MIDWIFERY CARE FOR NEWBORNS IN BABY "R" WITH LOW BIRTH WEIGHT (LBW)

Febriyanti [1], Dahniar Dahlan [2], Sudirman P [3]*

[1,2,3]Politeknik Baubau, Baubau, Indonesia

ARTICLE INFORMATION

Date, 12 October 2024
Revised : 15 November 2024
Accepted: 22 December 2024
DOI:

KEYWORDS

Newborn (BBLR); Infant; Western Infant Low Birth (BBLR)

CORRESPONDING AUTHOR

Nama : Dahniar Dahlan
Address : Jln. Latsitarda, RT 004 RW 004, Kel. Tanganapada, Kota Baubau
E-mail : dahniardahlan11@gmail.com

A B S T R A C T

***Background**: According to World Organization Health (WHO, 2019), Low birth weight (LBW) babies are those who weigh less than 2500 grams at birth. LBW babies are at a higher risk of dying within the first 28 days of life. Additionally, as they grow, LBW babies also have a greater risk of experiencing stunting and intellectual delays, which can pose a threat to the quality of human resources in the future. The purpose of this research is to provide midwifery care for low birth weight (LBW) newborns at the Wolio Health Center in 2024. The research **metho**d used in this study is the 7 steps of Varney and SOAP, which include basic data collection, basic data interpretation, identification of actual and potential problems, immediate action, care planning, implementation, and evaluation. The **results** of this study discuss a case of a low birth weight baby, whose management proceeded smoothly without any obstacles. The management steps for Ms. "R"'s baby included maintaining the baby's body temperature, monitoring nutrition, periodic weight measurements, infection prevention, and providing counseling to the mother regarding breastfeeding. **Conclusion:** The process of resolving obstetric issues was carried out through an assessment involving monitoring and data analysis of Ms. "R"'s baby with low birth weight (LBW) at the Wolio Health Center, Baubau City in 2024. During one day at the health center and two home visits, it was found that the baby's weight increased from 2300 grams to 2550 grams, reaching the normal range. The baby's vital signs are also within the normal range. All findings and actions taken on Mrs. "R"'s baby have been documented, and no discrepancies between theory and the case conditionswerefound.*

INTRODUCTION

Low Birth Weight (LBW) is a condition where a baby is born weighing less than 2500 grams, regardless of gestational age. LBW can be caused by premature birth (gestational age under 37 weeks), fetal growth restriction (FGR), or a combination of both. Babies with LBW have a higher risk of mortality, as well as delayed growth and development during childhood compared to babies born with normal weight.

Babies with low birth weight have a lower chance of survival. If they survive, they become more vulnerable to various diseases into adulthood. LBW babies tend to experience cognitive development disorders, mental delays, and are more susceptible to infections that can cause pain or even death. Another impact that emerges in adulthood for individuals with a history of LBW is the increased risk of degenerative diseases, which can add an economic burden both for the individual and society.(Hartiningrum & Fitriyah, 2019).

The nutritional status of pregnant women is very important because it reflects the well-being of both the mother and the fetus. Mothers who are in good health tend to give birth to healthy babies, while mothers with poor nutrition are at risk of giving birth to malnourished babies. The nutritional status of the mother is a key factor that determines the quality of life of the baby from the first day of birth until the age of two. The nutritional status of pregnant women can be measured by the increase in weight during pregnancy. If the mother's weight increases within normal limits, it indicates that the nutritional intake for fetal development is adequate. This weight gain occurs due to the increase in the size of reproductive tissues, accumulation of body fat, fetal growth, and metabolic changes.(Fahmi, 2020).

Based on data from the 2012 Indonesia Demographic and Health Survey (SDKI), the infant mortality rate in Indonesia was recorded at 23 deaths per 1,000 live births, while the under-five mortality rate reached 26 deaths per 1,000 live births. One of the main causes of neonatal death is asphyxia, which contributes 27% and is the second leading cause of death after Low Birth Weight (LBW) infants. The direct factors causing neonatal death include LBW (29%), asphyxia (13%), tetanus (10%), feeding problems (10%), infections (6.7%), hematological disorders (5%), and other factors (27%). (Vina, 2019).

