

## **THE CORRELATION OF PREGNANT WOMEN'S KNOWLEDGE LEVEL AND MOTHER'S CAPABILITY IN CARE OF NEWBORN AT THE DADAHUP COMMUNITY HEALTH CENTER**

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### **ABSTRACT**

**Background:** Newborn are susceptible to infection so their care requires optimal attention and mothers must prepare themselves by increasing their knowledge in caring for newborns from the time of pregnancy. The purpose of this study is to find out is to determine the correlation between the level of knowledge of pregnant women and the mother's ability to care for newborns at the Dadahup Community Health Center.

**Methods:** The design of this research is an analytic survey with a cross sectional approach. The sampling technique uses total sampling with a sample of 30 pregnant women and the data is primary data obtained from filling out questionnaires by respondents.

**Results:** Data analysis results characteristics of the majority of respondents were in the age range 21-34 years, multigravida pregnancy and gestational age in the 3rd trimester, senior high school education levels, and employment as a housewife. The majority of respondents' knowledge of pregnant women regarding caring for newborns had a good level of knowledge, namely 16 people (53.3%) and the ability of mothers in caring for newborns, the majority of responden had good abilities, namely 15 people (50%).

**Conclusion:** This states that there is a significant correlation between pregnant women's knowledge and ability to care for newborns. Dadahup Community Health Center can optimize information and education, if the mother has good knowledge in caring for newborns.

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**Keywords:** Knowledge, Pregnant mother, Newborn baby care

## **INTRODUCTION**

A newborn is a baby born from a gestational age of 37-42 weeks with a birth weight of 2500-4000 grams. During this period, there is a very big change from life that was initially in the womb completely dependent on the mother to outside the womb which must live independently (Nababan F. & Mayasari E., 2024). Newborns are susceptible to infection so that in their care, maximum attention is needed. Therefore, it is necessary for a mother to know about baby care, especially newborns, in order to obtain optimal baby growth and development (Kartika & Lestari H. E. P, 2021).

Infant morbidity and mortality rates are still a serious health problem in Indonesia. Based on data from Maternal Perinatal Death Notification (MPDN), the Ministry of Health's

maternal death recording system, the number of infant deaths in 2022 will be 20,882 and in 2023 it will be recorded at 29,945 (Redaksi Mediakom, 2024). In the Central Kalimantan region, based on data from the Central Kalimantan Provincial Health Service, the infant mortality rate in 2021 was recorded at 321 deaths with the highest cause of neonatal death being birth weight low. Other causes of death include neonatal tetanus, infection, asphyxia, congenital abnormalities, and others. For Kapuas Regency in 2021, the number of infant deaths recorded was 21 death (Dinkes, 2023)

Knowledge is one of the causes that influences a person's behavior and beliefs, in addition cognitive ability will shape a person's way of thinking in taking action. The higher a

person's level of knowledge about the importance of health and its benefits, the higher the desire to visit health facilities (Subandi, 2016). Pregnant women must prepare themselves to increase their knowledge in caring for newborns, because the mother's ability to care for newborns is influenced by the mother's knowledge from the start of pregnancy, if the mother does not have good knowledge then the mother will experience difficulties in carrying out her new role as a mother (Friedman M. M. et al., 2014). Some pregnant women do not understand how to care for newborn babies, due to their low knowledge and experience (Nursalam, 2016). Newborn care is an action taken to care for and maintain the health of the baby, as well as to meet the basic needs of the baby. Newborn care consists of exclusive breastfeeding, eye care, skin care, baby bathing, baby massage, umbilical cord care, keeping the baby warm, baby clothing, immunization, general baby care, baby observation (Dappa, 2014)

Preliminary study at the Dadahup Community Health Center, researchers used an interview guide that contained care for newborns. The results of the preliminary study showed that 4 pregnant women knew about newborn care such as bathing babies, swaddling babies and exclusive breastfeeding, but mothers did not know about newborn care such as umbilical cord care and baby massage. Therefore, it can be concluded that the knowledge possessed by pregnant women at the Dadahup Health Center can influence the care of newborn babies. Because mothers still lack knowledge such as bathing babies, umbilical cord care, exclusive breastfeeding, swaddling babies, and baby massage.

Based on the background described above, the formulation of the research problem is "What is the correlation between the level of knowledge of pregnant women and the mother's ability to care for newborns at the Dadahup Community Health Center?". The purpose of the research was to determine the characteristics, level of knowledge and abilities of pregnant women regarding the care of newborns at the Dadahup Community Health Center.

The benefit of the research is that it can provide an overview for health workers about

the knowledge of pregnant women and the mother's ability to care for newborns. This research can also be used as material for consideration for conducting health education to the community.

