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Structured Postnatal Care Education: Empowering Mothers for Improved Maternal and Newborn Health

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Abstract

The post-natal period is one of the most sensitive phase in a sequence of maternal and newborn health service. This period encompasses the physiological, psychological and social changes occurring in the mother from childbirth to the first six weeks postnatal, and the parallel adjustments in the newborn to the extrauterine environment. While progress in the institutional delivery and maternal health services have made significant contribution for maternal and neonatal survival, quality and continuity of postnatal care still have to be taken care as a public health concern. Maternal education is an essential part of postnatal care, which is often under developed. Mothers need the right information and skills and confidence for physical recovery, personal hygiene, nutrition, breastfeeding, basic newborn care, danger signs for mother and baby, mental health, family planning and follow-up care. This chapter will explore the use of structured postnatal care education to facilitate the translation of knowledge into appropriate self-care and newborn-care practices. The knowledge–practice gap and factors affecting implementation of health information by mothers, such as family support, cultural beliefs, socioeconomic status, health literacy and access to health services, are given special attention. The different approaches to postnatal education (facility-based, community-based, digital) are considered alongside the central role of the nurse/midwife in providing individualised, culturally responsive and ongoing education. The chapter also explores the significance of structured postnatal education in India, and Kerala where the positive health indicators and high coverage of institutional delivery opens the way for a greater focus on quality, continuity and maternal empowerment. A theoretical framework that links education, knowledge, self-efficacy, practice, care-seeking and maternal–newborn outcomes is presented. That comprehensive and continuous postnatal education should be considered a part of good maternity care not something which is optional at the time of hospital discharge.

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

Introduction

Postnatal period (also known as postpartum period or puerperium) starts immediately after delivery and is conventionally taken as the first 6 weeks or 42 days after delivery. It's a big significant change in the life of a woman and her family. Physiological changes of the pregnancy slowly begin to return, breastfeeding is conducted, emotional adjustment to becoming a mother, and responsibility for newborn care become a part of daily life during this time. Meanwhile, the newborn is also going through critical physiological changes and is still reliant on the caregiver for food, warmth, cleanliness, and to be able to see the signs of illness and provide protection from infection.

Therefore, the provision of postnatal care should not be just a clinical assessment after delivery. Comprehensive postnatal care encompasses clinical monitoring, preventive care, health promotion, counselling, education, psychological support, reproductive health care and continuity of care. The World Health Organization stresses the importance of a positive postnatal experience, ensuring women, infants and families are provided with consistent information, reassurance and support while at the same time receiving appropriate clinical interventions.

The importance of this period is further demonstrated by the health problems that may occur following childbirth. Mothers can suffer from postpartum haemorrhage, infections, hypertension, wound problems, anaemia, problems with breastfeeding and psychological issues. Long-term effects can involve incontinence, chronic pain, and mental health problems, sexual dysfunction (Chou et al., 2023). Newborns can have trouble feeding, may get infected, may have jaundice, respiratory issues, hypothermia and other potentially serious issues. Early detection of these conditions, leading to timely and proper care, can therefore significantly impact on maternal and neonatal outcomes.

This process involves education as its core. Mothers need to know what to expect as their bodies recover from childbirth, what is abnormal, how to get breastfeeding right, how to care for their newborn, how to stay clean, how to eat and drink well, when and what danger signs to watch for and how to take care of herself emotionally and make informed reproductive-health choices. But, transfer of information does not imply correct practice. Numerous factors—such as maternal education, socioeconomic status, cultural beliefs, family attitudes, past experiences, access to health care and quality of communication with health care providers—can affect the extent to which knowledge is put into practice.

This challenge is especially pertinent when mothers are discharged from health care institutions immediately after giving birth. While institutional delivery presents an important opportunity for professional support, transition from hospital to home may result in a gap in education. Information provided directly after giving birth

might be hard to remember as mothers are not only feeling tired, in pain, but are also worrying about caring for their newborn and are overwhelmed by responsibilities. It is therefore important to have post-discharge reinforcement.

Structured postnatal training can be a way of closing this gap. Instead of giving directions on each topic, a complete programme is systematic and covers the key areas of maternal and newborn care, plus it integrates information and demonstration, counselling, problem solving and follow-up. In this chapter, the elements, processes and significance of such an approach is discussed, focusing on the relevance of the same for nursing practice and the Indian and Kerala health care scenario.