According to data from the Baubau City Health Office, the Infant Mortality Rate (IMR) is recorded at 7.8 per 1,000 live births. In 2017, the Maternal Mortality Rate (MMR) in Baubau City reached 2,536 per 100,000 live births, while the Infant Mortality Rate (IMR) was 7.5 per 1,000 live births. (Chatra Al Shafa Qolby Naviu et al., 2024)

Breast milk is very important for babies in starting their lives. Colostrum or the first breast milk contains antibodies that can prevent infections and strengthen the baby. Therefore, it is important to give breast milk to the baby within the first hour after birth and then every 2 to 3 hours. Some studies suggest that breast milk may have a protective effect against sudden infant death syndrome, diabetes mellitus, lymphoma, allergic diseases, and other chronic digestive diseases. In addition, there is strong evidence that breastfeeding can reduce the incidence or severity of diarrhea, lower respiratory tract infections, otitis media, and several other diseases. Breastfeeding is also known to be associated with improved cognitive development in infants. (Hudayah et al., 2019).

Breast milk plays a very important role for babies in starting their lives. Colostrum, or first milk, contains enough antibodies to protect the baby from infections and strengthen its immune system. Therefore, giving breast milk to the baby within the first hour after birth and regularly every 2 to 3 hours is highly recommended. Several studies show that breastfeeding has the potential to protect against sudden infant death syndrome, diabetes mellitus, lymphoma, allergic diseases, and other chronic digestive disorders. In addition, there is strong evidence that breast milk can reduce the frequency or severity of diarrhea, lower respiratory tract infections, otitis media, and other diseases. Breastfeeding is also associated with improved cognitive development in infants.(adar BakhshBaloch, 2017)

Based on data obtained from the Wolio Health Center in Baubau City, in 2022, there were 287 newborn births, 3 births of low birth weight babies, and from 2023 to 2024, there was 1 birth of a low birth weight baby.

METHODOLOGY

The research method used is descriptive with a case study model. The research location is the Wolio Health Center in Bau-bau City, and the research period is from January to March 2024. The research subjects taken are newborns with Low Birth Weight. (BBLR). The types of data used are primary data and secondary data. The data collection techniques in this case study are Interviews, Observation, and Physical Examination.

RESULTS & DISCUSSION

Subjective Data

Mrs. R, 27 years old, GIP0A0, gave birth to her child in the hospital on February 2nd. On February 5th, 2024, baby "R," a 5-day-old baby girl, was born through normal delivery. The mother came to the community health center to have her newborn baby examined.During the anamnesis, the mother stated that her last menstrual period (LMP) was on May 15, 2023. Throughout her pregnancy, she received one TT injection. It was determined that her current gestational age is 37 weeks and 3 days. The mother mentioned that this is her first pregnancy and that she has never had a miscarriage. After further anamnesis, it was found that the mother gave birth on February 2 at 02:16 WITA normally at the regional general hospital.During the pregnancy, the mother did not experience any excessive complaints. The mother and family expressed their happiness over the birth of the baby. Based on the emotional support from the family, it has a positive effect on the development of the newborn and the psychological well-being of the mother. During this visit, it was shown that the baby's health has been stable since birth. The main factor influencing child development according to Bronfenbrenner's ecological theory is the microsystem, which is the first layer of the environment that directly interacts with the child, where the most important element within it is the family.(Sudirman et al., 2022)

Objective Data

On February 2, 2024, Ms. R gave birth to a baby at 02:16 WITA normally with a head presentation in the hospital.after an anamnesis was conducted on the 5th, Mrs. R, who visited the community health center, it was determined that the estimated delivery date for the mother is February 22, 2024.With a gestational age of 37 weeks and 3 days.During the examination, the general condition of the baby was good, with a conscious state and vital signs within normal limits. Upon anthropometric measurements, the birth weight was found to be 2400 grams, body length 47 cm, head circumference 30 cm, chest circumference 29 cm, abdominal circumference 29 cm, with an Apgar score of 10/10.After further examination, it was found that the baby's physical examination showed no abnormalities with a positive Moro reflex, positive rooting reflex, positive sucking reflex, positive grasp reflex, and positive swallowing reflex.It is known that Mrs. R's baby has had bowel movements and urinated.

During the home visit examination on February 12, 2024, baby "R" was in generally good condition with compos mentis consciousness. Vital signs are stable: heart rate 150 beats/min, respiratory rate 44 breaths/min, and temperature 36.5°C. The baby's weight reached 2400 grams, length 47 cm, and head and chest circumference remained the same as the previous examination. The Apgar score remains 10/10. A normal physical examination shows that the baby's development is in good health, which is one of the important aspects of monitoring the baby's growth and development in the first week after birth. (Ilham et al., 2021).

