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## Research Article

# Knowledge Analysis of Pregnant Mothers About Newborn Treatment

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### Abstract

**Aims :** Most of the newborn care experienced by the community is a lack of knowledge in newborn care, especially umbilical cord care. This study aimed to analysis of knowledge of pregnant women about newborn care at Panggang Island Health Center, North Seribu Islands in 2021.

**Design :** Analytical with cross sectional.

**Methods :** The data used primary data from the results of distributing questionnaires. The data collection instrument used a self-developed knowledge questionnaire. The analytical method used univariate analysis and bivariate analysis with Chi-Square test. Results: Most of the respondents have sufficient knowledge, age 20-35 years, secondary education, non-media sources of information and their husbands are not supportive. There is a relationship between age, education, parity, sources of information and husband's support and knowledge of pregnant women about newborn care.

**Conclusions :** There is a relationship between age, education, parity, sources of information and husband's support and knowledge of pregnant women about newborn care. Further research can be done to increase the knowledge of pregnant mothers about newborn treatment so that newborn care can be optimized.

### Keywords

Knowledge, Newborn, Pregnant

## INTRODUCTION

The United Nations Children's Fund (UNICEF) in 2019 estimated the number of child deaths in the world at 5.9 million people, of which there were almost 1 million deaths on the first day of life and 2 million in the first week of life. The highest mortality rate for children under five years of age came from South Asia with 1.9 million (31%) (1). The infant mortality rate (IMR) in 2019 in ASEAN countries such as Singapore 3/1000 live births, Malaysia 7/1000 live births, Thailand 12/1000

live births, Brunei 10/1000 live births and Vietnam 22/1000 live births. Meanwhile, the IMR in Indonesia is the second highest number in ASEAN countries, which is 27/1,000 live births, and the highest IMR in ASEAN, namely the Philippines, at 28/1000 live births (1).

According to the Ministry of Health of the Republic of Indonesia (2), the highest IMR in Indonesia in 2016 was West Papua with an IMR of 74/1,000 live births, then Gorontalo with 67/1,000 live births and North

Maluku with 62/1,000 live births. While the lowest IMR is East Kalimantan at 21/1,000 live births. The causes of infant mortality include low birth weight (34%), asphyxia (24%), infection (23%), premature (11%), and others (8%) (2).

In the increasingly advanced era of globalization, it is hoped that the Indonesian people can create quality human resources, one of which is in the field of infant and child health. The provision of good and correct care for infants and children has not been fully implemented by families and communities. The various roles contained in the family are the roles of father, mother and child, where the main function of the family is towards its family members, namely honing, loving and nurturing. So it takes a mother's role in the upbringing and good care for her baby. It was found that 65% of mothers with less knowledge had bad attitudes in caring for their babies, while 35% of mothers with good knowledge had good attitudes in caring for their babies (3).

Most newborn care experienced by the community is a lack of knowledge in the care of newborns, especially the umbilical cord. Especially in remote areas who take care of their babies using traditional methods as well as education and low socioeconomic status. In addition, it is also influenced by the mother's lack of knowledge about the importance of neonatal or newborn services (4). Babies are very susceptible to disease because they do not have perfect immunity, therefore parents must pay attention to how to care for newborns appropriately and comprehensively. Diseases suffered by babies are most commonly caused by

bacteria and viruses that can come from improper baby care. Mothers must maintain the overall cleanliness of their babies to prevent disease by bathing the baby and performing umbilical cord care for newborns so that bacteria or viruses do not enter the baby's body through the baby's umbilical cord (5).

The problem of caring for babies is a very natural thing because parents who are new parents and mothers do not have sufficient experience in handling babies. Mothers need to know baby care since the baby is in the womb so that the mother is not awkward and surprised when caring for her baby after birth (6). Whether or not health knowledge is influenced by several factors, namely age, education, parity and sources of information. The increasing knowledge of mothers about care for babies, the higher their desire to know health in themselves and will add a behavior or healthy habits in society (7).

