

Implementation of Continuity of Care in Integrated Midwifery Services with Video-Based HIV Counseling in Primary Care: A Case Report

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Abstract - Continuity of Care (CoC) in midwifery is recognized as an effective approach to improving maternal and neonatal outcomes through comprehensive and sustained monitoring. Strengthening maternal health literacy, particularly regarding HIV prevention, remains essential in primary care settings. This case report aims to describe the implementation of Continuity of Care from the third trimester through the neonatal period integrated with video-based HIV counseling as a digital educational innovation. A descriptive case report design was applied to a 35-year-old multigravida woman receiving comprehensive care in a primary midwifery clinic in Bandung, Indonesia. Standard antenatal, intrapartum, postpartum, and neonatal care protocols were implemented. HIV counseling was delivered using a structured educational video, and maternal knowledge was evaluated using pre- and post-counseling questions. The pregnancy progressed physiologically with stable vital signs (blood pressure 110/70 mmHg; hemoglobin 11.8 g/dL). Spontaneous vaginal delivery occurred at 40 weeks of gestation with a newborn weight of 3,200 grams and Apgar scores of 8 and 9. Postpartum recovery and neonatal adaptation were normal. Maternal knowledge improved from 2/5 correct responses before counseling to 5/5 after the intervention. The integration of Continuity of Care and video-based HIV counseling supported optimal clinical outcomes while enhancing maternal understanding of HIV prevention in primary midwifery practice.

Keywords - Continuity of Care, Midwifery, HIV Counseling, Video Education, Primary Care.

I. INTRODUCTION

Maternal mortality rate (MMR) and infant mortality rate (IMR) are one of the crucial indicators of the success of health development. The World Health Organization (2023) argues that the majority of maternal deaths happen because of complications that can, in fact, be averted by quality antenatal care, preventative identification of risk factors, and timely handling of labor. According to the 2022 reports published in the Indonesia Health Profile, hypertensive disorders during pregnancy, postpartum hemorrhage, and the infection are the most frequent causes of maternal death in Indonesia (Ministry of Health of the Republic of Indonesia, 2023).

This condition highlights the need to strengthen the quality of midwifery services that are not only curative but also promotive and preventive. The Continuity of Care (CoC) in midwifery model is a model that offers complete care, including pregnancy, childbirth, postpartum, and neonatal care, to the same healthcare provider or integrated healthcare system.

Such a practice enables the establishment of more robust therapeutic relationships between the mother and the healthcare provider, build trust, and enhance the patient response to clinical recommendations. Sandall et al. (26) used a Cochrane study to determine that midwife-led continuity models have lower unnecessary obstetric interventions and higher maternal satisfaction with care. In addition clinical conditions, the maternal health problems in Indonesia entail the prevention of maternal-to-child HIV infection. Mother-to-child transmission

(EMTCT) program is now a national priority; nevertheless, HIV counseling and testing coverage of pregnant women is uneven. As UNAIDS (2023) found out, early detection and education is some of the major aspects in preventing vertical transmission. Therefore, innovative and effective educational strategies are required to improve maternal health literacy.

In addition to clinical aspects, maternal health challenges in Indonesia include preventing mother-to-child transmission of HIV. The elimination of mother-to-child transmission (EMTCT) program has become a national priority; however, coverage of HIV counseling and testing among pregnant women remains uneven. UNAIDS (2023) reported that early detection and education are key components in preventing vertical transmission.

The use of information technology in health promotion has developed rapidly over the past decade. Video media as an educational tool has advantages in increasing information retention because it stimulates both visual and auditory senses simultaneously. A meta-analysis by DeSmet et al. (2021) demonstrated that digital media-based interventions are effective in improving health knowledge and behavioral change.

Integrating video-based education into antenatal services can be an innovative strategy to strengthen HIV counseling within the Continuity of Care framework. Based on this background, this case report aims to describe the implementation of Continuity of Care integrated with video-based HIV counseling in primary midwifery services and to analyze its contribution to maternal and neonatal outcomes.