Analysis

Baby Ny. "R", who is 5 days old, was born at term according to gestational age, with a posterior head presentation. This baby was born normally with low birth weight, but after the second visit, the baby's weight had reached normal levels.

Management

The initial step in management is to approach the mother and family and give the mother the opportunity to express the problems she is experiencing. Once the problems are identified, provide education regarding newborn issues. The next step is to explain to the mother the importance of early breastfeeding initiation for newborns and the benefits of exclusive breastfeeding to support the growth and development of the newborn. Additionally, explain to the mother the importance of maintaining cleanliness by changing the baby's diaper when it is wet to keep the baby's temperature stable.

As a precautionary measure, the mother was given information about warning signs in infants that should be observed, such as high fever or difficulty breathing. The mother understood this information, which would enable her to respond quickly if an emergency situation occurs, thereby minimizing the risk of delays in handling.

Next step: As part of long-term health management, complete immunization is also recommended for baby "R". The mother shows understanding and readiness to carry out the immunization recommendations. Immunization plays a crucial role in protecting babies from serious infectious diseases, thereby improving their quality of life and reducing the risk of health complications later on.

DISCUSSION

Subjective Data

On February 5, 2024, Ms. R's baby, a 5-day-old female, came to the community health center for a check-up after being born normally at the Regional Hospital on February 2, 2024. This baby was born with low birth weight. LBW (Low Birth Weight) is defined as a baby with a birth weight of less than 2500 grams at birth, measured within one hour after birth, regardless of gestational age. In this examination, no subjective data collection was conducted, while the objective data obtained included anthropometric and physical examinations. Anthropometric examination shows that this baby has a gestational age of less than 37 weeks, a weight below 2500 grams, a body length equal to or less than 46 cm, a head circumference equal to or less than 33 cm, and a chest circumference equal to or less than 30 cm.(Ismayanah et al., 2020).

On February 12, 2024, baby NY.R, who is now 10 days old, was re-examined at the Wolio health center. After the examination, it was found that baby NY.R had gained weight, now weighing 2400 grams, up from the previous weight of 2300 grams. Baby NY.R was born normally, and no complaints were found. (Mutiara et al., 2020).

Objective Data

The objective data obtained from the examination and observation of baby Ms. "R" are as follows: Baby's weight 2300 grams with a gestational age of 37 weeks and 3 days, body length 47 cm, head circumference 30 cm, and chest circumference 29 cm. Vital signs include a body temperature of 35.6°C, a pulse rate of 145 beats per minute, and a respiratory rate of 40 breaths per minute. The results of the physical examination (inspection and palpation) show: Head and hair: thick and black hair, clean white skin, and clear sutures, Face: no lumps or edema, Eyes: symmetrical left and right, pink conjunctiva, non-icteric sclera, and no secretions, Ears: symmetrical left and right, without cerumen buildup, Nose: symmetrical left and right, without secretions or polyps, Mouth and lips: clean mouth, pink and moist lips, pink gums, and clean tongue; good sucking and swallowing reflexes, Neck: good neck muscle tone, Chest and abdomen: chest movement follows breathing, no sternum protrusion, formed nipples, umbilical cord still wet and clamped and in clean condition, Shoulders and arms: symmetrical left and right, complete fingers, good grasp reflex, Legs and feet: symmetrical left and right, complete fingers, no fractures, Skin: appears pink, no abrasions or birthmarks. Genitalia: prominent clitoris, labia majora covering labia minora. In this examination, no discrepancies were found between the theory and the existing case condition.

Based on the data obtained from the examination results of By.Ny. "R," it is in line with the theory that By.Ny. "R" is indicated to be a Low Birth Weight Baby. (BBLR) (Octaviani Chairunnisa & Widya Juliarti, n.d.).

Analysis

Baby Ny. "R" is 10 days old with a birth weight, stable weight, and is in normal and healthy condition. A newborn baby can meet normal criteria in anthropometric development and does not show signs of abnormalities or concerning health conditions. Research states that monitoring the physical development of low birth weight infants is an important step in ensuring that they achieve growth milestones well, thereby minimizing the potential for long-term risks. (Wigianita et al., 2020).

