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**Development, Validation and Effectiveness of Postnatal Care Module for  
Confinement Ladies: A concept paper**

**Mazriyana Md Kasim<sup>1</sup>, Wan Ismahanisa Ismail<sup>2,3,4\*</sup>, Maryam Farooqi<sup>5</sup>, Parveen Azam Ali<sup>6</sup>**

*\*Corresponding Author*

<sup>1</sup> Department of Nursing, <sup>2</sup> Department of Medical Laboratory Technology, Faculty of Health Sciences, Universiti Teknologi MARA, Bertam Campus, Penang, Malaysia.

<sup>3</sup> Health Science Faculty, Universitas Pembangunan Nasional Veteran Jakarta.

<sup>4</sup> Division of Medical Laboratory Technology, Department of Health, Faculty of Vocational Studies, Universitas Airlangga Surabaya, Indonesia

<sup>5</sup> Discipline of Social and Administrative Pharmacy (DSAP), School of Pharmaceutical Sciences, Universiti Sains Malaysia (USM), Pulau Pinang, Malaysia

<sup>6</sup> Health Sciences School, University of Sheffield and Doncaster and Bassetlaw Teaching Hospital, United Kingdom

2022279294@student.uitm.edu.my, ismahanisa@uitm.edu.my, m.farooqi@usm.my, parveen.ali@sheffield.ac.uk  
Tel: +604-5623425

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**Abstract**

Postnatal care services provided by confinement ladies are available in many countries including Malaysia. With many modern treatments existing for postnatal mothers, midwives' roles are complemented by confinement ladies. In addition to modern care for postnatal mothers, the confinement lady must know and understand the choice and type of self-care after childbirth. This knowledge is to increase the confinement ladies' skills and self-efficacy to deliver appropriate postnatal care. This concept paper intends to provide a conceptual framework for evaluating the effectiveness of the Postnatal Care Module (PCM) in enhancing knowledge, skills, and self-efficacy among confinement ladies in delivering high-quality care.

**Keywords:** Confinement ladies; Postnatal mothers; Postnatal care module, Development

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**1.0 Introduction**

Maternal health is a key priority in Malaysia's healthcare system. Although it is often a positive and fulfilling experience, for many women in developing countries, motherhood is associated with suffering, ill health and even death. According to Abdullah Sidek & Wan Adnan (2021), women during pregnancy are vulnerable to problems such as physical and mental health issues. Having various emotional,

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behavioural, and physiological changes in their lives, especially during the postpartum period, they experience negative impacts on their thought, feelings, behaviours, and relationships with others. Some women need unique rehabilitative spaces to reduce the negative effects of postpartum depression.

Postnatal care services provided by confinement ladies (CLs) or traditional midwives are available in many countries including Malaysia. Utilisation of postnatal care by women influences their own and their children's lives, in terms of prevention of mortality and reduction of impairment or disabilities associated with childbirth. Mothers appreciate these services as part of their postnatal recovery, receiving the support of specialised staff to lighten their workload (Abdullah Sidek & Wan Adnan, 2021). This can directly lessen the burden and decrease the stress of a stressful event in a mother's life. Unfortunately, the service provided by confinement ladies or traditional midwives is often not skilled or adequately trained to meet the desired level of care.

This situation happened because confinement ladies did not have a standard module in formal training to practice postnatal care for the postnatal mother and baby. Most confinement ladies were "spiritually" educated and had acquired their skills while cooperating with other traditional midwives (Ali & Howden-Chapman, 2007). Although having extensive experience helping with deliveries, they struggle to manage obstetric complications that raise the risk of maternal and neonatal fatalities (Cheptum et al., 2017). Most confinement ladies learned from experience and knowledge passed down from one generation to the next (Ahmad Tajuddin et al., 2020). The issue was raised when there were complaints regarding substandard services provided by the confinement ladies, which resulted in serious medical complications for the mothers and infants (Wan Abdullah et al., 2023).

