

Original Article

The Effectiveness Of The Use Of Decision-Making Tools And WHO Wheel Criteria In the Selection Of Contraception For Post Partum Mother

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ARTICLE INFO	ABSTRACT
<p>Article History: Submit : Sep 16, 2022 Revised : Nov 6, 2022 Accepted : Dec 18, 2022</p> <p>Keywords: Decision-Making Tools, WHO Wheel Criteria, Postpartum.</p>	<p>Background: According to the World Health Organization (WHO), family planning is a program with several objectives, including regulating the number of children, regulating births between children, and anticipating unwanted pregnancies. According to data from the Central Statistics Agency for 2019, the number of contraceptive uses of all types in East Java was 66.24 percent, lower than in 2018, 67.88 percent. The number of contraceptive methods used at BPM Kiswaniyah for postpartum women in 2021 is higher than Long-Term Contraceptive Methods, which is 90 percent, compared to the MKJP method, which is only 10 percent. This study aimed to determine differences in the effectiveness of using the WHO Wheel Criteria and Decision-Making Assistance Tool (ABPK) in the selection of contraception by postpartum mothers.</p> <p>Methods: This research is a type of pre-experimental research, using a post-test-only control group design approach to determine differences in the effectiveness of using the WHO Wheel Criteria and Tools. The location of this study was at BPM Kiswaniyah during the time of the research from July to September 2022. The population in this study were all postpartum mothers (0-40 days), totaling 40 people. The independent sample t-test formula is used when the normality and normal distribution of data is tested to find the difference in the mean value between one group and another.</p> <p>Results: Data analysis A significance value of $0.002 < 0.05$ was obtained, which can be concluded that there is no significant difference between the effectiveness of using ABPK and WHO Wheel Criteria in the selection of postpartum</p> <p>Conclusion: contraception. ABPK and WHO Wheel Criteria have the same effectiveness in helping clients when choosing contraception after giving birth. This is possible due to several reasons, including the insufficient number of samples, the ability of each midwife to use contraceptive selection tools and the different understanding of respondents.</p>
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Introduction

Unmet need is a need in family planning services that are not fulfilled and is stated in the 2015-2019 RPJMN, which is also one of the strategic issues and special attention in controlling population quantity. The BKKBN has its strategic target for this issue, namely 10.48 per cent in 2016, 10.26 per cent in 2017, 10.14 per cent in 2018 and 9.1 per cent in 2019. According to the World Health Organization (WHO), Family Planning is a program with several objectives, including regulating the number of children, regulating births between children, and anticipating unwanted pregnancies. The family planning programs include condoms, oral contraceptives, injections, implants, Intra Uterine Devices (IUD), and sterilization. (Oktarina, & Sugiarto, 2013). This program not only functions as a prevention of the transmission of sexually transmitted diseases (STDs) but also suppresses population growth and minimizes the incidence of abortion (Nurjanah et al., 2022; Stephen, S. J., & Aryani, 2017)

World Health Statistics data for 2025 shows that the use of family planning in Indonesia has exceeded the average compared to other ASEAN countries, and the figure is still lower when compared to several countries in Southeast Asia, such as Thailand, Vietnam, and Cambodia. Worldwide Family Planning data, the number of Women of Childbearing Age (WUS) in Indonesia is the highest among other ASEAN countries. So the active role of all health workers and the various parties involved is still very much needed (Maziyyah, 2015; Zakaria, 2020). Based on data from Riskesdas, the use of contraceptives in Indonesia in 2018 was 66%. Most acceptors were still using Depo Medroxy Progesterone Acetate (DMPA) injection contraception 59.57% and pills

20.71% of the total family planning acceptors. Acceptors of Long-Term Contraceptive Methods (MKJP) are Implant at 6.21%, IUD at 7.30%, Female Operation Method (MOW) at 3.23%, Male Operation Method (MOP) at 0.27%, so the total use of MKJP is 17.01 %. This result is far from the national target of 21.7%. (Kementrian Kesehatan RI, 2018). According to data from the Central Statistics Agency in 2019, the number of contraceptive uses of all types in East Java was 66.24 per cent, lower than in 2018, which was 67.88 per cent. The number of contraceptive use in BPM Kiswaniyah among postpartum mothers in 2021 is higher for non-MKJP (Long-Term Contraceptive Methods), which is 90 per cent compared to the MKJP method, which is only 10 per cent (Riskesdas, 2018).

