**The Effect of Providing Booklets on Mother’s Knowledge of Long-Term Contraceptive Methods (LARC) in Ngunut Jumantono Village, Karanganyar**

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| **Article Info** |  | **ABSTRACT** |
| ***Corresponding Author:***  Setyo Rini,  Author's home institution Email: setyorini.rindu3@gmail.com |  | One of the causes of low public knowledge about LMPs is the lack of Communication Information Education (KIE) from Health Workers. Health workers must routinely provide KIE with the aim of increasing knowledge and also the interest of LARC acceptors in choosing contraceptive methods so as to increase community participation in using LARC. Efforts that are considered effective are through health promotion media. Visual and audio-visual media are widely used because they are practical, easy to carry anywhere and can be installed in public places such as booklets because they have a simple value that is easy to carry anywhere, for example, they can be put in a wallet, besides that they can also be read anytime if they want to read again.  This research is a quantitative of research. The design used is pre-experimental with One-Group Pretest-Posttest Design. The population in this study were fertile couples who were not active KB acceptors in Ngunut Village, totaling 82 respondents. The sample size in this study was 45 respondents. The sampling technique used is simple random sampling. The instrument used in this study was a questionnaire to assess the level of mother's knowledge about LARC.  The results of the Wilcoxon sign rank test obtained a p-value of 0.000, so the p-value <0.005 (a<0.05) means that Ha is accepted and H0 is rejected, so it can be concluded that there is an effect of providing booklets on Mothers' Knowledge of Long-Term Contraceptive Methods (LARC) in Ngunut Village, Jumantono District, Karanganyar Regency. |
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***Keywords:***

Booklet, Knowledge, LARC

1. **INTRODUCTION**

The Family Planning (KB) Program is one of the focuses in the health sector in the 2020-2024 National Medium-Term Development Plan. The KB program is expected to be able to overcome Indonesia's population problems so that quality Human Resources (HR) are created. Based on the 2020-2024 Population and Family Planning Development Strategy Plan, the use of modern contraception (Modern Contraceptive Prevalence Rate) has decreased in the number of modern contraception users from 57.9% (2012 IDHS) to 57.2% (2017 IDHS). The highest decline even occurred in the 15 to 29 years age segment which fell by 4%. It is estimated that the 2 main causes of the decline in the number of modern contraception users, especially among the younger age group, are the still low age of young couples regarding reproductive health and the lack of access to accurate and reliable information about contraception, especially modern contraception (BKKBN, 2020)

Judging from the family planning methods used in 2022, it shows that most acceptors choose to use injections at 61.9%, followed by pills at 13.5%, while long-term ones such as implants are only 10.6%, then IUDs at 7.7% and MOWs at 3.8%, MOPs at 0.2%. Contraceptive use in Indonesia is still dominated by short-term contraceptive methods compared to Long-Term Contraceptive Methods (LARC) (Kemenkes, 2022)

Based on data from the Kesga and Nutrition Section of Central Java Province, the number of Fertile Age Couples (PUS) in Central Java Province in 2022 was 6,408,024 pairs. Of all the PUS, 68.6% were active modern family planning participants with the following details: 3-month injection contraceptives 61.88% acceptors, implants 12.21% acceptors, IUDs 8.41% acceptors, condoms 3.52% acceptors, pills 9.33% acceptors, MOW 4.30% acceptors and MOP 0.33% acceptors. The selection of contraceptive method types for active KB participants in 2022 shows that most KB participants choose short-term contraceptive methods, namely injections, and there was a decrease in IUD KB participants in 2022 of only 8.41% compared to 2021 which was 9.31% (Dinkes Jateng, 2023)