## **METHOD**

The research time is the date, month and year in which the research activity was carried out (Sujarweni, 2014). The location of this research is in the work area of the Dadahup Community Health Center, Kapuas district. This research period was carried out from July to September 2024. The research design used was an analytical survey with a cross sectional approach, namely research that occurs on research objects is measured/collected simultaneously (Elvi, 2018). Research instruments are tools that will be used to collect data (Notoatmodjo, 2015). The data collection techniques used in this research was total sampling of 30 respondents. The research instrument is a questionnaire about knowledge and ability pregnant women that has been tested for validity with 48 valid questions. The data analysis used in this research is Chi-Square test.

## **RESULTS**

This research was conducted from July to September 2024 in the Working Area Dadahup Community Health Center. The sample in this research was 30 pregnant women respondents. In this research, obtained information regarding characteristics of respondents based on age, highest level of education, occupation, number of pregnancies, and gestational age. The following results obtained.

**Table 1. Respondent Characteristics at Dadahup Community Health Center**

| No       | Respondent Characteristics | F         | %            |
|----------|----------------------------|-----------|--------------|
| <b>1</b> | <b>Age</b>                 |           |              |
|          | < 20                       | 3         | 10.0         |
|          | 21-34                      | 18        | 60.0         |
|          | > 35                       | 9         | 30.0         |
| <b>2</b> | <b>Education</b>           |           |              |
|          | Not school                 | 1         | 3.3          |
|          | Elementary school          | 8         | 26.7         |
|          | Junior high school         | 8         | 26.7         |
|          | Senior high school         | 8         | 26.7         |
|          | College                    | 5         | 16.7         |
| <b>3</b> | <b>Work</b>                |           |              |
|          | Housewife                  | 24        | 80.0         |
|          | civil servants             | 1         | 3.3          |
|          | farmer                     | 2         | 6.7          |
|          | Honorary                   | 3         | 10.0         |
| <b>4</b> | <b>pregnancies</b>         |           |              |
|          | Primigravida               | 7         | 23.3         |
|          | Multigravida Grande        | 22        | 73.3         |
|          | Multigravida               | 1         | 3.3          |
| <b>5</b> | <b>Gestational</b>         |           |              |
|          | Trimester I                | 6         | 20.0         |
|          | Trimester II               | 10        | 33.3         |
|          | Trimester III              | 14        | 46.7         |
|          | <b>Total</b>               | <b>30</b> | <b>100.0</b> |

Table 1 shows that the majority of respondents were in the age range 21-34 years, 18 people (60%). In terms of final education, the majority of respondents had elementary, middle and high school educational backgrounds, 8 people each

(26.7%). If we look at the type of work, the majority of respondents are Housewives (IRT), namely 24 people (80%).

Based on data on the number of pregnancies, the majority of respondents were in the multigravida category (having been pregnant more than once), namely 22 people (73.3%). Meanwhile, the majority of respondents were in the third trimester of pregnancy, namely 14 people (46.7%).

**Table 2. Pregnant women's knowledge about Newborn care at Dadahup Community Health Center**

| No       | Knowledge    | F         | %            |
|----------|--------------|-----------|--------------|
| <b>1</b> | Good         | 16        | 53.3         |
| <b>2</b> | Enough       | 12        | 40.0         |
| <b>3</b> | Not enough   | 2         | 6.7          |
|          | <b>Total</b> | <b>30</b> | <b>100.0</b> |

In the table above, in terms of knowledge, most respondents have a good level of knowledge, namely 16 people (53.3%).

**Table 3. Ability of pregnant women about Newborn baby care at Dadahup Community Health Center**

| No       | Ability      | F         | %            |
|----------|--------------|-----------|--------------|
| <b>1</b> | Good         | 15        | 50.0         |
| <b>2</b> | Enough       | 11        | 36.7         |
| <b>3</b> | Not enough   | 4         | 13.3         |
|          | <b>Total</b> | <b>30</b> | <b>100.0</b> |

According table 3, ability of pregnant women about the majority of newborn care providers at the Dadahup Community Health Center have relatively good capabilities, namely 15 people (50%).