To address the identified issues, a prototype of a Postnatal Care Module (PCM) will be developed to serve as a training tool and knowledge resource, thereby strengthening the skills and self-efficacy of confinement ladies. This study aims to develop, validate, and evaluate the feasibility of a structured Postnatal Care Module, ensuring that every confinement lady possesses the necessary knowledge, skills, self-efficacy and competencies to deliver quality postnatal care services to mothers and infants.

## 2.0 Literature Review

The early postnatal period is a stressful transition period for mothers, especially first-time mothers (Shorey et al., 2015), because they face numerous physical and emotional challenges (Ong et al., 2014). Mothers who are in the postnatal period are still in a vulnerable and unhealthy state, in which some cultures hold that early postnatal mothers should not be left alone at home. According to Hardy (2017), the International Childbirth Education Association (ICEA) recognises eleven Domains of Postnatal Care that promote healthy competence, stronger family relationships, and successful postnatal outcomes. These Eleven Domains are emotional support, physical comfort, self-care, infant care, informational support, advocacy, referrals, partner/father support, support mother/father with infant, support mother/father with sibling(s) and household organisation.

In western countries such as the Netherlands, cases of an uncomplicated childbirth, whether at home or in hospital, professional postnatal care is provided by a maternity care assistant (MCA) who attends the new mother at home for at least three hours a day during the first seven or eight days after birth (Boerleider et al., 2014). MCAs are responsible for monitoring the mother's and baby's health and reporting it to the midwife. They also give instructions to the new mother such as how to breastfeed or bathe a baby and may do some household tasks such as laundry or look after the other children if time permits. With many modern treatments existing for postpartum mothers, midwives' roles are complemented by confinement ladies. In Malaysia, a postnatal mother will hire a trained confinement lady to treat, assist and look after them during the early stage of the postnatal period (Abdullah Sidek & Wan Adnan, 2021). The confinement lady is paid for caring for both the mother and the newborn baby for a certain time. They will take care of the postnatal mother's diet and bathing requirements for 30 days. During this time, the confinement lady is responsible for providing care and support to the mother and baby, including assistance with breastfeeding, bathing, diapering, and other daily tasks. They have a significant role in postnatal care especially in giving advice and petua including the practice of pantang. Additionally, they help protect new mothers' health as they return to their pre-pregnancy states. This includes preserving the reproductive system's health following childbirth. (Yusoff et al., 2018).

Given the widespread use and influence of confinement ladies in Malaysian postnatal care, there is an urgent need to formalise their role through structured training and national guidelines. Structured training would allow the incorporation of evidence-based practices (e.g., proper breastfeeding support, hygiene, newborn care, postpartum danger signs), the preservation of safe traditional practices, the development of standardised learning modules supported by MOH and professional bodies, and the establishment of a certification or registry system to ensure accountability and quality control. This will increase self-efficacy and confidence among confinement ladies through knowledge and skill-building.

Knowledge refers to the cognitive understanding of postnatal health, maternal recovery, and newborn care. Among confinement ladies, postnatal care knowledge often stems from cultural beliefs, personal experiences, or the intergenerational transfer of practices (Foong et al., 2021). However, research has shown that this traditional knowledge base may lack alignment with evidence-based practices recommended by the World Health Organisation (WHO, 2022) and the Ministry of Health Malaysia (MOH, 2018). A study by Koh and Teoh (2020) found that although many confinement ladies are knowledgeable about traditional practices, they may have a limited understanding of modern health recommendations, particularly in areas such as neonatal jaundice monitoring, postpartum depression, and infection prevention. Enhancing their knowledge through structured training can lead to more effective, safe, and holistic postnatal care.

Skills refer to the ability to perform practical tasks related to maternal and newborn care. Among confinement ladies, these skills are often acquired informally through observation or personal experience, leading to a wide variation in competence (Tan, 2020). While many confinement ladies are adept at traditional practices such as postnatal massage, body binding, and herbal remedies, studies have noted that they may lack competence in safe infant handling, breastfeeding problem-solving, and hygienic practices (Foong et al., 2021).

