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Comprehensive midwifery care for a term neonate with mild asphyxia from a mother with B20

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Abstract:

Neonatal asphyxia is a major cause of newborn morbidity and death, and care is more complex when the mother has HIV (ICD-10 B20), because the infant needs resuscitation and protection from vertical transmission together. This case study describes comprehensive midwifery care for a term neonate with mild asphyxia born to a mother with B20 in the Panji Room of Gambiran Regional General Hospital, Kediri City, Indonesia, from 16 to 28 June 2025. A descriptive single-case design was used and reported according to the CARE guidelines. Care followed Varney's seven-step management process with SOAP progress notes; data came from observation, interviews, medical records, and literature review. The neonate was born at 39 weeks without a spontaneous cry and had rapid breathing, chest wall retractions, and cyanosis of the extremities; Apgar scores were 7 and 8 at one and five minutes. Care included standard resuscitation, nasal oxygen in the high care unit, vital sign monitoring, prevention of hypothermia and infection, antiretroviral prophylaxis following the national protocol, and lactation and safe-feeding counselling. Oxygen saturation rose, retractions decreased, the sucking reflex emerged, and no further complications occurred. Prompt, standard-based, collaborative midwifery care can stabilise such neonates and supports prevention of mother-to-child transmission.

Keywords:
term neonate; neonatal asphyxia; HIV; mother-to-child transmission; midwifery care

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INTRODUCTION

Neonatal deaths make up a large share of child mortality worldwide, and almost all of them occur in low- and middle-income countries (Lawn et al., 2005). Complications of preterm birth, events during labor and birth, including birth asphyxia, and neonatal infection are leading causes of death in the first month of life (Liu et al., 2016). Intrapartum-related neonatal encephalopathy alone causes a large burden of death and long-term impairment at regional and global levels (Lee et al., 2013). For a baby who does not breathe well at birth, timely resuscitation is the most important single action. International guidelines describe it as a stepwise process that begins with anticipation and preparation and depends on a trained team (Aziz et al., 2020; Wyckoff et al., 2020).

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The Apgar score is widely used to describe a newborn's condition at 1 and 5 minutes, but it is a descriptive tool, not a diagnosis. Professional bodies advise that it should not be used alone to establish that asphyxia has occurred (American Academy of Pediatrics Committee on Fetus and Newborn & American College of Obstetricians and Gynecologists Committee on Obstetric Practice, 2015). In the Indonesian midwifery setting of this report, the term "mild asphyxia" is used for a newborn with delayed adaptation to breathing, visible respiratory signs, and a relatively high Apgar score. Clear case descriptions are therefore needed to show how this label is applied and what care follows from it.

Mother-to-child transmission (MTCT) is the main route by which children acquire HIV. Without treatment, the risk of transmission is about 15% to 30% during pregnancy and labor, with a further 10% to 20% linked to prolonged breastfeeding, yet antiretroviral therapy and related measures can lower the overall risk to below 5% (Adawiyah et al., 2022). Transmission can occur in utero, during labor and delivery, and after birth through breast milk (Kourtis et al., 2006). The evidence for prevention is strong. Zidovudine given to mother and infant cut transmission by about two-thirds in a landmark trial (Connor et al., 1994). Elective cesarean delivery was associated with a lower risk of transmission (International Perinatal HIV Group, 1999). Maternal combination therapy produced very low transmission rates (Fowler et al., 2016), and multidrug prophylaxis for the infant reduced intrapartum transmission when mothers had not been treated in pregnancy (Nielsen-Saines et al., 2012).

Infants who are exposed to HIV but remain uninfected still face a higher risk of illness and death than unexposed infants (Newell et al., 2004; Evans et al., 2016). In the first hours of life, the neonate of a mother with HIV who also needs resuscitation therefore carries two tasks at once: stabilizing breathing and circulation, and starting the measures that protect the baby from HIV, including thermal care, infection prevention, antiretroviral prophylaxis, and a safe feeding plan. Hypothermia is common among newborns worldwide and adds to the risk of death (Lunze et al., 2013), so thermal care belongs in the same plan.

