

MIDWIFERY CARE MANAGEMENT FOR NEWBORN BABY MRS. F WITH ASPHYXIA AT SALBIYANA PRIMARY CLINIC

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ABSTRACT

Background: Neonatal asphyxia is a critical condition in newborns caused by the failure to initiate and maintain spontaneous breathing immediately after birth. This condition leads to hypoxia, hypercapnia, and metabolic acidosis. Globally, neonatal asphyxia remains one of the leading causes of neonatal mortality and requires interventions. **Objective:** This study aimed to implement and evaluate comprehensive midwifery care management for Baby Mrs. F with moderate neonatal asphyxia at Salbiyana Primary Clinic, Deli Serdang Regency. **Methods:** This study employed a descriptive case study design using Varney's seven-step midwifery management approach. The stages included basic data collection, data interpretation, identification of potential diagnoses, anticipation of immediate actions, planning, implementation of interventions, and clinical evaluation. Data were collected through direct observation, physical examination, and review of medical records. **Results:** At birth, the infant presented with signs of moderate asphyxia characterized by central cyanosis, weak muscle tone, slow respiration (30 breaths/minute), and an initial APGAR score of 6 due to a triple nuchal cord complication. Immediate resuscitation procedures were performed according to standard protocols, including positioning the head in slight extension, clearing the airway, drying the infant under an infant warmer, providing tactile stimulation, and ensuring positive pressure ventilation. Following intervention, the infant's significantly, with stable respiration (40–60 breaths/minute), heart rate above 100 beats/minute, pink skin coloration, stronger reflexes, and an APGAR score increasing to 7–8 at the fifth minute without secondary complications. **Conclusion:** The implementation of midwifery management based on Varney's seven-step approach proved highly effective in managing moderate neonatal asphyxia. Early detection, prompt standardized resuscitation

Keywords: Neonatal asphyxia, newborn baby, moderate asphyxia, midwifery care management, neonatal resuscitation.

INTRODUCTION

A newborn baby is in a transitional phase from intrauterine life to extrauterine life, which requires adaptive abilities, especially in the respiratory system. One of the common problems during the neonatal period is neonatal asphyxia. Neonatal asphyxia is a condition where the baby fails to start and maintain spontaneous and regular breathing after birth, resulting in hypoxia, hypercapnia, and acidosis. Asphyxia can also be categorized into two types: primary asphyxia some time after birth. Birth asphyxia is the second leading cause of neonatal death worldwide. A newborn baby is in a transitional phase from intrauterine life to extrauterine life, which requires adaptive abilities, especially in the respiratory system. One of the common problems during the neonatal period is neonatal asphyxia. Neonatal asphyxia is a condition where the baby fails to start and According to data from the World Health Organization (WHO), asphyxia is still one of the leading causes of neonatal deaths in developing countries. In Indonesia, asphyxia is one of, infections, and congenital abnormalities.. Management is carried out according to standard midwifery services and neonatal resuscitation guidelines,

Approximately 10% of babies need extra respiratory support immediately after birth (Addis Eyeberu a, 2024). Asphyxia that is not handled immediately can cause damage to vital organs, neurological function disorders in brain cells, even neonatal death. Midwives play an important role in the early detection and management of asphyxia through the implementation of proper midwifery care management. Based on cases found at the Salbiyana Primary Clinic in Deli Serdang Regency in 2025 a newborn baby of Mrs. F was found with moderate asphyxia due to complications from One of the most important evidence-based interventions to address birth asphyxia is neonatal resuscitation. (Addis Eyeberu Elias Yadeta, 2024) also have a higher risk of experiencing neonatal asphyxia. The APGAR score, assessed at 1, 5, and 10 min after birth, helps determine the severity of birth asphyxia by evaluating the baby's appearance, heart rate, reflex irritability, BMC (Muluken Amare Wudu^{1*}, 2025)

This research uses a descriptive method with a case study approach. The case study was conducted at Salbiyana Primary Clinic in Deli Serdang Regency, Medan Marelan, in March 2025.

The research subject is a newborn baby of Mrs. F who was diagnosed with moderate asphyxia. Data collection was carried out comprehensively through anamnesis (subjective data), direct observation, and physical examination (objective data). (Kautsar Prastudia Eko Binuko¹, 2024) (Intan Kumalasari¹ 2022) as well as the documentation of the clinic's medical records. Data analysis is explained using Varney's seven-step midwifery management approach, which includes assessing basic data, interpreting basic data, identifying diagnoses or potential problems, determining immediate action needs, preparing a care plan (interventions) implementing the care plan, and evaluating care outcomes. Negara maju umumnya memiliki sistem skrining dan penatalaksanaan asfiksia neonatal yang better so that it can reduce the incidence, death, and complications caused by asphyxia

