

Midwifery Care for Mrs. N Baby Provision of Cord Care Health Education with Wet and Smelly Cord Problems

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ABSTRACT

Background: One indicator of health status in Indonesia is the infant mortality rate. The third goal of the Sustainable Development Goals (SDGS) is to create a good degree of Health (National Health System) by 2030, namely by ending preventable infant and toddler deaths. Child deaths in Indonesia occur in the newborn (neonatal) period, the first month of life that many are caused by infection. At the time of cutting the umbilical cord and at the time of its treatment before the removal of the umbilical cord can cause tetanus neonatorum. To overcome the occurrence of these infections can be done health education to the public. Health promotion is the process of improving health and socializing to the community in order to increase awareness, willingness and ability as well as the development of an environment that can improve the degree of Health. *Method:* Case study report using descriptive methods and case analysis. The case study subject was a 6 day old newborn whose umbilical cord was wet and had a slight odor. The time of the case study is February 21 2023, located at Mrs. N, Pekaja RT 05/02 Village, Kalibagor District, Banyumas Regency. Data collection techniques include interviews and secondary studies including documentation and literature studies. *Results:* The condition of the newborn is generally good, after the umbilical cord care health education to the mother and the demonstration of umbilical cord care to the baby one day later the umbilical cord is dry and loose. *Conclusion:* Provision of Health Education umbilical cord care is effective in preventing infection in newborns.

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1. INTRODUCTION

The third Sustainable Development Goal (SDGS) aims to create good health by 2030, ending preventable infant and under-five deaths, with all countries working to reduce the neonatal mortality rate to at least 12 per 1,000 KH and the infant mortality rate to 25 per 1,000 KH. Meeting these targets implies the need to implement strategies that can be achieved efficiently and effectively (Madolan, 2016).

The WHO Essential Newborn Care Guidelines are evidence-based measures that can be used to meet SDG 3 which include breastfeeding, umbilical cord care, eye care, thermoregulation, asphyxia management, recognition of danger signs, immunization and care of low birth weight babies. Lack of knowledge, coupled

with strong cultural beliefs, affects neonatal survival once the baby is at home with a primary caregiver (Amolo, Irimu, & Njai, 2017).

The World Health Organization (WHO) in 2016 found that the infant mortality rate was 560,000 from live births caused by umbilical cord infections. In Southeast Asia the infant mortality rate due to umbilical cord infections is 126,000 from live births. Asiyah (2017), stated that the incidence of newborn infections in Indonesia ranges from 24% to 34%, and is the second cause of death after neonatal asphyxia which ranges from 49% to 60%. The most common infection in newborn babies is neonatal tetanus, due to cutting with non-sterile tools, and due to improper care of the umbilical cord, for example by using leaves that people use to care for the umbilical cord.

With child health efforts, among other things, it is hoped that it will be able to reduce child mortality. (Ministry of Health of the Republic of Indonesia, 2018) The World Health Organization (WHO) shows that there are several causes of infant death, namely 17% caused by pneumonia, 15% caused by asphyxia, 11% caused by diarrhea, 7% caused by malaria, 7% caused by congenital abnormalities, and 7% are caused by neonatal infections (WHO, 2015). Meanwhile, in 2020, the most common cause of neonatal death was low birth weight (LBW), namely 35.2%. Other causes of death include asphyxia (27.4%), infection (3.4%), caused by congenital abnormalities (11.4%), neonatal tetanus (0.3%), and others (22.5%) (Indonesian Ministry of Health, 2021) Umbilical cord infection is an infection that occurs in the umbilical cord and the surrounding tissue, characterized by an unhealthy baby, redness in the area around the umbilical cord and swelling. The incidence of newborn infections in Indonesia ranges from 24% to 34%, and the infant mortality rate due to infection is 7.3% (Rakesnas, 2019). Neonatal tetanus can be caused by improper care of the umbilical cord and umbilical cord cutting tools. In 2019, 53% of cases received traditional cord care, 29% of cases received other treatments, and 18% of cases were unknown. Meanwhile, based on the tool used to cut the umbilical cord, there were 41% of tetanus cases where the umbilical cord was cut using scissors, while 18% of cases used bamboo, 23% of cases used other tools, and 18% of cases did not know the tool used (Ministry of Health RI, 2021) Umbilical cord care is an action aimed at caring for the umbilical cord in newborn babies to keep it dry and prevent infection. Apart from that, the advantage of correct umbilical cord care is that it speeds up the release of the umbilical cord and prevents infection.