This skill gap may increase the risk of postpartum complications or delay necessary medical referrals. Therefore, skill-based training is crucial to standardise safe caregiving practices.

Self-efficacy, a key construct in Bandura's (1997) Social Cognitive Theory, refers to an individual's belief in their ability to perform specific tasks or roles successfully. In the context of postnatal care, self-efficacy influences the confidence and motivation of confinement ladies to apply their knowledge and skills effectively. However, confinement ladies with low self-efficacy may rely solely on traditional practices and resist incorporating modern, evidence-based care, even when trained. Building self-efficacy through hands-on practice, positive reinforcement, peer learning, and expert feedback is therefore essential in any educational intervention (Schunk & DiBenedetto, 2020).

The development of the Postnatal Care Module, delivered during the educational programme, is essential to standardise knowledge, skills and increase self-efficacy among the confinement ladies. It could be one of the strategies that would have a direct impact on enhancing knowledge and skills during postnatal care services. Some reviews of the subject conclude that confinement ladies training is associated with improvements in knowledge, attitudes and behaviours and a potential reduction in perinatal mortality. As mentioned by Mohd Jidin et al. (2021), a structured training programme was effective in improving the postnatal care knowledge among confinement ladies in East Coast Malaysia. A quasi-experimental study conducted among 65 confinement ladies residing on the East Coast of Malaysia showed a significant increase in postnatal care knowledge scores among those who attended the postnatal care workshop ( $p < 0.001$ ). A similar study conducted by Rao & Shetty (2012) demonstrating the findings of the study suggest improvements in scores between the pretraining and post-training periods suggesting that the training in postnatal care significantly increased scores on evaluations of knowledge and skills in midwives despite their earlier advanced formal education and many years of experience. Maintaining midwives' knowledge and skills through retraining or reinforcement could be pivotal to sustaining the high levels of postnatal care skills in midwives required to prevent maternal and infant mortality. Structured training modules that integrate modelling, skills practice, and reflection such as those guided by the ADDIE Model and Social Cognitive Theory can effectively enhance self-efficacy and ultimately improve care quality.

### 3.0 Methodology

This study will employ multiple research methods, conducted over three phases. A mixed-method multiphase (exploratory sequential) and quasi-experimental design will be utilised in this study. The study encompasses three phases. Phase I: qualitative (analysis), Phase II: development and validation and Phase III: intervention (Postnatal Care Module implementation and evaluation). The goal is to gather as much information as possible about the knowledge, skills, and self-efficacy in postnatal care among confinement ladies, as well as the experiences, expectations, and opinions of postnatal mothers. The development, validation and effectiveness of the Postnatal Care Module for this study were based on the ADDIE Model (Analysis-Design-Development-Implementation-Evaluation) by Michael Molenda (2003) and Albert Bandura's Social Cognitive Theory (1986).

#### 3.1 Phase I (Qualitative)

This study will use a qualitative research design with a phenomenological approach. The aim is to identify core knowledge areas, skill gaps, and self-efficacy issues among confinement ladies, alongside user expectations and cultural considerations expressed by postnatal mothers. In this phase, data obtained from interviews with confinement ladies and postnatal mothers will serve as input for the analysis phase in the ADDIE Model. The sample size in both cases was determined by data saturation. Sufficient data will be collected until a rich and in-depth discussion of the phenomenon under study is achieved. The inclusion criteria for confinement ladies are that they are aged 21 to 60, have at least 6 months of experience providing postnatal care services either at the confinement centre or at home, and are willing to participate in the study. The sample inclusion criteria for postnatal mothers are women older than 21 years, who have given birth to a baby (alive or dead) and had their latest delivery within 12 months of the study period, have experienced taking the confinement ladies' services before, and are willing to participate in the study.