Indonesia has not yet closed the gap in prevention of mother-to-child transmission (PMTCT). National policy adopted PMTCT in 2005 and made HIV testing a routine part of antenatal care in 2017, yet testing among pregnant women rose only from 27% in 2017 to 45% in 2019, and fewer than half of the women who tested positive started treatment in 2019 (Adawiyah et al., 2022). Studies also point to low coverage of antenatal testing and difficulty retaining women in care (Baker et al., 2020; Lumbantoruan et al., 2020), and a systematic review showed that fear, stigma, and access barriers limit uptake of antiretroviral drugs for PMTCT (Gourlay et al., 2013). Research in East Java has also examined the risk of onward sexual HIV transmission among people living with HIV (Kurniawan et al., 2021), which shows why prevention must run across the whole care continuum, from adults to the newborn. The global elimination framework likewise stresses the integration of HIV services into routine maternal and childcare (Taylor et al., 2017).

Midwives provide much of Indonesia's maternal and newborn care (Adawiyah et al., 2022), so their ability to recognize respiratory difficulty, start resuscitation, escalate care, and carry out PMTCT measures matters. To our knowledge, few published case descriptions follow a structured midwifery process for a neonate with asphyxia and maternal HIV, and fewer show how resuscitation, thermal care, antiretroviral prophylaxis, and feeding counseling fit together in one

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care plan. This article addresses that gap. It describes comprehensive midwifery care for a term neonate with mild asphyxia born to a mother with B20 at Gambiran Regional General Hospital, Kediri City, using Varney's seven-step approach, with international standards as the benchmark.

METHODS

This was a descriptive single-case study of midwifery care, reported in line with the CARE guidelines for case reports (Riley et al., 2017). The design suits the aim of describing in depth how care was planned, delivered, and evaluated for one neonate in a real clinical setting. The study took place in the Neonatal Care Room (Panji Room) of Gambiran Regional General Hospital, Kediri City, East Java, Indonesia, from 16 to 28 June 2025.

The case was that of Mrs. F's newborn, aged 0 days at the start of care. The infant met three criteria: term gestation, mild asphyxia, and a mother with a documented diagnosis of HIV infection (ICD-10 B20). The object of study was the midwifery care process provided to the baby. In this report, "mild asphyxia" means delayed respiratory adaptation at birth with clinical signs of respiratory difficulty and Apgar scores of 7–8, which is the authors' working definition; its limits are discussed below.

Four sources were combined: (1) direct observation of the neonate's condition during care; (2) interviews with family members and health personnel; (3) review of medical records and documentation; and (4) literature review to support the care standard. The instruments were maternal and neonatal assessment forms, midwifery management forms based on Varney's seven steps (data collection, interpretation of data, identification of potential problems, immediate action and collaboration, planning, implementation, and evaluation), and progress notes in the SOAP format (subjective, objective, assessment, plan).

Data were analyzed descriptively and qualitatively. Findings from each Varney step were tabulated and compared with benchmark standards: the 2020 American Heart Association neonatal resuscitation guidelines (Aziz et al., 2020), the international consensus on neonatal life support (Wyckoff et al., 2020), the Indonesian national PMTCT protocol, and the trial evidence cited in the Introduction. The neonate's progress was documented in the SOAP notes. To strengthen credibility, findings from observation, interviews, and records were cross-checked (triangulation). The mother and infant are identified only by initials, and no other identifying details are reported.

RESULTS

The infant of Mrs. F was a newborn aged 0 days, born at term at 39 weeks of gestation to a mother with B20 (HIV). At birth, the baby did not cry spontaneously and showed rapid breathing, chest wall retractions, and cyanosis of the extremities. The Apgar score was 7 at the first minute and 8 at the fifth minute. The medical team started resuscitation immediately, and the infant was then referred to the high care unit (HCU) for intensive care, including nasal oxygen therapy. Table 1 summarizes the findings at birth.