Based on data from the Kesga and Nutrition Section of Karanganyar Regency, PUS in active KB in Karanganyar Regency in 2022 was 1,643 or 2.9% of the 56,130 PUS 4T. The number of active KB in 2022 was 115,903 acceptors. Active KB participants using modern methods with the following details: 3-month injection KB as many as 64,242 people, IUD as many as 17,401 people, pills as many as 9,473 people, implants as many as 9,210 people, condoms as many as 7,702 people, pills as many as 9,473 people, MOW as many as 7,235 people and MOP as many as 640 people. The data above shows that the use of Short-Term Contraceptive Methods, namely injections, is higher than the Long-Term Contraceptive Method (MKJP) of 32,972 acceptors(Dinkes Karanganyar, 2022)

Based on data from the Jumantono District PLKB in January - March 2024, there were 7808 PUS and 5860 active KB participants. Participants using traditional KB were 75 participants (1.27%). Meanwhile, the most modern KB acceptors were injections with 3510 acceptors (59.89%), then there were IUDs with 888 acceptors (15.15%), Implants with 551 acceptors (9.40%), KB Pills with 315 acceptors (5.37%), MOW with 333 acceptors (5.68%), Condoms with 168 acceptors (2.86%) and MOP with 18 acceptors (0.30%).

In terms of effectiveness, both types of contraceptive injections/drugs/ methods and pills are included in Short-Term Contraception so that the level of effectiveness in controlling pregnancy is lower than MKJP. The dominance of short-term contraceptive use causes the discontinuation rate of contraceptive use to be high. The discontinuation rate of short-term contraceptive use reaches 34%. The high discontinuation rate of contraceptive use can reduce the effectiveness of contraceptive protection against risky pregnancies (BKKBN, 2020)

Long-Term Contraceptive Method (LCM) or Long-term Active Reversible Contraception (LARC) is a very effective contraceptive method to reduce birth rates. In addition, using LCM has a higher level of effectiveness, the level of continuity of using LCM is more guaranteed, thus reducing the drop out rate. This contraceptive method can be used for a long period of time, more than 2 years and is very effective and efficient for the purpose of spacing pregnancies or terminating pregnancies in couples who no longer want to have any more children (Kemenkes, 2021).

Limited knowledge about long-term contraceptive methods makes women easily influenced by incorrect information related to LARC, and easily believe myths that exist in society about LARC. Lack of knowledge and minimal understanding of MKJP is what causes low use of LARC. This means that knowledge is closely related to the behavior of using LARC in society. The level of knowledge is one of the factors that determines and is the basis for women to choose the right contraception (Supriyati et al., 2023)

One of the causes of low public knowledge about LARC is the lack of Communication Information Education (KIE) from Health Workers. Health workers must routinely provide IEC with the aim of increasing knowledge and also the interest of LARC acceptors in choosing contraceptive methods so as to increase community participation in using LARC. Efforts that are considered effective are through health promotion media. Media commonly used in health promotion can be visual, audio, or audio-visual media. Visual and audio-visual media are widely used because they are practical, easy to carry anywhere and can be installed in public places such as booklets because they have a simple value that is easy to carry anywhere, for example, they can be put in a wallet, besides that they can also be read at any time if they want to read again (Iqbal et al., 2022)

This is in accordance with the research results of Supriatin, 2024entitled "The Influence of Booklet and Visual Audio Media on KB Acceptors' Knowledge of Long-Term Contraception in the North Bogor Region in 2023" with the results that based on the p-value (.000), it can be concluded that the use of both booklet and visual audio media has a significant influence on increasing KB acceptors' knowledge of long-term contraception in the North Bogor Region in 2024.

Based on a preliminary study conducted in Ngunut Village, Jumantono District on March 18, 2024, the results showed that the number of PUS was 698 couples and the number of active KB acceptors was 522 acceptors, with LARC acceptors there were 114 acceptors (21.84%) consisting of 2 MOP acceptors, 33 MOW acceptors, 43 IUD acceptors and 36 KB Implant acceptors. Meanwhile, those using short-term contraceptive methods were 408 acceptors (78.16%), the most were KB Injection acceptors, namely 337 acceptors. After conducting interviews with 10 KB acceptors, it was found that 6 KB acceptors did not know what MKJP was and did not understand the side effects and how the types of MKJP worked. The other 4 KB acceptors only knew about how to install MKJP and could mention some of the side effects of IUDs and implants.

