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## The Relationship Between Maternal Anxiety and Basic Immunization in Toddlers

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### Abstract

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*There is still a lot of anxiety experienced by mothers in giving immunizations to. So, it is common to give incomplete immunizations to children. Factors that often influence maternal anxiety in giving immunizations are behavioral views, interpersonal views, age, gender, educational status, and occupation. This research is conducted to analyze the correlation between maternal anxiety and giving basic immunization to toddlers in Sedayulawas Village, Brondong District. This research uses correlation analytic research methodology with cross sectional approach. The population is 57 mothers in Sedayulawas Village, Brondong District and the sample is 50 respondents selected by consecutive sampling technique. The independent variable is anxiety and the dependent variable is basic immunization. The research data are collected within 3 weeks using the HARS questionnaire and the MCH handbook. The data are analyzed using Spearman Rank Test correlation test with  $p < 0.05$ . The results of this research indicate that the no anxiety level shows percentage of 38.0% or 19 respondents. Basic immunization is mostly complete with a percentage of 52.0% or 26 respondents. The results of the analysis show that there is a correlation between maternal anxiety and giving basic immunization in Sedayulawas Village, Brondong District ( $p = 0,000 < \alpha 0,05$  with the correlation value of 0.780). It means that there is a strong correlation between maternal anxiety and basic immunization for toddlers in Sedayulawas Village, Brondong District. Conclusion of the research: There is a strong correlation between maternal anxiety and giving basic immunization to children under five-year-old in Sedayulawas Village, Brondong District. Therefore, mothers who have toddlers need to participate in health education regarding complete basic immunization and ask a lot of questions before giving immunizations.*

### Keyword:

*Maternal Anxiety, Giving Basic Immunization.*

## INTRODUCTION

Immunization is a process to make the body's defense system immune to infection by microorganisms (bacteria and causing microorganisms the opportunity to attack our bodies. With immunization our bodies will be protected from infection as well as other people. Because it is not transmitted from us. Since the establishment of the expanded program on immunization (EPI) by the World Health Organization (WHO) until now the infant mortality rate due to infectious diseases that should be prevented by immunization is still relatively high (Directorate General of PP & PL, Ministry of Health of the Republic of Indonesia, 2017). The immunization program is a program used to reduce the morbidity, mortality, and disability of infants and toddlers. This program is implemented for diseases that can be prevented by immunization such as tuberculosis, diphtheria, tetanus, hepatitis B, polio and measles. Ideally, infants should receive complete basic immunization consisting of BCG 1 time, DPT 3 times, polio 4 times, HB 3 times and measles 1 time. To assess the completeness of basic immunization for infants, it is usually seen from the coverage of measles immunization, because measles is the last immunization that given to infants (Indonesian Ministry of Health, 2015).

Immunization as one of the preventive efforts that have a positive impact on public health must be carried out continuously, comprehensively, and according to standards so that it can break the chain of disease transmission and actively create / increase a person's immunity to a disease (Ministry of Health, 2017). According to Universal Child Immunization (UCI) set by WHO (World Health Organization, 2016), namely in accordance with BCG coverage of at least 90% DPT I and DPT II at least 90% DPT III at least 80%, Hepatitis B at least 90%, Polio at least 95%, and Measles at least 90% (Ministry of Health, 2016). From the results of basic health research by the Indonesian Ministry of Health in 2018, the coverage of complete basic immunization status (IDL) in children aged (12-23 months) decreased from 59.2% to 57.9% (Ministry of Health, 2018). This means that out of 6 million children aged 12-23 months, only around 2.5 million children have complete immunizations. Meanwhile, based on an interview with a posyandu cadre in Sedayulawas Village in July 2021, it was stated that out of 50 mothers, 18 mothers

did not immunize their children, 15 mothers felt anxious when their children were immunized, 10 mothers had incomplete child immunizations, and only 7 mothers had complete immunizations. due to the side effects that arise with immunization.

