



The Effect of Counseling with Decision Making Tools (ABPK) on the Fertilization Inhibition Process in the Postpartum Period in 2024

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Abstract: This study examines the effect of counseling using Decision Making Tools (ABPK) on the use of fertilization inhibition methods during the postpartum period at TPMB Eva Lestarida Bekasi in 2024. ABPK serves as a standard guide in family planning counseling, focusing on client rights and informed choice. The research employs a quasi-experimental design with a one-group pre-test and post-test approach, involving 200 respondents. Data were analyzed using the Wilcoxon statistical test. Prior to counseling, 72% of respondents did not use fertilization inhibition methods. After ABPK counseling, the use of these methods increased to 71.5%, showing a significant change ($p = 0.000$). The findings indicate that ABPK-based counseling greatly influences patients' decisions, enabling them to choose the most appropriate fertilization inhibition method. These results highlight the effectiveness of ABPK in improving family planning counseling services by ensuring that patients make informed choices based on accurate information. ABPK is thus proven to be a valuable tool in educating patients and supporting their decisions regarding postpartum contraceptive methods.

Keywords: ABPK counseling; Fertilization inhibition; Postpartum

Introduction

State the Family Planning (KB) program has an important contribution in improving the quality of the population, namely in terms of dealing with population growth. World Health Organization (WHO) states that family planning programs can anticipate and determine the number of children each couple wants and can estimate birth spacing (WHO, 2020). Increasing population is one of the big problems faced by all countries, both developed and developing countries (Wahyuni & Mahanani, 2019). Indonesia is one of the developing countries with the largest population increase after China, India and the United States. The population of Indonesia in 2021 is 273,879,750 people, consisting of 138,303,472 male residents and 135,576,278

female residents. This number increased by 3,675,833 people from 2020. According to records from the Central Statistics Agency (BPS), in 2020, Indonesia's population was 270,203,917 people. The population distribution based on gender is 136,661,899 people for the male population and 133,542,018 people for the female population. Family planning (KB) is an effort to achieve prosperity by providing marriage advice, infertility treatment and birth spacing (Piccoli et al., 2018; Turon et al., 2023; Wei et al., 2024). Family planning helps individuals or married couples to avoid unwanted births, get the births they really want and regulate the interval between births. Family planning is the process of deciding the number and spacing of children and the time of birth. Based on this the family planning movement now gives more power to the community to

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participate according to the aspirations, tastes, satisfaction and independence of the community in family planning (Ars et al., 2022; Lee et al., 2022; Wong et al., 2022).

The choice of type of fertilization inhibition device in 2021 shows that family planning participants actively choose injections (59.90%), pills (15.80%), implants (10.00%), IUD (8.00%), MOW (4.80%), condoms (1.80%), MOP (0.20%), and MAL (0.10%). This pattern occurs every year, where more participants choose short-term fertilization inhibition methods than long-term fertilization inhibition methods (Wulandari et al., 2022). Types of fertilization inhibition such as injections and pills are included in the short term fertilization inhibition method, which has a lower level of effectiveness in controlling pregnancy compared to the Fertilization Inhibition Method (Dörner & Güss, 2022; Randall et al., 2017; Shenoy et al., 2018). Fertilization Inhibition Method is a fertilization inhibitor that can be used for a long period of time, more than two years, effectively and efficiently to space births for more than three years or end pregnancies in couples of childbearing age (PUS) who do not want to have more children. Methods include IUD/IUD, Implant, MOP, and MOW.

One of the challenges in increasing participation in family planning programs is concern about the side effects of fertilization inhibitors. There are still shortcomings in development in the field of population and family planning, especially in the socialization of fertilization inhibition, which is reflected in the low number of men using fertilization inhibition, the lack of knowledge of couples about family planning, and the lack of synergy in population control policies (Dolmans et al., 2019; Farquhar et al., 2017; von Wolff, 2019). Quality family planning services are not only about providing services in installing fertilization inhibition devices, but also about providing interpersonal communication and counseling to acceptors. Family planning counseling is communication between family planning service providers and clients regarding awareness of using family planning, including reproductive plans, needs, choices and client concerns. Family planning counseling is important as protection for client decisions based on complete information, as well as providing freedom for clients to make comprehensive choices (Burbick et al., 2023; Campbell & Woodard, 2020; Tröster & Sauer, 2021).

