

## Utilization of local culture “Bapalas Bidan” as a postpartum counseling media on contraception tools



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### ABSTRACT

**Background:** Postpartum contraception is a way to prevent recurrent pregnancies to ensure the health of both mother and baby. Many postpartum mothers think that there will be no pregnancy during amenorrhea in the postpartum period and will use the contraceptive method after the first menstruation. There are still some who do not use contraception. Contraceptive success will be achieved if the counseling and media are effective. Palangka Raya's city has a Bapalas Bidan culture, a ritual in which a newborn baby is declared a midwife's child until the midwife's blessing ceremony is carried out for the baby and the mother.

**Methods:** This research type is a quasi-experimental study with two group comparison pretest-posttest design with counseling intervention and booklets. The research subjects were postpartum mothers who gave birth or were treated at the Midwives Individual Service in Palangka Raya City, amounting to 30 each per treatment and control group.

**Results:** There was a difference in the mean and an increase in the group's knowledge score after receiving counseling through the Bapalas Bidan ( $p = 0.000$ ). The increase in knowledge was higher in the group that received counseling than in those who did not get counseling. Postpartum mothers who have high knowledge of contraception use contraception more than mothers with low knowledge. The proportion of postpartum mothers who used contraception was more in the group who received counseling ( $p = 0.018$ ), aged 20-35 years ( $p = 0.015$ ), had parity  $\geq 3$  ( $p = 0.024$ ), and higher education ( $p = 0.006$ ).

**Conclusion:** Postpartum mothers who have high knowledge of contraception use contraception more than mothers with low knowledge.

**Keywords:** *contraception, counseling, local culture, postpartum.*

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## INTRODUCTION

Family planning is one of the birth control efforts that aim to increase the quality of the family so that a sense of security, peace, and hope for a better future can be achieved in realizing physical well-being and inner happiness by institutionalizing and cultivating the norms of a small, happy and prosperous family.<sup>1,2</sup> In addition, family planning aims to increase efforts to regulate childbirth, distance, the ideal age of delivery, and regulate pregnancy through promotion, protection and assistance according to reproductive rights to create a quality family (Indonesia Government Regulation, No. 87 of 2014).<sup>1,2</sup>

The postpartum period is the right time to start using contraception and a time when unwanted pregnancies occur. The difficulty in determining the return

of ovulation in women after childbirth increases pregnancy risk in the postpartum period. Postpartum contraception is a way to prevent recurrent pregnancies to ensure the health of both mother and baby.

However, in developing countries, the use of postpartum concentrations is still low.<sup>2,3</sup> The World Health Organization estimates that about 830 women die each day from pregnancy complications and birth worldwide, and nearly all (99%) of maternal deaths occur in developing countries. A large number of these deaths can be prevented through interventions such as the use of modern contraceptives. Evidence shows that around 20% of deaths due to obstetrics would have been prevented if modern contraceptive methods were used.

Although family planning in the postpartum period plays a major role in

reducing the unmet need for contraception and avoiding labor with short birth spacing, its utilization is still very low.<sup>4</sup> Many postpartum mothers think that there will be no pregnancy during amenorrhea in the postpartum period and will use the contraceptive method after the first menstruation comes. There are still some who do not use contraception. Many childbearing-age couples have started sexual intercourse before the traditional postpartum examination six weeks after the baby is born.<sup>5</sup>

One of the factors causing fertile-age couples not to use contraception is not getting counseling. Counseling is often neglected and poorly carried out because officers do not have time and do not know that counseling clients will find it easier to follow advice. This causes many postpartum mothers who do not

immediately use contraception in the postpartum period.<sup>6</sup>

The success of contraception will be achieved if the counseling and media are effective.<sup>7</sup> In carrying out family planning counseling, it is advisable to use counseling tools or media to facilitate client understanding to decide to use the right contraceptive device. The various types of counseling media that can be used include flipcharts, q-card, leaflets, books, posters, aprons for reproductive organs (women and men), medical kits, family planning tools and drugs, videos, and family planning decision-making tools.<sup>8</sup>