Comprehensive Postnatal Care Education is defined as

Postnatal care education can be considered as an organised process whereby mothers and families learn the knowledge, practical skills, confidence and decision making they need to provide proper self-care for mothers and care for their newborn. Education can be provided in individual counselling, organised teaching, demonstration, group education, written education information, home visits, via telephone, online and/or a combination of these.

There's a difference between information and education. Information can just inform a mother of what she should do. Effective education allows her to learn the why and how of the practice, ask questions, identify barriers and check if she can make use of the knowledge on her own.

A conceptual pathway that can be used is:

Structured Educational Input → Knowledge and Awareness → Self-Efficacy and Confidence → Appropriate Maternal and Newborn Care Practices → Timely Care-Seeking → Improved Maternal and Newborn Health

This pathway is not automatically accessible. Maternal age, education, parity, socioeconomic status, cultural practices, family structure, social support, previous health education, access to services and quality of communication may enhance or diminish the link between knowledge and behaviour.

The approach of General System Theory, as proposed by the German scientist, Ludwig von Bertalanffy (1968), also offers a valuable conceptual framework. In this context, mothers and their socio-demographic and obstetric characteristics are the inputs, structured education and personalised support are the process or throughput, improvements in knowledge and practices are the outputs and assessment and follow-up is the feedback to improve future education.

Thus, postnatal teaching is not a one-shot event, but an ongoing process.

The Major Domains of Comprehensive Post Natal Education are as follows:

- **Physical Recovery of Mother, Personal Hygiene**

There is a need for information for women about what is normal in their physiology after childbirth. Uterine involution, Lochia, perineal or surgical-wound healing, pain, rest, mobility, nutrition and gradual return to daily activities shall be discussed with education.

Personal hygiene is especially important with regard to preventing infection. Mothers need to be educated on hand washing, perineal care, wound care and clean environment. There should also be a distinction made between the expected symptoms and those that require urgent medical attention like continued fever, smelly vaginal discharge, heavy bleeding, worsening pain, redness and discharge of the wound.

Individualisation is essential. Not all deliveries are caesarean as recovery is different after an uncomplicated vaginal delivery. Likewise, women with anaemia, hypertension, diabetes or other health issues might need extra guidance and support. So, standardised education is not uniform education, but it is to ensure that each mother gets the necessary information and that the content is flexible to the needs of each mother.

- **Breastfeeding and Maternal Nutrition**

Breastfeeding is a focal point for the post natal education. Moms need more than just information about the benefits of breastfeeding. They require hands-on information about early initiation, positioning, attachment, how often they should feed, signs of good feeding and how to deal with common challenges.

There can be a substantial knowledge–practice gap for breastfeeding. A mother might know the breastfeeding benefits but stop due to breastfeeding pain, difficulty with attachment or perceived lack of milk, family recommendations, or moving back to work or not having professional support. This is where practical demonstration or observation is thus even more valuable.

Nurses/midwives can show positioning and attachment and then invite mothers to try it for themselves. Such a return-demonstration strategy will ensure understanding and uncover issues prior to discharge.

Maternal nutrition should be taken into consideration in conjunction with breastfeeding. Adequate dietary intake contributes to postpartum recovery and maternal well-being. Education should encourage good nutrition including a balanced diet, fluid and clinically indicated supplementation and sensitively address nutritional misconceptions. Where safe, there is a need to respect cultural food practices, but where there is no need, an evidence-based discussion with culturally appropriate

communication should be used to discuss any unnecessary or potentially harmful dietary restrictions.

- **Essential Newborn Care**

Any newborn-care education should empower mothers with the skills they need to keep newborns warm, clean, properly fed, and to prevent infection and care for the umbilical cord. Education for mothers should also be provided on immunisation, follow-ups and safe care practices.

Thermal protection is especially needed during the early life of neonates. Mums and families need to be aware of the benefits of thermoregulation and skin-to-skin contact where indicated.

The umbilical-cord care is an aspect that needs to be carefully attended to since sometimes the traditional methods of care may involve putting substances on the cord. There is a need to encourage good and proper cord care through education, and educate families to watch for signs of cord infection such as redness, swelling, discharge, and other indicators.