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Table 1. Clinical findings of the neonate at birth and initial management

Parameter	Finding
Subject	Newborn of Mrs. F, aged 0 days
Gestational age	39 weeks (term)
Maternal HIV status	B20 (HIV)
Spontaneous cry	Absent
Respiratory signs	Rapid breathing; chest wall retractions
Skin colour	Cyanosis of the extremities
Apgar score	7 at 1 minute; 8 at 5 minutes
Initial management	Immediate resuscitation by the medical team; referral to the HCU; nasal oxygen therapy

Note: HCU = high care unit.

Using Varney's seven steps, the main needs identified were impaired respiratory adaptation, risk of hypothermia, risk of vertical HIV transmission and infection, nutritional needs with an emerging sucking reflex, and the parents' need for information. Care combined collaborative actions, carried out with pediatricians and HCU nurses, and independent midwifery actions: monitoring of vital signs, fulfilling nutritional needs, preventing hypothermia, and educating the parents. Infection prevention and antiretroviral (ARV) prophylaxis, according to protocol, were part of the care, along with lactation support and counseling on safe infant feeding. Table 2 links each need to the care given and the documented outcome.

Table 2. Midwifery needs, care provided, and documented outcomes

Need identified	Care provided	Type of action	Documented outcome
Impaired respiratory adaptation (no spontaneous cry, rapid breathing, retractions, cyanosis)	Standard resuscitation; nasal oxygen therapy in the HCU; monitoring of vital signs	Collaborative (medical team, HCU nurses); monitoring independent	Higher oxygen saturation; fewer chest wall retractions; vital signs returned to normal
Risk of hypothermia	Measures to prevent hypothermia; monitoring of vital signs	Independent	Vital signs returned to normal; no further complications
Risk of vertical HIV transmission and infection	Infection prevention; ARV prophylaxis according to protocol	Collaborative	No further complications
Nutritional needs and feeding	Nutritional support including parenteral nutrition; lactation support and counselling on safe feeding	Independent, with counselling	Sucking reflex gradually emerged
Parents' need for information	Education on the baby's condition and follow-up care	Independent	Parents informed about the condition and follow-up care

Note: ARV = antiretroviral; HCU = high care unit.

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The neonate's condition improved gradually. Oxygen saturation increased, the frequency of chest wall retractions decreased, vital signs returned to normal, and a sucking reflex gradually appeared. No further complications were recorded during the observation period.

DISCUSSION

This case study shows how a structured midwifery process was used to care for a term neonate with mild asphyxia born to a mother with HIV. The baby needed rapid support of breathing and, at the same time, protection against HIV acquisition. After standard resuscitation, oxygen therapy, thermal care, infection prevention, antiretroviral prophylaxis, and feeding support, oxygen saturation improved, retractions decreased, vital signs returned to normal, and no further complications were recorded. Three lessons stand out. Respiratory stabilization comes first, HIV prevention must start in the first hours of life, and midwives are most effective when they work as part of a team.

The first priority was the transition from fetal to neonatal life. International guidance holds that the baby's breathing, heart rate, and tone guide a stepwise response, that ventilation is the main intervention, and that preparation and teamwork before birth shape outcomes (Aziz et al., 2020; Wyckoff et al., 2020). In this case, the medical team initiated resuscitation immediately, and the baby was moved to the HCU for oxygen, which aligns with this approach. The gradual rise in oxygen saturation and fall in retractions suggest that the respiratory problem was a transitional one that responded to timely support. The midwife's role was to recognize that the baby was not adapting well, call for help, and continue monitoring after the first emergency had passed. Monitoring of vital signs is the thread that links early resuscitation to later decisions about oxygen, feeding, and transfer.