In addition, the method and media used also affect the family planning services utilization. Research conducted by Shintiana, Nurdiati DS, and Sumarni shows that counseling in the paired group has a difference of 86% higher than individual counseling.<sup>9</sup> Another study conducted by Khoirina Nella et al. regarding understanding local cultural values in the counseling approach shows that local cultural values are very important to understand to assist in a comprehensive counseling approach.<sup>10</sup>

Palangka Raya's city has a local culture of "Bapalas Bidan," a ritual in which a newborn baby is declared a midwife's child until the midwife carries out a blessing ceremony for the baby and the mother.<sup>11</sup> Apart from being carried out by the Banjar people who live in the countryside, the bapalas bidan ceremony is also carried out by other Dayaks (Dayak Tribe). After the baby is born, the family then carries out the bapalas bidan ceremony to give gifts (piduduk) in the form of sticky rice lamang, rice, sugar and money to the midwife. Usually, at the same time, giving a name to the baby. The midwife's reply is intended as remuneration for the midwife and redemption for the blood spilled during childbirth. With the implementation of this bapalas bidan, it is hoped that bloodshed will not occur as a result of accidents or fights in the neighborhood or in the own family. Because according to the belief that the child has redeemed the spilled blood at the bapalas bidan ceremony.

Responding to the culture of Bapalas Bidan, this study was conducted to determine the effect of the use of the local

culture of Bapalas Bidan as a postpartum counseling media on contraceptive utilization.

## METHODS

This type of research is a quasi-experimental study with a two-group comparison pretest-posttest design. In this study, the changes observed were the knowledge of postpartum mothers and the use of contraceptives. The interventions given were counseling and booklets to one group for a certain period of time. This study population was all postpartum mothers who gave birth and who live in Palangka Raya City. The purposive sampling technique was used in sampling in this study. Samples were postpartum mothers who gave birth or were cared for at the Midwives Delivery Service in Palangka Raya City who met the criteria. Inclusion criteria are the mother came from Dayak or Banjar tribe, can communicate verbally well and doesn't have an obstetrical emergency after delivery. The exclusion criterion is the mother who's not willing to be a respondent. The sample size calculation is obtained using the two-average hypothesis test formula. The difference in the change in knowledge scores expected from postpartum mothers was 9.32.<sup>4</sup> The sample for each group was 30 people. Independent variables, namely counseling during Bapalas Bidan and provision of booklets to postpartum mothers. The intermediate variable is knowledge, and the dependent variable is the use of contraceptives. Meanwhile, the external variables are age, parity, and education. Data analysis was performed by univariate and bivariate (t-test, binomial regression, and Chi-Square). SPSS 24.0 program is used to perform data analysis.

## RESULTS

Following are the results of the univariate analysis of this study (Table 1 – 4).

There was a significant difference in the mean score of knowledge in the group before and after receiving counseling and using the booklet of 9.57 with a p-value of 0.000 ( $p < 0.05$ ) (Table 2).

There is a significant difference in the mean score of knowledge in the two groups of 10.91 with a p-value of 0.000 ( $p$

$< 0.05$ ) (Table 3).

There was a significant relationship between counseling and contraceptive use with OR = 3.59 with a p-value of 0.018 ( $p < 0.05$ ), meaning that postpartum mothers who received counseling during midwifery had 3.59 times more use of contraception than mothers who were not getting counseling (Table 4).

There is a significant relationship between age and use of contraception, the obtained OR = 3.75 with a significance of 0.018 ( $p < 0.05$ ), which means that mothers aged 20-35 years have a 3.75 times greater proportion using contraception compared to mothers aged  $< 20$  and  $> 35$  years. The parity factor has a significant relationship with the use of contraceptives. This can be seen with the OR = 3.77 with a significance of 0.024 ( $p < 0.05$ ), meaning that postpartum mothers who have parity  $\geq 3$  people have a 3.77 times greater proportion using contraception compared to mothers who have parity  $< 3$  people. Education has a significant effect on contraceptive use, the OR = 4.44 with a significance of 0.006 ( $p < 0.05$ ), meaning that postpartum mothers with higher education are 4.44 times more using contraception than postpartum mothers who have low education.