#### 3.2 Phase II (Development and Validation)

During this phase, we will design and map out how confinement ladies will achieve the desired learning objectives. Data collected or obtained during the analysis phase will serve as input for the design phase, helping us develop objectives, core contents and choose instruction strategies, and materials that will be most effective for the confinement ladies. We will review the existing material and determine whether it applies to the plans under development for the Postnatal Care Module. The preliminary Postnatal Care Module will include topics from Phase I, in which needs assessment, knowledge, skills, and self-efficacy among confinement ladies were identified, as well as experiences, expectations, and opinions among postnatal mothers. During the ADDIE Model development phase, we will create the materials outlined in the previous design phase. The content created includes the overall learning framework, exercises, lectures, simulations, and other training materials regarding postnatal care. Development of a Postnatal Care Module based on participant responses according to the appropriate theme. Empirical approaches will be employed to calculate the content validity index (CVI), a widely used measure of content validity in instrument development. After developing the Postnatal Care Module, a multidisciplinary expert panel in the field of Midwifery will be invited to provide input on the contents and framework of the Postnatal Care Module, based on data collected from the interviews.

#### 3.3 Phase III (Quantitative)

The evaluation phase in the ADDIE Model measures the effectiveness and efficiency of the instructional program. In this study, the confinement ladies will be given pre-interventional tests and post-tests after the intervention to evaluate the overall outcome of the learning program including an assessment of the program's overall effectiveness. The quantitative phase aims to investigate the effect of the Postnatal Care Module on knowledge, skills, and self-efficacy among confinement ladies. This study will use a quasi-experimental design (pre-post-test) with a control group. The purposive sampling technique will be used, and respondents will be recruited once they have fulfilled the inclusion criteria. The first stage consists of a questionnaire-based pre-interventional analysis (pre-test) to assess knowledge, skills, and self-efficacy regarding postnatal care, as well as their confidence in practising postnatal care for postnatal mothers. The second stage is to implement an educational intervention based on the Postnatal Care Module through a workshop for the selected confinement ladies. In this workshop, all confinement ladies will receive teaching material, theory, and practical sessions to facilitate their understanding and skills in postnatal care. The third stage consisted of an immediate post-test administered after the intervention (workshop), measuring changes in knowledge, skills, and self-efficacy related to postnatal care and confidence in practising it among postnatal mothers. This phase will evaluate the impact of the intervention (postnatal care module) on improving knowledge, skills, and self-efficacy among confinement ladies. Changes in scores will be used to evaluate the impact of the Postnatal Care Module outcomes. A summary of the method is shown in Fig. 1.