From the side effects that arise now there is redness or swelling in the area of the body that was immunized, the child cries easily or is fussy, and also with the reason that the child has never been sick. In general, most mothers are still afraid and reluctant to take their children for immunization to the integrated health post because the baby gets sick after being immunized. In this case, the role of parents, especially mothers, is very important, because the closest person to the baby and child is the mother. Likewise, regarding the mother's education and knowledge. The mother's education and knowledge will affect the completeness of basic immunization in babies and children, so that it can affect their immunization status. The problem of understanding, comprehension and compliance of mothers in their baby's immunization program will not be a big obstacle if adequate education and knowledge about it are given. In addition to the role of parents, it cannot be denied that almost all Posyandu service activities will not run well without the presence of cadres as volunteers. These cadres are actually the spirit of Posyandu.

Anxiety is a subjective feeling of mental tension that is disturbing or a lack of security. These uncertain feelings are generally unpleasant which will later cause or be accompanied by physiological and psychological changes (Rochman, 2010). In this case, the role of cadres in Posyandu is very large because the smooth implementation of Posyandu activities is determined by the extent to which the cadres' abilities and activeness in carrying out their functions and building good cooperation between fellow cadres and towards Posyandu supervisors and target groups. Given the strategic nature of the existence of cadres, in order to provide optimal services, the government has programmed the provision of training for cadres who will later help educate about maternal anxiety regarding immunization of toddlers in the hope of reducing the anxiety felt by each mother when immunizing. (Bapenas, 2015). This attracted the author's attention to raise this problem in the study. The author wants to know more. Is there a "Relationship between maternal anxiety and basic immunization of toddlers" in Sedayulawas Village,

Brondong District. Scientifically, I want to prove the relationship between maternal anxiety and basic immunization of toddlers.

## METHODS

This study used a correlational analytical research design with a Cross Sectional approach, namely a study to study the relationship between the independent variable of maternal anxiety and the dependent variable of immunization in toddlers with measurements once at the same time (Notoatmodjo, 2016). What is meant by the researcher is making observations between the independent variable, namely maternal anxiety, and the dependent variable, namely the provision of basic immunization at the same time. In this study, the population was 57 mothers who had infants from 3 integrated health posts in Sedayulawas Village, Brondong District. The sample of this study was 50 mothers who had toddlers and were domiciled in Sedayulawas Village, Brondong District.

## RESULTS

Respondent characteristics show that the highest value at the age of 26-30 years is 42.0% with a total of 21 respondents, and the lowest value at the age of >35 years is 12.0% with a total of 6 respondents. The highest value at the level of education is high school at 52.0% with a total of 26 respondents, and the lowest value is Postgraduate 2.0% with a total of 1 respondent. The highest value at the level of employment is Bad Factory at 34.0% with a total of 17 respondents, and the lowest value is Postgraduate 16.0% with a total of 8 respondents. The highest value at the level of anxiety is no anxiety at 38.0% with a total of 19 respondents, and the lowest value is very severe anxiety with a value of 4.0% with a total of 2 respondents.

The highest value with complete immunization is 52.0% with a total of 26 respondents, and the lowest value with incomplete immunization is 16.0% with a total of 8 respondents. Based on the results of the cross tabulation, the highest value was no anxiety with complete immunization of 19 respondents (38.0), and the lowest value was very severe anxiety with complete immunization of 2 respondents (4.0%) with incomplete immunization. The results of the analysis to determine the relationship between maternal anxiety and the provision of immunization to toddlers using the Spearman's rank correlation test

SPSS Windows version 23.00 program obtained the result  $p = (0.000) < \alpha 0.05$  meaning that there is a significant relationship between maternal anxiety towards the provision of basic immunization in Sedayulawas Village, Brondong District with the meaning of a positive relationship so that the relationship between variables is in the same direction.