II. METHODS

This study employed a descriptive case report design. The subject was a 35-year-old multigravida woman who received midwifery care at a primary midwifery service in Bandung City. Care was provided continuously from the third trimester of pregnancy through the neonatal period. The care procedures included routine antenatal examinations, labor monitoring using a partograph, active management of the third stage of labor, postpartum monitoring, and neonatal evaluation.

HIV counseling was provided during antenatal care using a structured educational video containing information on HIV transmission, prevention, and the importance of HIV testing. Maternal understanding was evaluated using pre- and post-intervention questions. Data were presented descriptively in narrative form.

III. RESULTS

At the third-trimester antenatal visit (32 weeks), the mother's condition was stable with blood pressure 110/70 mmHg, pulse 82 beats/minute, respiratory rate 20 breaths/minute, and temperature 36.7°C. Hemoglobin was 11.8 g/dL, which means no clinical anemia. Fundal height was equal to the gestational age, the fetus was cephalic, and the fetal heart rate was 144 beats/minute with normal limits. Urinalysis was negative for protein and glucose. Video-based HIV counseling was provided during this visit.

Before the intervention, the mother correctly answered only 2 out of 5 questions regarding HIV transmission and prevention. After watching the approximately 7-minute educational video and participating in clarification discussion, she correctly answered all questions and expressed willingness to undergo HIV testing as recommended.

Labor occurred spontaneously at 40 weeks of gestation. The active phase was 6 hours and the cervical dilation followed the partograph without fetal distress. A spontaneous birth gave birth to a baby of 3,200 grams, a body length of 49 cm, head circumference of 34 cm and Apgar of 8 at one minute and 9 at five minutes. No asphyxia or neonatal complications were observed.

Active management of the third stage of labor was performed according to WHO standards by administering 10 IU intramuscular oxytocin within one minute after birth, controlled cord traction, and uterine massage. The estimated loss of blood was about 250 ml. The postpartum time went on in a physiological process by proper involution of the uterus and with no evidence of infection. The neonate demonstrated normal physiological reflexes and successful early initiation of breastfeeding.

Table 1. Postpartum Maternal Progress

Clinical Parameter	Day 1	Day 3	Day 7	Interpretation
Blood pressure	110/70 mmHg	110/70 mmHg	110/80 mmHg	Stable
Pulse	84 bpm	80 bpm	78 bpm	Within normal limits
Temperature	36.8°C	36.7°C	36.6°C	Afebrile
Fundal Height	At umbilicus	2 fingers below umbilicus	Not palpable above symphysis	Normal involution
Lochia	Rubra	Sanguinolenta	Serosa	Physiological progression
Pain	Mild	Minimal	None	Normal adaptation
Infection Signs	None	None	None	Normal

Table 2. Neonatal Examination Results

Parameter	Result	Interpretation
Birth weight	3,200 grams	Normal (not LBW)
Body length	49 cm	Appropriate for gestational age
Head circumference	34 cm	Normal
Apgar score	8 (1 min), 9 (5 min)	Good adaptation
Respiratory rate	44 breaths/min	Normal (40–60)
Body temperature	36.7°C	Stable
Moro reflex	Present	Normal
Sucking reflex	Present	Successful early breastfeeding
Skin color	Pink	No cyanosis
Elimination	Urination and meconium <24 hrs	Physiological

IV. DISCUSSION

The findings of this case report demonstrate that the implementation of Continuity of Care supported a physiological course of pregnancy and childbirth. The therapeutic relationship that was built since the third trimester made it possible to diagnose possible risk factors early and also provided effective clinical follow-up. It agrees with Sandall et al. (2022) who found that midwife-led continuity models are linked to better maternal safety and fewer unnecessary obstetric interventions. The third stage of labor was well controlled, and this prevented postpartum hemorrhage, which is one of the main causes of maternal mortality in Indonesia. Observing clinical protocols in the primary care setting is very important in promoting the minimization of the risk of complications. The innovative aspect of this case lies in the integration of video-based HIV counseling. The improvement in knowledge scores from 40% to 100% after the intervention indicates the effectiveness of audiovisual media in enhancing maternal understanding.