Therefore, from the description above, the researcher is interested in conducting a study entitled "The Effect of Providing Booklets on Mothers' Knowledge of Long-Term Contraceptive Methods (LARC) in Ngunut Jumantono Village, Karanganyar".

1. **METHOD**

This research is a quantitative of research. The design used is pre-experimental with One-Group Pretest-Posttest Design. The population in this study were fertile couples who were not active KB acceptors in Ngunut Village, totaling 82 respondents. The sample size in this study was 45 respondents. The sampling technique used is simple random sampling. The instrument used in this study was a questionnaire to assess the level of mother's knowledge about LARC.

1. **RESULTS**

**3.1. Characteristics of Respondent**

Respondent in this research is 45 of fertile couple who were not active KB in Ngunut Village. After doing this research, the characteristics of respondent were obtained :

Table 4. 1 Characteristic of Respondent

|  |  |  |
| --- | --- | --- |
| Variable | N | % |
| Mother’s age |  |  |
| <20 year | 4 | 8,9 |
| 20-35 year | 33 | 73,3 |
| >45 year | 8 | 17,8 |
| Mother’s Education |  |  |
| Elementary School | 6 | 13,3 |
| Junior High School | 9 | 20,0 |
| Senior High School | 24 | 53,3 |
| College | 6 | 13,3 |
| Parity |  |  |
| Primipara | 22 | 48,9 |
| Multipara | 23 | 51,1 |
| Total | 45 | 100 |

In table 4.1, it is known that the majority of respondents are aged 20-35 years, namely 33 respondents (73.3%) and there are respondents aged >45 years, namely 8 respondents (17.8%). Most respondents have a high school education, namely 24 respondents (53.3%). Most respondents are multiparas, namely 23 respondents (51.1%) and there are primiparas, namely 22 respondents (48.9%).

**3.2 Level of Mother's Knowledge about Long-Term Contraceptive Methods (LARC) before being given the booklet**

Table 4. 2 Level of Mother’s Knowledge about LARC before given the booklet

|  |  |  |
| --- | --- | --- |
| Mother’s Knowledge | N | % |
| Poor | 23 | 51,1 |
| Moderate | 22 | 48,9 |
| Good | 0 | 0 |
| Total | 45 | 100 |

Based on table 4.2, it can be seen that before being given the booklet, most respondents had a low level of knowledge regarding long-term contraceptive methods (LMPs), namely 23 respondents (51.1%) and no respondents had a good level of knowledge, while 22 respondents (48.9%) had sufficient knowledge.

**3.3 Level of Mother’s Knowledge about Long-Term Contraceptive Methods (LARC) after being given the booklet**

Tabel 4. 3 Level of Mother’s Knowledge about LARC after given the booklet

|  |  |  |
| --- | --- | --- |
| Mother’s Knowledge | N | % |
| Poor | 0 | 0 |
| Moderate | 20 | 44,4 |
| Good | 25 | 55,6 |
| Total | 45 | 100 |

Based on table 4.3, it can be seen that after being given the booklet, most respondents had a good level of knowledge regarding long-term contraceptive methods (LMPs), namely 25 respondents (55.6%) and there were no respondents with poor knowledge, while those with sufficient knowledge were 20 respondents (44.4%).

**3.4 The Effect of Providing Booklets on Mother’s Knowledge of Long-Term Contraceptive Methods (LARC)**

Tabel 4. 4 Wilcoxon Test Results The Effect of Providing Booklets on Mothers' Knowledge of LARC

|  |  |
| --- | --- |
|  | Postest – Pretest |
| Negative Rank | 0 |
| Positive Rank | 41 |
| Ties | 4 |
| Z | -6.010 |
| *p-Value* | 0,000 |

Based on table 4.4, it can be seen that there is an increase in mothers' knowledge after being given a booklet about LARC as many as 41 respondents and there are 4 respondents who have the same level of knowledge before and after being given the booklet.

