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Article

Effectiveness Of Booklet And Video As A Prenatal Health Education Media For Preparation And Decrease In Labor Anxiety

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A B S T R A C T

Pregnancy and Childbirth are physiological. But normal pregnancy and childbirth can turn into pathology. One of the ways to prevent delays in handling is through the readiness of childbirth by means of health education using media and video media.Analyzing the differences in the effectiveness of Prenatal health education using Booklet and Video media in reducing anxiety and increasing maternity readiness. This type of research is Quasy Experiment with one group pretest posttest design research design. The population in this study were all pregnant women in the working area of the South Klaten Puskesmas in the February to September 2019 period with a sampling quota of 60 pregnant women, namely 30 booklet groups and 30 video groups. Data analysis uses paired t-test, Wilcoxon and Mann Whitney.Prenatal health education using the Media Booklet is effective in reducing anxiety and increasing readiness to face labor with a p value <0.05. Prenatal health education using Video Media is effective in decreasing the increase in readiness to face childbirth with a p value <0.05. Prenatal health education using the Booklet media is more effective compared to Video media in reducing anxiety and increasing labor readiness with a p value <0.05

I. INTRODUCTION

Pregnancy and birth are normal events in life, although this is a normal thing, but the potential for pathology in women and babies still exists. All individuals have a risk / potential for pathological events(Rohani, Saswita dan Marisah, 2011).

In the third trimester phase psychological changes in pregnant women are increasingly complex and increased from the previous trimester. This is because the pregnancy condition is getting bigger. Most mothers feel their body shape getting uglier. In addition, feelings of discomfort are also related to feelings of sadness because they will be separated from their babies and lose the special attention received during pregnancy. In the last months leading up to labor the emotional changes in the mother are increasingly fickle and sometimes become out of control. This emotional change comes from feelings of worry, fear and doubt.

Pregnancy and childbirth are events and experiences and are important phases of a woman's life, which events and experiences can cause stress for a mother, especially in primigravida. (Reeder, et al 2011). For a woman who is especially facing her first time in labor, she will get anxiety because labor is a new experience (Musbikin, 2006)

Maternal and fetal death is often not caused by technical inability or neglect, but also because of a lack of maternal health education about childbirth. Limited knowledge of primigravida mothers about childbirth increases anxiety (Gayatri et al, 2010). To overcome this and prevent primigravida anxiety in the face of childbirth, one effort that can be done by health workers is to provide health education about childbirth preparation and childbirth. (Bobak et al, 2005).

Pregnancy and Childbirth are physiological. But normal pregnancy and childbirth can turn into pathology. One of the care done by midwives to screen for these risks is early detection of complications or diseases that may occur during pregnancy (Kusmiyati, et al, 2010). One way to prevent delays in handling is by the readiness of labor. The readiness for labor can be done by preparing a birth plan and preparing a plan if complications occur in maternal labor.

Gebre, Gebremariam and Abebe (2015) research shows that birth readiness is associated with mothers who are informed of antenatal care, possessing a minimum of two signs of danger during pregnancy. According to Kabakyenga research, Östergren and Pettersson (2011) show a significant relationship between knowledge with one of the danger signs of pregnancy, or during labor or during childbirth and labor readiness. Young age and level of education have a relationship with knowledge and readiness for labor.

One effort to increase readiness and reduce anxiety about childbirth is to provide adequate information with prenatal health education for Trimester III pregnant women who will be facing

childbirth. Health education will be effective when using the right media. The forms of health education media include Booklet and Video.

The use of booklets and videos as a means of health education is now beginning to be developed in line with current technological advances. Health education through video media has advantages in terms of providing good visualization so as to facilitate the process of absorption of knowledge. Video and Booklet are included in audio-visual media because they involve the sense of hearing as well as the sense of sight. Audio-visual media is able to produce better learning outcomes for tasks such as remembering, recognizing, recalling and connecting facts and concepts (Kustandi, 2011). Both of these media have advantages and disadvantages of each.

II. METHODS

The type of this research is Quasy Experiment with one group pretest posttest design research design to compare and analyze anxiety and Primigravida Readiness to face childbirth before and after health education is given through Booklet and Video media. This research will be conducted in the working area of the southern Klaten Puskesmas. This research will be conducted in February to September 2019. The population in this study is all pregnant women in the working area of the South Klaten Health Center in the period February to September 2019. To determine the sample size is calculated using a quota sampling of 60 pregnant women

Hypothesis testing in this study is determined based on the results of the data normality test, from the results of the data normality test it can be determined the appropriate bivariate analysis test method. In this study the use of Saphiro Wilk Test data normality test. If the data is normally distributed then Paired t-test is used. If the data are not normally distributed then Wilcoxon non-parametric test is used.