**Table 4. The correlation between pregnant women's knowledge and the mother's ability to care for newborns at the Dadahup Community Health Center**

|              | Ability   |             |           |             |            |             | Total     | %            | p     |
|--------------|-----------|-------------|-----------|-------------|------------|-------------|-----------|--------------|-------|
|              | Good      |             | Enough    |             | Not Enough |             |           |              |       |
| Knowledge    | F         | %           | F         | %           | F          | %           |           |              |       |
| Good         | 14        | 46.7        | 2         | 6.7         | 0          | 0.0         | 16        | 53.3         | 0.000 |
| Enough       | 1         | 3.3         | 9         | 30.0        | 2          | 6.7         | 12        | 40.0         |       |
| Not enough   | 0         | 0.0         | 0         | 0.0         | 2          | 6.7         | 2         | 6.7          |       |
| <b>Total</b> | <b>15</b> | <b>50.0</b> | <b>11</b> | <b>36.7</b> | <b>4</b>   | <b>13.3</b> | <b>30</b> | <b>100.0</b> |       |

Based on the analysis of the table above, it is known that of the 16 respondents who are well-informed, the majority have good abilities (14 people or 46.7% of the total). The results of the Chi-Square test show a Pearson Chi-Square value of 31.258 with a significance level (p-value) of  $0.000 < \alpha 0.05$  so that  $H_0$  is rejected and  $H_a$  is accepted. These results state that there is a significant correlation between the knowledge of pregnant women and the mother's ability to care for newborns.

## DISCUSSION

Based on research results in terms of knowledge, the majority of pregnant women in the Dadahup Community Health Center work area have a good level of knowledge, namely 16 people (53.3%), 12 people (40%) have sufficient knowledge, and only 2 people (6.7%) have poor knowledge. In line with the previous theory, knowledge is the result of knowing and occurs after someone senses (sight, hearing, touch, taste and smell) ((Notoadmojo (2003) in Hamzah and Sari (2019)). A person's knowledge can be influenced by several factors such as age, parity, education and occupation which are very important in shaping a person's behavior. Knowledge is obtained from sensing through the senses of sight, hearing, smell, taste, and touch (Pakpahan M. et al., 2021).

Individual knowledge about an object contains two aspects, namely positive aspects and negative aspects. The existence of positive and negative aspects can determine an individual's attitude in behaving and if more positive aspects and objects are known, it can lead to positive behavior towards certain objects (Sinaga L., 2021).

The results of this study are in accordance with the results of previous studies regarding factors related to the ability of primiparous mothers to care for newborns, namely a high level of knowledge of 79.5% (Rintiani et al., 2022). Other studies state that the majority of primiparous mothers have good knowledge about newborn care (Pebrianthy and Aswan, 2020).

From the results of research at the Dadahup Community Health Center, pregnant women have good knowledge about caring for newborns, on average they have high school and college graduates. Mothers with a minimum

education of junior high school, elementary school and no school had sufficient and poor levels of knowledge. The mother's ignorance about newborn care will be detrimental to both the mother and the baby. Pregnant mothers who have good knowledge about caring for newborns, their babies have more opportunities to receive appropriate care and handling of newborns compared to mothers who have sufficient knowledge and less good knowledge. The results of research at the Dadahup Community Health Center were that most of the mothers had relatively good abilities, namely 15 people (50%), while 11 people (36.7%) had sufficient abilities, and the other 4 people (13.3%) had poor abilities in caring for newborns.

Previous theory stated that that mothers must regulate themselves by expanding information in focusing on the baby, arguing that the mother's ability to really focus on the baby is influenced by the information that the mother has from the start, if the mother does not have good information then the mother will encounter obstacles in carrying out her obligations as a mother (Friedman M. M., Bowden V. R., 2014).

The results of this study are not in line with previous studies on factors related to the ability of primiparous mothers to care for newborns. Based on the aspect of maternal ability, it was found that almost all were unable, namely 20 respondents (51.3%) and 19 respondents (48.7%). Meanwhile, based on maternal ability, it was found that almost all of them were unable, namely 20 respondents (51.3%) and 19 respondents (48.7%) (Rintiani et al., 2022).

The results of the bivariate analysis in this study showed that of the 16 respondents with good knowledge, the majority had good abilities (14 people or 46.7% of the total). Most of the respondents with sufficient knowledge had adequate abilities (9 people or 30%), while respondents with less good knowledge all had poor abilities (2 people or 6.7%). The Chi-Square test results show a Pearson Chi-Square value of 31.258 with a significance level (p-value) of  $0.000 < \alpha 0.05$  so that  $H_0$  is rejected and  $H_a$  is accepted. These results state that there is a significant correlation between the

knowledge of pregnant women and the mother's ability to care for newborns.

This research is in line with other research which shows that there is a correlation between the characteristics of primiparous mothers and the level of knowledge about caring for newborns Indriani (2018). Knowledge according to Lawrence Green's theory is classified as a predisposing factor along with beliefs, attitudes, beliefs, and values. While the availability of facilities can be categorized as a supporting factor and the behavior and attitude of health workers as driving factors. These three factors influence a person's health behavior (Notoatmodjo, 2014).

## CONCLUSION

Providing information and education can be optimized if the mother has good knowledge in caring for newborns.

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