant women in their first, second, and third trimesters who did not complete the pre-test and post-test in this study, and high-risk pregnant women in emergency conditions (bleeding). This study has received approval from the Surya Global Yogyakarta Health Research Ethics Committee with Number 3.28/KEPK/SSG/VIII/2024.

RESULT

Research on the Effect of Health Education with Buharti Package Media (Booklet for High-Risk Pregnant Women) on the Readiness of Pregnant Women in Facing Childbirth was conducted to increase the knowledge of high-risk pregnant women to prepare pregnant women in readiness for childbirth.

Respondent characteristics

Age

The description of respondents based on age level can be presented in Table 6.1 as follows:

Table 1.
Sample Distribution by Age

Variables	Treatment group I		Treatment group II		P
	f	%	f	%	
≤ 20 years	2	6,67	1	10	3
21-34 years	25	83,33	20	66,66	45
≥ 35 years	3	10	9	30	12

Table 1 shows that the majority of respondents are aged 21-34 years in treatment group I and treatment group II. In treatment group I, the majority are aged 21-34 years, as many as 25 respondents (83.33%) and in the treatment group aged 21-34 years, as many as 20 respondents (66.66%). Education

Description of respondents based on education level can be presented in Table 2 as follows:

Table 2.
Sample Distribution Based on Education Level

Variables	Treatment group I		Treatment group II		P
	f	%	f	%	
Elementary	2	6,67	6	20	8
Middle School	3	10	11	36,66	14
High School	23	76,66	13	43,33	36
Higher Education	2	6,67	0	0	2
Total	30	100	30	100	60

Table 2 shows that the majority of respondents were pregnant women with a high school education level, namely 22 respondents (76.66%) in treatment group I and 13 respondents (43.33%) in treatment group II.

Job

Description of respondents based on type of work can be presented in table 6.3 as follows:

Table 3.
Sample Distribution by Occupation

Variables	Treatment group I		Treatment group II		P
	f	%	f	%	
Housewife	21	70	16	53,33	25
Working	9	30	14	46,66	35
Total	30	100	30	100	60

Table 3 shows that the majority of respondents were pregnant women who were housewives, namely 21 respondents (70%) in treatment group 1 and 16 respondents (53.33%) in treatment group II.

Pregnancy Risk Factors

Description of respondents based on pregnancy risk factors can be presented in table 4 as follows:

Tabel 4.
High Risk Factors for Pregnancy in Pregnant Women

Variabel	Treatment group I		Treatment group II		P
	f	%	f	%	
Severe Preeclampsia	20	66,66	22	73,33	42
Diabetes	3	10	2	6,66	5
Anemia	2	6,66	3	10	5
KEK	1	3,33	2	6,66	3
Young Primi	2	6,66	1	3,33	3
Old primi	2	6,66	2	6,66	4
Total	30	100	30	100	60

Table 4 shows that the majority of pregnancy risk factors in pregnant women at the Imogiri I PEB PUSKESMAS were 20 respondents (66.66%) in treatment group I and 22 respondents (73.33%) in treatment group II. Paritas.

Description of respondents based on pregnancy parity can be presented in table 5 as follows:

Table 5.

Pregnancy Parity Factors in Pregnant Women

Variables	Treatment group I		Treatment group II		P
	f	%	f	%	
Primigravida	18	60	20	66,66	38
Multigravida	12	40	10	33,33	22
Total	30	100	30	100	60

Table 5 shows that the majority of parity factors in pregnant women are primigravida, with 18 respondents (60%) in treatment group I and 20 respondents (66.66%) in treatment group II

History of IUFD (intra Uteri Fetal Distress)

Description of respondents based on IUFD history can be presented in Table 6 as follows:

Tabel 6.

Faktor Riwayat IUFD pada Ibu Hamil

Variabel	Treatment group I		Treatment group II		P
	f	%	f	%	
Once	3	10	2	6,66	5
Never	27	90	28	93,33	35
Total	30	100	30	100	60

Table 6 shows that the majority of respondents did not have a history of IUFD in their pregnancy. In treatment group I, there were 3 respondents (10%) who had experienced IUFD and in treatment group II, there were 2 respondents (6.66%) with a history of IUFD.

History of Miscarriage

Description of respondents based on History of Miscarriage can be presented in table 6.7 as follows:

Table 7.