The results of the Wilcoxon sign rank test obtained a p-value of 0.000, then the p-value <0.005 (a<0.05) means that Ha is accepted and H0 is rejected, so it can be concluded that there is an effect of giving booklets on Mothers' Knowledge about Long-Term Contraceptive Methods (MKJP) in Ngunut Village, Jumantono District, Karanganyar Regency.

1. **DISCUSSION**

**4.1 Characteristic of Respondent**

In table 4.1, it is known that the majority of respondents are aged 20-35 years, namely 33 respondents (73.3%) and there are respondents aged >45 years, namely 8 respondents (17.8%). The older the age, the more the ability to understand and think so that the knowledge gained will also improve and increase. Meanwhile, according to Notoadmojo (2015), the older the age, the level of maturity and strength of a person will be more mature in thinking and working. Research conducted by Budiarti (2017) showed that women aged ≥ 35 years were 2.24 times more likely to choose to use LARC compared to women aged <35 years (Mahmudah, 2015). The older a person is, the more they choose a contraceptive method by looking at its high effectiveness in preventing pregnancy, namely LARC (BKKBN, 2017). Women aged >35 years are advised to use LARC, because there are many risks if a woman is pregnant at the age of >35 years, including gestational diabetes, hypertension, premature birth in babies and a high possibility of chromosomal abnormalities in the baby to be born (Weni et al., 2019)

Most respondents had a high school education, namely 24 respondents (53.3%) and those who had elementary school and college education were 6 respondents (13.3%). A person's level of education influences an individual's perception of something including the individual's role in the family planning program. Women with higher education are 1.3 times more likely to use LARC than women with low education (Laksmini, 2017). Theoretically, formal education has a very large influence on a person's knowledge, someone with higher education tends to have broader knowledge compared to people with low education. Women with higher education will tend to follow the family planning program and choose effective contraception.

Most respondents were multiparas, namely 23 respondents (51.1%) and there were primiparas as many as 22 respondents (48.9%). Parity is the number of children born alive from a mother. Mothers with high parity (more than 2 children) have high mortality or morbidity rates due to endometrial disorders. Mothers who have had 2 or more children tend to be interested in using LARC because mothers start to think about stopping having children, especially if the mother is at an unproductive age because the mother starts to think about the risk of childbirth (BKKBN, 2017).

**4.2 Level of Mother's Knowledge about Long-Term Contraceptive Methods (LARC) before being given the booklet**

Based on table 4.2, it can be seen that before being given the booklet, most respondents had a low level of knowledge about Long-Term Contraceptive Methods (LARC), namely 23 respondents (51.1%) and no respondents had a good level of knowledge, while those with sufficient knowledge were 22 respondents (48.9%). Based on the research conducted, the researcher assumed that respondents who had a sufficient level of knowledge about Long-Term Contraceptive Methods (LARC) before being given the booklet because a person's knowledge can be influenced by several factors such as age, education and parity and can also be influenced by the mother's activeness in accessing information through the mass media or from health workers so that it can increase the mother's knowledge about LARC. Likewise with respondents who still have insufficient knowledge. This is in accordance with the theory of Notoatmodjo, 2015which states that knowledge is influenced by several things such as education, experience, information, age, social and economic and culture.