Where relevant, the family must be engaged in newborn education as childcare doesn't happen in a vacuum. Everyday practices can be significantly affected by partners, grandparents and other caregivers.

- **Know how to Recognize Danger Signs in the Mother and Newborn**

One of the most significant possible benefits of post-natal education is that it can help in identifying danger signs and thereby the speed of seeking professional care.

Signs of trouble on the mother's side include excessive bleeding, high fever, severe headache, breathing difficulty, chest pain, seizures, and severe abdominal pain and complications of infection. Signs of danger in newborns can include poor feeding, trouble breathing, abnormal temperature, extreme lethargy, convulsions, excessive jaundice or significant changes in appearance or behavior.

Learning should not just be about learning lists of symptoms. Mothers should know what to do if a danger sign is encountered, the location of health care services, and the potential risk of delay. Understanding can be reinforced with visual materials, realistic situations and easy action plans.

Again, the participation of the family might be relevant as sometimes healthcare decisions are made based on partners or older members of the family. Training key caregivers can thus help in prompt action to change course for seeking help while maintaining respect to the mother's autonomy.

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

There is more focus on physical recovery and newborn care than on the mother's psychological well-being. However, the process of pregnancy and childbirth

and the role of motherhood can be emotionally challenging. Mom can feel anxious, have trouble sleeping, be emotionally unstable, feel like she is failing or feel sad all the time.

Discussion of emotional health should be part of the normal routine of postnatal education, and mothers and families should be alert to signs that may indicate the need for a professional assessment, such as: persistent sadness, severe anxiety, hopelessness, loss of interest or difficulty functioning.

Education about mental-health can minimize stigma and promote seeking help. Nurses and midwives are well placed to provide a non-judgemental space for women to talk about their concerns.

Education cannot however substitute for clinical assessment or treatment. If there are significant psychological symptoms, there is a need for the appropriate screening, referral pathways and professional mental-health services. The conception of comprehensive education should then be considered as part of an integrated support system.

- **Family Planning and Reproductive Health**

Postpartum is a time of opportunity to talk about contraception, birth spacing, reproductive options, sexual health. Women should be provided with accurate information on the available contraceptive options and their appropriateness in the post natal period.

Counselling shall be voluntary, respectful and non-coercive. The goal should be to help women make informed decisions not to force a woman into a reproductive choice.

If it is culturally appropriate, partners may be involved in counselling; but mother's autonomy and reproductive rights need to remain paramount.

Values the importance of follow-up and continuity of care.

The learning doesn't stop when mom leaves the hospital. Common issues that often arise after discharge involve breastfeeding difficulties, fatigue, sleep issues, new born behaviour concerns and emotional strains.

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

Follow-up is the chance to consolidate earlier work, to find out what is really happening, to identify issues and to offer individual support. This continuity can be achieved by nurses, midwives, community health workers and primary health care professionals.

Postnatal education should thus be conceived as a series of activities linked together as hospital education, preparation for discharge, reinforcement following discharge and home or community-based follow-up.

From Knowledge to Practice: Addressing the Knowledge–Practice Gap

Knowledge is a good educational goal, yet knowledge must not be the end product. The ultimate goal is to translate knowledge into the implementation of the correct maternal and newborn-care practices.

A mother may know that breastfeeding is the only feed recommended, but may start to add other feeds because she feels that her milk is not enough. Another mother might have the right knowledge about cord care and have conflicting advice from family members. Likewise, a woman might know that she is sick, but not be able to get to a clinic due to transportation barriers or financial limitations or lack of decision making power.

The determinants that influence the knowledge–practice gap are thus multiple, and they interact with one another: health literacy, self-efficacy, cultural beliefs, family support, socioeconomic situation, maternal employment, services and gender relations in the family.

For this reason, a quality postnatal education should thus transcend didacticism. Participatory approaches can be demonstrations, return demonstrations, problem solving discussions, teach back and realistic scenarios. Opportunities for mothers to share what they have learned and practice key skills.

The transition from knowledge to behaviour can be represented as:

Knowing what to do → Understanding why it matters → Developing the skill of doing it → Confidence to perform it → Support to continue it → Practicing it on a regular basis.

This expanded view of education puts empowerment as the core of postnatal care.

Learning strategies for successful post natal care.