Previous studies has demonstrated that digital media enhances patient engagement and information retention in relation to verbal counseling by itself (DeSmet et al., 2021). Regarding the prevention of mother-to-child HIV transmission, better health literacy is a key to assisting the elimination programs (UNAIDS, 2023). The combination of ongoing clinical and technological based education shows that there is synergy between curative and promotive strategies. This model does not only emphasize clinical stability, but also enhances maternal ability to make informed choices in health. This is in line with the primary healthcare paradigm that focuses on patient empowerment as a strategy towards enhancing service quality. All in all, this case report proposes that Continuity of Care with digital educational innovation can be adapted as an adaptive primary midwifery care model to support modern maternal health challenges.

V. CONCLUSION

The implementation of Continuity of Care integrated with video-based HIV counseling in primary midwifery services supported physiological maternal and neonatal outcomes and enhanced maternal understanding of HIV prevention. This approach has the potential to serve as a promotive and preventive care model that can be further developed in primary midwifery practice.

VI. REFERENCES

1. A. DeSmet, D. Van Ryckeghem, S. Compennolle, and T. Baranowski, "A Meta-Analysis of Digital Interventions for Health Promotion," *Journal of Medical Internet Research*, vol. 23, no. 5, p. e25517, 2021.
2. International Confederation of Midwives, *Essential Competencies for Midwifery Practice*, ICM, 2021.
3. D.L. Lowdermilk, S.E. Perry, M.C. Cashion, and K.R. Alden, *Maternity and Women's Health Care*, 12th ed., Elsevier, 2020. [Google Scholar](#) | [Publisher Link](#)
4. Ministry of Health of the Republic of Indonesia, *Integrated Antenatal Care Guidelines*, Ministry of Health of Indonesia, 2022.
5. Ministry of Health of the Republic of Indonesia, *Indonesia Health Profile 2022*, Ministry of Health of Indonesia, 2023.
6. J. Sandall, H. Soltani, S. Gates, A. Shennan, and D. Devane, "Midwife-Led Continuity Models Versus Other Models of Care for Childbearing Women," *Cochrane Database of Systematic Reviews*, vol. 4, p. CD004667, 2022. [Google Scholar](#) | [Publisher Link](#)
7. R.P. Sari and S. Wahyuni, "Implementation of Continuity of Care in Independent Midwifery Practice," *Jurnal Kebidanan Indonesia*, vol. 12, no. 2, pp. 85–92, 2021.
8. J.D. Tucker, C.H. Bien, and R.W. Peeling, "Point-of-Care Testing for Maternal Health," *The Lancet Global Health*, vol. 8, no. 3, pp. e304–e305, 2020.
9. UNAIDS, *The Path That Ends AIDS: Global AIDS Update 2023*, Joint United Nations Programme on HIV/AIDS, 2023.
10. D. Utami and B. Prasetyo, "Effectiveness of Video Media in Improving Pregnant Women's Knowledge About HIV/AIDS," *Jurnal Vokasi Kesehatan*, vol. 8, no. 1, pp. 45–52, 2022.
11. H. Varney, J.M. Kriebs, and C.L. Geger, *Varney's Midwifery*, 6th ed., Jones & Bartlett Learning, 2019. [Google Scholar](#)
12. World Health Organization, *WHO Recommendations on Antenatal Care for a Positive Pregnancy Experience*, WHO, 2020. Online: <https://www.who.int/publications/i/item/9789241549912>
13. World Health Organization, *Trends in Maternal Mortality 2000–2020*, WHO, 2023. Online: <https://www.who.int/publications/i/item/9789240068759>