



Knowledge of Postpartum Mothers About Umbilical Cord Care in Newborns

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ABSTRACT

Cord is a unique network consisting of two arteries and one vein protected by sheathed mucoid connective tissue by a thin mucous membrane. During pregnancy, the placenta provides all the nutrients for the growing fetus and excretes waste products through the umbilical cord. This research uses a descriptive research method, using secondary data in the form of total data on pregnant mothers taken from the monthly report at the health center Mount Sari from February to March 2023. In this research, researchers used secondary data in the form of total data Mother pregnant taken from the monthly report at the health center Mount Sari from February to March 2023. Each respondent has different knowledge; some respondents know and understand how to prevent or treat infection and apply it in everyday life so that respondents can answer questions properly. Meanwhile, some respondents needed help understanding how to prevent or treat infection and had not applied it in their daily lives, making it difficult to answer questions from researchers. The level of knowledge of postpartum mothers about the meaning of umbilical cord care in newborns is included in the sufficient category, namely 15 respondents (44.12%). Meanwhile, the level of knowledge of postpartum mothers regarding the purpose of umbilical cord care in newborns was included in the sufficient category, namely 12 respondents (35.30%).

Keywords: care rope center, newborn baby, mother childbirth

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INTRODUCTION

Health development public For Towards a healthy Indonesia is to increase awareness, willingness, and ability to live a healthy life to realize optimal public health status throughout Indonesia. (Lardo, 2020).

A cord is a unique network consisting of two arteries and one vein protected by sheathed mucoid connective tissue by a thin mucous membrane. During pregnancy, the placenta provides all the nutrients for the growing fetus and excretes waste products through the umbilical cord (Yuanita, 2022).

care is to prevent the occurrence of tetanus in newborns. This disease is caused by entering tetanus germ spores into the body through the umbilical cord, either from unsterile tools, using drugs, powders, or leaves sprinkled on the umbilical cord. so it can cause infection (Nurbiantoro dkk., 2022).

Topical drugs such as triple dry (2.29 g brilliant greens; 1.14 g of proflavine hemisulfate and 2.29 g crystal violet in water, bacitracin ointment, silver cream sulfadiazine, betadine 10% (Wasiah &

Artamevia, 2021). These drugs can inhibit or reduce bacterial colonization in the umbilical cord, especially staphylococci aureus. Alcohol, often used in the hospital or after returning home from the hospital, accelerates the drying of the umbilical cord and the release of the umbilical cord. Tetanus neonatorum is a tetanus disease that occurs in neonates (infants less than one-month-old), caused by *Clostridium tetani*. This germ secretes a toxin (poison) and invades the central nervous system. The spores of the germ enter the baby's body through the only entrance, namely the umbilical cord, which can occur at the time of cutting the umbilical cord when the baby is born or at the time of its care before discharge (detachment of the umbilical cord): incubation period 3-28 days, average six days. If the incubation period is less than seven days, the disease is usually more severe and has a high mortality rate (Armina, 2022).

One of the infections that can cause death in the neonatal period is neonatal tetanus infection. In 2013, it was reported in Indonesia that there were 78 cases of Tetanus Neonatorum, with 42 cases of death. This shows the case number Fatality Rate (CFR). Tetanus Neonatorum was 53.8%, an increase compared to 2012 49.6%.

According to data from the Ministry of Health, 75% of infant deaths occur during the perinatal period. The highest neonatal mortality in the 8-28 days age group was an infection of 57.1% (including tetanus sepsis, pneumonia, and diarrhea); the proportion of deaths due to neonatal tetanus was 9.5% (Viva BK, 2022).

Infant mortality is still very high, as evidenced by the fact that many cases of infant mortality still occur in Indonesia and other countries; this happens because we still lack the awareness to maintain personal and environmental hygiene to avoid infection. According to the Ministry of Health, Indonesia's Infant Mortality Rate (IMR) is still the highest compared to other ASEAN countries. According to data from the 2007 Indonesian Demographic and Health Survey (IDHS), the Infant Mortality Rate (IMR) in Indonesia is 34 per 1000 live births (Viva Budy, 2022)

The highest cause of neonatal death is caused by infection, one of which is neonatal tetanus infection which can result from poor umbilical cord care resulting in infection of the umbilical cord. (Sari, 2020). The incidence of IMR in West Java Province in 2013 was 30 per 1,000 live births, and the number of cases of tetanus neonatorum was 3 cases with two deaths. This shows the CFR Tetanus Neonatorum figure of 66.7% (Nurhayati & Mulyanti, 2023).

The Infant Mortality Rate in Cirebon City has decreased; in 2014, the mortality rate became 38 per 5455 live births. The leading causes of infant death caused by LBW are infection and asphyxia. (Cirebon City Health Office, 2014). According to data from the Gunungsari Health Center in 2015, 2 cases of newborn death were recorded as the leading cause of infection. (Gunungsari Health Center, 2015).

Based on data obtained at the Puskesmas Gunungsari, obtained results knowledge Mother childbirth about maintenance rope center, got part Mother childbirth Still Not yet know about maintenance rope good center. So, researchers want to give education to mothers about childbirth. For a start, do and know method maintenance rope good and faithful center, so _ the number infections of in babies newly born will be reduced.

