

Article

## The Effect of the KLOP Wheel Application in Family Planning Decision Making in the Practice of Midwife a Banjarbaru

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**Abstract:** The KLOP wheel in Indonesia, which stands for Circle Diagram and Application of Medical Feasibility in the Use of Contraception. The importance of the KLOP wheel as a screening tool before using contraception is because it can help decision making by taking into account the medical conditions or medical characteristics of the client. The use of KLOP aims to reduce medical barriers and increase access and quality of family planning services, because in clients with medical conditions or special characteristics, there are contraceptive methods that may worsen medical conditions or create health risks. Objective: To find out the effect of the KLOP Wheel application in family planning decision making in the practice of Midwife A Banjarbaru. Method: This research is quantitative research with an experimental design method (Quasi Experiment). The population is old family planning acceptors and new family planning acceptors, totaling 120 people and a sample of 30 people. Results: The most common type of birth control used before treatment was a combination injection, 9 people (30%). The most common type of birth control used after treatment was a combination injection, 13 people (46.6%). The relationship between the effect of the Roda KLOP application and family planning decision making was obtained by p-value (0.030). Conclusion: There is a relationship between the effect of the Roda KLOP application and family planning decision making, which is expected to facilitate family planning decision making according to medical conditions or medical characteristics. The ability and accuracy of officers in screening medical eligibility criteria is expected to improve the quality of contraceptive services.

**Keywords:** KLOP Wheel Application, Family Planning Decisions , Medical Eligibility Criteria

**Citation:** Zoraya Defada Nawiswari. The Effect of the KLOP Wheel Application in Family Planning Decision Making in the Practice of Midwife a Banjarbaru. International Journal of Health Systems and Medical Sciences 2024, 3(3), 266-272.

Received: 10<sup>th</sup> July 2024

Revised: 11<sup>th</sup> July 2024

Accepted: 24<sup>th</sup> July 2024

Published: 27<sup>th</sup> July 2024



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### 1. Introduction

The Family Planning (KB) program is one of the priorities of health development as a maternal and child health effort and contraceptive use is one of the pillars in reducing maternal and infant mortality. Contraceptive use can help mothers control pregnancy spacing and prevent unwanted pregnancies, so that every mother is expected to undergo pregnancy in a healthy condition (Irmawati, Rupdi L, 2020).

According to the World Health Organization (WHO) in 2017 contraceptive use has increased in many parts of the world, especially Asia and Latin America and Sub-Saharan Africa. Globally, contraceptive use has increased insignificantly from 54% in 1990 to 57.4% in 2016. In Africa from 23.6% to 27.6% in Asia it has increased from 60.9% to 61.6% (Novianti, 2023).

Data from the 2017 IDHS shows that the rate of family planning compliance (using contraceptives) for women who need family planning is still 86%, not reaching 100%. A quarter of family planning participants use short-term contraceptive methods, especially

injections and pills, and only a quarter use long-term contraceptive methods, such as IUDs and implants. As a result, the contraceptive dropout rate in one year is increasing. (Ditjen Kesmas, 2021).

According to BKKBN 2022, the coverage of active family planning participants in Indonesia who use injectable contraceptive methods is 47.58%, pills are 39.99% IUDs are 2.16%, implants are 7.40%, condoms are 1.84%, MOW are 1.37% and MOP are 0.32%. When viewed from the effectiveness of short-term contraceptives such as injections and pills are lower than long-term contraceptives such as implants, IUDs, MOW, MOP [1]. This pattern often occurs every year, which proves that short-term contraceptives are more popular (Indonesian Ministry of Health, 2021).

From the 2020 population census data in South Kalimantan, the number of couples of childbearing age in South Kalimantan was 718,924 people, with 546,312 active family planning participants (76%). The coverage of active participants in South Kalimantan province in 2022 based on contraceptive methods is above the target of > 60% but the contraceptive dropout rate is 26.1%. In terms of contraceptives, the highest dropout rate occurred in contraceptive pills 29% and injections 22% for short-term contraceptive methods (BKKBN, 2022).