## DISCUSSION

Based on the results of the analysis, shows that counseling for postpartum mothers has a significant effect on contraceptive use when compared to groups that do not use counseling. The results of this study are the same as research conducted at 11 Puskesmas in Kupang City, which concluded that there was a significant effect between counseling for postpartum mothers on contraceptive use.<sup>12</sup> Likewise, research conducted by others states that there is a significant effect on the use of postpartum contraception in the group that received intervention in the form of counseling using decision-making tools compared to the control group.<sup>13</sup>

According to Dehlendorf et al., counseling about contraception can help clients choose a contraception method appropriate to their needs, manage the side effects, and consider continuity and transition contraception methods.<sup>13</sup> Counseling the quality of high potential

to reduce the incidence of the needs of contraception are not fulfilled. Other studies also stated that counseling on family planning during pregnancy and postpartum related to contraception is modern during the past period postpartum.<sup>14</sup> Women who get counseling Salama pregnant and postpartum can 6 times higher use contraception methods modern in the postpartum period than that did not get counseling. This is because women who receive counseling are more motivated to use modern contraception methods in the postpartum period.

Research conducted by Zapata *et al.* shows that counseling on postpartum contraception has a significant relationship with contraceptive use, where women who receive counseling are 2.01 times more likely to use contraception than those who do not.<sup>15</sup> This is emphasized again by Taye that it is important for a woman in the postpartum period to be given counseling about the contraceptive method.<sup>4</sup> This is because ovulation occurs before menstruation, so amenorrhea does not guarantee the absence of fertility.

Plans for contraceptive use should be initiated optimally within 3 weeks postpartum before a woman returns to the postpartum home in the health care facility. This is because the majority of women have had sexual intercourse again within 6 weeks of delivery. In women who are not breastfeeding, ovulation can occur during the 4th postpartum week.

Counseling given during postpartum is considered effective in starting the use of postpartum contraception to prevent unwanted pregnancies, so the counseling given is considered useful.<sup>16</sup>

Counseling given to a woman has benefited so that women have the confidence in choosing contraceptives to use. The contraceptive method that will be used later is based on the woman's willingness because the advantages and disadvantages have been considered without coercion. The counseling obtained by women helps avoid making decisions to use irrational contraceptive methods so that women do not feel sorry and hinder their next use of contraception.<sup>8</sup> According to the studies, before getting contraceptive services, couples should get clear and complete information from health workers so that when they get postpartum family planning services, the client can make the right choice.<sup>16-18</sup>

In this study, counseling given to postpartum mothers was carried out during Bapalas Bidan as an effort to take advantage of the local culture that is still practiced by some people, especially after childbirth. According to Norsam *et al.*, from several understandings about Bapalas Midwives in the community, it can be interpreted that Bapalas Bidan is a ritual that is carried out after giving birth by giving back the baby to its parents by a midwife or traditional birth attendant who has helped the delivery process and

has cared for the baby.<sup>19</sup> Bapalas Bidan is also a form of gratitude for the family to the midwives who have helped the delivery process. This condition is used to provide counseling to married couples about postpartum contraception so that women's choice to use contraception gets approval and support from their husbands and families. This is supported by Aryastami *et al.*, who state that socio-culture is a condition that is inherent in certain communities and affects the community in utilizing services provided by health facilities, including not using contraception for non-medical reasons.<sup>18</sup>