Based on a preliminary study conducted by researchers through filling out questionnaires at two Puskesmas located in the North Thousand Islands towards 10 pregnant women, namely the Pulau Panggang Village Health Center, the results showed that 20% had good knowledge, 30% had sufficient knowledge and 50% lacked knowledge in daily baby care. day. While at the Harapan Island Health Center, it was found that 30% had good knowledge, 40% had sufficient knowledge and 30% had less knowledge in daily baby care. From the data above, researchers are interested in researching "Analysis of knowledge of pregnant women about newborn care at Panggang Island Health Center, North Seribu Islands in 2021".



## METHODS

The research method uses analytics with a cross-sectional approach. Data collection was carried out using primary data, namely data obtained from the results of distributing questionnaires. The data collection instrument used was a self-developed questionnaire. The questionnaires has 12 items with option was true and false and categorized into good, enough, and not enough. The population in this study were all pregnant women in Panggang Island Health Center as many as 70 people (total sampling). The analytical method used in univariate analysis and

bivariate analysis with the Chi-Square test.

## RESULTS

**Table 1.**  
**Frequency Distribution of Respondents' Knowledge About Newborn Care**

| No           | Knowledge  | Frequency | %            |
|--------------|------------|-----------|--------------|
| 1.           | Good       | 5         | 7,1          |
| 2.           | Enough     | 45        | 64,3         |
| 3.           | Not enough | 20        | 28,6         |
| <b>Total</b> |            | <b>70</b> | <b>100.0</b> |

**Table 2.**  
**Relationship of demographic characteristics and pregnant Women's Knowledge About Newborn Baby Care**

| Variable              | Newborn care knowledge |      |        |      |            |      | Total |       | P. Value     |
|-----------------------|------------------------|------|--------|------|------------|------|-------|-------|--------------|
|                       | Good                   |      | Enough |      | Not enough |      | F     | %     |              |
|                       | F                      | %    | F      | %    | F          | %    |       |       |              |
| Age                   |                        |      |        |      |            |      |       |       |              |
| < 20                  | 0                      | 0.0  | 1      | 25.0 | 3          | 75.0 | 4     | 100.0 | <b>0.002</b> |
| 20-35                 | 2                      | 3.4  | 41     | 70.7 | 15         | 25.9 | 58    | 100.0 |              |
| >35                   | 3                      | 37.5 | 3      | 37.5 | 2          | 25.0 | 8     | 100.0 |              |
| Education             |                        |      |        |      |            |      |       |       |              |
| Low                   | 0                      | 0.0  | 2      | 33.3 | 4          | 66.7 | 6     | 100.0 | <b>0.008</b> |
| Intermediate          | 2                      | 3.9  | 33     | 64.7 | 16         | 31.4 | 51    | 100.0 |              |
| High                  | 3                      | 23.1 | 10     | 76.9 | 0          | 0.0  | 13    | 100.0 |              |
| Parity                |                        |      |        |      |            |      |       |       |              |
| Primipara             | 0                      | 0.0  | 23     | 62.2 | 14         | 3.8  | 37    | 100.0 | <b>0.018</b> |
| Multipara             | 5                      | 15.2 | 22     | 66.7 | 6          | 18.2 | 33    | 100.0 |              |
| Source of information |                        |      |        |      |            |      |       |       |              |
| Media                 | 2                      | 33.3 | 4      | 66.7 | 0          | 0.0  | 6     | 100.0 | <b>0.017</b> |
| Non media             | 3                      | 4.7  | 41     | 64.1 | 20         | 31.3 | 64    | 100.0 |              |
| Support               |                        |      |        |      |            |      |       |       |              |
| Support               | 4                      | 22.2 | 13     | 72.2 | 1          | 5.6  | 18    | 100.0 | <b>0.002</b> |
| Does not support      | 1                      | 1.9  | 32     | 61.5 | 19         | 36.5 | 52    | 100.0 |              |

## DISCUSSION

### 1. Age

The results of the cross-tabulation between the age variable and the knowledge of pregnant women about newborn care show that the Chi-Square statistical test results obtained a value of P.0.002 (P.Value <0.05), which means that there is a significant relationship between age and knowledge of pregnant women about newborn care.

The results of this study are in accordance with (7) which says that the older a person gets, the more knowledge they have. Maternal age also affects how a mother makes decisions in maintaining the health of herself and her family, the older she gets, the more experience and knowledge a mother gains. Increasing a person's age will cause changes in psychological and psychological aspects (mental). A person's age is related to a person's level of knowledge, where something that has been experienced by someone will increase knowledge about something that is informal. The more old enough, the level of maturity and strength of a person will be more mature in thinking and working. In terms of public trust, people who are more mature will be more trusted than people who are not yet high enough in their maturity level (7).