- **Facility-Based Education**

Hospital and maternity centres offer a good platform for structured education given that mothers get to see nurses, midwives and other health workers. Basic skills like breastfeeding and handling babies can be observed and demonstrated.

However, the workload placed on hospital staff, the length of hospital stay, the general tiredness of the mother, variation in the way teaching is carried out, or the lack of standardisation of teaching material, may pose a challenge in hospital education. Consistency can be improved by structured protocols, teaching checklists and special education resources.

Education should be ideally spread throughout the hospital stay, not as a huge mass of information right before discharge.

- **Education in the Community and at Home**

Community-based services are used to continue education outside the hospital. Home visits can inform professionals on the 'real world' where the mother and baby are cared for and shed light on practical issues that may not have been evident in the hospital setting.

Community health workers, nurses and primary health care workers can reinforce messages, watch practices and prompt timely referrals. Peer-support groups may also provide emotional and practical support, particularly for first-time mothers.

- **Digital and Blended Education**

Mobile technology provides opportunities to reinforce post natal education with messages, videos, teleconsultation and other digital platforms. Digital communication can be especially effective in reminders about follow up, danger signs, immunisation, breastfeeding support.

Digital interventions must also take into account literacy, language, access to the internet, privacy and socioeconomic inequalities, however. Technology is supposed to be a supplement to, NOT a replacement for, interpersonal health care.

There may be scope for a blended approach in which face-to-face counselling is used in conjunction with printed literature and suitable online follow-up.

Role of Nurses and Midwives in Postnatal Education

A key role for postnatal education is played by the nurse and the midwife, since they are often in regular contact with the mother in the immediate post-natal period. Not only do they play a role in information transmission but also examining individual learning needs, demonstration of skills, pointing out misconceptions, helping with breastfeeding and emotional problems, and reinforcing danger-sign awareness.

The quality of communication is of vital importance. There should be opportunities for questions and information should be presented in an understandable language. Information should not be assumed to have been understood, and healthcare professionals should not engage in judgmental communication, but in checking for understanding instead.

The "teach back" method can be especially helpful. The health care provider might ask the mother to explain what she would do if a specific problem did arise, or perform the skill taught. This will make misunderstandings obvious and enable prompt correction.

Nurses and midwives should be supported by the healthcare setting through the standard educational protocols, training, materials and time for counselling.

Postnatal education should be seen as an integral part of professional duties and not as something which can be done on top of clinical work.

Family, Culture and Social Support

Postnatal care is provided in a social and cultural context. Family members can facilitate maternal rest, nutrition, breastfeeding, emotional well-being and health care utilization. On the other hand, inconsistent recommendations, limiting practices or inaccurate information can be barriers to evidence-based practice.

Thus family inclusive education can be helpful. Selected educational activities including breastfeeding support, newborn danger signs and emotional well-being of mothers can include partners/ influential caregivers.

Sensitivity to the cultural context is also critical. Health care professionals should never ignore traditions without knowing what it means. Some practices in the culture are harmless and can be practised along with evidence-based healthcare, while some may be harmful and should be explained and refuted in a respectful manner with the help of safer alternatives.

Family involvement should never compromise the dignity, privacy, autonomy or decision making of the mother. Empowerment is empowering women to be involved in decision making about their health and their baby.

Equity and Social Determinants of Postnatal Education

Educational interventions are situated in social conditions. Poor access to health services, limited income, transportation challenges, poor literacy, and household duties can all impact a woman's ability to adhere to recommended practices or go for follow-up care.

Similarly, environmental factors such as housing, sanitation, clean water and crowding within the household may also impact maternal and newborn health practices. Structural barriers cannot be eliminated through education alone.

Education for parents after birth should thus be realistic and situation-specific. Recommendations should take into account what mothers can practically do in their family and the socioeconomic conditions of their family. Women in need of extra support within equity-oriented programmes should be identified and community and health-care resources should be appropriately linked with the programme.

Indian/Kerala Context Relevance

India has made significant progress in increasing institutional maternity services and enhancing the maternal and child health programmes. However, more coverage does not necessarily mean more complete post-natal education.

The challenge is interesting in Kerala in particular. The state has high literacy and good health services which provide good conditions for organized health education. However, good population level indicators should not be interpreted as

reflecting that all mothers are receiving comprehensive and standardised postnatal counselling.

