12 Empowering Mothers through Comprehensive Postnatal Care Education: A Review of Knowledge, Practices, and Maternal–Newborn Health Outcomes

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Abstract

The post natal period is a critical period in the continuum of maternal, newborn and child health. The first 6 weeks after birth is a time of significant physiological, psychological and social adaptation for mothers and a vulnerable time for newborns. While significant strides have been made in institutional deliveries, maternal and newborn health care services, there remains a need for more quality and continuity in postnatal services as a public health issue. Mothers need adequate knowledge and skills to manage their own recovery, start and continue breastfeeding, provide essential newborn care, know signs and symptoms of danger for mothers and newborns, safeguard their mental health and make informed decisions about family planning and follow-up care. But there is evidence that education is often fragmented and inconsistent, and tends to be directed at parts of post natal care and not being continuous and comprehensive. This review chapter explores the role of comprehensive postnatal care education in enhancing maternal knowledge, care giving behaviours and maternal – newborn health outcomes. It covers the major areas of post-natal education such as: Physical recuperation of the mother, Personal cleanliness, Breastfeeding, Nutrition, Care of the newborn, Danger-sign recognition, Mental health of the mother, Contraception and follow-up. The chapter also addresses the knowledge–practice gap and reviews the success of structured, facility-based, community-based and post-discharge education. Focus is placed on the role of the nurse/midwife, family/social support, culturally sensitive education and the role of socioeconomic and health system factors. The review points to the importance of embedding full education in regular postnatal care and outlines lines of research for sustainable, woman-centred, contextually relevant education models. It is concluded that structured and continuous postnatal education can help to empower mothers and improve self-care and newborn-care practices, which can also have a positive impact on their health as well as the health of their newborns.

Keywords: Postnatal Care, Maternal Education, Maternal Knowledge, Newborn Care, Breastfeeding, Maternal Mental Health.

Introduction

Postnatal period refers to the period from birth to the 6 week period after delivery and is a significant period of health and well being for mother and infant. In this time, the mother goes through huge changes physically, emotionally and takes on the responsibility of caring for a newborn. In turn, the newborn is in constant need of care for feeding, keeping warm, cleanliness, prevention of infectious diseases, vaccinations, and identification of potentially life-threatening illnesses. Hence, it should not be considered as a simple clinical follow-up service and should be considered as a process of health promotion, disease prevention, education, counselling and empowerment.

The significance of the postnatal period is especially clear as many of the maternal and neonatal complications happen in the first few weeks after birth. Mothers may experience maternal haemorrhage, infection, hypertension, thromboembolic disorders, breastfeeding problems, nutritional deficiencies, psychological issues and postpartum depression during this time. Infants are also at risk of infection, cold, feeding problems, jaundice, respiratory issues, and other issues. The recognition of these conditions early in life and access to health care services can significantly impact outcomes.

Hence, it is important to include postnatal care education as a part of the maternal and newborn health care. It is important for mothers to know what to expect during the post-partum period and what is normal recovery and what is not. They also require hands-on information about breastfeeding, feeding, hygiene, newborn care, immunizations, birth planning and emotional health. Knowledge alone, however, may not always lead to appropriate behaviour. Family support, cultural beliefs, socioeconomic status, health-system accessibility and the quality of education received affect the mothers' ability to translate information into practice.

Comprehensive postnatal education is of special importance in settings where mothers are discharged from hospital quite soon after giving birth. Commitment to institutional delivery is an important opportunity for professional assistance, but there may be a gap between hospital and home. While mothers can be given oral instructions right after their delivery, they may not have adequate chances to confirm points or get reinforcement afterward. It may be more severe in first-time mothers, women with less educational opportunities and women who lack family support.

This concern is also mentioned in the synopsis that underlies this chapter, for Kerala. While Kerala has relatively good maternal and child health indicators and is relatively well-educated, provision of postnatal education may not be consistent across facilities. The synopsis highlights the importance of well organized educational sessions on physical recovery and hygiene, breastfeeding, newborn management

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and danger signs, psychological support for mothers, family planning and follow-up sessions. It also highlights a research gap for comprehensive programmes of postnatal education for the improvement of knowledge and practice.

This chapter thus examines the evidence on comprehensive postnatal care education and how it could help empower women and improve maternal–newborn health. The chapter does not aim to provide a specific educational intervention as such but does aim to integrate the most important educational domains, influential factors on maternal knowledge and practices, and the health professionals and health systems in providing continuity of care.