Based on the data above, this newborn baby was diagnosed with Low Birth Weight (LBW), which is a baby with a birth weight below 2500 grams despite being of full-term gestation. This condition of low birth weight (LBW) infants is generally at high risk of experiencing hypothermia, infections, and nutritional problems. Hypothermia is often experienced by low birth weight babies due to the lack of body fat that serves as a protector of body temperature. Therefore, midwifery care should focus on monitoring weight, vital signs, and efforts to prevent hypothermia through kangaroo method and maintaining the cleanliness and warmth of the baby's body. (Widiastuti & Rusmini, 2019).

According to research, low birth weight infants (LBW) have a higher risk of hypothermia, infections, and difficulties in maintaining nutritional needs. This is due to the limited body fat, which plays an important role in maintaining body temperature and metabolic processes. Babies born with low birth weight also tend to have an immune system that is not yet optimal, making them more susceptible to infections. Care methods such as the kangaroo method have proven effective in helping to naturally warm the baby's body through direct skin-to-skin contact with the mother, which can reduce the incidence of hypothermia in low birth weight infants. (Sarnah et al., 2020).

The kangaroo method helps maintain the baby's body temperature and improves the ability to suck breast milk, which is very important in the process of fulfilling nutrition and weight gain. Breast milk also contains nutrients that are very beneficial for low birth weight babies in helping organ maturation and boosting immunity. Therefore, exclusive breastfeeding is highly recommended as an essential practice in midwifery care for low birth weight babies.(Herawati & Anggraini, 2020).

Management

On February 2, 2024, the management of baby "R" began with providing education to the mother regarding the examination results, which was well-received by her. Such education is important because it provides parents with an understanding of their baby's health, thereby reducing the risk of complications and supporting optimal baby care. Next, routine observations of the baby's vital signs were conducted, including the baby's heart rate, respiration, and body temperature, all of which were within normal limits. Monitoring these vital signs is crucial to ensure the stability of the newborn's condition, especially for low birth weight infants (LBWI), who are more vulnerable to temperature imbalances and vital organ function.(Rohana et al., 2020).

Early initiation of breastfeeding (IMD) is also carried out to form an early bond between the mother and the baby, as well as to strengthen the baby's immune system through the transfer of antibodies that occurs during breastfeeding. Mothers are advised to provide exclusive breastfeeding as early as possible, which is accepted and implemented by mothers as an important effort in supporting the optimal development of the baby. In addition, mothers are advised to consume nutritious foods, which contribute to the quality and quantity of breast milk, an aspect that is essential for meeting the nutritional needs of low birth weight infants. (Adam et al., 2016).

Baby hygiene is the main concern in this management. Mothers are encouraged to change the baby's diapers and clothes every time the baby has a bowel movement or urinates to reduce the risk of infection. Baby clothes are also recommended to remain clean and dry to keep the baby's body temperature stable, an important measure for babies who are vulnerable to changes in environmental temperature. Umbilical cord hygiene is also given special attention, considering that this area can become an infection pathway if not properly cared for. The mother was educated on how to maintain the cleanliness of the baby's umbilical cord, which she understood and practiced, to prevent infections in the newborn.

As a precautionary measure, the mother was given information about warning signs in babies that should be observed, such as high fever or difficulty breathing. The mother understands this information, which will enable her to respond quickly if an emergency occurs, thereby minimizing the risk of delays in handling. Information is an important element in a person's understanding process. The information conveyed includes knowledge about what happens to the individual, particularly in the aspect of reproduction, as well as how the development of reproductive organs and their functions occurs. (Dahlan Prodi D-III Kebidanan Jurusan Kesehatan Politeknik Baubau dahniardahlan, 2021).

On February 12, 2024, further management for baby "R" was carried out at the Wolio Health Center. The first step taken was a routine observation of the baby's vital signs. The examination results showed vital signs within normal limits, namely the baby's heart rate at 150 beats/minute, respiration at 44 breaths/minute, and body temperature at 36.5°C. This monitoring is very important for low birth weight babies because it allows for early detection of potential health issues that may require further action. The mother followed this recommendation well, demonstrating awareness and commitment in caring for her baby.

