

The Relationship of Mother's Knowledge and Employment Status with the Provision of PCV Immunization to Babies at the Lembur Health Center, Alor District

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ABSTRACT

The leading infectious disease that kills children under five worldwide is still pneumonia. According to the WHO, Indonesia has the eighth-highest pneumonia-related death rate among 15 nations for toddlers and children because of low Pneumococcal Conjugate Vaccine vaccination rates. The study design employs a cross-sectional methodology and correlation analytics. With a population of 300 and a sample of 75, the sampling method used was accidental sampling. The Chi Square test type in SPSS Version 25 was used to examine the results. According to the study's findings, 36% of mothers had high understanding, 64% had poor knowledge, 33.3% were working mothers, 66.7% were not, and 36% had received the PCV vaccine while 64% had not. Maternal knowledge (p value 0.032) and job status with PCV immunization (p value 0.000) were revealed to be related by the Chi Square test. Given that the p value is less than the alpha value (α) = 0.05, H1 is accepted and H0 is rejected, indicating a relationship between the mother's work level and her knowledge and her decision to vaccinate her children against PCV. In addition to knowledge and employment situation, other factors that may impact the decision to vaccinate infants against PCV include age, education, family support, perception, reminders, information the mother has received, distance from home, vaccine composition, and vaccine availability. It is advised that the Community Health Center enhance the way its health education initiatives for infant PCV vaccination are carried out.

Keywords: PCV Immunization, Employment Status, and Knowledge

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INTRODUCTION

The Pneumococcal Conjugate Vaccine (PCV), which can offer children more durable and efficient protection, is one method of preventing the onset of pneumonia. A WHO report from 2007 suggested that all nations incorporate the pneumococcal conjugate vaccine (PCV) into their regular baby vaccination regimens. The 10- or 13-valent PCV formulation that is currently on the market for children is advised by the WHO Strategic Advisory Group of Experts (SAGE) on Immunization. Significant decreases in pneumonia and severe (invasive) pneumococcal illness have been noted in nations that have used PCV.

In order to enable the routine use of PCV vaccination, the World Health Organization (WHO) has advised that the PCV vaccine be included in child immunization programs worldwide and has given the PCV vaccine introduction program top priority. In Indonesia, the PCV vaccination program is administered in three doses: first to infants at 2 months of age, along with DPT-HB-Hib 1 and OPV 2; second to infants at 3 months of age, along with DPT-HB-Hib 2 and OPV 3; and finally, as the

immunization progressed, to children at 12 months. However, according to Ministry of Health data as of July 14, 2022, the percentage of infants who have received new antigen immunization has only reached 29%, complete basic immunization coverage (IDL) has only reached 33.4%, and toddler immunization coverage has only reached 28.4%. This accomplishment still falls short of the 37% goal that was supposed to be met in May (RI Ministry of Health, 2022). Eleven Indonesian provinces achieved Complete Basic Immunization (IDL) in 2022, falling short of the 90% national goal. West Sulawesi, Southeast Sulawesi, Maluku, East Nusa Tenggara, North Kalimantan, Riau, West Kalimantan, West Papua, West Sumatra, Papua, and Aceh are the eleven provinces in question. Naturally, this is quite concerning and susceptible to infections-related illnesses and extraordinary occurrences (KLB).

The data presented indicates that since the initial implementation of PCV immunization, it has not reached the expected target. As can be seen, the achievement of PCV immunization in August was still below 50%, meaning that half of the targets have not received service, according to a preliminary study conducted at the Overtime Community Health Center through interviews with immunization program managers. PCV vaccination. Due to their absence from the posyandu, several babies have not received their vaccinations. According to health professionals' and cadres' explanations, the majority of moms in their work areas are farmers, therefore they frequently spend more time with their partners and children outside the home. In addition, 20 infant moms were interviewed, and the results revealed that 10 of them had not received the PCV vaccine. The mother also stated that she was unaware of the nature of the PCV vaccination. In order for VPD to be achieved right away, efforts to raise immunization coverage must be sustained in order to reach a high level of population immunity, or community immunity. In order to ensure that an immunization program is successful, an achievement strategy must be developed while maintaining and improving the quality of immunization services by enhancing the knowledge of parents and caregivers, providing human resources with both formal classroom training and informal on-the-job coaching, and ensuring that officers receive the training they need to become proficient and competent in their roles. (Simarmata, 2020) field. Researchers are interested in studying "The Relationship between Knowledge and Employment Status of Mothers and Providing PCV Immunization to Babies at the Alor Regency Overtime Health Center" in light of the problem's history.

METHODS

Correlation analysis was the research design employed, and data was gathered cross-sectionally at specific dates. The 300 moms who had children between the ages of 0 and 59 months made up the research population. The sample size, which has been determined using the Slovin formula, and the minimum number needed, which is 75 individuals, are used to determine the number of samples. Mothers with three-year-old toddlers participating in the Overtime Health Center posyandu programs were the subjects of this study, which used the Chi-Square statistical test.