Conceptualizing Comprehensive Postnatal Care Education

Postnatal care can be interpreted as a spectrum of care that is delivered to mothers and their babies following the birth to promote recovery, reduce the risk of complications, encourage healthy development and adapt to parenting. Postnatal care is comprehensive and not only involves physical assessment, but also education, counselling, emotional support, breastfeeding support, newborn care support, reproductive health services and suitable follow-up.

Postnatal period education can be seen as a process that enables mothers to learn the knowledge, skills, confidence and decision making that is needed for self-care and newborn care. Education can be delivered by individual counselling, demonstration, group education, printed materials, electronic materials, home visit, telephone support and/or community based programs.

A good conceptual route might be stated as:

Educational Inputs → Knowledge and Awareness → Self-Efficacy and Confidence → Appropriate Maternal and Newborn Practices → Timely Care-Seeking → Improved Maternal and Newborn Outcomes

There are a number of contextual factors that affect this pathway. These are factors such as maternal age, educational level, gravidity, socioeconomic status, family structure, culture, previous health education, social support, access to health services, and the communication with health services.

The approach of the underpinning synopsis, based on the General Systems Theory, is also of value. This model sees mothers as the input, the structured education programme as the process, and the increased knowledge and practices as the output, and information for strengthening future educational approaches as feedback from the follow-up assessments. The framework highlights the importance of the role of educational intervention in a broader maternal and health care system.

Educational needs should therefore be considered as ongoing rather than only one lesson. Information provided in the hospital setting should be reinforced after discharge and as needed via community or home services.

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The Postnatal Period as a Critical Window for Maternal and Newborn Health

Evidence and policy for maternal and newborn health during the Postnatal Period as a critical window. Postnatal Period as a critical window for maternal and newborn health: evidence and policy.

Rapid changes in maternal physiology and newborn adaptation occur in the first six weeks after birth. The uterus involutes, the vagina and caesarean wounds heal, hormonal changes take place and nursing is established. Moms can also feel tired, wake up frequently, have pain, worry and emotional changes.

The early postnatal period in newborns is the adaptation period to extrauterine life. The key elements of newborn survival and healthy development are successful breastfeeding, temperature regulation, infection prevention, safe sleep, and immunization.

Although this time is crucial it has not been as well studied as the antenatal and intrapartum periods. This imbalance is worrisome since mothers could be discharged from health facilities without adequate confidence in self-care and caring for their infant.

An integrated postnatal intervention needs to therefore involve clinical assessment, education and empowerment. Moms should be given information that is useful, understandable, culturally appropriate, and relevant to their unique situation. The educational experience should also allow for questions, demonstrations, return demonstrations and individual counseling.

Postnatal care education for women. B. Postnatal care education for fathers/male partners.

- **Maternal Physical Recovery and Personal Hygiene**

Information about what is normal after childbirth and warning signs should be shared with mothers. It is important that mothers are aware of normal vaginal secretions, wound healing, uterine involution, pain, nutrition, rest and exercise.

Personal hygiene is of special importance in preventing infection. Advise mothers on washing their hands, perineal hygiene, bathing after a caesarean section, appropriate bathing and signs of fever, smelly discharge, increasing pain or wound problems.

Education should also recognize the fact that recovery is unique for each woman. A mother who had a cesarean delivery might require different needs than the one that had an uncomplicated vaginal delivery. Likewise, the women who suffer from anaemia, hypertension, diabetes or other well being problem may need particular recommendation.

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- **The importance of maternal nutrition in breastfeeding**

Breastfeeding is a major part of the post natal education. Mums need support in the practical aspects of start, position, attachment, how often to feed, indicators of a successful feed, and how to deal with common problems.

Many mothers may be aware of breastfeeding but that does not always equate to proper practice. Early discontinuation or inappropriate feeding practices may be due to pain, poor attachment, perceived inadequate milk, family influences, maternal employment, and lack of professional support.

Therefore, educational programmes should focus on demonstration and practical assistance instead of verbal instructions only. Mums can learn correct positioning and attachment of the baby and can get feedback on this which is personal to them.

There is a close linkage between maternal nutrition and recovery and breastfeeding. Diet, fluid, micronutrient supplementation (if indicated) and anaemia should be encouraged through education. Dietary customs of culture should be respected and misconceptions and harmful restrictions corrected.

- **Essential Newborn Care**

Newborn-care education should enable mothers to address the basic needs for warmth, feeding, hygiene, cord care, sleep, immunization, and infection prevention.

Thermal protection is particularly critical for baby survival. Mums should be aware of the need to keep babies warm, avoid unnecessary exposure to cold and use skin-to-skin contact, wherever possible.