This study shows a significant relationship between counseling and an increase in maternal knowledge about contraception. These results were obtained through the results of changes in the pre-test and post-test knowledge scores.<sup>18,19</sup> This is following the research results conducted by Yilmazel *et al.* that there are differences in the increase in the mean and knowledge of postpartum mothers about contraception before and after counseling. A postpartum mother needs to know contraceptive methods to determine a safe contraceptive method. Increased knowledge of postpartum mothers about contraception can impact the form of independent motivation to use contraception.<sup>20</sup>

Shreffler *et al.* researched 44 respondents of trimester III pregnant women who were given counseling on contraception.<sup>21</sup> The results showed that there were significant differences in increasing knowledge after counseling was given. Another study conducted by Oduyebo *et al.* also showed the same results. Statistically, there were significant results regarding the effect of counseling conducted by midwives on the level of respondents' knowledge about contraceptives.<sup>22</sup>

Midwives, as service providers, can provide contraceptive counseling to clients. Counseling is part of family planning services to ensure that clients receive contraceptive services that are appropriate and of high quality. The

**Table 1. Characteristics of Respondents.**

Variable	Intervention Group			
	Counseling		Booklet	
	n	(%)	n	(%)
<b>Age</b>				
20-35 years	17	56.7	18	60
<20 and> 35 years	13	43.4	12	40
<b>Parity</b>				
<3 times	11	36.7	11	36.7
≥ 3 times	19	63.3	19	63.3
<b>Education</b>				
High	18	60	16	53.3
Low	12	40	14	46.7
<b>Total</b>	<b>30</b>	<b>100</b>	<b>30</b>	<b>100</b>

**Table 2. Differences in the Mean of Paired Group Knowledge.**

Group knowledge	Pre-test	Group knowledge	Pre-test	Group knowledge
Counseling	65.33 ± 7.67	88.63 ± 9.13	23.30 (-27.31 - (- 29.28)	0,000
Booklet	65.40 ± 8.98	79.13 ± 10.48	13.73 (-16.63 - (- 10.83)	0,000

**Table 3. Differences in the Mean of Independent Group Knowledge.**

Group knowledge	Knowledge (Mean ± SD)	Different Mean (95% CI)	p-value
Counseling	23.30 ± 7.93	9.57 (6.17-15.65)	0.000
Booklet	13.73 ± 10.41		

**Table 4. Relationships of The Independent Variable and Dependent Variable to Use Contraception.**

Variable	Contraceptive Use		OR	p-value
	Yes	No		
<b>Group</b>				
Counseling	22 (73.3)	8 (26.7)	3.59	0.018
Booklet	13 (43.3)	17 (56.7)		
<b>Age</b>				
20-35 years	25 (71.4)	10 (28.6)	3.75	0.015
<20 and> 35 years	10 (40)	15 (60)		
<b>Parity</b>				
<3 times	17 (77.3)	5 (22.7)	3.77	0.024
≥ 3 times	18 (47.4)	20 (52.6)		
<b>Education</b>				
High	25 (73.5)	9 (26.5)	4.44	0.006
Low	10 (38.5)	16 (61.5)		

counseling given to postpartum mothers using flashcards containing information about contraceptive methods increases the mother's knowledge when compared to before receiving counseling.<sup>24</sup>

This study also shows that knowledge affects contraceptive use, where the value of the respondents' knowledge is higher in the group using contraception than those who do not use contraception. The results of this study state that respondents who have good knowledge after receiving counseling use contraception more than those who have sufficient and less knowledge. There is a correlation between increased knowledge of postpartum mothers and participation in using contraceptives.<sup>24</sup> This study's results are different from those conducted by other studies regarding the determinants of contraceptive use, which states that there is no significant relationship between the respondent's level of knowledge and contraceptive use.<sup>25</sup> Respondents with good and poor knowledge levels have the same tendency to use contraception.