III. RESULT

A. Univariate Analysis

1. Booklet Group

a. Average Anxiety Score

Table 4.1 Average Anxiety Scores Before and After Providing Health Education with Boklet Media for Pregnant Women at the South Klaten Health Center (n = 30)

Anxiety	N	Min	Max	Mean±SD
Before	30	81,25	100	91,12±5,32
After	30	73,75	98,75	83,96±6,04

Source: Primary Data 2019

The average anxiety score of the booklet group before being given health education was 91.12 ± 5.32 and after being given health education was 83.96 ± 6.04. When selected from the average

anxiety score, the booklet group after being given health education had a smaller average than the intervention group before being given health education. It can be interpreted that the booklet group after being given health education had less anxiety than the booklet group before being given health education.Rerata Skor Kesiapan Persalinan

Table 4.2 Average readinessScores for Delivery Before and After Providing Health Education with a Boklet Media for Pregnant Women at the South Klaten Health Center (n = 30)

Readiness	N	Min	Max	Mean±SD
Before	30	75,75	96,90	87,41±5,11
After	30	81,81	100	92,15±4,80

Source: Primary Data 2019

The mean score of readiness to face childbirth of the booklet group before being given health education was 87.41 ± 5.11 and after being given health education was 92.15 ± 4.80. When selected from the mean of labor readiness scores, the booklet group after being given health education had an average greater than the booklet group before being given health education. It can be interpreted that the booklet group after being given health education had greater readiness for labor than the booklet group before being given health education.

2. Video group

   a. Average Of Anxiety Score

Table 4.3 Average Anxiety Scores Before and After Providing Health Education with Video Media to Pregnant Women at the South Klaten Health Center (n = 30)

Anxiety	N	Min	Max	Mean±SD
Before	30	87,50	100	98,12± 2,91
After	30	73,75	93,75	85,12± 5,46

Source: Primary Data 2019

The mean score of the anxiety group of the video before being given health education was 98.12 ± 2.91 and after being given health education was 85.12 ± 5.46. When viewed from the average anxiety score, the video group after being given health education has a smaller average than the video group before being given health education. It can be interpreted that the video group after being given health education has less anxiety than the video group before being given health education.Rerata Skor Kesiapan Persalinan

Table 4.4 Mean Preparation of Labor Readiness Scores Before and After Providing Health Education by Video to Pregnant Women at the South Klaten Health Center (n = 30)

Readiness	N	Min	Max	Mean±SD
Before	30	60,60	93,90	77,75±8,21
After	30	90,90	100	97,66±9,61

Source: Primary Data 2019

The mean score of readiness to face childbirth of the booklet group before being given health education was 77.75 ± 8.21 and after being given health education was 97.66 ± 9.61. When selected from the average score for every delivery, the video group after being given health education has a higher average than the video group before being given health education. It can be interpreted that the video group after being given health education has greater readiness for labor than the video group before being given health education.

B. Bivatriate Analysis

1. Differences in Anxiety and Labor Readiness Scores Before and After Providing Health Education in Booklet and Video groups

Table 4.5 Results Of T-test Differences in Anxiety and Readiness Scores Facing Labor Before and After Providing Health Education in the Booklet group

	Mean (s.b)	Difference (s.b)	IK 95%	P Value
Anxiety Before	91,12 (5,32)	7,16 (5,21)	9,11-522	<0,001
anxiety after	83,96 (6,04)			
Readiness before	87,41 (5,11)	-4,74 (2,71)	-3,72—5,75	<0,001
Readiness after	92,15 (4,80)			

Source: Primary Data 2019

Based on table 4.6 the mean value of anxiety scores of pregnant women facing childbirth between before and after health education was given with booklets decreased by 7.16, while the readiness of labor mean values between before and after an increase that is equal to an increase of -4.74 and there are significant differences between anxiety scores and labor readiness before and after treatment (p <0.05)Perbedaan Skor Kecemasan dan Kesiapan Persalinan Sebelum dan Sesudah Diberikan Pendidikan Kesehatan pada kelompok Video

Table 4.6 ResultsOf Wilcoxon Test Differences in Anxiety Score and Labor Readiness Before and After Providing Health Education in the Video group

	Median (minimum-maksimum)	P Value
Anxiety Before (n=30)	100 (87,5-100)	<0,001
Anxiety After (n=30)	78,78 (60,60-93,90)	
Readinessbefore (n=30)	86,87 (73,75-93,75)	<0,001
Readinessafter (n=30)	96,96 (90,90-100)	

Source: Primary Data 2019

Based on table 4.6 shows there are differences in anxiety and readiness for labor with a p value <0.05.