Education for cord care should focus on asking for hygienic practices and avoiding use of potentially harmful substances. Mothers and families should also be educated to watch umbilical area and look for signs of redness, swelling, discharge or signs of infection and seek professional care.

In addition, safe sleep and immunization should be included in education. Newborn care will be all family care and family members should be involved as appropriate.

- **Identify Maternal and Newborn Danger Signs**

One of the most significant achievements of post natal education is to be able to identify signs of danger and to seek timely medical attention.

Maternal warning signs can include any of the following: Excessive or prolonged bleeding, high fever, severe headache, trouble breathing, chest pain, seizures, severe abdominal pain, or signs of infection. Signs of danger in newborns can include difficulty feeding, breathing problems, irregular temperature, lethargy, convulsions, excessive jaundice or other major changes in behavior or appearance.

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Dangers should not just be enumerated in education. Mothers should be educated on what to do, where to get help and the importance of responding promptly. Use of practical examples and visual materials to enhance understanding.

However, the role of family involvement is even more significant because the decision on care-seeking is not necessarily up to mothers. Professional care may be affected by husband, parents, grandparents and other caregivers' influence on whether or when to seek professional care.

- **Maternal Mental Health & Emotional Well-Being**

The post-partum period may trigger a lot of psychological adaptations. Mums might feel slightly different emotionally, have some anxiety, struggle to sleep or feel inadequate. In some cases these problems can progress into more serious conditions like postpartum depression or anxiety disorders.

There is therefore a need to educate the public about emotional health in the postnatal education. Mothers and families should be encouraged to identify ongoing sadness, extreme worry, loss of interest, hopelessness or difficulty functioning.

Educating the public about mental health can diminish stigma and encourage individuals to seek help for mental health issues. Nurses and midwives have the opportunity to provide opportunities for mothers to share their emotional concerns in a non-judgemental and supportive environment.

But, when there are major mental health issues, education is not enough. Screening, referral systems, psychological support and access to appropriate professional services are needed to provide effective postnatal care.

- **Family planning/reproductive health**

Contraceptive, birth spacing, sexual health and reproductive choice information should be given during the postnatal counselling sessions. Women should be provided with accurate information on the various methods and enabled to make free and informed choices.

Family planning can be incorporated during the postpartum period as the mother may be open to family planning information related to the future birth of a child. Counselling should be, however, respectful and non-coercive.

Family planning education should also take into account the role of partners and family members and ensure the woman's independence and reproductive rights.

- **Follow-Up and Continuity of Care**

Postnatal education should not stop after the birth of a child. After returning home, mothers can be faced with new challenges, breastfeeding issues, sleep issues, fatigue, baby sickness and emotional issues.

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Follow-up contacts allow for the reinforcement of knowledge, evaluation of practices, discovery of issues, and further assistance. Community health workers, nurses, midwives and primary healthcare providers are all key to continuity of care.

Postnatal care Knowledge–Practice Gap

Knowledge-practice gap is a key issue in maternal and newborn health. A mother might know the importance of exclusive breastfeeding, but stop breastfeeding due to perceived low milk supply. Likewise, she might be aware of the inappropriateness of using harmful materials on the umbilicus, but submit to family pressure because of social pressures.

This gap evidences the need to get beyond information transmission in health education. Effective teaching should build confidence, skills, problem-solving and decision making.

Education, socioeconomic factors, cultural values, family support, availability of health services, mother's employment and gender norms may affect the knowledge–practice gap. Within families, in some instances, older relatives might significantly shape newborn-care practices. Therefore, it can sometimes be insufficient to educate the mother only.

The educational programmes should therefore be based on participatory approaches. Mothers should be asked to ask questions, talk about challenges, show skills, and find solutions. Where appropriate, partners and family members should also be involved.

Impact of Organised Postnatal Education Programmes

Literature reviewed in the underlying synopsis shows that through structured educational interventions, there is potential for enhancing maternal knowledge and practices. Interventions have ranged from lectures, demonstrations, audiovisual materials, individual counselling, printed booklets, to follow-up support.

Facility based programmes have a number of benefits. Mothers can be reached in a structured health care setting, health care professionals can demonstrate and provide demonstrations while mothers are in their care, and information can be embedded in basic maternity care.

But, single education is not enough. Over time, some knowledge may fade, and new issues can arise post-discharge. Follow-up contacts as a form of reinforcement can thus reinforce retention and application.

A comprehensive educational programme can incorporate:

- Structured teaching sessions;
- Individualized counselling;

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Demonstration and return demonstration;

Visual and printed materials;

- Breastfeeding support;
- Danger-sign education;
- Mental health counselling;
- Information about family planning;
- Follow-up reinforcement.

