



THE EFFECTIVENESS OF THE EDUCATIONS TO POSTPARTUM ON IMMUNIZATION BEHAVIOR

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Abstract, Introduction: Immunization coverage in Cipelah village, Rancabali sub-district Bandung Regency in the last 3 months has decreased. So that the immunization coverage rate is below the set target of 80% (UCI). This happens, among others, because the education and knowledge of mothers is lacking so that mothers consider that immunizing babies is not necessary, while immunization itself has a very important function, namely to increase immunity in infants..

Method: This research uses analytic quantitative method with quasy experimental design. The population in this study were first-day postpartum mothers in Cipelah Village, Rancabali District, while 36 sample to be used in this study was taken from the population using purposive sampling technique where each member of the population must meet the inclusion criteria to become a sample in this study. Data analysis used in this study is the Chi square test..

Objectives: The purpose of this study was to determine the effect of providing education on maternal behavior in providing immunization to infants in Cipelah Village, Rancabali District, Bandung Regency.

Result: The results showed that the characteristics of the two groups were homogeneous, namely most of them were 20-35 years old, had 1-3 children, the last education was high school, and the respondents' work status was housewives. The statistical test results show a value of $p=0.01<0.05$ which means that there is a relationship between the provision of education to postpartum mothers with the behavior of immunization in infants.

Conclusion: There is an influence between the provision of education on maternal behavior in providing immunization to infants.

Keywords: Behavior, Education, Immunization, Vaccination

INTRODUCTION

Immunization is an effort or process to increase the body's immune system by entering vaccines, namely viruses or bacteria that have died, weakened, or parts of viruses or bacteria that have been modified¹. Every year around 1.4 million children in the world die caused by several diseases that can be prevented by immunization. immunization. Some diseases that can be prevented by immunization include diphtheria, tetanus, hepatitis B, pleurisy, pneumonia, and polio.¹

Universal Child Immunization (UCI) achievement is an indicator of the achievement of complete basic immunization in infants (0-11 months).² UCI villages are villages with basic immunization coverage of 80%. UCI coverage West Java in 2019 amounted to 93.74%, decreased by 11.48 points in 2020 which amounted to 82.26%. According to the West Java Provincial Health Office, in 2020 Bandung Regency was included in 11 districts / cities with low coverage below 80%, namely 68.57%.²

Cipelah Village is one of the villages in Rancabali District, Bandung Regency, West Java Province and is also a village that has an immunization coverage rate below 80% in the last three months in 2022, namely in September 60%, October 53%, and in November 54%. After conducting preliminary studies on 10 mothers in the village, the reasons for not immunizing babies include because the mother does not want her child to fuss and become sick after being immunized and believes that if not immunized, her child will grow up healthy. This can show that knowledge about immunization is very important to give to mothers or parents.³

Knowledge is one of the factors that can influence the occurrence of a behavior, based on the results of research from Nelly Nugrawati⁴ showing that there is a relationship between maternal knowledge and the behavior of immunization in infants. This is also supported by Herman's research (2020).⁵ which says that education using leaflets can improve a person's knowledge, attitudes, and behavior. In an effort to increase maternal knowledge, education by health workers is needed regarding immunization in infants.

METHODS

This research uses analytic quantitative method with quasy experimental design. The population in this study were first-day postpartum mothers in Cipelah Village, Rancabali District, while the sample to be used is 36 respondents using purposive sampling technique where each member of the population must meet inclusion criteria such as postpartum mothers who have not immunized their babies, healthy babies, and are willing to be respondents in the study. Data analysis used in this study is the Chi square test.

RESULTS AND DISCUSSION

1. Characteristics of Respondents

The results of the study based on the age of most respondents in this study were in the range of 20-35 years where in the intervention group 89% (16 people) and in the control group 78% (14 people). Based on the theory from Dwi Rani's research, et al (2020)⁶ shows that the safe age for reproduction is in the age range of 20-35 years, because mothers with ages < 20 years or > 35 years tend to experience complications during pregnancy and childbirth.

The number of children of respondents in the intervention group of this study mostly amounted to 1 child by 56% (10 people) while in the control group most of the number

of children the respondents had amounted to 2-3 children, namely 50% (9 people). Based on the theory that states that parity or the number of children of a person can affect the process of receiving knowledge, because the more experience a person has, the acceptance of knowledge will also be easier.⁷ Sources of knowledge from experience can be used as a way of obtaining the truth of a knowledge, namely by repeating the knowledge that has been obtained before. Based on the level of education of respondents in this study, most of them are high school students, where in the intervention group and control group the same is 44% (8 people).