**4.3 Level of Mother’s Knowledge about Long-Term Contraceptive Methods (LARC) after being given the booklet**

Based on table 4.3, it can be seen that after being given the booklet, most respondents had a good level of knowledge regarding the Long-Term Contraceptive Method (LCM), namely 25 respondents (55.6%) and no respondents had poor knowledge, while those with sufficient knowledge were 20 respondents (44.4%). (Notoatmodjo, 2015)explains that knowledge is something that is known by people or respondents related to health and illness or Health. A person's knowledge is usually obtained from experiences that come from various sources, for example: mass media, electronic media, manuals, health workers, poster media, pocket books, close relatives and so on.

Media are all tools or efforts to display messages or information that the communicator wants to convey. The thing that needs to be considered and is important in counseling is the selection of media, where counseling media is anything that contains messages or information that can help counseling activities (Leilani et al., 2017). In this study, researchers used booklet media for mothers of fertile age couples who were not active KB acceptors to increase mothers' knowledge about LARC. Booklets are seen as suitable media for delivery that contains many messages, because booklets consist of sheets of paper into small books that are practical to use (Kurnia & Guslinda, 2018). Booklet media has several advantages, namely the counseling process with booklet media to the target can be done at any time and according to the target, booklets in addition to text also contain images so that they can improve understanding in learning, more detailed and cleared so that they are easy to understand (Ulya, 2017).

**4.4 The Effect of Providing Booklets on Mother’s Knowledge of Long-Term Contraceptive Methods (LARC)**

Based on table 4.4, it can be seen that there was an increase in mothers' knowledge after being given a booklet about LARC as many as 41 respondents and there were 4 respondents who had the same level of knowledge before and after being given the booklet. However, when viewed from the score or value, the 4 respondents experienced an increase in knowledge value after being given the intervention of providing the booklet.

According to the researcher's assumption based on the research conducted, the increase in mothers' knowledge about Long-Term Contraceptive Methods before and after being given a booklet about Long-Term Contraceptive Methods (LARC) can provide in-depth information and messages related to Long-Term Contraceptive Methods (LARC), such as what LARC are, their types, how they work and side effects, as well as the advantages and disadvantages of the LARC type.

The results of the Wilcoxon sign rank test obtained a p-value of 0.000, so the p-value <0.005 (a<0.05) means that Ha is accepted and H0 is rejected, so it can be concluded that there is an effect of providing booklets on Mothers' Knowledge of Long-Term Contraceptive Methods (LARC) in Ngunut Village, Jumantono District, Karanganyar Regency.

This is in accordance with research from Nengsih et al., 2022entitled "The Effect of Education for Posyandu Cadres Using Booklets on Increasing Knowledge about Long-Term Contraceptive Methods (LARC)" by showing the results based on the t-test, the p-value is 0.000, so it can be concluded that there is an effect of education for posyandu cadres using booklets on increasing knowledge about Long-Term Contraceptive Methods (LARC) in the Sungai Baung Health Center Work Area, Sarolangun Regency in 2022.

Another supporting study is research from Supriatin, 2024entitled "The Effect of Booklet and Visual Audio Media on KB Acceptors' Knowledge of Long-Term Contraception in the North Bogor Area in 2023" with the results it can be concluded that providing booklet media has a positive effect in increasing KB acceptors' knowledge about long-term contraception in the North Bogor Area. There was a significant increase in the range of knowledge values ​​after using booklet media.

1. **CONCLUSION**

The majority of respondents were aged 20-35 years, namely 33 respondents (73.3%), with the highest education level of high school, namely 24 respondents (53.3%) and multipara, namely 23 respondents (51.1%). Before being given the booklet, most respondents had a low level of knowledge about LARC, namely 23 respondents (51.1%). After being given the booklet, most respondents had a good level of knowledge about LARC, namely 25 respondents (55.6%). The results of the Wilcoxon sign rank test obtained a p-value of 0.000, then the p-value <0.005 (a <0.05) means Ha is accepted and H0 is rejected, so it can be concluded that there is an effect of giving booklets on Mothers' Knowledge about Long-Term Contraceptive Methods (LARC) in Ngunut Village, Jumantono District, Karanganyar Regency.

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