The educational model described in the synopsis underlying the proposed educational approach reflects this multi-component model. It consists of structured education after birth, individual counseling, and a print information booklet, plus evaluations at various intervals post-discharge. This way of working takes into account that change of behaviour is a process, not an outcome.

But there are still heterogeneities in the evidence base. Research varies with respect to intervention length, content of education, participant population, outcome measures, and length of follow-up. Thus, it may be challenging to make direct comparisons between studies.

Future assessments need to include not only knowledge learning but also changes in behaviors and appropriate maternal and newborn outcomes.

Facility Based, Community Based, and Digital Educational Strategies

- **Facility-Based Education**

Hospitals offer a valuable opportunity to give postnatal education due to the close association of the mother with the nurse, the midwife and the doctor. Pregnancy education prior to delivery can begin with the mother acquiring the basic information and skills.

However, staff workload, time constraints, patient turnover and the absence of standardised educational materials could all have an impact on the quality of education. Consistency may be enhanced with structured protocols and checklists.

- **Community-Based Education**

Community interventions can prolong learning outside the hospital. Community meetings, peer support groups and primary health care services can help to reinforce messages given during hospitalisation, and home visits can be useful.

Community-based interventions are especially important for mothers who have challenges accessing hospitals. They are also able to contribute to identifying environmental and social constraints to recommended practices.

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- **Digital Education**

New opportunities for postnatal support through digital technologies. Remind and inform post-discharge via mobile messaging, application, online video and teleconsultation.

Digital approaches should, however, supplement and not completely replace interpersonal care. Digital literacy, access to Internet, language, privacy and socioeconomic inequality have to be taken into account.

A blended approach (face to face + printed and online materials) might provide more flexibility.

The nurse and midwife in Postnatal education.

Nurses and midwives play an important role in providing postnatal education. The time they spend with mothers is often more than that of other health care providers and thus they can be in a key position to recognize learning needs.

They are responsible for evaluating what is known, offering one-on-one counselling, demonstrating skills, clearing up misunderstandings, helping with breastfeeding, identifying psychological issues and reminding of danger signals.

Communication skill is one of the factors that affect the quality of education. Healthcare professionals need to communicate in simple terms, allow for questions, avoid judgemental communication and confirm understanding.

Using the teach back approach (when mothers explain or demonstrate what they have learned) can help to uncover misunderstandings. Role play especially around breastfeeding, handling newborns, care of the umbilical cord, hygiene is helpful.

Nurses and midwives should be trained using standardized educational protocols, appropriate educational materials, sufficient time and healthcare institutions should offer their relevant training.

Family and Social Support

Postnatal care takes place in the context of a family and community. While mothers are education's main target, family members can impact everyday practices.

Family environments that support breastfeeding, rest, nutrition, use of health services and emotional health. On the other hand, barriers can be caused by conflicting guidance or negative traditional practices.

Family context should thus be taken into account in educational programmes. Engaging partners and key caregivers can help to enhance adherence to professional recommendations and home practices.

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However, at the same time, the involvement of family members should not take away the autonomy of the mother. Women need to be empowered to actively engage in decisions that impact their health and the care of their newborns.

Postnatal Education that is Culturally Sensitive and Woman Centred

Postnatal education must be culturally competent and sensitive. Beliefs and traditions are a fundamental part of family and community life. Some are harmless or beneficial, others may be in opposition to evidence based recommendations.

Healthcare workers should not pathologize cultural practices without an understanding of what they are. Rather, education should promote discussion and highlight other alternatives that would be safer if needed.

Respecting individual preferences, privacy, dignity and autonomy is key to woman-centred care. Don't treat mom as a passive recipient of information. They should play a major role in making decisions about their health and their baby.

A positive postnatal experience, thus, means more than clinical safety, it means respectful communication, emotional support and empowerment.

Equity and Social determinants of postnatal care

Social and economic factors affect access to post-natal education. The barriers to access to health services can be greater for the women of a rural community, informal settlement or resource-restricted family.

Structural obstacles including transportation, financial limitations, staff shortages or lack of health care services cannot be addressed with education.

The environment might also play a role in adherence to recommendations. Maternal and newborn health may be impacted by housing conditions, overcrowding, sanitation, clean water and hygiene.

Comprehensive post-natal education, therefore, should be realistic and context-oriented. The recommendations need to take into account the mothers' real-life situations.

In Kerala the health system is comparatively good, which allows for improving the standardized postnatal education. But the things hidden in the synopsis indicate that high institutional delivery does not assure regular and proper education for the post natal period. The move from 'coverage' to 'quality, continuity and empowerment' is the challenge.