According to the results of research from Dewi and Notobroto in 2014, non-MKJP contraceptive acceptors were higher than MKJP due to several factors, such as the level of knowledge, age, and parity. Most non-MKJP users have many children (≤ 2), compared to MKJP users, most have few children (< 2). Knowledge of non-MKJP users is primarily low compared to the knowledge of MKJP users, and the Younger age has less chance of using long-term methods compared to an older age. (Ashari, 2021; Dewi, P. H. C., . & Notobroto, 2014). Many things cause the achievement of family planning services not to be maximized, including the communication, information and education (KIE) process carried out by health workers to the community that has not been able to change the concept of the ideal number of children expected (BKKBN, 2015; Kabra et al., 2022).

WHO Wheel Criteria or pie chart of medical eligibility criteria is a counselling tool modified by WHO. This counseling tool is the result of a modification of the WHO, namely Medical Eligibility Criteria for Contraceptive Use, 5th edition 2015 Update.

(WHO, 2015). In this Tool, there have been modifications with several additions, including client screening procedures, additional pregnancy screening, and the effectiveness of contraceptives and emergency contraception. At the same time, the ABPK is a simple, straightforward, informative, practical, easy-to-obtain, easy-to-use, and helpful tool for services. Daily health (Herlyssa, Mulyati,S.,&Dairi, 2014; Mushy et al., 2021). ABPK is a family planning decision-making tool by acceptors that functions as an IEC media in making family planning method decisions, work aids for providers to help solve problems in the use of family planning, provide technical references/info, and visual aids for training new providers. Counselling principles used in ABPK are prospective acceptors who make decisions, health workers help prospective acceptors weigh and make the most appropriate decisions, as far as possible, the client's wishes are respected/honoured, health workers must respond to statements, questions or client needs, not only that health workers must also listen to what the prospective acceptor has to say so that he can know what he should do next (Sri Wenda, D.,& Legiati, T., 2017; Warren et al., 2022) This study aimed to determine the differences in the effectiveness of the use of WHO Wheel Criteria and Decision Making Aids (ABPK) in the selection of contraception by postpartum mothers at BPM Kiswaniyah, S.ST.

Methods

This research is a type of pre-experimental research, using a post-test-only control group design approach to determine the differences in the effectiveness of using WHO Wheel Criteria and Aids. The location of this research is at BPM Kiswaniyah S, ST, and the time of the

research is July to September 2022. The independent variables in this study are ABPK and WHO Wheel Criteria, while the dependent variable is the choice of contraception in postpartum women.

The population in this study were all postpartum mothers (0-40 days) at BPM Kiswaniyah S.ST from July to September 2022, totalling 40 people, then divided into two groups, namely the group that received treatment and those that did not. In the implementation of this research, there are several stages. The first stage is a preliminary study. At this stage the team visits the research site for a survey, problem identification and coordination with stakeholders. The second stage is licensing. After getting problems and coordinating with stakeholders, the team takes care of research permits to Bakesbangpol, which t Then the implementation stage. After getting permission from the stakeholder, the team then conducted research. This research can also be carried out after obtaining consent from the respondent by providing a consent form. A midwife assists the researcher. This study used the AKBK instrument and the WHO Wheel criteria. Bivariate analysis was conducted to determine the difference between the independent and dependent variables. The independent sample t-test formula was used when tested for normality and average distribution data and to determine the difference in the average value between one group and another. This research has ethical clearance

Results

Table 1. Frequency distribution of respondents

No	Age	Frequency	%
1	≤21	10	25
2	21-35	20	50
3	≥35	10	25
Total		40	100

According to table 1 above, most of the respondents were 21-35 years 50 per cent.

Table 2. frequency distribution of respondents based on education

No	Education	Frequency	%
1	SD	6	15
2	Middle School	20	50
3	SMA	14	35
Total		40	100

According to table 2 above, most respondents have a junior high school education of 50 per cent.

Table 3. Frequency distribution of respondents by occupation

No	Job	Frequency	%
1	Working	10	25
2	Not Working	30	75
Total		40	100

According to table 3 above, most of the respondents have jobs, which is 75 per cent.

Table 4. Frequency distribution of the suitability of the selection of contraceptives on ABPK

No	Appropriate selection of contraceptive	Frequency	%
1	suitable	7	35
2	Not suitable	13	65
Total		20	100

According to Table 4 above, most of the respondents were included in the inappropriate category in selecting contraception using the ABPK method, which was 65 per cent.

Table 5. Frequency distribution of the suitability of the selection of contraceptives on WHO Wheel Criteria

No	Appropriate selection of contraceptive	Frequency	%
1	suitable	13	65
2	Not suitable	7	35
Total		20	100

According to Table 5 above, most of the respondents were included in the inappropriate category in the selection of contraception using the WHO Wheel Criteria method, which is 65 per cent.