According to research by Nur Satiyaroh and Fany Mariska (2022) the contraceptive decision-making process using the KLOP wheel has an influence [2], [3]. This is because family planning acceptors who are assisted by using the KLOP wheel get effective family planning counseling according to their medical condition or other medical characteristics, especially whether the method worsens existing medical conditions or poses new health risks, and whether existing medical conditions reduce the efficacy of the method. so that it can reduce the dropout rate. So that it can reduce the dropout rate. According to research by Rabia Zakaria (2020), the use of WHO wheel Criteria on decision making for contraception is more influential when compared to using Decision Support Tools. This is because it is a contraceptive guide that helps recommend decision making in starting contraception that suits the needs of family planning acceptors and helps in choosing contraception when acceptors experience health problems before using contraception. [4], [5], [6] While ABPK is still more inappropriate contraceptives because the selection of contraceptives is still based on their own decisions without any direction as to what contraceptives should be used.

The success of family planning in Indonesia cannot be separated from how counseling is provided. Counseling can maintain continuity in the use of contraceptive methods by providing counseling clients can choose contraceptive methods that are believed and in accordance with client criteria [7]. Therefore, health counselors need to know the medical conditions and special characteristics before clients use contraception. This is because in clients with medical conditions or special characteristics, there are contraceptive methods that may worsen medical conditions or create additional health risks [8]. On the other hand, there are also medical conditions or client characteristics that may affect the effectiveness of contraceptive methods [9], [10]. In screening for medical appropriateness before contraceptive use, health counselors can use a tool such as the Medical Appropriateness Criteria for Contraceptive Use Circle Chart according to WHO MEC 2nd Edition, 2017. This standard was created based on the findings of a review of recent clinical and epidemiologic studies on contraceptive services conducted by WHO and partners. The WHO MEC Wheel was eventually modified into the KLOP Wheel in Indonesia, which stands for Circle Diagram and Application of Medical Appropriateness Criteria in Contraceptive Use [11].

Based on data from DP3AP2KB 2023 (Department of Women's Empowerment, Child Protection, Population Control and Family Planning) from 5 Puskesmas in Banjarbaru City, Landasan Ulin Puskesmas ranks first in the number of family planning use with a total of 1975 people and Banjarbaru Selatan Puskesmas ranks second in the number of

active family planning use with a total of 1437 people. Puskesmas Banjarbaru Selatan includes 9 Independent Midwife Practices, Midwife Practice A ranks third with 173 family planning acceptors in 2 months and the number of family planning acceptors who experienced discontinuation as many as 25 people (14.45%) [12], [13]. Before conducting the research, a preliminary study was conducted from a brief discussion with 10 birth control acceptors who experienced dropping out, there were 6 people dropping out on the grounds of getting side effects from the birth control such as dizziness, nausea, and irregular menstruation, 3 people on the grounds of wanting to do a pregnancy program, 1 person on the grounds of being uncomfortable [14].

Based on the above background, the researcher is interested in examining "The Effect of the Klop Wheel Application in Decision Making on the Use of Kb in Midwife A Banjarbaru Practice" [15].

## 2. Materials and Methods

The research method used in this study was an experimental method (Quasi Experiment) with the design of The Nonrandomized Control Group Pretest Posttest Design. This research was conducted at the Practice of Midwife A Banjarbaru. The population of this study were old family planning acceptors and new family planning acceptors totaling 120 people [16]. The sample in this study was the population of old family planning acceptors who changed contraceptives and new family planning acceptors who came to get contraceptive services at the Midwife Practice using non-probability sampling with a minimum sampling method totaling 30 people. The data collection instrument used in this study was a questionnaire to determine the effect of the KLOP wheel application on family planning decision making [17], [18].

## 3. Results

### Univariate Analysis

- a. Type of birth control used before decision making with KLOP at PMB A

**Table 1.** Frequency of types of family planning used before using KLOP at PMB

No Type of Family Planning Frequency	
Percentage (%)	
1. CombinationPills	0
2. ProgestinPill	3 10
3. Combination injection	9 30
4. Progestin injection	8 26.7
Implant	2 6.6
IUD	0
Condom	2 6.6
Not yet family planning	6 20
Total 30 100	

Based on table 1 above, it shows that the types of birth control used before treatment are progestin pills 3 people (10%), combination injections 9 people (30%), progestin injections 8 people (26.7%), implants 2 people (6.6%), condoms 2 people (6.6%) and have not used birth control 6 people (20%).