The classification of this infant as having mild asphyxia needs careful reading. Apgar scores of 7 and 8 fall in a range that international bodies regard as reassuring, and these bodies also warn that the score alone does not establish asphyxia; the diagnosis usually rests on added evidence such as acidemia, neurological signs, and multi-organ involvement (American Academy of Pediatrics Committee on Fetus and Newborn & American College of Obstetricians and Gynecologists Committee on Obstetric Practice, 2015). In this report, the label describes a term baby with delayed respiratory adaptation and visible respiratory signs, which is a clinical description and not a diagnosis of hypoxic–ischemic injury. This does not reduce the value of the care given, because a baby who does not cry, breathes rapidly, retracts, and is cyanosed needs prompt attention whatever the Apgar score. It does mean that readers should not compare this case directly with studies of moderate or severe perinatal asphyxia. The burden of long-term impairment described for intrapartum-related neonatal encephalopathy (Lee et al., 2013) relates to infants with clear evidence of hypoxic–ischemic injury, and these infants need different care pathways, including neurological monitoring. Future reports should add cord blood gas results, where available, to describe severity more objectively.

Thermal protection was a second pillar of care. Hypothermia is common in newborns worldwide and raises the risk of illness and death (Lunze et al., 2013), and its prevention remains an essential element of neonatal resuscitation (Aziz et al., 2020). The midwife's independent

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actions, namely keeping the baby warm and checking temperature along with other vital signs, are low-cost and within the midwife's scope. They also need to continue during every handover, from the delivery area through resuscitation and transport to the HCU, because each handover is a point where heat can be lost.

The second task was preventing HIV infection in the infant. Landmark trials show that antiretroviral drugs given to mother and infant sharply reduce transmission (Connor et al., 1994), that very low rates are achievable when mothers receive effective combination therapy (Fowler et al., 2016), and that infant prophylaxis protects babies exposed around delivery, especially when the mother was not treated in pregnancy (Nielsen-Saines et al., 2012). The infant in this case received ARV prophylaxis per protocol, consistent with this evidence. A local study found that adherence to zidovudine was the factor most strongly related to successful prophylaxis in infants of mothers with HIV (Mundriyastutik et al., 2020), a reminder that giving the drug is only half of the task; caregivers must be able to continue it at home. Two further points deserve emphasis. First, the infant's risk depends largely on events before birth, notably maternal treatment, viral suppression, and mode of delivery (International Perinatal HIV Group, 1999; Kourtis et al., 2006). This neonatal-focused report did not analyze these maternal factors, and future case reports should state the maternal treatment history and viral load, as these guide the intensity of infant prophylaxis. Second, prophylaxis does not replace testing: early infant diagnosis and follow-up are needed to confirm the infant's HIV status.

Feeding counseling was the third element. Postnatal transmission through breast milk is a real risk, and in one cohort, exclusive breastfeeding was associated with lower transmission than mixed feeding (Coovadia et al., 2007). Feeding decisions for infants of mothers with HIV therefore depend on the mother's treatment and viral suppression, the national guideline, and the availability of safe alternatives, and they must be discussed with the mother before discharge. In this case, the midwife supported lactation and counseled the family on safe feeding. Because feeding advice has evolved as evidence has grown, midwives should follow the current national PMTCT protocol and avoid relying on memory. Counseling should also address stigma and fear of disclosure, which limit adherence to PMTCT plans (Gourlay et al., 2013). Support for lactation must also respect the baby's clinical state; parenteral nutrition in the first days can bridge the period until the sucking reflex matures, as happened here.