The age variable in this study has a significant relationship with contraceptive use. Most of those who use contraception are in the age range of 20-35 years, and the group that does not use contraception

is mostly at the age <20 years and> 35 years. This is similar to the results of research obtained by Islam *et al.* which shows that the age group 25-34 years uses contraception more than those who are younger and older.<sup>26</sup> Age also plays a role as an internal factor that can affect the work of the body. Age also affects a person in thinking and behavior, including in making decisions to use contraception.<sup>27</sup>

Some of the studies stated that most contraceptive users were younger women between the ages of 19-24 years. There was a significant relationship between age and contraceptive use. The majority were aged 20-34 years.<sup>15-23</sup> This is due to the possibility that the group with a higher age assumes that the fertility rate has decreased so that they do not need contraception. Other research shows that respondents who are > 30 years old prefer not to use contraception, and the level of contraceptive use decreases at higher ages.<sup>8,17,19</sup>

Parity in this study shows the result that the majority of respondents who use contraception are those who have parity ≥ 3. This is similar to the results of a study conducted by Anguzu *et al.* in Uganda that there is a dose-response relationship between contraceptive use and parity.<sup>28</sup>

As the number of children increases, the likelihood of using contraception increases. Women with more than 1 number of children will be motivated to use contraception, especially long-term methods because they are likely to have reached the desired number of children.<sup>27,28</sup>

The higher the parity, the higher the risk of maternal death. Parity > 3 has a higher maternal mortality rate than parity < 3. This can be prevented or reduced by the use of high-effectiveness contraceptives.<sup>29</sup> Women who have children < 2 are more at risk of experiencing the unmet need for contraception than those who have children > 2. The more children you have, the more likely a woman will use contraception.<sup>30</sup>

The analysis results show that education has a significant effect on contraceptive use. Postpartum mothers with higher education use contraception more than postpartum mothers who have low education. Education is an effort to help individuals, groups, and communities improve and develop knowledge optimally.<sup>7,13</sup> Education will affect the learning process. The higher a person's education, the easier it will be for that person to receive information. With high education, someone will get good information from other people and from the mass media.

According to Pazol *et al.*, in their research results, it is stated that education is a benchmark for a person in seeking information and knowledge about contraceptives.<sup>31</sup> Mothers with higher education will have more knowledge about contraception, so they will prefer to use contraception. Similar to research conducted in Ethiopia by Seifu *et al.*, it is said that education influences the use of postpartum contraception.<sup>32</sup> Women with secondary education were 4.25 times more likely to use postpartum contraception than those without formal education. Likewise, education affects health decision-making, especially for women with higher education who are less likely to use contraception.<sup>12,13</sup> The limitation of this study is there are sociocultural factors and beliefs that may affect the use of contraception that have not been explored in this study.

## CONCLUSION

There was a difference in the mean and increase in knowledge scores in the group after receiving counseling through the Bapalas Midwives program and in groups that did not receive counseling using booklets. There is a difference in the mean knowledge after receiving counseling through the Bapalas Midwives program and non-counseling. The increase in knowledge was higher in the group who received counseling compared to those who did not get counseling. Postpartum mothers who have high knowledge of contraception use contraception more than mothers with low knowledge. The proportion of postpartum mothers who used contraception was more in the group who received counseling than in the group who did not receive counseling. The proportion of mothers who use contraception is more at the age of 20-35 years than mothers with ages <20 years and > 35 years. The proportion of use of contraception was higher in mothers who had parity  $\geq 3$  compared to parity <3. Contraceptive use is more in groups with higher education than those with low education.

## ETHICAL CONSIDERATIONS

This research has already got ethical clearance from Poltekkes Kemenkes Palangkaraya No 012/III/KF.PE/2020.

## CONFLICT OF INTEREST

The authors declare that they have no competing interests.

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## AUTHOR'S CONTRIBUTION

Data gathering and idea owner of this study by Noordiati and Wahidah Sukriani. Study design by Noordiati and Wahidah Sukriani. Data gathering by Noordiati and Wahidah Sukriani. Writing and submitting manuscript by Noordiati and Wahidah Sukriani. Editing and approval of the final draft by Noordiati and Wahidah Sukriani.

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