- b. Type of birth control used after decision making with KLOP at PMB A

**Table 2.** Frequency of types of family planning used before using KLOP in PMB A

No Type of Family Planning	Frequency	Percentage (%)
1. Combination Pills	0	
2. Progestin Pill	0	
3. Combination injection	13	46.6
4. Progestin injection	12	40
Implant	4	13.3
IUD	1	3.3
Condoms	0	
8. Not yet family planning	0	
Total		30
		100

Based on table 2 above, it shows that the types of birth control used after treatment are combination injections 13 people (46.6%), progestin injections 12 people (40%), implants 4 people (13.3%), IUD 1 person (3.3%).

c. Normality Test

**Table 3.** Normality Test

Effect Sig a	Distribution	Wheels of Klop
Yes	0.509	0.05 Normal

Data Source: Data Management Results

The normality test is shown to determine whether the data is normally distributed or not [19]. A data is said to be normal if the significant value  $> \alpha = 0.05$ . Based on the data above, it can be seen that getting the effect on the KLOP wheel application obtained a significant value of  $0.509 > \alpha 0.05$ , the requirement for the normality test is if the calculation results show a significant value  $> \alpha 0.05$ , therefore the data above has met the test criteria, it can be concluded that the data is normally distributed and can be continued to parametric statistics.

### Bivariate Analysis

After the researchers conducted a univariate analysis, bivariate analysis was then carried out using the T-Test test to determine the relationship between the independent variable, namely the effect of the Roda KLOP application and the dependent variable, namely Family Planning Decision Making, can be seen in the following table:

- a. The Effect of KLOP Wheel Application in Family Planning Decision Making in Midwife Practice A Banjarbaru

**Table 4.** Effect of KLOP Wheel Application in Family Planning Decision Making in Midwife Practice A Banjarbaru

Effect of mean	SD	Difference	t	p Value
Wheels of Klop				
before	10,200	0.509	6.676	6.646 0.030
After	10,200	1,535		

Source: Primary Data, 2023

Table 4 shows that the average effect of the KLOP wheel application after treatment shows an increase of 24. The results of the paired t test obtained a p value = 0.030 ( $p = 0.05$ ) and the tcount value  $6.646 > t_{table} = 1.701$ , so it can be concluded that there is an effect of the KLOP wheel application in decision making in Midwife Practice A Banjarbaru.

#### 4. Discussion

The effect of the KLOP wheel application in family planning decision making was measured using a questionnaire. The questionnaire includes the type of family planning before decision making with the KLOP wheel and the type of family planning after decision making with the KLOP wheel.

Based on the results of the study, it was found that the results of 3 people who did depletion using KLOP had no change in contraceptive decisions even though family planning acceptors knew that their medical conditions or diseases would pose a risk. . The acceptor's medical condition is the presence of hypertension, obesity assessed by Body Mass Index which is more than equal to 30 and there has been a history of bleeding. Of the 30 acceptors there was 1 acceptor who experienced hypertension, having a blood pressure of more than 160/100 mmHg and this hypertensive acceptor used implantable contraceptives [20]. When viewed from the medical eligibility criteria, it is classified in category 2 in the use of implanted contraceptives, which means that the use of implanted contraceptives can be used but needs supervision, in this case the client is recommended to use the contraceptive but still requires further examination (Kemenkes RI, 2018). The consequences of using the contraceptive are increased blood pressure, bleeding and stroke.

In this study, there were also acceptors with obesity, as many as 1 person who used implants, after being seen from the medical feasibility criteria belonging to category 1, which means that the benefits outweigh the risks. As a result of using contraception, weight gain and excessive headache. And there is 1 person who has experienced bleeding, according to the medical eligibility criteria included in category 4A which means the use of IUD contraception cannot be used (Kemenkes RI, 2018).

The results of research conducted on 30 respondents, who got the effect of the KLOP Wheel application on hormonal birth control 27 people (90%) and non-hormonal none. While those who cannot influence the application of the KLOP Wheel on hormonal birth control 2 respondents (6.6%) and non-hormonal 1 respondent (3.3%). The results of the T-Test test obtained p-value (0.030) means that there is a significant relationship between the influence of the KLOP Wheel application with family planning decision making.

#### 5. Conclusion

There is a relationship between the effect of the Roda KLOP application and family planning decision making, which is expected to facilitate family planning decision making according to medical conditions or medical characteristics. The ability and accuracy of officers in screening medical eligibility criteria is expected to improve the quality of contraceptive services.

#### 6. Acknowledgments

The author would like to thank Novita Dewi Iswandari S.Si.T and Dr. Dede Mahdiyah, M.Si who have provided direction and guidance in the completion of this research and Independent Midwife Practice A as a research site that has allowed me to conduct research

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