Providing counseling has a big influence on the client's decision to use fertilization inhibition. The Decision making Tool (ABPK) in family planning counseling is a standard guide that not only provides information about fertilization inhibition, but also a counseling process that is based on client rights and

Informed Choice (Betz et al., 2023; Hu et al., 2023; Miller et al., 2021). ABPK plays a role in helping decision making, solving problems, providing references, as well as being a visual aid for provider training. The quality of counseling between clients and providers is an important indicator of the success of family planning programs. Midwives can provide counseling about fertilization inhibition tools using various media, one of which is ABPK (Decision Making Tool) with KB. ABPK is one of the media that influences the counseling process, so that there can be changes in acceptor perceptions and behavior in choosing and using fertilization inhibition. Therefore, this research is to find out "Influence Counseling with ABPK on Use in the Postpartum Period in 2024".

Method

Research This research is a quantitative study utilizing a quasi-experimental method. The research design employed is a one-group pre-test post-test design, an experimental research design without a comparison (control) group. In this design, measurements are taken twice: before and after the intervention, allowing researchers to observe any changes resulting from the intervention (Sugiyono, 2019). The population in this study consists of 200 postpartum mothers in the working areas of Sajira Health Center, Kresek Health Center, Sumur Health Center, and Midwife Eva's Independent Practice. The selection of this population is based on the relevance of postpartum mothers' characteristics to the intervention objectives, focusing on those experiencing specific conditions related to the study's aim.

The main objective of this research is to evaluate the effectiveness of an intervention on postpartum mothers by comparing the pre-test and post-test results. The quasi-experimental method was chosen due to its flexibility in field research settings, where full control over variables is not always feasible (Cunningham et al., 2015; Lodigiani et al., 2017; Weinreb et al., 2022). Although there is no control group, this design still provides a reasonably strong indication of significant changes in the variables measured after the intervention. Data collection is conducted using valid and reliable instruments, and the analysis is carried out through the Wilcoxon Signed-Rank test. This test is selected because the data analyzed are paired and not normally distributed. The Wilcoxon test determines whether there is a significant difference between the pre-test and post-test results, thus helping to conclude whether the intervention has a significant impact on postpartum mothers. The findings of this research are expected to contribute to the development of more effective

interventions in supporting postpartum maternal health and to provide recommendations for healthcare services in enhancing the quality of care for new mothers. This study can serve as a reference for health practitioners in improving postpartum care strategies.

Result and Discussion

Results

Table 1. Frequency Distribution of Fertilization Inhibition Use Before and After Counseling in 2024

Inhibition of fertilization	Counseling with ABPK			
	Before		After	
	(f)	(%)	(f)	(%)
Do not use	144	72	57	28.50
Use	56	28	143	71.50
Total	200	100	200	100

Based on Table 1, of the 200 respondents before being given counseling with ABPK, the majority did not use fertilization inhibition, 144 people (72%), while 56 people used fertilization inhibition (28%). After undergoing counseling with ABPK, there was an increase in the use of fertilization inhibition, with the majority using it reaching 143 people (71.50%), while those who did not use it were 57 people (28.50%).

Table 2. Normality Test results

	Kolmogorov - Smirnov		
	statistics	df	themselves.
Before	.453	200	.000
After	.451	200	.000

Table 2 shows the results of the normality test using Kolmogorov-Smirnov values of 0.000 (before) and 0.000 (after). Because the p-value < 0.05, it can be concluded that the data is not normally distributed. Based on these results, the statistical analysis used in this research is a non-parametric test, namely test wilcoxon signed-rank, to draw conclusions from hypothesis testing.

Table 3. Effect of Counseling with ABPK on Use in the Postpartum Period in 2024

Counseling with ABPK	Of		No		Total f	Mean Rank	P Value
	f	%	f	%			
Before	56	28	144	72	200	100	69.00
After	143	71.50	57	28.50	200	100	0.000

Based on the research results, it is known that before counseling with ABPK, more respondents did not use it, namely 56 people (28%). Meanwhile, after counseling, more respondents used it, namely 143 people (71.50%). Average value before and after counseling with ABPK (mean rank) is 69.00 and is statistically significant $p = 0.000 < 0.05$, meaning there is an influence of counseling with ABPK on use in the postpartum period.