Implications for Kerala and Indian context

The maternal and newborn health care achievements have been significant in India, with good strides in institutional deliveries and maternal health services. But, there is still a need to strengthen postnatal care.

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There are opportunities and difficulties in Kerala. Good levels of literacy and relatively advanced health care facilities can help to carry effective education programmes. Meanwhile, differences in the medical institution, counselling methods, and informal counselling advice may hamper the extent of standardization.

The synopsis from which this chapter is developed, highlights a particular need for structured post-natal education within the context of Kollam district. The proposed programme includes the following components: maternal recovery and hygiene, breastfeeding, newborn care, danger-sign recognition, maternal mental health care, family planning, and follow-up. This multi-dimensional approach is in line with the general concept on postnatal care that the mother and newborn should be treated as a whole.

Standardized postnatal education package may have the potential of being integrated to hospital discharge and reinforced through follow-up services. Implementation may be within the remit of nursing professionals.

Research Gaps and Future Directions

Based on literature reviewed, there are several areas that need further research.

First is the need for the more uniformization of the contents of postnatal education. Information provided by different facilities may vary, leading to varying maternal knowledge.

Second, there are many studies that measure knowledge at the end of an intervention. There is a need for longer term follow up to observe whether knowledge leads to long-term changes in behavior.

Third, there is a need to pay more attention to maternal mental health. Often, physical recovery and newborn care is the focus more so than emotional well-being.

Fourth, future interventions need to consider the role of family and social support. Education for mothers may be ineffective if the larger family context is not considered.

Fifthly, there is a need for more research in Digital and Blended Teaching and Learning. There may be opportunities for reinforcement using technology, but there must be consideration for accessibility and digital inequalities.

Sixthly, intervention trials should assess cost-effectiveness and feasibility. The programme should be integral to routine healthcare systems for success.

In conclusion, more and more the mother's voice should be heard in research. While quantitative indicators of knowledge, and practice, are important qualitative research can provide insight into women's experiences, what hinders them, and what they find acceptable and helpful in relation to postnatal education.

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Nursing Practice, Education, Policy and Research Implications

- **Nursing Practice**

Postnatal education should be an integral part of the nurse's work and not an extra activity. Education should be customized, sequenced, participative and based on follow-up.

- **Nursing Education**

Postnatal counselling should be a part of the nursing curriculum which will train them to provide comprehensive counselling. Communication skills, breastfeeding support, newborn care, mental health, family planning and culturally sensitive practice should be included in training.

- **Healthcare Policy**

Health systems should have standard postnatal education procedures and provide sufficient staff and resources. Monitoring should include an evaluation of postnatal contacts done as well as an evaluation of the quality and completeness of education delivered.

- **Research**

Rigorous design multi-component interventions with longer follow-up should be evaluated. Knowledge, practices, self-efficacy, maternal mental health, newborn outcomes and health care utilization should be evaluated in research.

Conclusion

Postnatal care education is an essential part of maternal and newborn health promotion. The postnatal period is a critical time to build mothers' knowledge, skills, confidence, and decision making ability. Maternal education on maternal recovery, hygiene, breastfeeding, nutrition, newborn care, danger signs, mental health, family planning and follow up can enhance mothers' newborn and self-care capacity.

The results discussed in this chapter indicate that organized educational interventions can help increase maternal knowledge and may lead to better care giving behavior. But the impact of education is dependent on the quality of the intervention, the time and continuity of the intervention, and the contextual appropriateness. The continuum of care should then make education a part of it and not just of one discharge session.

Nurses and midwives play a special part in this process. They will be able to assist mothers to bridge the gap between knowledge and practice through structured counselling, demonstration, individual support and follow-up. Along with this, family involvement, culturally sensitive communication and social determinants are also important.

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The key issue is the information-action gap. Empowerment is more than just facts; it is about developing environments where women feel confident, supported, and empowered to implement evidence-based practices.

Enhancing standardised and complete postnatal education could be a key opportunity to build on the gains in maternal and newborn health in Kerala and India. Future programmes should be woman-friendly, family friendly, culturally appropriate and linked to health services in the facility and community.

Comprehensive postnatal education should finally be acknowledged as part of providing quality care for mother and baby. Providing mothers with sufficient information, support and empowerment equips them to identify health issues, access timely services, adopt healthy behaviours and make positive contributions for the health of their newborns. Improving postnatal education is not just an education intervention, it is an investment in the empowerment of mothers, the survival of babies, the health of families, and healthier communities.

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