Care does not end at discharge from the HCU. HIV-exposed infants who remain uninfected still have a higher risk of illness and death than unexposed infants (Newell et al., 2004; Evans et al., 2016), so they need growth monitoring, infection prevention, immunization, and timely HIV testing. Indonesian evidence shows that the weakest part of the PMTCT chain is often follow-up: women are lost between testing, treatment, and retention in care (Baker et al., 2020; Lumbantoruan et al., 2020; Adawiyah et al., 2022), and the care dynamics around PMTCT are shaped by health system and social factors (Hardon et al., 2009). Midwives can narrow this gap by giving the family a written follow-up plan, linking them to the HIV clinic and the community health center, and involving trusted family members. Nutrition and household food security also matter for children's later growth in Indonesian communities (Shofa et al., 2024), so growth and feeding follow-up should be built into the plan from the start.

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The case supports several practical messages. First, every maternity and neonatal unit should be ready to resuscitate any baby, since the need cannot always be predicted (Aziz et al., 2020). For babies of mothers with HIV, readiness also means having ARV prophylaxis available at once, and gaps in PMTCT drug stock and trained staff have been reported in Indonesia (Adawiyah et al., 2022). Second, midwifery education should combine neonatal resuscitation skills with PMTCT knowledge so that graduates can manage both at the bedside. Third, a structured process such as Varney's seven steps with SOAP notes makes care visible and auditable and gives teams a shared language for handover. Finally, integrating HIV prevention into routine maternal and newborn care, as proposed in the global elimination framework (Taylor et al., 2017), helps avoid parallel services in which the newborn falls between programs.

This report has strengths: it follows a recognized reporting guideline, uses a structured care process, combines several data sources, and links bedside care to international evidence and the Indonesian PMTCT context. Its limitations are equally clear. It describes one infant, so it cannot show cause and effect or be generalized. The outcome data cover only the observation period; the infant's HIV test results and long-term development are not part of this report. Severity was described using the Apgar score and clinical signs, without blood gas data, which limits comparison with other studies. Maternal treatment history, viral load, and mode of delivery were not analyzed, and reliance on records and interviews may introduce recording bias. Despite these limits, the case gives a clear, practical picture of how midwives can organize care for a neonate who needs both respiratory support and HIV prevention. It can serve as teaching material and as a base for larger studies, such as case series or cohort studies of HIV-exposed neonates in Indonesian hospitals.

CONCLUSION

Comprehensive midwifery care for a term neonate with mild asphyxia born to a mother with B20 at Gambiran Regional General Hospital, Kediri City, shows that prompt, standard-based neonatal care can stabilize the baby. Immediate resuscitation, oxygenation, close monitoring of vital signs, prevention of hypothermia and infection, and antiretroviral prophylaxis were the key elements, supported by lactation and safe-feeding counseling. A structured midwifery process, from assessment to evaluation, helped the neonate to stabilize, return vital signs to normal, and avoid further complications. These findings underline the importance of midwives' competence in neonatal emergencies and in PMTCT. Larger studies with longer follow-up, including infant HIV test results, are needed to confirm these observations.

REFERENCES

Adawiyah, R. A., Boettiger, D., Applegate, T. L., Probandari, A., Marthias, T., Guy, R., & Wiseman, V. (2022). Supply-side readiness to deliver HIV testing and treatment services in Indonesia: Going the last mile to eliminate mother-to-child transmission of HIV. *PLOS Global Public Health*, 2(8), e0000845. https://doi.org/10.1371/journal.pgph.0000845

American Academy of Pediatrics Committee on Fetus and Newborn, & American College of Obstetricians and Gynecologists Committee on Obstetric Practice. (2015). The Apgar score. *Pediatrics*, 136(4), 819–822. https://doi.org/10.1542/peds.2015-2651

Aziz, K., Lee, H. C., Escobedo, M. B., Hoover, A. V., Kamath-Rayne, B. D., Kapadia, V. S., et al. (2020). Part 5: Neonatal resuscitation: 2020 American Heart Association guidelines for cardiopulmonary resuscitation and emergency cardiovascular care. *Circulation*, 142(16_suppl_2), S524–S550. https://doi.org/10.1161/CIR.0000000000000902