RESULTS AND DISCUSSIONS

The assessment results showed that Mrs. F, 30 years old (G2P1A0), gave birth spontaneously vaginally on March 12, 2025, at 2:45 PM WIB. During labor, the mother appeared weak and her pushing effort was insufficient, which resulted in edema in the birth canal. When the baby's head was delivered, there was a complication of the umbilical cord wrapped around three times, so the umbilical cord was immediately clamped at the birth canal. The baby did not cry strongly right away, had weak and irregular breathing (breathing rate 30 times/minute), weak muscle movement, and the skin color wasThe extremities appear bluish (cyanosis). The results of the initial assessment showed that the (*, 2024) APGAR Score in the first minute was 6 which indicates a moderate asphyxia condition. The baby's physical parameters showed a birth weight of 2900 grams and a body length of 48 cm. The obstetric diagnosis established from the interpretation of these basic data is Full-Term Newborn, Spontaneous (Fernando Montes-Tapia, 2024) Birth with Moderate Neonatal Asphyxia. The management of immediate actions that are carried out includes keeping the airway open by adjusting the position of the head slightly extension, drying and warming the baby's body under the warmer, providing tactile stimulation, giving oxygen as medically indicated, closely monitoring vital signs, and collaborating with the doctor. After a series of (Mulugeta Demisse, 2023)

DISCUSSIONS

Based on the review of basic data, it was found that Mrs. F's baby experienced moderate asphyxia, marked by a first-minute APGAR score of 6, slow and irregular breathing (30 times/minute), weak muscle tone, and cyanosis in the extremities. This case aligns with midwifery theory, which states that moderate neonatal asphyxia is characterized by a first-minute APGAR score of 4–6 and clinically requires prompt action. berupa resusitasi serta pemberian oksigen terkendali. Munculnya gangguan pernapasan pada bayi ini dipicu oleh the presence of the umbilical cord wrapped around three times, (Sri Handayani¹, 2023) which obstructs the flow of oxygen from the placenta to the fetus, combined with labor complications due to the mother's weakened pushing strength (Sari, 2026) Emergency management for this newborn focuses on the initial steps of neonatal resuscitation. Airway clearance is done by placing the baby's head in a slightly extended position (sniffing position) and cleaning the mucus make sure the airways are clear of any blockage. Preventing hypothermia is done by drying the baby's body with a dry cloth and placing them under a warming device (infant warmer). (Pratiwi², 2022) Tactile stimulation is given on the back or soles of the feet to trigger the baby's spontaneous breathing reflex. The whole series of clinical actions that The care provided at the Salbiyana Primary Clinic has met both national (Dewa Gede Sahabhiseka Dewanta¹, 2022) and international neonatal care standards. The final evaluation results prove the success of midwifery care, marked by improvements in the baby's tissue oxygenation status. The baby began to breathe spontaneously and regularly, heart rate stabilized, skin color turned reddish, and the APGAR Score increased to 7–8 at the fifth minute. The success of this management shows that fast, precise, and systematic midwifery care is very effective in restoring the condition of newborns from asphyxia and preventing the baby from the risk of long-term neurological damage. (Abel, 2022)

CONCLUSIONS AND SUGGESTION

Based on the results of the case study and the application of midwifery care management for Mrs. F's baby with moderate asphyxia at Salbiyana Primary Clinic in Deli Serdang Regency in 2025, it can be concluded that midwifery care was carried out systematically using Varney's seven-step midwifery management, which includes assessment, data interpretation, identification of potential problems, immediate action, planning, implementation, and evaluation. At the assessment stage, data was obtained that the baby was born spontaneously with the umbilical cord wrapped three times, did not cry strongly right away, had bluish extremities, weak movements, a breathing rate of 30 times per minute, and a 1-minute APGAR score of 6, leading to a diagnosis of a full-term newborn with moderate asphyxia.

Based on these results, actual problems and potential problems that could pose a threat were identified. A baby's life can be at serious risk from severe hypoxia, hypothermia, hypoglycemia, neurological disorders, and even neonatal death if they don't receive proper care immediately (Sinaga Kamelia, 2025). The immediate actions taken include keeping the airway open, drying and warming the baby, providing oxygen as needed, regularly monitoring vital signs, and collaborating with doctors for further management. All the actions taken follow neonatal care standards and midwifery management principles, which ensures the baby's. After the midwifery care was carried out, the baby's condition showed good progress. Breathing became more regular, the heartbeat increased to more than 100 beats per minute, the skin color, which was previously bluish, gradually turned reddish, and the baby's muscle tone and reflexes started improving. The APGAR Score at the fifth minute also went up to 7-8, showing a good response to the care provided. (Natalya Rut naomi Nainggolan1), 2025) Therefore, it can be concluded that applying midwifery care management properly, quickly, and continuously for newborns with moderate asphyxia plays a big role in preventing more serious complications and improving the health and safety of the newborns. The success of midwifery care in this case highlights the importance of midwives being competent in early detection, immediate handling, and collaboration with other healthcare workers to provide quality neonatal care (Imran Saputra Surbakti, 2025). It is hoped that healthcare workers, especially midwives, can continue to improve their knowledge, skills, and competence in managing neonatal emergencies, particularly in cases of neonatal asphyxia. In addition, health service facilities are expected to be able to provide adequate facilities and infrastructure to support the services. neonatal yang optimal. Bagi institusi pendidikan seperti STIKes Mitra Husada Medan, hasil studi kasus ini diharapkan It can serve as a reference material in improving students' ability to apply midwifery care management. For the community and families, it is expected to increase awareness of the importance of regular pregnancy check-ups and to promptly seek help from healthcare professionals if signs of emergencies are found in either the mother or the baby, so that complications can be prevented as early as possible. (Ribur Sinaga, 2026)