The baby's health depends on several factors, consisting of the mother's health and health behavior before pregnancy, the level of participation in prenatal care, the quality of the delivery and the baby's environment after birth. The baby's environment includes not only the home and family environment, but also the availability of essential medical services, for example postnatal physical examinations, visits to the doctor and appropriate immunizations, which also depend on correct nutrition and forms of care in the home environment (Zahara, 2018).

Postpartum anxiety is associated with impaired mother-infant attachment, postpartum depression, reduced likelihood of breastfeeding, increased risk of infant abuse, delayed cognitive and social development in infants, and increased likelihood of anxiety in children (Lonstein, 2007). Judging from the growth and development of the baby, the neonatal period is the most critical period. Prevention of asphyxia, maintaining the baby's body temperature, especially in low birth weight babies, giving breast milk (ASI) in an effort to reduce the death rate due to diarrhea, preventing infection, monitoring weight gain and psychological stimulation are the main tasks for baby health monitors and Children in this case are health workers, mothers and families. Neonates in the first weeks are greatly influenced by the mother's ability to care for the newborn. Good management while still in the womb, during labor, immediately after birth, caring for newborns and monitoring subsequent growth and development will produce healthy babies (Saifuddin, 2010).

Efforts to maintain health for children can be aimed at preparing future generations who are healthy, intelligent and qualified and to reduce child mortality rates. Efforts to maintain children's health can be carried out from when the fetus is in the womb, at birth, after birth, and until the age of 18 years.

Umbilical cord care is an effort to prevent infection of the umbilical cord, in fact it is a simple action, before caring for the umbilical cord and the area around the umbilical cord, always clean and dry, and always wash your hands with clean water and use soap before caring for the umbilical cord (Sodikin, 2012). A method in health education is needed to improve the quality of health services and increase knowledge in order to encourage patients or mothers to become independent individuals in maintaining health, especially in caring for the baby's umbilical cord properly and correctly so as to reduce or prevent the risk of infection in the umbilical cord. One of these efforts is the use of counseling for mothers and families to increase mothers' knowledge, namely with health education methods (Ulfani et al., 2011)

Postpartum infections will remain the main cause of neonatal morbidity and mortality worldwide, the highest percentage of infections come from bacterial colonization of the umbilicus because different treatments sometimes cultural traditions can influence the care of the baby's umbilical cord (Stewart et al., 2016).

Umbilical cord infections continue to be a cause of illness and death in many countries. Every year 500,000 babies die from neonatal tetanus and 460,000 babies die from bacterial infections. In Southeast Asia, there are an estimated 220,000 infant deaths due to poor umbilical cord care. The duration of umbilical cord

removal in babies with dry closed treatment was faster (70.105 hours) with a time difference of 35 hours compared to treatment with alcohol.

One effort or way to overcome and reduce the infant mortality rate due to umbilical cord infection or neonatal tetanus as stated by the government Minister of Health is to provide quality and cost-effective services for mothers and newborns as outlined in three keys. The message is that every pregnancy is given tetanus toxoid which is very useful for preventing tetanus, education to know about correct umbilical cord care in the community.

Newborn babies have a high risk of being exposed to infection, especially in the umbilical cord, which is a wet wound and can be the entry point for tetanus germs which very often cause sepsis and death of newborn babies (Ellen, 2014). One indicator of health status in Indonesia is the infant mortality rate. The high infant mortality rate in Indonesia is caused by various factors, including disease, infection and poor nutrition.

Health education is the process of providing information to the community to overcome the health problems they face so that people are more independent in maintaining their health. Umbilical cord care is caring for the umbilical cord by keeping the umbilical cord wound clean, not exposed to urine, baby feces or pus. If it is dirty, wash the umbilical cord with water, dry it with a clean, dry cloth.