2. Perbandingan Penurunan Kecemasan dan Peningkatan kesiapan ibu hamil mengadapi persalinan pada kelompok booklet dan video

Table 4.7 Results of Mann Whitney Test Difference in Decreased Anxiety Score and Increased Readiness for Labor Before and After Providing Health Education in the Video group

	Median (minimum-maksimum)	Nilai p
Anxiety of Booklet Group (n=30) Anxiety Of Video Group (n=30)	9,35 (0-26)	<0,001
Readiness of BookletGroup (n=30) Readiness Of Video Group (n=30)	9,1 (0-36,7)	<0,001

Source: Primary Data 2019

Based on table 4.7 shows there is a comparison of anxiety and readiness of labor with a p value <0.05 and seen from the difference in the media group of booklets and videos is 2.5, then health education with booklets is more effective than health education with videos.

IV. DISCUSSION

A. Anxiety

The average anxiety score of the booklet group before being given health education was 91.12 ± 5.32 and after being given health education was 83.96 ± 6.04. When viewed from the average anxiety score, the booklet group after being given health education had less or less anxiety than the booklet group before being given health education.The mean score of the anxiety group of the video before being given health education was 98.12 ± 2.91 and after being given health education was 85.12 ± 5.46. This can be interpreted that the video group after being given health education has less anxiety than the video group before being given health education.

Based on statistical test results obtained p value <0.05, this means that both the booklet group and the video group both experienced decreased anxiety scores. The results of the study can be said that health education using both booklets and videos has a significant effect on reducing anxiety in pregnant women.Anxiety in the booklet and video group is due to the mother's experience in dealing with labor, fear of complications or problems during the delivery process both to the mother or her baby, fear of experiencing labor pain, fear of the birth canal torn and sewn, fear of not being able to push properly, hope the baby soon born and free from physical discomfort, the experience of people around that childbirth is a scary thing that can even lead to death. One of the recommended efforts to increase self-confidence and reduce maternal anxiety in the face of labor is health education (Devilata & Swarna, 2015).

Health promotion interventions aim to reduce stressful situations, increase self-defense against stress and learn skills that reduce physiological responses to stress. The information provided can increase maternal knowledge in pregnancy care and delivery preparation (Reeder et al., 2016). Knowledge obtained from health education will be stored in a memory system to be processed and given meaning and then the information will be used when needed. Knowledge about childbirth will affect the physical and

psychological readiness of the mother in dealing with childbirth. Lack of knowledge about childbirth will cause feelings of anxiety. Health education is useful in increasing the knowledge and confidence of pregnant women who are expected to reduce anxiety (Gayathri, 2010).

The results of this study are consistent with Sari's (2017) study concludes that health education carried out in the third trimester of pregnancy influences primigravida trimester III anxiety. This result is also supported by the study of Mukhoirotin (2014) concluding that health education with booklets is more effective in reducing primigravida anxiety in the face of childbirth compared with health education alone. Prastika's research (2017) also concluded that health education can reduce the anxiety of pregnant women.

Based on the results of research, theory and supporting research there is no gap between the results of this study with the theories of previous researchers and it is proven that health education can reduce the anxiety of pregnant women facing childbirth.

B. Childbirth Readiness

The mean score of readiness to face childbirth of the booklet group before being given health education was 87.41 ± 5.11 and after being given health education was 92.15 ± 4.80. after being given health education it has a greater average than the booklet group before being given health education. It can be interpreted that the booklet group after being given health education had higher or better maternity readiness than the booklet group before being given health education.

The mean score of readiness to face childbirth of the booklet group before being given health education was 77.75 ± 8.21 and after being given health education was 97.66 ± 9.61. It can be interpreted that the video group after being given health education has a higher birth readiness than the video group before being given health education.