## DISCUSSION

The highest value at the anxiety level was no anxiety at 38.0% with 19 respondents, and the lowest value was very severe anxiety with a value of 4.0% with 2 respondents in Sedayulawas Village, Brondong District in September 2021. In a person's anxiety level, it is usually related to feelings of uncertainty and helplessness. Anxiety can also be interpreted as unclear worries spreading in the mind and related to feelings of uncertainty and helplessness, no object can be identified as an anxiety stimulus. (Stuart & Laraia, 2017). Factors that influence anxiety are (age) someone who is younger is more likely to experience anxiety disorders than someone who is older, this disorder is more often experienced by women than men, (gender) women have higher levels of anxiety than male subjects, (knowledge) with the knowledge that a person has, it can reduce feelings of anxiety experienced in perceiving something, (environment) someone who is in a foreign environment is more likely to experience anxiety than when he is in the environment he usually lives in.

This is in accordance with Kaplan and Sadock (2015). Based on the data obtained, anxiety has a percentage of 38.0% with no anxiety and 62.0% with anxiety, either mild, moderate or severe. Based on the data found by researchers, education and knowledge greatly affect the level of maternal anxiety. For mothers who are not anxious because basic immunization will affect the health of children such as being protected and having immunity to several dangerous diseases, it can improve growth and development towards healthy children. Most respondents, namely 26-30 years old, as many as 21 people (42.0%) with no anxiety because younger ages are more likely to experience anxiety. This is in accordance with Waldoher (1997, in Reza, 2016). Completeness of immunization was 48.0% with 24 respondents who did incomplete immunization, while 52.0% with 26 respondents who did complete immunization from a total of 50 respondents in

Sedayulawas Village, Brondong District in September 2021. In the completeness of immunization is usually related to the lack of knowledge and access to information in mothers. Factors that affect the completeness of immunization can occur in (age) The age of productive women greatly influences the maturity of the woman's thinking, especially regarding her responsibility as a mother, namely caring for her children until adulthood, (education) Education is one of the most important factors in determining maternal behavior, because a mother with a high education will affect the health of her family, but if someone has a low education, it is hoped that she can increase her information, (work) Mothers who have jobs to meet family needs (first needs) will affect immunization activities which include the need for a sense of security and protection so that mothers prioritize work rather than delivering immunizations, (knowledge).

Sufficient knowledge is expected to influence a mother's actions in providing complete immunization to her child. This is in line with the results of the study from the age with a percentage of 26-30 years as many as 21 people (42.0%), education mostly high school as many as 26 respondents with a percentage (52.0%), and the mother's occupation mostly as a factory worker as many as 17 respondents with a percentage (34.0%). Based on the results of the questionnaire, it shows that the completeness of immunization with complete and incomplete categories can occur due to factors that occur including age, education, knowledge and work. Immunization in Sedayulawas Village, Brondong District, which has anxiety where this anxiety will have a major impact on the completeness of immunization. According to (Butarbutar, 2018) explains that anxiety experienced by individuals can arise due to the influence and role of the environment around the individual, the stimulus faced and perception so that it can affect the completeness of immunization. This is in line with the results of the cross tabulation obtained by researchers that the weight, light, no anxiety that will be received by the mother will also affect the good or bad of the completeness of the immunization given. Anxiety that arises due to immunization is because of swelling at the injection site, the child will be fussy, feverish. They assume that immunization will only make the baby hot, cry in pain, have a red rash, and their condition will weaken, so mothers choose to stop

immunizing their babies. Every time a health worker comes to provide complete basic immunization, mothers tend not to attend on the grounds of being busy, and say that being immunized or not being immunized is the same as being sick.

## CONCLUSION

The level of maternal anxiety in providing basic immunization to toddlers in Sedayulawas Village, Brondong District, was mostly at the level of anxiety, there was no anxiety of 38.0% with a total of 19 respondents, and the lowest value was very severe anxiety with a value of 4.0% with a total of 2 respondents. The provision of basic immunization to toddlers in Sedayulawas Village, Brondong District, was mostly 26 respondents (52.0) with complete immunization. There was a significant relationship between maternal anxiety and the provision of immunization to toddlers in Sedayulawas Village with  $p = (0.000) < \alpha 0.05$  and a correlation coefficient of 0.780.

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