Good and correct umbilical cord care will have a positive impact, namely the umbilical cord will give birth on the 5th and 7th day without complications, while the negative impact of improper umbilical cord care is that the baby will experience neonatal tetanus. The aim of umbilical cord treatment is to prevent the occurrence of tetanus in newborn babies which is caused by the entry of tetanus germ spores into the body through the umbilical cord either from tools, use of medicines, powder or leaves sprinkled on the umbilical cord so that it can cause infection (Ministry of Health RI, 2015).

2. RESEARCH METHOD

Case study report using descriptive method, location in Mrs. N house in Pekaja Village Rt 05/02, Kalibagor District, Banyumas Regency. The subject of the case study was a 6-day-old newborn who had a wet and slightly smelly umbilical cord. Case study time on February 21, 2023. Data collection techniques include interviews, physical examination and secondary studies include documentation and literature studies.

3. RESULT AND DISCUSSIONS

Experience is one of the factors that influences knowledge. Experience is a source of knowledge or a way to obtain the truth of knowledge. This is done by returning the experience gained in solving problems faced in the past.

A mother's good knowledge can also be influenced by a person's curiosity about something. This sense of knowing encourages a person (the mother) to look for information about what she wants. The process of removing the umbilical cord is influenced by several factors that can support and help, either faster than seven days or longer (more than four weeks). These factors include whether there is infection in the baby's umbilical cord, environmental hygiene and sanitation, humidity of the area around the baby's umbilical cord, how to care for the umbilical cord itself, and knowledge about umbilical cord care.

The baby's health depends on several factors, consisting of the mother's health and health behavior before pregnancy, the level of participation in prenatal care, mutual delivery and the baby's environment after birth. The baby's environment not only includes the home and family environment, but also the availability of essential medical services, for example postnatal physical examinations, doctor visits and appropriate immunizations, also depend on correct nutrition and forms of care in the home environment (Zahara, 2018).

Post partum anxiety is associated with mother-infant disorders, post partum depression, reduced likelihood of breastfeeding, increased risk of grasping the baby, delayed cognitive and social development in infants, and increased likelihood of anxiety in children (Lonstein, 2007). Judging from the growth and development of the baby, the neonatal period is the most critical period. Prevention of asphyxia, maintaining baby's body temperature, especially in low birth weight babies, giving breastmilk (ASI) in an effort to reduce death rates due to diarrhea, preventing infection, monitoring weight gain and psychological stimulation are the main tasks for infant and child health monitors. In this case, namely health workers, mothers and families. Neonates in the first weeks are greatly influenced by the mother's ability to care for the newborn. Good management while still in the womb, during labor, immediately after birth, caring for newborns and monitoring subsequent growth and development will produce healthy babies (Saifuddin, 2010).

Lack of treatment and care for newborns is one of the factors that causes perinatal deaths. One of the reasons for the lack of handling and care of newborns is the lack of maternal knowledge about caring for newborns, especially for primigravida mothers who do not have direct experience in caring for newborns, thus causing maternal anxiety in caring for newborns in the first week of life (Amolo, Irimu, & Njai, 2017). Anxiety disorders are something that is often experienced by primiparous mothers which arise due to the mother's inability and unpreparedness to accept the presence of her baby who requires special care in the first weeks of birth. However, this anxiety is generally relative, meaning that there are people who are anxious and can calm

down again after receiving support from the people around them, but there are also people who continue to worry even though the people around them provide support. The anxiety often associated with prenatal anxiety disorders is associated with poorer quality of the mother's relationship with her postpartum infant, measured by maternal self-reported bonding and observed mother-infant interactions (Nath et al., 2019).

In facing situations that have never been worried about before. Feeling anxious about her inability to care for her baby because it is something new for her. Moreover, realizing that she will become a mother means that her busy life will increase. This can diminish her pride as a woman. She is worried that this situation will affect her relationship with her husband and her social environment (Lukaningsih&Bandiyah, 2011).