Baby hygiene is also continuously maintained through the recommendation to change diapers or clothes every time the baby has a bowel movement or urinates. According to WHO, this practice can reduce the risk of infection in newborns through optimal hygiene. In addition, mothers are encouraged to always cover the baby with clean and dry clothes to maintain the baby's body temperature. Babies with low birth weight are more vulnerable to temperature changes, so this step serves as a preventive measure to maintain the baby's well-being. (Damanik, 2019)**.**

As part of long-term health management, complete immunization is also recommended for baby "R". The mother shows understanding and readiness to carry out the immunization recommendations. Immunization plays a crucial role in protecting infants from serious infectious diseases, thereby improving their quality of life and reducing the risk of health complications later on. This documentation emphasizes a comprehensive approach in monitoring and caring for newborns with low birth weight, combining nutritional support, hygiene, temperature protection, and prevention through immunization as part of efforts to optimize the baby's growth and development.

CONCLUSION

After providing care to Mrs. "R" by applying midwifery management, the author discusses and compares the theory and the implementation results, as well as the application of theory with the reality that occurred during the care of low birth weight (LBW) infants born at term at Baubau Regional Hospital in 2024. Low birth weight babies (BBLR) are babies born weighing less than 2500 grams, who require special attention in their care, including monitoring weight, body temperature, and providing intensive breastfeeding to support optimal growth.

From the observation results, Mrs. "R" showed a good weight gain during the treatment, from 2300 grams to 2550 grams after the second visit. Proper obstetric management, such as the kangaroo method and on-demand breastfeeding, is very effective in maintaining body temperature and increasing the baby's weight. Furthermore, providing educational support to mothers about the importance of maintaining the baby's body temperature and breastfeeding is also an important part of the care provided. These steps have been proven to align with midwifery care theories in improving the well-being of low birth weight infants (LBW).

In this study, the author found alignment between the theory and practice applied in midwifery care for baby Ms. "R". Although no potential serious problems were detected, it is important to continue monitoring the baby's development, particularly in maintaining body temperature stability and avoiding hypothermia. Therefore, regular evaluation and adjustment of midwifery care need to be conducted to ensure the baby's health is well maintained. It is hoped that comprehensive and collaborative midwifery care can reduce the risk of future complications and support the optimal growth of the baby.

In addition, a collaborative approach with mothers in implementing care methods, such as kangaroo care and exclusive breastfeeding, has a positive impact on mothers' involvement in the care process of low birth weight infants. This not only strengthens the bond between mother and baby but also boosts the mother's confidence in independently caring for her baby at home. The education provided, such as maintaining the baby's body temperature and hygiene practices, helps the mother to be more prepared to face the challenges that may arise during the care period. With ongoing support from the healthcare team, the implementation of this midwifery care is expected to build a better long-term health foundation for Mrs. "R"'s baby and strengthen the mother's capacity as the primary caregiver in supporting her baby's growth and development.

ACKNOWLEGMENT

With all due respect, the author would like to express the deepest gratitude to Supervisor 1 and Supervisor 2 for their guidance, direction, and invaluable suggestions during the process of compiling this journal. The author also extends thanks to Politeknik Baubau for providing the necessary facilities and data to ensure the smoothness of this research.

Thank you also to the family and friends who have provided support and assistance during the preparation and research process. Without the support and encouragement from all parties, this research could not have been completed successfully.

REFERENCES

Adam, A., Alim, A., & Sari, N. P. (2016). Pemberian Inisiasi Menyusu Dini. *Jurnal Kesehatan Manarang*, *2*(2), 76.

Chatra Al Shafa Qolby Naviu, Ansar Suherman, & Wa Nurfida. (2024). Strategi Komunikasi Penyuluhan Pencegahan Stunting di BKKBN Kota Baubau. *Jurnal Audiens*, *5*(2), 361–370. https://doi.org/10.18196/jas.v5i2.365

Dahlan Prodi D-III Kebidanan Jurusan Kesehatan Politeknik Baubau dahniardahlan, D. (2021). Desember 2021 Perilaku Personal Hygiene Remaja Putri Pada Saat Menstruasi. *Journal Health Qualty Development E*, *1*(2), 109–115.

Damanik, R. K. (2019). *HUBUNGAN PERAWATAN TALI PUSAT DENGAN KEJADIAN INFEKSI PADA BAYI BARU LAHIR DI RSUD Dr . PIRNGADI MEDAN 2019*. *2*(2), 51–60.