APPRECIATE (If There Is)

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REFERENCES

- M. A. (2024). Post Mortem Molecular Biomarkers Of Asphyxia:. *International Jurnal Of*.
- Abel, S. A. (2022). Perinatal Asphyxia And Associated Factors Among Neonates Admitted To A Specialized Public Hospital In South Central Ethiopia : Aretrospective Cross-Sectional Study. *Plos One*.
- Addis Eyeberu A, E. Y. (2024). Neonatal Resuscitation In Eastern Africa: Health Care Providers' Level Of Knowledge And Its Determinants. A Systematic Review And Meta-Analysis. *Global Health Action*, 17, 2396636.
- Dewa Gede Sahabhiseka Dewanta1, G. D. (2022). Faktor Risiko Yang Berhubungan Dengan Kejadian Asfiksia Pada Neonatus Di Rsia Dedari Kupang, Nusa Tenggara Timur,Indonesia. *Original Article*.
- Fernando Montes-Tapia, M. P.-A.-E.-T.-C. (2024). Traumatic Asphyxia. *Illustrative Case*.
- Imran Saputra Surbakti, R. U. (2025). Faktor-Faktor Yang Mempengaruhi Kejadian Asfiksia Neonatorum Di Puskesmas Pagar Merbau Kec. Pagar Merbau Kab.Deli Serdangprovinsi Sumatera Utara Tahun 2023. *Nursing Applied Journal*.
- Kameliasinaga. (2025). Manajemenasuhanpadabayibaruahirdenganasfiksia Neonatorum Diklinik Siti Kholijah Medan Tahun 2024. *Forum Ilmiah Dan Diskursi Mahasiswa*.
- Mulugeta Demisse, R. T. (2023). Birth Asphyxia And Its Associated Factors Among Newborns At A Tertiary Hospital: Evidence From Southern Ethiopia. *African Health Sciences*, , Vol 23.
- Muluken Amare Wudu1*, E. B. (2025). Incidence And Predictors Of Mortality Among Neonates Admitted With Birth Asphyxia To Neonatal Intensive Care Units In Ethiopia:A Systematic Review And Meta-Analysis. *Bmc Pediatrics*.
- Natalya Rut Naomi Nainggolan1), S. N. (2025). Manajemen Asuhan Kebidanan Pada By Ny.S Dengan Asfiksia Neonatorum Di Ruangn Picu Uptd Khusus Rsu Haji Medan Provinsi Sumatera Utara Tahun 2025. *Forisma*.
- Pratiwi2, A. K. (2022). Faktor-Faktor Yang Berpengaruh Terhadap Kejadian Asfiksia Pada Bayi Baru Lahir. *Jurnal 'Aisyiyah Medika* .
- Qiu, Y. W. (2025). Incidence Of Neonatal Asphyxia And Associated Risk Factors: A Systematic Review And Cumulative Meta-Analysis. *Bmc Pediatrics*.
- Ribur Sinaga. (2026). Midwifery Care Management For Newbornbabymrs. Fwith Asphyxiaat Salbiyana Primaryclinic. *Forum Ilmiah Dan Diskursi Mahaiswa*.
- Sari, D. (2026). Manajemen Asuhan Kebidanan Pada Bayi Ny.S Dengan Asfiksia Neonatorum Di Klinik Siti Kholijah Tahun 2025. *Forum Ilmiah Dan Diskursi Mahasiswa*.
- Sinaga Kamelia. (2025). Manajemen Asuhan Pada Bayi Baru Lahir Dengan Asfiksia Neonatorum Diklinik Siti Kholijah Medan Tahun 2024.
- Sri Handayani1, M. H. (2023). Faktor-Faktor Yang Berhubungan Dengan Kejadian Asfisia Pada Bayi Baru Lahir. *Babul Ilmi_Jurnal Imiah Multi Science Kesehatan*.