The postpartum period is often a very anxious time for a woman who has become a mother for the first time because she is required to be able to breastfeed and care for her baby (Wulandari&Handayani, 2011).

Newborn care is very important after the baby is born and is very beneficial for both mother and baby, such as the rapid recovery of the mother's body organs which experience changes during pregnancy and the establishment of a loving relationship between mother and baby (Shrestha et al., 2014; Shrestha, Adachi ,Petri, Shuda, & Shrestha, 2015).

The birth of a child causes fundamental challenges to the existing structure of family interaction and also to the care of the newborn. When a baby is first born, the mother may feel confused about how to care for him. Even routine tasks such as changing diapers and dressing can make a mother anxious, especially if she has never spent time on things related to baby care before. birth is also the beginning of the parent/baby relationship and, once mother and baby are confirmed to be healthy, the parents' privacy to talk, touch, and be alone with the baby is important (Fraser and Cooper, 2012).

The importance of knowledge in combating neonatal morbidity and mortality requires equipping mothers with the correct knowledge about newborn care to ensure appropriate practices.

Generally, the umbilical cord becomes a cocoon when the baby is between 6-7 days old, but the release of the umbilical cord can also occur within 2 weeks after birth. During the care period before it becomes a cocoon, it is best to pay attention to sterile and intensive care methods so that it does not smell. umbilical cord and infections that will prolong the pupal period of the umbilical cord. Unsterilized delivery methods and umbilical cord care using traditional concoctions increase the occurrence of tetanus in newborn babies. Factors that influence the duration of umbilical cord removal are the emergence of infection in the umbilical cord, how to care for the umbilical cord, humidity of the umbilical cord and environmental sanitation conditions and there are several supporting factors in drying and removing the baby's umbilical cord. namely cleanliness of the umbilical cord area, breast milk nutrition, maternal compliance in caring for the umbilical cord. How to properly care for the umbilical cord. Pay attention to the area between the base of the umbilical cord and the folds of the umbilical cord. It is often covered in dirt and irritation in the umbilical cord which is not yet dry and this place also often experiences infections because it is dirty and damp which can become a breeding ground for microorganisms.

In observing obstetric services for newborns, primary data was collected based on the mother's age of 6 days. The mother's subjective data stated that the umbilical cord was wet and smelled a bit. Objective data obtained from the patient was good general condition, composite consciousness, heart rate 138 x/minute, breathing 42 x/minute, temperature 36.6°C, body weight 3150 grams, body length 51 cm, active movement and crying. On physical examination, the results showed that the skin turgor was good, the skin color was reddish, the abdomen: the umbilical cord was wet and had a slight odor, no festering, and it was discovered that the umbilical cord had fallen off on February 22 2023. From the results of the examination management carried out, namely providing health education about cord care. center, and carry out umbilical cord care so that the umbilical cord is dry and clean. Infection does not occur because the mother is aware of how to care for the umbilical cord. With health education, the umbilical cord care provided has a positive impact on both the mother and baby.

In the case of Mrs. cleaned 6 days after the baby was born, this indicates that the mother's level of knowledge about how to prevent infection in newborn babies is very low and the mother's knowledge about how to prevent infection in newborn babies is very low. umbilical cord care is also low. If immediate action is required, immediately clean the umbilical cord with drained soapy water, dry it with sterile gauze and cover it again with sterile gauze without putting any seasoning on the umbilical cord. In this way, midwifery services are provided according to needs.

If you are late in providing treatment, what will happen is that the umbilical cord does not dry out, smells bad, and produces pus, resulting in infection of the umbilical cord and can cause neonatal tetanus. By increasing the promotion of health education to postpartum mothers, it helps target a reduction in the death rate of newborns in Banyumas, Indonesia.

Based on the data above, theory and field practice are appropriate. Baby case. N did not mention the emergency. So no immediate treatment was carried out. Thus, the fields of theory and practice show congruence.