Fahmi, Z. Y. (2020). Indeks Massa Tubuh Pra-Hamil sebagai Faktor Risiko Terjadinya Bayi Berat Lahir Rendah. *Jurnal Ilmiah Kesehatan Sandi Husada*, *12*(2), 842–847. https://doi.org/10.35816/jiskh.v12i2.412

Hartiningrum, I., & Fitriyah, N. (2019). Bayi Berat Lahir Rendah (BBLR) di Provinsi Jawa Timur Tahun 2012-2016. *Jurnal Biometrika Dan Kependudukan*, *7*(2), 97. https://doi.org/10.20473/jbk.v7i2.2018.97-104

Herawati, I., & Anggraini, N. (2020). Efek Perawatan Metode Kangguru Terhadap Kenaikan Berat Badan pada Bayi Berat Lahir Rendah. *Jurnal Kebidanan Dan Kesehatan Tradisional*, *5*(1), 23–28. https://doi.org/10.37341/jkkt.v5i1.108

Hudayah, N., Meilani, N., & Ona, W. (2019). Determinan Pemberian ASI Eksklusif di Wilayah Kerja Puskesmas Mangarabombang Kabupaten Takalar. *Kesehatan Masyarakat*, *2*(3), 1–11.

Ilham, R., Kurnaesih, E., & S, S. (2021). Manajemen Asuhan Kebidanan Bayi Baru Lahir pada Bayi

Ny. F dengan Bayi Berat Lahir Rendah. *Window of Midwifery Journal*, *2*(2), 97–106. https://doi.org/10.33096/wom.vi.365

Ismayanah, I., Nurfaizah, N., & Syatirah, S. (2020). Manajemen Asuhan Kebidanan Bayi Baru Lahir Pada Bayi Ny "I" Dengan Berat Badan Lahir Rendah (Bblr) Di Rsud Syekh Yusuf Kabupaten Gowa Tanggal 23 Juli - 25 Juli 2019. *Jurnal Midwifery*, *2*(2), 60–70. https://doi.org/10.24252/jm.v2i2a2

Mutiara, A., Apriyanti, F., & Hastuty, M. (2020). Hubungan Jenis Persalinan Dan Berat Badan Lahir Dengan Kejadian Asfiksia Pada Bayi Baru Lahir di RSUD Selasih Kabupaten Pelalawan Tahun 2019. *Jurnal Kesehatan Tambusai*, *1*(2), 42–49.

Octaviani Chairunnisa, R., & Widya Juliarti. (n.d.). Asuhan Kebidanan Pada Bayi Baru Lahir Normal. *Jurnal Kebidanan Terkini (Current Midwifery Journal)*, *2*(1), 23–28.

Rohana, Sriatmi, & Budiyanti. (2020). *Pelaksanaan Pelayanan Neonatal Berdasarkan Standar Pelayanan Minimal Kesehatan Bayi Baru Lahir Di Puskesmas Dukuhseti Kabupaten Pati*. *8*. https://ejournal3.undip.ac.id/index.php/jkm/article/view/25877

Sarnah, S., Firdayanti, F., & Rahma, A. S. (2020). Manajemen Asuhan Kebidanan pada Bayi Ny "H" dengan Hipotermi di Puskesmas Jumpandang Baru Makassar. *Jurnal Midwifery*, *2*(1), 1–9. https://doi.org/10.24252/jmw.v2i1.10652

Sudirman, S., Ernawati, S., Justin, W. O. S., Amiruddin, A., & Malik, A. (2022). Lingkungan Pengasuhan dan Tingkat Perkembangan Anak Usia 4-5 Tahun. *JSHP : Jurnal Sosial Humaniora Dan Pendidikan*, *6*(2), 178–189. https://doi.org/10.32487/jshp.v6i2.1447

Vina, E. (2019). Hubungan Paritas Dan Berat Bayi Lahir Dengan Kejadian Asfiksia Neonatorum Pada Bayi Baru Lahir. *Jurnal Muara Sains, Teknologi, Kedokteran Dan Ilmu Kesehatan*, *3*(1), 183. https://doi.org/10.24912/jmstkik.v3i1.4054

Widiastuti, A., & Rusmini. (2019). Jurnal sains kebidanan. *Jurnal Sains Kebidanan*, *1*(1), 1–6.

Wigianita, M. R., Umijati, S., & Trijanto, B. (2020). Hubungan kenaikan berat badan ibu saat hamil dengan berat badan bayi baru lahir. *Darussalam Nutrition Journal*, *4*(2), 57. https://doi.org/10.21111/dnj.v4i2.3944