Baker, C., Limato, R., Tumbelaka, P., Rewari, B. B., Nasir, S., Ahmed, R., et al. (2020). Antenatal testing for anaemia, HIV and syphilis in Indonesia—a health systems analysis of low coverage. *BMC Pregnancy and Childbirth*, 20, 326. https://doi.org/10.1186/s12884-020-02993-x

Connor, E. M., Sperling, R. S., Gelber, R., Kiselev, P., Scott, G., O'Sullivan, M. J., et al. (1994). Reduction of maternal-infant transmission of human immunodeficiency virus type 1 with zidovudine treatment. *New England Journal of Medicine*, 331(18), 1173–1180. https://doi.org/10.1056/NEJM199411033311801

Coovadia, H. M., Rollins, N. C., Bland, R. M., Little, K., Coutsoudis, A., Bennish, M. L., & Newell, M.-L. (2007). Mother-to-child transmission of HIV-1 infection during exclusive breastfeeding in the first 6 months of life: An intervention cohort study. *The Lancet*, 369(9567), 1107–1116. https://doi.org/10.1016/S0140-6736(07)60283-9

Evans, C., Jones, C. E., & Prendergast, A. J. (2016). HIV-exposed, uninfected infants: New global challenges in the era of paediatric HIV elimination. *The Lancet Infectious Diseases*, 16(6), e92–e107. https://doi.org/10.1016/S1473-3099(16)00055-4

Fowler, M. G., Qin, M., Fiscus, S. A., Currier, J. S., Flynn, P. M., Chipato, T., et al. (2016). Benefits and risks of antiretroviral therapy for perinatal HIV prevention. *New England Journal of Medicine*, 375(18), 1726–1737. https://doi.org/10.1056/NEJMoa1511691

Gourlay, A., Birdthistle, I., Mburu, G., Iorpenda, K., & Wringe, A. (2013). Barriers and facilitating factors to the uptake of antiretroviral drugs for prevention of mother-to-child transmission of HIV in sub-Saharan Africa: A systematic review. *Journal of the International AIDS Society*, 16(1), 18588. https://doi.org/10.7448/IAS.16.1.18588

Hardon, A. P., Oosterhoff, P., Imelda, J. D., Anh, N. T., & Hidayana, I. (2009). Preventing mother-to-child transmission of HIV in Vietnam and Indonesia: Diverging care dynamics. *Social Science & Medicine*, 69(6), 838–845. https://doi.org/10.1016/j.socscimed.2009.05.043

International Perinatal HIV Group. (1999). The mode of delivery and the risk of vertical transmission of human immunodeficiency virus type 1—A meta-analysis of 15 prospective cohort studies. *New England Journal of Medicine*, 340(13), 977–987. https://doi.org/10.1056/NEJM199904013401301

Kourtis, A. P., Lee, F. K., Abrams, E. J., Jamieson, D. J., & Bulterys, M. (2006). Mother-to-child transmission of HIV-1: Timing and implications for prevention. *The Lancet Infectious Diseases*, 6(11), 726–732. https://doi.org/10.1016/S1473-3099(06)70629-6

Kurniawan, D. E., Sulistyorini, L., Rosyidi Muhammad Nur, K., Nur Khamid, M., Afandi, A. T., Purwandari, R., & Ardiana, A. (2021). Risk of HIV transmission through sexual activities: A survey among HIV-positive gay men in Jember, Indonesia. *Nursing and Health Sciences Journal (NHSJ)*, 1(1), 38–42. https://doi.org/10.53713/nhs.v1i1.14

Lawn, J. E., Cousens, S., & Zupan, J. (2005). 4 million neonatal deaths: When? Where? Why? *The Lancet*, 365(9462), 891–900. https://doi.org/10.1016/S0140-6736(05)71048-5

Lee, A. C. C., Kozuki, N., Blencowe, H., Vos, T., Bahalim, A., Darmstadt, G. L., et al. (2013). Intrapartum-related neonatal encephalopathy incidence and impairment at regional and global levels for 2010 with trends from 1990. *Pediatric Research*, 74(Suppl 1), 50–72. https://doi.org/10.1038/pr.2013.206