RESULTS

Association between PCV vaccination and maternal employment status

Table 5 The relationship between the employment status of mothers who have babies aged 1-3 years and the status of providing immunizations to babies at overtime health centers

Employment Status	PCV Immunization				Total	
	Complete		No Complete			
	F	%	F	%	f	%
Mather Dosent Work	19	76	6	24	25	33
Mother Working	8	16	42	84	50	64

Based on table 5 regarding the relationship between the employment status of mothers who have babies aged 1-3 years and the status of providing PCV immunization to babies in the overtime health center area, the majority of working mothers whose babies did not receive complete PCV immunization were 42 people, or 84 percent, while working mothers who provided complete PCV immunization for babies

were as many as 8 people, or 16 percent. In the data, 19 mothers, or 76 percent, gave complete PCV immunization to their babies.

Multiple Logistic Regression Analysis of the Association between Mother's Knowledge and Work Status and Giving Babies PCV Immunization at the Overtime Health Center in Alor Regency

Table 6 Analysis of data on the relationship between knowledge and employment status of mothers with the provision of PCV immunization to babies at the Overtime Health Center in Alor Regency (multiple regression)

Variable	level of significance
Mothers Knowledge	0,032
Mother's Work Situation	0,000
<i>Pearson Chi Square</i>	0,000

The p value of 0.00 is derived from the results of the chi square statistical test computation using the SPSS 25.0 for Windows application. H1 is approved while H0 is denied since the p value is (0.000), which can be interpreted as being greater than the alpha value (α) of 0.05. Therefore, the administration of PCV vaccination to infants at the Overtime Health Center, Alor Regency, is correlated with the mother's employment situation and level of awareness. With a significance value of $0.019 < \alpha$ value (0.05), the mother's job status was one of the two independent variables that showed a significant link with PCV immunization in the multivariate logistic analysis.

DISCUSSION

Families and the media may provide free information to parents of all income levels, enabling them to be well-informed about the risks of pneumonia and the significance of PCV vaccination. Heru Listiona and Bina Aquari's research (2023) Thirty respondents were subjected to statistical tests utilizing both univariate and bivariate analysis. According to the findings of a bivariate analysis using the chi square calculation, there was a strong correlation between vaccinating infants against PCV and maternal motivation, education, and knowledge. mother with p value = 0.001, indicating that there is a statistically significant correlation (alpha 5%) between mother motivation, education, and knowledge and vaccinating infants against PCV. Since the action will result in the breastfeeding process being successful, the amount of knowledge is based on good, sufficient, and less significant information. Knowledge is the process of producing actions. The separation of knowledge categories serves as the foundation for the classification of knowledge into excellent and poor knowledge. Low vaccination coverage can also be attributed to working mothers' busy schedules, which prevent them from getting their children vaccinated on time. Working parents have less time and are even less informed about the need of vaccinations for their children's health (Arifin, 2015). Generally speaking, the mother is the one who determines if a child has received all recommended vaccinations. One of the factors influencing the completion of a child's immunizations is the mother's employment situation, which limits her time to accompany her child to the posyandu or health service center. According to Balitbangkes (2013), parents' hectic schedules are one of the reasons why kids do not receive vaccinations. While mothers who did not work or were housewives were more compliant in providing complete basic immunization, working mothers had to balance work and child care, which led to complete basic immunization not being a priority, according to the findings of Makamban et al.'s 2014 study. Compared to working moms, housewives and mothers who do not work have more time at home to attend to their children's health, which includes providing basic vaccinations, including the full PCV vaccine (Makamban et al., 2014). Since low childhood and baby vaccination rates prevent the development of herd immunity, there is a chance that an outbreak or other extraordinary event and makes infants younger than five years old more vulnerable to infection. Contrary to Dian Irawati's (2015) research, it has been demonstrated that the mother's job level and the precision of basic immunization implementation are related. In contrast to mothers who do not work, who have more time to interact with others and share opinions, even in the absence of a sufficient knowledge base, working mothers find it easier to obtain information, despite the fact that work consumes time and interferes with family life. Compared to working mothers, non-working mothers exhibit superior attitudes and

behaviors. This study supports the findings of Fitriyah et al. (2017) and Mohanis (2014), who found a correlation between work status and PCV vaccination availability. This is because, according to this study, working mothers' limited time prevented them from giving their infants the full range of vaccinations. Because they are able to spend all of their time with their children, women who do not work can schedule the vaccinations for their children. (2019, Rita). In order to provide vaccinations, mothers who do not work have enough time to spend with their children at all times. Providing complete PCV immunization can increase the baby's immunity against pneumonia infections.

CONCLUSION

Based on data analysis that has been carried out through the chi-square test using the SPSS version 25.0 application, the p-value is 0.00, which means that the p-value is $> \alpha$ (a) 0.05, so H1 is accepted and H0 is rejected, so there is a relationship. between mother's knowledge and employment status and PCV immunization for babies at the Lembur Community Health Center, Alor Regency. Year 2023. For multivariate logistic regression analysis, it was found that the two independent variables that had a significant relationship with PCV immunization were the mother's employment status variable, with a significance value of $0.019 < \text{the alpha value (0.05)}$.

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