Based on the results of statistical tests it can be seen that there are differences in labor readiness before and after health education is given by video and booklet, these results are indicated by p values <0.05. These results are consistent with research Kabakyenga, Östergren and Pettersson (2011) show the relationship between knowledge with one of the danger signs of pregnancy, or during labor or when childbirth and labor readiness showed significant statistical significance after adjusting for possible confounding (OR 1.8 95% CI: 1.2-2.6) and (OR 1.9, 95% CI: 1.2-3.0) respectively. Young age and level of education have a relationship with knowledge and readiness for labor. This result is in accordance with Naha's research (2018) found that the highest number of readiness to face childbirth in Ibutrimester III in Puskesmas Umbulharjo I Yogyakarta is having a good preparedness of 18 pregnant women (52.9%).

Labor readiness includes preparing a birth plan and preparing a plan if complications occur in maternal delivery. Preparing a birth plan is a plan made by mothers, fathers and health care providers to identify helpers and delivery places, and savings plans to prepare for labor costs. Then the family also needs to prepare a plan if there are complications in maternal labor, such as identifying a referral place and transportation to reach that place, preparing blood donors, making financial preparations and identifying

the first decision maker and the second decision maker if the first decision maker is not in place (Saifuddin , 2009).

Readiness is a condition that is owned both by individuals and by one body in preparing themselves both mentally, and physically who achieve the desired goals. Readiness includes physical, mental, emotional readiness (Slameto, 2013).Readiness for delivery planning will reduce confusion and confusion at the time of delivery and increase the likelihood that the mother will receive appropriate and timely care. There are 5 important components that are asked to the respondent in the delivery plan, such as: delivery plan, ideally every family should have the opportunity to make a birth plan. These things must be explored and decided in making the delivery plan: the place of delivery chooses trained health workers, how to contact the health worker, how to transport to the place of delivery, who will accompany during labor, how much is needed and how to collect fees who and who will take care of his family if the mother is not there (Rahmi, 2010).

C. Perbedaan Kecemasan dan Kesiapan Persalinan pada Kelompok Booklet dan Video

Based on table 4.5 shows there is a comparison of anxiety and readiness of pregnant women facing childbirth with a p value <0.05 and seen from the difference in the media group of booklets and videos is 2.5 then health education with booklets is more effective than health education with videos.

Statistical analysis using the mann whitney test showed that there was a difference in the difference in average anxiety and increased readiness of labor between the booklet and video groups. This means that health education with booklets can reduce anxiety and increase labor readiness compared to health education with video (Mukhoirotin, 2014).

There is a difference in the booklet and video groups because in addition to the health education group booklets are also given a booklet for each pregnant woman. This is because the booklet has several advantages including: 1) Can be learned at any time, because the design is in the form of a book; 2) Load more relative information. Booklets are generally used with the aim of increasing knowledge about health issues, because booklets provide specific information, and are widely used as alternative media to be learned at any time if someone wants it. (Mintarsih, 2017).

This is also in accordance with a study conducted by Reberte et all (2012) on the preparation of booklets as an educational medium for the promotion of health of pregnant women in which the study results state that experts and pregnant women are of the opinion that booklets can enrich and enlighten knowledge in health education performed during prenatal care. This booklet is to strengthen the potential of pregnant women and their family members and to improve health conditions. This booklet is a support for professionals and pregnant women to overcome doubts and difficulties in absorbing the process of pregnancy and birth.

Pregnant women can use the booklet at any time so that knowledge about the labor process increases and anxiety decreases. This is consistent with the results of previous research which states that health education with booklets is effective in reducing anxiety and readiness of pregnant women in the third

trimester in the face of childbirth, booklets are health education media that contains more information also easily understood. Someone with high knowledge will think positively also has positive coping so that it can reduce anxiety (Hosentha, 2011).

The results of this study are also consistent with the results of other similar studies conducted by Vardanjani et al (2013), in myocardial infarction patients who stated that anxiety in groups given health education by face to face method and booklets given to patients was reduced compared to the video group

V. CONCLUSION

Based on the results of research and discussion it can be concluded that Prenatal health education using the Media Booklet is effective in reducing anxiety and increasing readiness to face labor with a p value <0.05. Prenatal health education using Video Media is effective in reducing the increase in readiness to face childbirth with a p value <0.05. Prenatal health education using the Booklet media is more effective compared to Video media in reducing anxiety and increasing labor readiness with a p value <0.05

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