Discussion

Discussion of Univariate Analysis

The results of this study showed that of the 200 respondents before being given counseling with ABPK, the majority did not use fertilization inhibition, 144 people (72%), while 56 people used fertilization inhibition (28%). After undergoing counseling with ABPK, changes occurred with the majority using fertilization inhibition, 143 people (71.5%) and 57 people (28.5%) not using fertilization inhibition. In line with research conducted by Partiw (2022), differences were found in the choice of IUD fertilization inhibition between the group that received family planning counseling using a family planning decision aid (ABPK) and the group that received family planning counseling using the KIA book. In the group using ABPK, 13 people (81.25%) chose IUD fertilization inhibition, while 3 people (18.75%) did not choose IUD fertilization inhibition. Meanwhile, in the group that used the MCH book, 4 people (25%) did not choose IUD fertilization inhibition and 12 people (75%) chose IUD fertilization inhibition. Many potential acceptors experience difficulty in choosing the type of fertilization inhibition, not because of the limited choices available, but because of a lack of knowledge regarding the advantages, disadvantages and side effects of each fertilization inhibition method (Dainis & Ashley, 2018; Lu et al., 2023; Saeki et al., 2022). IDHS data shows that more than 50% of fertilization inhibition users use short-term methods for more than 10 years. Concerns regarding fertilization inhibition methods (such as implants, IUDs, tubectomy, or vasectomy) are often caused by misunderstandings about their use and impact on health (BKKBN, 2017; BKKBN, 2020).

This is in line with research by Erliani et al. (2024) which shows that of the 30 respondents at the Tanjung Batu Community Health Center UPT before being given ABPK media, 18 respondents (60%) had a positive perception regarding, while 12 respondents (40%) had a negative perception. After giving ABPK media, 24 respondents (80%) had positive perceptions about, while 6 respondents (20%) still had negative perceptions. The main indicator of the quality of family planning services is the provision of quality counseling to mothers as potential family planning acceptors, which results in

informed choice. This can only be achieved through good, complete counseling, as well as the use of communication media and providing standard information (Alesi et al., 2021; Hassel et al., 2021; Klobodu et al., 2024).

The standard information includes: contraindications, risks and benefits of each fertilization inhibition device or method; how to use fertilization inhibitors; side effects that may arise and how to overcome these side effects; and the expectations that clients can get from the services of family planning officers (Susiloningtyas et al., 2022). ABPK with KB is a standard guide for family planning counseling which not only provides information about fertilization inhibition but also establishes counseling procedures and steps based on family planning client rights and Inform Choice (Committee & Society, 2019; Moffat & Güth, 2014; Somigliana et al., 2020; Tal & Seifer, 2017). The quality of counseling between clients and medical providers is an important factor in the success of family planning programs (Mukarramah et al., 2021). According to researchers' assumptions, family planning counseling using family planning decision-making tools can provide accurate and clear information regarding fertility inhibition. This allows postpartum mothers and their partners to understand reproductive rights needs and carefully plan the use of quality fertilization inhibition (Enang et al., 2023). In line with the theory according that ABPK also functions as a tool for providers to help make decisions about family planning methods, solve problems related to the use of family planning, provide technical references, and as a visual aid (Cheng et al., 2023).

Bivariate Analysis

The results of this research show that Asymp. Sig (2 - Tailed) has a value of 0.000 because $0.000 < 0.05$, it can be concluded that the hypothesis is accepted. This means that there is a difference in the use of fertilization inhibition before and after counseling with ABPK. So, it can be concluded that there is an influence of counseling with ABPK on use in the postpartum period. In line with research by Susiloningtyas et al. (2021) and Susiloningtyas et al. (2022) analysis using the Wilcoxon signed rank test shows a p-value of 0.000, which is less than the research critical limit of 0.05. Therefore, the hypothesis decision is to accept H1, which means there is a significant difference before and after being given counseling regarding long-term fertilization inhibition methods (Nurcahyani & Widiyastuti, 2021). According to Notoatmodjo (2020), effective family planning counseling can increase knowledge about family planning, which will form certain beliefs so that a person can behave in accordance with their beliefs. The use of

media in health education techniques is an important factor that supports the success of educational goals. Research by several experts shows that the media can clarify the presentation of messages, reducing the verbalistic nature which may be difficult to understand, especially for targets who have language limitations.