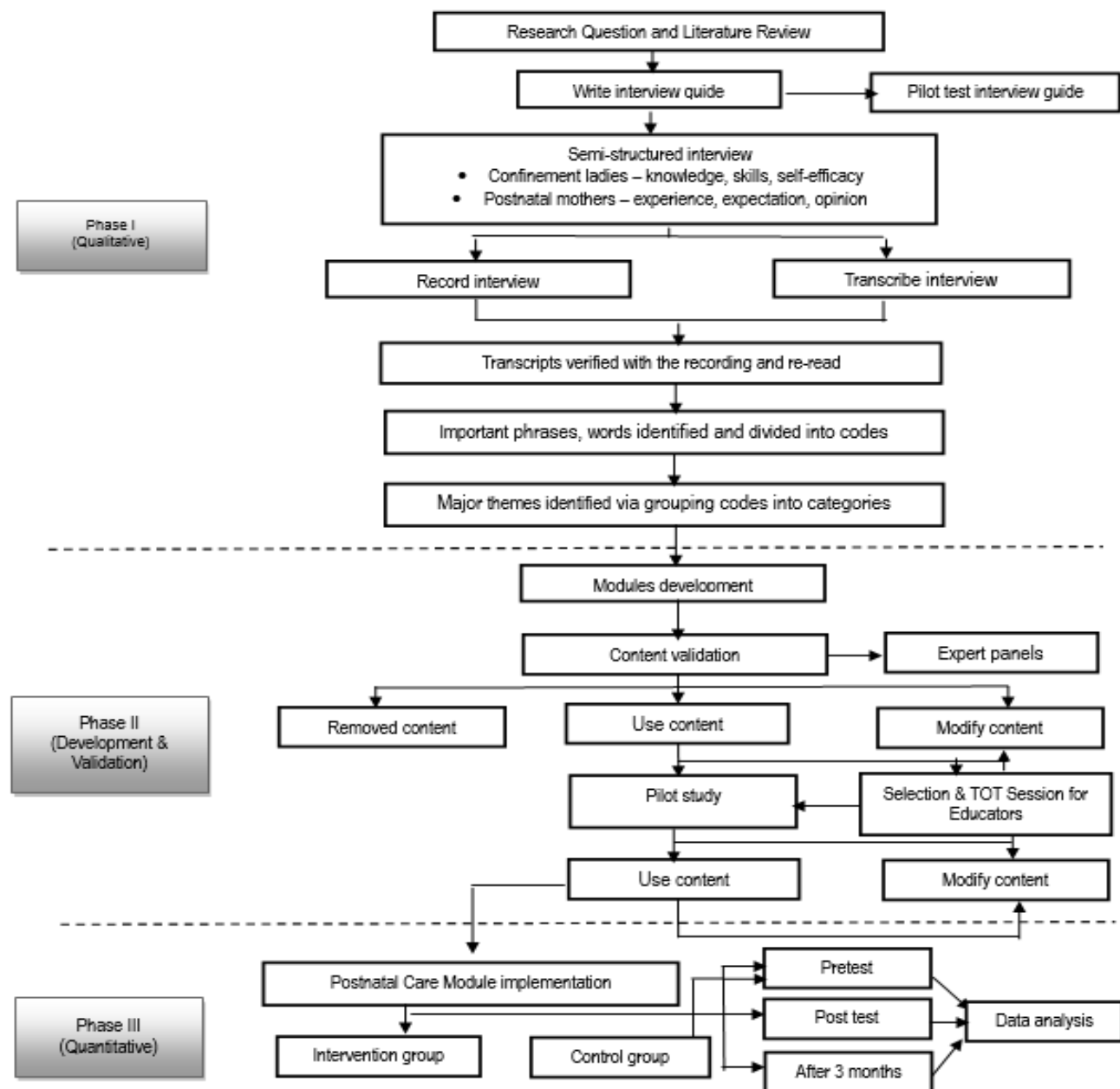


Fig. 1: Flowchart of Qualitative, Development and Quantitative Phases

#### 4.0 Concept proposal to develop Postnatal Care Module

The conceptual framework guiding the development of the Postnatal Care Module for confinement ladies in this study integrates two complementary models: the ADDIE instructional design model and Social Cognitive Theory (SCT).

The ADDIE model (Molenda, 2003) provides a structured process comprising five phases: Analysis, Design, Development, Implementation, and Evaluation. This model ensures that the module is designed systematically based on the identified learning needs of confinement ladies, promotes active learning, and facilitates continuous improvement through evaluation.

In parallel, Social Cognitive Theory (Bandura, 1986) provides a behavioural lens for understanding and promoting sustainable changes in postnatal care practices. SCT emphasises the importance of reciprocal determinism, observational learning, self-efficacy, reinforcement, and self-regulation as key mechanisms that drive behaviour change. This is particularly relevant for confinement ladies, whose practices are strongly influenced by cultural traditions, peer learning, and social reinforcement. Fig. 2 illustrates the proposed concept for PCM development by adaptation based on the ADDIE Model and Social Cognitive Theory.