METHODS

Research uses a descriptive research method, namely a study conducted to describe or describe a phenomenon that occurs in society. This research will be conducted at the Gunungsari Community Health Center, Cirebon City. This research was conducted from February to March 2023. In this research, researchers used secondary data in the form of total data Mother pregnant taken from the monthly report at the health center Mount Sari from February to March 2023.

RESULTS AND DISCUSSION

The results of This research will be presented in the form of a table distribution frequency simple and given descriptions narratively so you can give precise information about the research results.

Knowledge-Based Understanding Cord Care

From 34 respondents obtained results distribution frequency knowledge postpartum about understanding cord care as follows:

Table 1 . Frequency Distribution of Knowledge of Postpartum Mothers About the Definition of Umbilical Cord Care in Newborns at the Gunungsari Health Center

Understanding	Frequency (F)	Percentage (%)
Good	15	44.12%
Enough	12	35.29%
Not enough	7	20.59%
Amount	34	100%

Source: Results from a questionnaire

Based on table 1 above regarding the notion of cord care shows that 15 respondents (44.12%) had good knowledge, 12 respondents (35.29%) had sufficient knowledge, while those who had sufficient knowledge less seven respondents (20.59%).

Knowledge-Based Purpose Cord Care

From 34 respondents obtained results distribution frequency knowledge postpartum about objective umbilical cord care in tabular form, as follows:

Table 2. Frequency Distribution of Knowledge of Postpartum Mothers About the Purpose of Umbilical Cord Care in Newborns at the Gunungsari Health Center

Understanding	Frequency (F)	Percentage (%)
Good	11	32.35%
Enough	12	35.30%
Not enough	11	32.35%
Amount	34	100%

Source: Results from a questionnaire

Based on table 2 above regarding the purpose of cord care shows that 11 respondents, or (32.35%) have good knowledge, 12 respondents, or (35.30%) have sufficient knowledge, while those who have less knowledge, as many as 11 respondents (32.35%).

Knowledge-Based Management Cord Care

From 34 respondents obtained results distribution frequency knowledge postpartum about management umbilical cord care in tabular form, as follows:

Table 3 . Frequency Distribution of Knowledge of Postpartum Mothers About the Management of Umbilical Cord Care in Newborns at the Gunungsari Health Center

Understanding	Frequency (F)	Percentage (%)
Good	14	41.18%
Enough	14	41.18%
Not enough	6	17.64%
Amount	34	100%

Source: Results from a questionnaire

Based on table 3 above regarding the management of cord care shows that 14 respondents, or (41.18%) had good knowledge, 14 respondents, or (41.18%) had sufficient knowledge, while those who had sufficient knowledge less six respondents, or (17.64%).

Knowledge-Based Benefits Cord Care

From 34 respondents obtained results distribution frequency knowledge postpartum about the benefits of umbilical cord care in tabular form, as follows:

Table 4 . Frequency Distribution of Knowledge of Postpartum Mothers About the Benefits of Umbilical Cord Care in Newborns at the Gunungsari Health Center

Understanding	Frequency (F)	Percentage (%)
Good	14	41.18%
Enough	12	35.29%
Not enough	8	23.53%
Amount	34	100%

Source: Results from a questionnaire

Based on table 4 above regarding the benefits of cord care shows that 14 respondents, or (41.18%) have good knowledge, 12 respondents, or (35.29%) have sufficient knowledge, while those who have less knowledge, as many as eight respondents or (23.53%).

Knowledge-Based Ways Prevention Or Countermeasures Umbilical Cord Infection

From 34 respondents, the results of the frequency distribution of postpartum mothers' knowledge about how to prevent or treat infections in umbilical cord care were obtained in tabular form, as follows:

Table 5. Frequency Distribution of Knowledge of Postpartum Mothers About How to Prevent or Manage Infections for Umbilical Cord Care in Newborns at the Gunungsari Health Center

Understanding	Frequency (F)	Percentage (%)
Good	11	32.35%
Enough	13	38.24%
Not enough	10	29.41%
Amount	34	100%

Source: Results from the questionnaire

Based on table 5 above on how to prevent or treat infections in cord care shows that 11 respondents (32.35%) have good knowledge, and 13 respondents (38.24%) have sufficient knowledge. In comparison, ten respondents have less knowledge (29.41%).

Got conclusion that knowledge of postpartum mothers about umbilical cord care in newborns from 34 respondents obtained results as follows:

Table 6. Frequency Distribution of Knowledge of Postpartum Mothers About Umbilical Cord Care in Newborns at the Gunungsari Health Center

Understanding	Frequency (F)	Percentage (%)
Good	19	55.88%
Enough	11	32.35%
Not enough	4	11.77%
Amount	34	100 %

Source: Results from a questionnaire

Based on table 6 . above about the Knowledge of Postpartum Mothers About Umbilical Cord Care in Newborns shows that respondents have good knowledge 19 respondents, or (55.88%) have sufficient knowledge 11 respondents, or (32.35%). In contrast, those who have less knowledge, as much as 4 respondents or (11.77%).