4. CONCLUSION AND RECOMMENDATION

Based on the discussion of the management of the baby case Mrs. N (umbilical cord treatment) in Pekaja RT 05/02 Village, Kalibagor District, Banyumas Regency using obstetric management according to Varney with soap documentation method, the author can draw the following conclusions:

From the research conducted by the author, obtained subjective data that the mother said the umbilical cord is still wet and slightly smelly, the mother did not dare to replace the gauze wrapping the umbilical cord. Physical examination of the baby.N under normal conditions, on examination of the abdomen the umbilical cord is still palpable wet and slightly smelly.

From these subjective and objective data can be diagnosed that the baby Mrs.N age 6 days with normal conditions. For the management of the immediate needs needed is to provide health education about the care of the umbilical cord in the mother, and perform umbilical cord care in infants Ny.N. Based on the results of the evaluation / management, it was found that the mother understood the health education provided, and the condition of the baby's umbilical cord.Clean and dry. In addition, the mother also promised to take good care of the baby's umbilical cord to avoid infection.

Based on the case studies that have been conducted, the author gives the following suggestions:

1. For the writers
As a medium to assist the author in applying obstetric care according to obstetric service standards in the case of umbilical cord care in neonates.
2. For institutions
As a medium to increase knowledge, especially in the care of the umbilical cord to prevent death in neonates.
3. For Field
As a material for health services and to improve the quality and quantity of the implementation of obstetric care in neonates with umbilical cord care.
4. For clients
As an effective means of reducing the mortality rate of newborns with infection or tetanus neonatorum.

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REFERENCES

- Ainun Sajidah. (2017). Pengaruh Model Pendidikan Kesehatan Tentang Cara Merawat Tali Pusat Terhadap Pengetahuan Dan Sikap Ibu Dalam Perawatan Tali Pusat PadaBayi Di Wilayah Kerja Puskesmas Ampenan. *Jurnal Poltekkes Kemenkes Banjarmasin, Poltekkes Kemenkes Mataram*.
- Damanik, R, Hubungan perawatan tali pusat dengan kejadian infeksi pada bayi baru lahir di rsud dr. Pirnga di Medan 2019. *Jurnal Keperawatan Priority, 2(2), 51-60, 2019*.
- Hamilton, P. (2015). *Dasar-dasar Keperawatan Maternitas*. Edisi 2. Jakarta: EGC.
- Hidayat, A. A. (2012). *Asuhan Neonatus, Bayi dan Balita*. Jakarta: Penerbit Buku Kedokteran EGC.
- Hindratni, F, Hubungan pengetahuan ibu nifas tentang perawatan tali pusat dengan waktu lepasnya tali pusat. *Menara Ilmu, 12(2), 2018*.
- Nath, S., Pearson, R. M., Moran, P., Pawlby, S., Molyneaux, E., Challacombe, F. L., & Howard, L. M. (2019). The association between prenatal maternal anxiety disorders and postpartum perceived and observed mother-infant relationship quality. *Journal of anxiety disorders, 68, 102148*.
- Nolvi, S., Karlsson, L., Bridgett, D. J., Korja, R., Huizink, A. C., Kataja, E.- L., & Karlsson, H. (2016). Maternal prenatal stress and infant emotional reactivity six months postpartum. *Journal of affective disorders, 199, 163-170*.
- Putri, E., & Limoy, M, Hubungan Perawatan Tali Pusat Menggunakan Kassa Kering Steril Sesuai Standar Dengan Lama Pelepasan Tali Pusat Pada Bayi Baru Lahir Di Puskesmas Siantan Hilir Tahun 2019. *Jurnal_Kebidanan, 9(1), 2019*.
- Saputri, N, Pengaruh Pendidikan Kesehatan Tentang Perawatan Tali Pusat Terhadap Perilaku Ibu MerawatTali Pusat PadaBayi. *Jurnal Medika: Karya Ilmiah Kesehatan, 5(1), 2020*.
- Zahara, E. (2018). HUBUNGAN PENGETAHUAN DENGANKECEMASAN IBU NIFAS DALAM *Proceedings homepage: <https://conferenceproceedings.ump.ac.id/index.php/pshms/issue/view/30>*

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