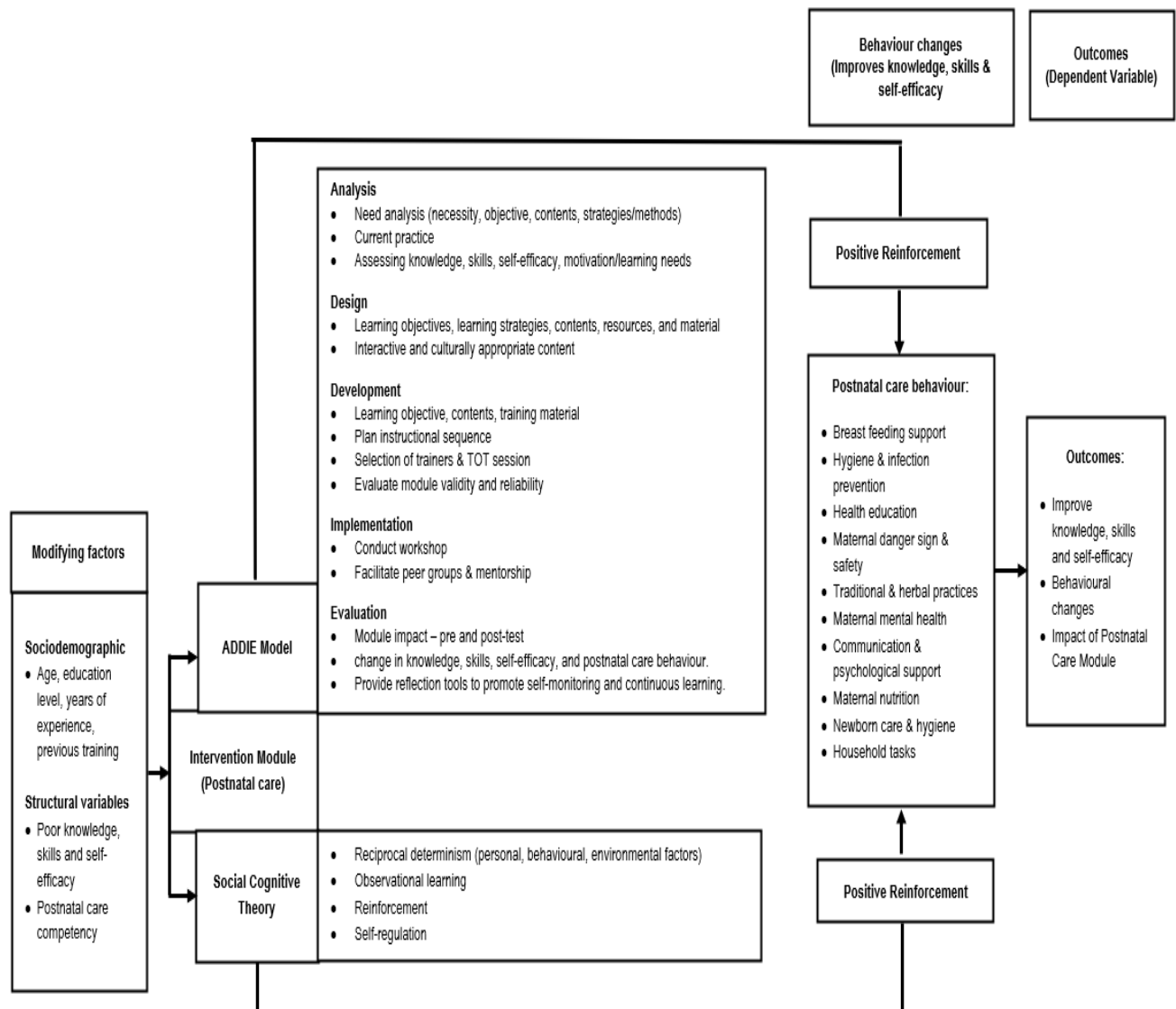


Fig 2: Conceptual framework for Postnatal Care Module development by adaptation based on ADDIE Model and Social Cognitive Theory

By combining ADDIE and SCT, the framework ensures that the training is not only content-rich and culturally appropriate but also psychologically aligned to support behaviour change. For example, the training design incorporates modelling of safe postnatal care behaviours (observational learning), provides repeated practice opportunities with feedback (reinforcement), and fosters reflection and confidence building (self-efficacy and self-regulation).