The results of this study are also in accordance with the results of research by Efi Indriani (8) at Puskesmas I Sokaraja, Banyumas Regency which said that there was a significant relationship between age and mother's knowledge of newborns with a p value of 0.005.

According to the opinion of researchers at the Panggang Island Health Center, most pregnant women aged 20-35 years with sufficient knowledge, this is because pregnant

women aged 20-35 years have received information and some have had previous experience in caring for newborns. Although some research results show that pregnant women aged < 20 years are mostly less knowledgeable about newborn care, this is because pregnant women < 20 years old still do not get information about newborn care and do not have experience in newborn care. For this reason, the participation of health workers is needed to educate pregnant women through counseling, home visits, providing training on newborn care and the participation of community leaders or religious leaders in making a personal approach through religious activities (recitation or congregational meetings), so that It is hoped that there will be an increase in knowledge and independence about newborn care for pregnant women aged < 20 years and pregnant women aged 20-35 years. For pregnant women aged >35 years, those with good knowledge and knowledge are quite balanced, this is because pregnant women aged >35 years already have a lot of experience and knowledge from previous child care.

### 2. Education

The results of the cross tabulation between the education variable and the knowledge of pregnant women about newborn care show that the Chi-Square statistical test results obtained a value of P.0.008 (P.Value <0.05), which means that there is a significant relationship between education and knowledge of pregnant women about newborn care.

The results of this study are in accordance with Notoatmodjo's theory (7) which says that education means guidance given by someone to others on something so that they can understand, where the higher a person's education,

the easier it is for them to receive information, and in the end the more knowledge which he has. The ease of obtaining information can help speed up someone to acquire new knowledge. A person's level of education affects knowledge, the higher and more formal the level of education a person has, the greater the intellectual activities carried out.

The results of this study are also in line with the results of research by Efi Indriani (8) at Puskesmas I Sokaraja, Banyumas Regency which said that there was a significant relationship between education and mother's knowledge of newborns with a p value of 0.000.

According to the opinion of researchers at the Panggang Island Health Center, most of the pregnant women with secondary education with sufficient knowledge about newborn care, this is because pregnant women with secondary education are quite responsive to the information they receive, especially about BBL care. For pregnant women with low education and lack of knowledge, this is because with low education, mothers are less responsive to information about daily baby care, besides pregnant women with low education are still difficult to receive new information, especially about health. The mindset of respondents with low education is not as good as the mindset of those with higher education so that those with low education find it more difficult to capture information.

### 3. Parity

The results of the cross tabulation between the parity variable and the knowledge of pregnant women about Newborn care show that the Chi-Square statistical test results obtained a value

of P.0.018 (P.Value <0.05), which means that there is a significant relationship between parity and knowledge of pregnant women about newborn care.

The more a person gains knowledge, the more one can understand. Mother's experience of previous pregnancy, childbirth and postpartum will affect the mother's knowledge about baby care during the next delivery. A person's experience includes what he experiences as a result of his perception of things that happen or that exist in the surrounding environment that are produced through the five senses. Parity has something to do with the direction of seeking information about infant care. This is related to the influence of own experiences and other people's knowledge about infant care. Knowledge is closely related to parity because the more often a woman gives birth to a baby and cares for her, the more personal experience she gains and can guide a person in drawing conclusions (7).

Women who have given birth to live babies, where women gain knowledge from personal experience. Experience is a way to obtain the truth of knowledge. Therefore, personal experience can be used as an effort to gain knowledge. Whether obtained directly or indirectly, but not all personal experience can lead someone to draw conclusions correctly. The more a person has many children, the better the mother's level of knowledge about caring for babies will be. Parity shows a mother's experience in caring for and caring for children. Mothers who have children for the first time, of course, do not have experience in caring for babies before. A mother with her first baby may experience problems when caring

for a baby such as bathing, breastfeeding and others which are actually just because they don't know how to properly care for a baby. In contrast to multiparous mothers who already have experience caring for babies in their first child (9).