Liu, L., Oza, S., Hogan, D., Chu, Y., Perin, J., Zhu, J., et al. (2016). Global, regional, and national causes of under-5 mortality in 2000–15: An updated systematic analysis with implications for the Sustainable

Development Goals. *The Lancet*, 388(10063), 3027–3035. https://doi.org/10.1016/S0140-6736(16)31593-8

Lumbantoruan, C., Kelaher, M., Kermode, M., & Budihastuti, E. (2020). Pregnant women's retention and associated health facility characteristics in the prevention of mother-to-child HIV transmission in Indonesia: Cross-sectional study. *BMJ Open*, 10(9), e034418. https://doi.org/10.1136/bmjopen-2019-034418

Lunze, K., Bloom, D. E., Jamison, D. T., & Hamer, D. H. (2013). The global burden of neonatal hypothermia: Systematic review of a major challenge for newborn survival. *BMC Medicine*, 11, 24. https://doi.org/10.1186/1741-7015-11-24

Mundriyastutik, Y., Sukarmin, S., & Sulikanah, S. (2020). Analisa faktor-faktor keberhasilan zidovudin terhadap pencegahan virus HIV pada bayi ibu HIV di RSUD Genteng. *Indonesia Jurnal Kebidanan*, 4(2), 13. https://doi.org/10.26751/ijb.v4i2.1364

Newell, M.-L., Coovadia, H., Cortina-Borja, M., Rollins, N., Gaillard, P., & Dabis, F. (2004). Mortality of infected and uninfected infants born to HIV-infected mothers in Africa: A pooled analysis. *The Lancet*, 364(9441), 1236–1243. https://doi.org/10.1016/S0140-6736(04)17140-7

Nielsen-Saines, K., Watts, D. H., Veloso, V. G., Bryson, Y. J., Joao, E. C., Pilotto, J. H., et al. (2012). Three postpartum antiretroviral regimens to prevent intrapartum HIV infection. *New England Journal of Medicine*, 366(25), 2368–2379. https://doi.org/10.1056/NEJMoa1108275

Riley, D. S., Barber, M. S., Kienle, G. S., Aronson, J. K., von Schoen-Angerer, T., Tugwell, P., et al. (2017). CARE guidelines for case reports: Explanation and elaboration document. *Journal of Clinical Epidemiology*, 89, 218–235. https://doi.org/10.1016/j.jclinepi.2017.04.026

Shofa, N. Z., Ahmad, N. B., Raisa, D., Kurniyawan, E. H., Afandi, A. T., Kurniawan, D. E., & Muhammad Nur, K. R. (2024). Food security on the incidence of stunting in agricultural areas. *Nursing and Health Sciences Journal (NHSJ)*, 4(4), 451–458. https://doi.org/10.53713/nhsj.v4i4.432

Taylor, M., Newman, L., Ishikawa, N., Laverty, M., Hayashi, C., Ghidinelli, M., et al. (2017). Elimination of mother-to-child transmission of HIV and syphilis (EMTCT): Process, progress, and program integration. *PLOS Medicine*, 14(6), e1002329. https://doi.org/10.1371/journal.pmed.1002329

World Medical Association. (2013). World Medical Association Declaration of Helsinki: Ethical principles for medical research involving human subjects. *JAMA*, 310(20), 2191–2194. https://doi.org/10.1001/jama.2013.281053

Wyckoff, M. H., Wyllie, J. P., Aziz, K., de Almeida, M. F., Fabres, J., Fawke, J., et al. (2020). Neonatal life support: 2020 international consensus on cardiopulmonary resuscitation and emergency cardiovascular care science with treatment recommendations. *Circulation*, 142(16_suppl_1), S185–S221. https://doi.org/10.1161/CIR.0000000000000895