Based on the theory which states that the factor that has the greatest influence on knowledge is education, because people who have higher education can provide a more rational response to the information received and will think about the extent of the benefits that a person gives to the development of others in achieving a goal. Education not only affects the level of knowledge but also affects one's behavior.⁸

Data on the occupation of respondents in this study were mostly housewives (IRT), where in the intervention group the number of respondents who worked as IRTs was 83% (15 people) and in the control group all respondents worked as IRTs. In principle, work will provide experience and have an influence on a person's knowledge. Mothers who are busy outside the home and interact with many people will have broader knowledge than mothers who spend their time at home. This is because mothers have relationships and opportunities to obtain broader information.⁹

2. Differences in knowledge levels between the two groups

Based on the results of data collection at the time of the pretest, most of the respondents' knowledge levels in the intervention group and control group were the same, namely poor. The level of knowledge is grouped into two groups if the respondents are the community, the grouping is the level of knowledge in the good category with a value of $> 50\%$ of the maximum value and the level of knowledge in the poor category with a value $\leq 50\%$ of the maximum value.¹⁰

Based on the research data, it shows that the pretest results in the intervention group were mostly in the poor category, namely 61% (11 people) while in the posttest all respondents in the intervention group were in the good category, namely 100% (18 people). The results of statistical tests that have been carried out in the intervention group using the Mc Nemar test obtained the result $p = 0.001 (< 0.05)$ which means that there is a significant difference between the results of the pretest and posttest in the intervention group.

In contrast to the control group, the results showed that the respondents' knowledge level was mostly in the unfavorable category, namely 72% (13 people) at pretest and 56% (10 people) at posttest. The results of statistical tests that have been carried out on the control group using the Mc Nemar test obtained the result $p = 0.250 (> 0.05)$ which means that there is no difference between the results of the pretest and posttest in the control group. This is in line with previous research which shows that there are differences in knowledge between the intervention group given education using booklets and the control group who were not given education.

The lowest level of knowledge is knowing or recalling something that has been known or learned. Providing education through counseling on immunization is one of the health promotion efforts in increasing a person's knowledge so that it can have a positive impact on him.¹¹ Someone who gets information about a certain thing will have a better level of knowledge than someone who does not get information, as well as respondents who get

information about immunization using booklet media are expected to increase respondents knowledge¹². This is in line with research which says that health promotion is an effective method because it can increase health knowledge in a person. It is likely that the factors that cause a lack of knowledge in respondents include respondents have never received knowledge or information about immunization, respondents forget about information about immunization, and also respondents do not want their children to become fussy because of the effects of immunization. Health workers have a very important role in providing education about the importance of infant immunization to parents.¹²

This is the same as the results that midwives as health workers play a very important role in increasing the knowledge of a mother and family so as to improve the quality of services in maternal and child health¹³. Therefore, providing information will make someone who does not know to know and who already knows can apply this knowledge in their daily lives.

3. Effect of Education on infant Immunization

Based on the results of statistical data analysis using the chi-square test, the p value = $0.01 < 0.05$ was obtained. The results showed that of the 18 respondents who were given treatment in the form of education and immunized their babies by 89% (16 people) and of the 18 respondents who were not given treatment in the form of education but immunized their babies by 50% (9 people). Thus it can be concluded that there is a relationship between the provision of education to postpartum mothers and the behavior of immunization of infants.

Based on the results of the research that has been done, this is in line with the research on the effect of nutrition education on vegetable and fruit consumption behavior in adolescents which shows that education using leaflet media can improve knowledge, attitudes, and behavior of adolescents in fruit and vegetable consumption⁵. Similar research on the effect of basic immunization booklet education on mothers' knowledge and attitudes towards immunization which shows that there is an influence between providing education with booklet media on basic immunization on parental behavior in providing immunization during Covid 19.¹⁴ Previous research also stated that there was an effect of counseling through booklet media on complete basic immunization on parental behavior which became better after being given booklet media.

Based on the results of the study in the group given treatment in the form of education, 11% (2 people) did not immunize their babies because at the time of the immunization schedule the baby was sick. This is in line with research regarding the analysis of the behavior of mothers who do not immunize their babies which shows that the factors that hinder immunization include laziness, not having time because of work, constrained by long distances to health service facilities, and because the baby is sick when the immunization schedule is scheduled so that the immunization schedule is delayed.¹⁵ Researchers assume that respondents who are given treatment in the form of education but do not immunize their babies are not due to ineffective education but there are internal inhibiting factors that cause babies not to get immunized.

CONCLUSION

The characteristics of the 36 respondents in this study were mostly aged 20-35 years, most of the respondents had 1-3 children, the education level of the respondents was mostly high school, and the employment status of the respondents was mostly housewives (IRT). The homogeneity test results show that $p < 0.05$, which means that the characteristics in this study are the same.

There was a significant difference in knowledge before and after being given education in the intervention group with statistical test results showing that $p = 0.001$ (<0.05). Meanwhile, the control group that was not given the intervention showed the result of $p = 0.250$ (>0.05) which means that there was no significant difference in knowledge in the control group.

There is an influence between the provision of education on the behavior of respondents in immunization with the results of statistical tests obtained p value = 0.01 (<0.05). In the intervention group, the number of respondents who gave immunization to their babies was 89% (16 people), while in the control group who gave immunization to their babies was 50% (9 people).

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