The expected outcomes of this integrated framework include improved knowledge and skills among confinement ladies, increased self-efficacy in providing evidence-based care, reduction in unsafe traditional practices, and ultimately, enhanced maternal and newborn health outcomes. This approach aligns with the recommendations of the WHO (2022), MOH Malaysia (2018), and recent systematic reviews, which highlight the importance of structured training and behaviour change support in postnatal care (Goyal et al., 2019).

## 5.0 Discussion

Many studies identified that the postnatal period receives less attention from trained care providers than the prenatal and intranatal periods (Mon et al., 2018). In 2018, over 2.5 million child deaths occurred in the first month of life, accounting for 47% of all child deaths under the age of five years old (Aminuddin et al., 2022), and the maternal mortality ratio in Malaysia was 21.1 maternal deaths per one hundred thousand live in 2019 (Chin et al., 2023). In Malaysia, confinement ladies play an essential role in delivering postnatal care, particularly in home-based settings. However, their knowledge and practices often rely heavily on traditional beliefs and informal learning, which may not always align with evidence-based guidelines provided by the Ministry of Health Malaysia and the World Health Organisation. There is a lack of structured, culturally appropriate training modules to equip confinement ladies with the necessary knowledge, skills, and self-efficacy to provide safe and effective postnatal care.

This study aligns with one of the SDG 3 targets set by the World Health Organisation (WHO), which is to reduce maternal and newborn mortality in all nations by 2030 (World Health Organisation, 2018; Ahmad Tajuddin et al., 2020). The conceptual framework of this study integrates the ADDIE instructional design model with Social Cognitive Theory to guide the development and evaluation of a postnatal care training module for confinement ladies in Malaysia. The structured phases of ADDIE ensure that the module is systematically developed, culturally relevant, and evaluated for effectiveness. Social Cognitive Theory informs the instructional strategies used in the module, promoting behaviour change through observational learning, self-efficacy building, reinforcement, and self-regulation. The study aims to improve confinement ladies' knowledge, skills confidence, and self-efficacy in delivering safe and evidence-based postnatal care.

## 6.0 Conclusion & Recommendation

Confinement ladies are key providers of postnatal support in Malaysian households, but they often face knowledge gaps, inconsistent skills, and variable self-confidence in delivering safe and effective care. To improve maternal and infant health outcomes, postnatal training interventions must address all three domains which are knowledge, skills, and self-efficacy through structured, culturally sensitive, and evidence-based approaches. This module offers a significant contribution and adds new value to the body of knowledge in postnatal care, enriching existing research findings, particularly within the Malaysian context. It helps to narrow the information gap regarding postnatal care services that confinement centres and confinement ladies can implement. Future studies are suggested to include participants from a variety of geographic areas, use larger sample sizes and incorporate long-term follow-ups to evaluate the persistence of behavioural changes and overall health outcomes. Further research could explore the module's long-term effects on maternal and infant health outcomes, as well as its adaptability and effectiveness in different cultural and institutional contexts.

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## Paper Contribution to Related Field of Study

This research contributes to building knowledge, improving skills and it can also serve as a guide for policy development. The findings of this research may be utilised by health authorities, who are responsible for policy formulation and improvement, in understanding current challenges and issues related to postnatal care practices and services. The Postnatal Care Module can serve as a key reference for local agencies to strengthen the planning and implementation of specialised training and certification programmes for confinement ladies. This module also offers structured guidance that can contribute to the standardisation and professionalisation of postnatal care services in Malaysia. By addressing real-world needs, the module helps bridge the gap between policy intentions and on-the-ground caregiving practices, ensuring alignment with maternal and child health goals.

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