The results of this study are in line with the results of research at 2018 (8) at public health center I Sokaraja, Banyumas Regency, which said that there was a significant relationship between parity and mother's knowledge of newborns with a p value of 0.005. According to the opinion of researchers at the Panggang Island Health Center, most of the respondents with primiparous parity with sufficient knowledge about BBL care, this is because mothers with primiparous parity have received information about BBL care from health workers during pregnancy counseling and ANC examinations so that they have sufficient experience even in practice. the truth is not known. For respondents with multipara parity, most of them with sufficient knowledge about BBL care, this is because mothers with multipara parity already have experience from previous children in caring for babies from previous children in caring for babies (10).

#### 4. Resources

The results of the cross tabulation between the source of information variables and the knowledge of pregnant women about BBL care show that the Chi-Square statistical test results obtained a value of P.0.017 (P.Value <0.05), which means that there is a significant relationship between sources of information and knowledge of pregnant women about newborn care.

Experiences from the closest people or family about newborn care can be a source of more knowledge for mothers, making it easier for mothers to absorb important information about how to care for their babies properly and correctly so that it is less likely that disease will occur due to lack of hygiene and care for babies. Sources of information regarding newborn care are very easy to obtain, from print media (magazines) to electronic media, and even the latest information about baby care on the internet. Besides these media, mothers can also get information about baby care in health workers or directly from parents or closest family (7).

The results of this study are in line with the results of research by Yanik Nurul Hidayah (11) in Tugusari Village, Jember Regency, who said that there was a significant relationship between sources of information and mother's knowledge about newborn care with a p value of 0.001

In the opinion of researchers at the Panggang Island Health Center, most pregnant women get sources of information from non-media with sufficient knowledge, this is because mothers who only get information from non-media sources such as family, friends, neighbors and health workers are not fully understood because most parity pregnant women are primiparous who do not have experience in BBL care. For pregnant women who get sources of information from the media with sufficient knowledge, this needs an explanation from health workers so that pregnant women understand very well how to care for babies properly and correctly. (12)



## 5. Husband's support

The results of the cross tabulation between the husband's support variable and the knowledge of pregnant women about BBL care show that the Chi-Square statistical test results obtained a value of P.0.002 (P.Value <0.05) which means that there is a significant relationship between husband's support and knowledge of pregnant women about newborn care.

The support given by the husband is a form of social interaction in which there is a relationship of mutual giving and receiving of real assistance, this assistance will place the individuals involved in the social system which in turn will be able to provide love, attention and a good sense of attachment. in social families and couples. A husband's moral support for his wife is really needed and it is highly recommended that the husband provide greater support or motivation to his wife (13).

Then new behavior will be formed, especially in adults starting in the cognitive domain, in the sense that the subject knows in advance about the stimulus in the form of material or external objects causing an inner response in the form of attitudes. Finally, the stimulus, namely the object that has been known and fully realized, will cause a further response, namely in the form of action against the stimulus or object. Although the level of knowledge will greatly affect the acceptance of a program, the lack of information on a program also affects the level of acceptance (7).

The results of this study are in line with the results of research by Yanik Nurul Hidayah (11) in Tugusari Village, Jember Regency, who said that there was a significant relationship between

husband's support and mother's knowledge about newborn care with a p value of 0.001.

According to the opinion of the researcher in this study, which was located at the Panggang Island Health Center, most of them did not get support from their husbands with sufficient knowledge, this was because the husband also did not necessarily have knowledge about baby care so that the husband did not know what support would be given to his wife to increase knowledge. his wife about BBL care. For this reason, it is necessary for the role of health workers to provide education, and a personal approach directly to husbands during home visits by providing direct practice on BBL care (bathing babies, changing baby diapers, caring for the umbilical cord, drying the baby and others) when the husband is in bed. tinsel at home, especially on Fridays where the fishing community is on holiday looking for fish, providing leaflets and counseling to increase husband's knowledge. Husband's support is very important in helping mothers in finding knowledge, especially about BBL care, so pregnant women who do not get support from their husbands will seek information on their own to increase their knowledge, especially about newborn care.

## CONCLUSION

There is a significant relationship between age, education, parity, sources of information and husband's support and knowledge of pregnant women about newborn. Future studies could increase sample size with more rigors method.

## CONCLUSION

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