This research is in line with the findings of Kostania et al. (2014), which shows that counseling using ABPK with family planning has an influence on the use of fertilization inhibition devices. Providing accurate information to acceptors can change a person's behavior. ABPK with KB allows acceptors to have a clearer understanding of the various types of fertilization inhibition available, because ABPK functions as a medium or channel that influences the counseling process. This leads to changes in perception and behavior, so that acceptors can choose and use fertilization inhibition tools better. The low selection of Long-Term Fertilization Inhibition Methods has been the trigger for stagnant birth rates over the last decade. The stagnation stems from the situation where most modern family planning participants currently still use short-term fertilization inhibition methods known as non-. The use of health education media can be based on Edgar Dale's experience, which states that a health education process that involves more senses will be more easily accepted and remembered by educational targets.

According to Pratiwi et al. (2022), her research showed that there were significant differences in knowledge between the treatment and control groups in the pretest and posttest. This research found a significant difference between counseling using ABPK and verbal counseling regarding pregnant women's knowledge about. Providing counseling using ABPK has proven to be more effective than verbal counseling (Wahyuni & Mahanani, 2019; Wahyuni, 2019). According to the researchers' assumptions, the counseling process with ABPK assisted by midwives can increase client understanding because midwives can provide direct explanations and answer questions directly. With the help of midwives, the use of ABPK becomes clearer and more informative, thus having a positive impact on increasing client knowledge and decisions regarding fertilization inhibition methods. As a result, the number of choices of fertilization inhibition methods may increase. This is in line with the findings of, who stated that education using ABPK can increase WUS' perceptions and knowledge about (Setiowati et al., 2022). The increase in perception occurred because of the direct information that WUS received from education using ABPK.

Conclusion

This research involved 200 respondents with the aim of measuring the effect of counseling with Decision Making Tools (ABPK) on the use of fertilization inhibition methods in the postpartum period at TPMB Eva Lestarida, Bekasi. Before being given counseling, the majority of respondents (72%) did not use a fertilization inhibition method, with only 56 people (28%) choosing this method. This condition reflects that many postpartum mothers may feel unsure or lack information regarding fertilization inhibition methods before receiving structured counseling. However, after being given counseling with ABPK guidance, there was a significant change in their decision. The number of respondents who chose to use the fertilization inhibition method increased drastically to 143 people (71.50%), while those who still did not use this method decreased to 57 people (28.50%). This increase shows that ABPK is effective in helping clients understand the various options available and encouraging better decision making that is more tailored to individual needs. Statistical analysis using the Wilcoxon test shows that this result is statistically significant with a value of $p = 0.000$, which means there is a significant difference between the use of fertilization inhibition methods before and after being given counseling. The effectiveness of counseling with ABPK in increasing clients' understanding and awareness of the importance of fertilization inhibition in the postpartum period is reflected in the high rate of change in this decision. This emphasizes that the information delivered through ABPK is not only comprehensive but also client-centred, emphasizing their right to make the right choice according to their individual conditions and preferences. In the context of health services, ABPK plays a role as an essential tool to improve the quality of family planning counseling that is more personal and inclusive, ensuring that each client can make decisions based on adequate information and careful consideration. The results of this research can be used as a basis for improving counseling programs in maternal and child health services, especially in efforts to minimize the number of unwanted pregnancies and related health complications. With proper implementation, ABPK not only helps in decision making, but also strengthens clients' confidence in choosing a method that is in accordance with their right to receive quality health services.

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Author Contributions

I.H., N.S., R., Y.U., & E.N.L.S. contributed to the conceptualization data collection process, data processing, article writing.

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Conflicts of Interest

The authors declare no conflict of interest.

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