Discussion

Knowledge-Based Understanding Cord Care

Knowledge of postpartum mothers about the meaning of cord care at the Gunungsari Health Center, it can be concluded that the majority of postpartum mothers at the Gunungsari Health Center have knowledge with good criteria as many as 15 respondents (44.12%).

"Knowledge included in the cognitive domain has six levels, one known (know), defined as remembering a material that has been studied before." The material referred to here is about umbilical cord care. When viewed from the education level of mothers, most have high enough education that mothers can learn about cord care from various sources, making it easier for mothers to get information, especially about cord care (Anggredi, 2022).

Knowledge-Based Purpose Cord Care

Knowledge of postpartum mothers about the purpose of cord care at the Gunungsari Health Center, it can be concluded that most postpartum mothers at the Gunungsari Health Center know with sufficient criteria as many as 12 respondents or (35.30%).

As explained in his book *Health Research Methodology*, "Knowledge included in the cognitive domain has 6 levels, one of which is known (know), defined as remembering a material previously studied". The material referred to here concerns umbilical cord care (Adiputra, 2021). When viewed from the education level of mothers, most of them have high enough education so that mothers can find out about umbilical cord care from various sources, making it easier for mothers to get information, especially about umbilical cord care.

Knowledge-Based Management Cord Care

Knowledge of postpartum mothers about the meaning of cord care at the Gunungsari Health Center, it can be concluded that the majority of postpartum mothers at the Gunungsari Health Center know with good criteria as many as 14 respondents (41.18%) and the criteria Enough . as many as 14 respondents or (41.18%).

This is under Faridi's theory (2021) about acquiring knowledge, one of which is through experience and a way of thinking. (Faridi dkk., 2021). Each respondent has different knowledge; some respondents know and understand how to prevent or treat infection and apply it in everyday life so that respondents can answer questions correctly. Meanwhile, some respondents had difficulty understanding how to prevent or treat infection and had not applied it in their daily lives, making it difficult to answer questions from researchers.

Judging from the low education of the respondents and a socio-economic perspective, most respondents do not work; it is necessary to conduct counseling by health workers, especially counseling about cord care.

Knowledge-Based Benefits Cord Care

Knowledge of postpartum mothers about the benefits of umbilical cord care at the Gunungsari Health Center, it can be concluded that most postpartum mothers at the Gunungsari Health Center know the criteria as many as 14 respondents (41.18%).

This is under the book *Health Research Methodology* (2010) theory about acquiring knowledge through experience and thinking. (Anjani dkk., 2022). So, several respondents learned about the benefits of umbilical cord care through personal experience. So that respondents know about the benefits of umbilical cord care (I Made Sudarma Adiputra, 2021). Nevertheless, there are times when experience is not always correct, so providing information or counseling about the benefits of cord care is

necessary. Health promotion, in general, can be carried out through various programs and sectors related to health, for example, approaches to community leaders, providing information with engaging media carried out in villages, health centers, posyandu, and activities that involve moms cadres and the community. Implementation of the provision of this information can be carried out with a predetermined schedule and situation.

Knowledge-Based Ways Prevention Or Countermeasures Umbilical Cord Infection

Knowledge of postpartum mothers about how to prevent or treat umbilical cord infections at the Gunungsari I Health Center, it can be concluded that the majority of postpartum mothers at the Gunungsari Health Center know with sufficient criteria, as many as 13 respondents (38.24%).

As explained by Siregar (2022), knowledge included in the cognitive domain has six levels, one of which is understanding (*Comprehension*), which means the ability to explain a known material or object. In this case, the object is not only knowledge but the respondent's ability to explain cord care (Siregar dkk., 2022).

Each respondent has different knowledge; some respondents know and understand how to prevent or treat infection and apply it in everyday life so that respondents can answer questions correctly. Meanwhile, some respondents had difficulty understanding how to prevent or treat infection and had not applied it in their daily lives, making it difficult to answer questions from researchers.

Judging from the low education of the respondents and a socio-economic perspective, most respondents do not work; it is necessary to conduct counseling by health workers, especially counseling about cord care.

CONCLUSION

The level of knowledge of postpartum mothers about the meaning of umbilical cord care in newborns is included in the sufficient category, namely 15 respondents (44.12%). Meanwhile, the level of knowledge of postpartum mothers regarding the purpose of umbilical cord care in newborns was included in the sufficient category, namely 12 respondents (35.30%).

The level of knowledge of postpartum mothers about managing umbilical cord care in newborns is included in the excellent and sufficient categories, respectively 14 respondents (41.18%). The level of knowledge of postpartum mothers about the benefits of umbilical cord care in newborns is included in the excellent category, namely 14 respondents (41.18%).

The level of knowledge of postpartum mothers about how to prevent or deal with the infection in the care of the umbilical cord in newborns is included in the sufficient category, namely 13 respondents (38.24%). The level of knowledge of postpartum mothers regarding umbilical cord care in newborns is included in the less category, namely seven respondents (20.59%).

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