Miscarriage History Factors in Pregnant Women

Variabel	Treatment group I		Treatment group II		P
	f	%	f	%	
Ever had a miscarriage	5	16,66%	3	10%	8
Never had a miscarriage	25	83,33%	27	90%	32
Total	30	100%	30	100%	60

Table 7 shows that the majority of respondents did not experience miscarriage in their pregnancy. In treatment group I, there were 5 respondents (16.66%) who had experienced miscarriage and in treatment group II, there were 3 respondents (10%) with a history of miscarriage.

Results of the Evaluation Test of Readiness for Childbirth in Pregnant Women with High-Risk Pregnancy

Table 8.

Readiness of High-Risk Pregnant Women before and after being given health education with the Buharti module

Readiness Variables	Treatment Group I (n=30)				Treatment Group II (n=30)			
	Mean	SD	(95%CI)	p	Mean	SD	(95%CI)	p
Pretest	45,5	3,12	12,6±82	0,001*	45,2	2,82	1,63±0,52	0,28
Posttest	58,3	3,26			45,7	2,53		

*P<0,05

The results of Table 6.8 show that the readiness of pregnant women in treatment group I is statistically significant $p = 0.001$ while in treatment group II it is not significant $p = 0.28$.

DISCUSSION

It can be concluded that the BU HARTI package has a greater influence on the readiness of high-risk pregnant women in facing childbirth. These results are in accordance with the research conducted by (Nurhabib, Wahyuni and Sitorus, 2024), stating that the Health Education Booklet is effective in improving pregnant women's knowledge of pregnancy danger signs at the Sonomartini Labura Health Center with a p-value of 0.000. Booklets are a very useful medium for conveying health messages in the form of sheets, both writing and pictures that can change a person's attitude and behavior after being given health education (Mursiti, Sundari and Sapartinah, 2019). Health education provided to pregnant women is very important in perinatal care. Health workers have a very important role in providing information about high-risk pregnancies (Widarta, 2015). Health workers are required to be able to promote healthy living and implement health education related to possible complications that may occur during pregnancy and childbirth (Dominika, et al 2018). Imogiri I Health Center has implemented pregnancy classes for both high-risk and non-risk pregnant women. However, the implementation of education is usually only carried out through lectures. Based on research, providing health education or education using media has the result of increasing the knowledge of high-risk pregnant women, and can also improve the attitudes of high-risk pregnant women (Devi, I et al, 2021).

Booklets are one form of media. The use of booklets in providing explanations will make it easier for respondents to understand the material presented (Astarani, K, et al, 2020). Booklets were chosen as a medium for providing health education because booklets can provide more detailed information, are easy to carry so that they can be studied at any time and are more interesting. Several studies have shown that the use of booklets as a medium for health education can increase knowledge (Pranata, et al, 2020). Based on research (Sulistiawati and Yulianti, 2023), it is proven that booklet media is effective in increasing knowledge about pregnancy danger signs. The study showed an increase in the range of knowledge values before and after being given education with booklet media. The increase in the readiness of high-risk pregnant women in this study is in line with the research conducted (Suwanti1, Julyartha and Imtihanatun Najahah, 2022), namely that increasing readiness for childbirth is also associated with an increase in knowledge which is a process of remembering and re-familiarizing objects that have been studied through the five senses in a field well. The knowledge of pregnant women about preparing for childbirth will be related to the readiness of pregnant women in facing childbirth (Jannah, Widyastutik and P, 2021). One of the knowledge of pregnant women can be obtained from routine ANC visits, where in the ANC visit health workers will provide health education, one of which is with booklet media. Health education can influence the habits of knowledge, attitudes and readiness of pregnant women in their pregnancy. Having new information about something will provide a new cognitive foundation so that mature childbirth readiness is formed during pregnancy (Maharani and Aprilina, 2020)

CONCLUSION

The results of the study indicate that there is a significant influence on health education media package booklet for high-risk pregnant women (Buharti) with the readiness of pregnant women to face childbirth (Significance $0.001 < 0.0005$). The conclusion of this study is that there is a significant influence of providing education using the BUHARTI package (Booklet for High-Risk Pregnant Women) on the readiness of childbirth at the Imogiri I PUSKESMAS.

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