Table 6. Effectiveness of Decision Making Aids (ABPK) and WHO Wheel Criteria on the selection of contraception in postpartum women.

Treatment	Selection of contraceptives				Total		Mann Whitney	Sig Two-tailed
	suitable	%	Not suitable	%	n	%		
WHO Wheel Criteria	13	32.5	7	17.5	20	50	520,000	0,002
ABPK	7	17.5	13	32.5	20	50		
Total	20	50	20	50	40	100		

Before analyzing the bivariate data, the normality test of the data was first carried out. It was found that the significance value was less than 0.05, so the data in this study were not normally distributed, so they did not meet the requirements for the T-test. Therefore it was continued with the Mann-Whitney test. The Mann-Whitney test showed a significance value of 0.002 < 0.05, so it can be concluded that Ho is rejected and Ha is accepted, that is, there is no significant difference between the effectiveness of using ABPK and WHO Wheel Criteria in the selection of postpartum maternal contraceptives.

Discussion

Postpartum contraception is a contraceptive that is used within one year after giving birth. Several types of contraception that postpartum women can use include IUDs, progestin injections, progestin pills, implants, sterilization,

lactational amenorrhea and emergency contraception. (Kementrian Kesehatan RI, 2018; Mubangizi et al., 2022; Organization, 2018). After the research, some was obtained some data including most of the respondents aged 21 to 35 years 50%, most of the respondents having the latest junior high school education 50%, most of the



respondents not working 75%, most of the respondents belonging to the inappropriate category in the selection of contraception using ABPK by 65% and most of the respondents included in the appropriate category in the selection of contraception using the WHO Wheel criteria of 65%. The results of the data analysis test using the Mann-Whitney test showed a significance value of $0.002 < 0.05$, which can be concluded that H_0 is rejected and H_a is accepted, that is, there is no difference. There is a significant difference between the effectiveness of ABPK and WHO Wheel Criteria in selecting contraception for postpartum women (El Ayadi et al., 2022; Festin, 2020; Saleem et al., 2022).

Two tools can be used to assist mothers in choosing the appropriate contraceptive device: the Contraceptive Selection Aid (ABPK) and the WHO Wheel Criteria. The WHO Wheel criteria have been modified by adding screening for pregnancy, the effectiveness of the selected contraceptive method, and screening clients before choosing a contraceptive method. (Herlyssa, Mulyati, S., & Dairi, 2014). ABPK is a tool that helps make decisions by focusing on counselling. Its function is also as an IEC media, a tool for providers, and helps solve problems (Beatson et al., 2021; Kizito, 2019; Sri Wenda, D., & Legiati, T., 2017).

According to Univariate data on ABPK data, 65% of respondents who do not fit in the choice of contraception after giving birth are found due to several things, including the size of the ABPK, which is quite large so that it is considered less practical, the explanation is more about the use than the disadvantages, and the benefits of contraception are more to the decision. Without a clear explanation of how contraception is used. (Gul et al., 2019; Kostantina, Kuswati & Kusmiyati, L., 2014; Widyana & Kusmiyati, 2022)

Univariate data on the WHO Wheel Criteria were obtained from 65% of respondents who matched the choice of contraception because the WHO Wheel Criteria is a tool for choosing contraceptives and is in the form of a pie chart which also helps recommend making decisions when starting to use contraception and when mothers have problems. Health before using contraception. (Organization, 2019; Peahl et al., 2019; Yeates et al., 2021; Zakaria, 2020).

The results of the data analysis test using the Mann-Whitney test obtained a significance value of $0.002 < 0.05$, which can be concluded that H_0 was rejected and H_a was accepted, that is, there was no significant difference between the effectiveness of using ABPK and WHO Wheel Criteria in the choice of postpartum contraception. ABPK and WHO Wheel Criteria have the same effectiveness in helping clients when choosing contraception after childbirth. This was made possible due to several reasons, including the insufficient number of samples, the ability of each midwife to use contraceptive selection tools and the different understanding of respondents. This is also inconsistent with WHO (2009) in the Indonesian Ministry of Health (2010), which explains that the WHO Wheel Criteria is a tool that is simple, easy, informative, simple, applicable and easy to use for use in daily health service practice (All in one Tool). The next possibility is that the data is invalid (information bias occurs) because the researchers did not collect the data but were assisted by midwives at BPM and assistants.

Conclusion

This study concludes that there is no significant difference between the effectiveness of using ABPK and WHO

Wheel Criteria in selecting contraception for postpartum mothers. Further research needs to be carried out with the same theme but with more samples to produce better research.

Authors Contributions

The author carries out tasks from data collection, data analysis, making discussions to making manuscripts

Conflicts of Interest

There is no conflict of interest

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