There is a possibility that school practices and health care providers can differ. Mothers might get good advice in one area, for example, breastfeeding, and less in another area, such as mental health, family planning, warning signs or follow up. Likewise, it can be challenging to remember verbal directions that are broken up.

Improving health contacts in these settings should, therefore, focus not just on the number of women who make contact, but also on the quality, completeness, continuity and effectiveness of contacts.

Five main domains can be incorporated in a comprehensive postnatal educational package that can be adapted to a setting like Kerala:

- mother's physical convalescence and personal cleanliness;
- breastfeeding techniques and support;
- basic newborn care and maternal and newborn danger signs;
- maternal mental health and emotional wellbeing; and
- Family planning and continuity of follow up care.

Such education can start in the facility and then be reinforced by follow-up visits, community services and appropriate digital communication and printed materials.

For districts like Kollam, assessing structured multi-domain programmes would give evidence about the impact of structured education on maternal knowledge and if that increase in knowledge results in ongoing maternal care practices. This research would help not only in nursing practice, but in the overall dialogue of quality improvement in maternal and newborn care.

Research Gaps and Future Directions

A number of key research issues arise in the above discussion.

Firstly, there is a need to pay attention to the standardisation of the educational content. There may be inequalities in exposure to key postpartum information across facilities and health care providers. Key learning areas thus need to be determined, but there needs to be flexibility for individualised counselling.

Second, it is necessary to investigate not only immediate knowledge gains but also behavioural outcomes. Although it is valuable to know that mothers' knowledge has changed after attending an educational session, the bigger question is whether or not mothers continue to practice appropriately once they go home.

Third, longer follow-up times are needed in studies. Immediate post-intervention evaluation can over-estimate the effectiveness of the education, as the

information learned is new. Assessments can be repeated to gain insight into retention and behavioural sustainability.

Fourth, there is a need for more attention to be paid to maternal mental health in comprehensive models of education. Women's psychological well-being should not be viewed as an optional extra to physical and newborn care but as a fundamental part of maternal health.

Fifthly, family and social factors should be studied. Where newborn-care practices and/or household decision-making are significantly shaped by other family members, educational interventions targeting mothers only may be limited in effectiveness.

Sixth, the need for further research of digital and blended approaches. Mobile communication might be an efficient way of post-discharge reinforcement, but its effectiveness, acceptability, accessibility and digital inequality must be critically assessed.

Seventh, cost-effectiveness and feasibility should be taken into account in research. An intervention that enhances the outcome but is not feasible in terms of staffing or resources may not be possible to implement in routine health services.

Lastly, more focus is needed on the voices and experiences of mothers. Qualitative studies to investigate what women find useful, what barriers are they facing and what can be done to make educational programmes more responsive to women's real needs can complement quantitative measures of knowledge and practice.

Implications for Nursing Practice, Education, Administration and Policy

- **Nursing Practice**

Post natal education should be part of the normal nursing care. Identification of learning needs, systematic counselling, demonstration, teach back and follow up should be an integral part of routine post natal nursing.

- **Nursing Education**

Nursing and midwifery education programs must enhance skills in maternal counselling, breastfeeding management, newborn care, danger signs recognition, mental health education for mothers and reproductive-health counselling and culturally competent communication.

- **Hospital Administration**

Standardised postnatal educational packages, checklists, educational materials and documentation systems can help healthcare institutions in the context of quality improvement. Administrators should also make sure that health care personnel have enough time and training to effectively counsel.

- **Health Policy**

The monitoring of post-natal care should not only monitor whether contacts were made but should also monitor the quality of education and support received. Policies should foster continuity between maternity facilities, primary healthcare and community services and post-discharge support.

- **Research**

Multi-component interventions should be assessed in the future with repeated follow-up and rigorous designs. Knowledge, practices, self-efficacy, care-seeking behaviour, maternal mental health, breastfeeding outcomes, newborn health and use of health services should be outcomes.

Conclusion

The postnatal period is a significant window of opportunity to safeguard maternal health, promote newborn survival and healthy family behavior. Education that is thorough in this time can help mothers gain knowledge and hands-on experience and confidence to engage in their own care and newborn care.

Postnatal education is more than just giving information. It includes maternal physical recovery, hygiene, breastfeeding, newborn care, recognition of danger signs, emotional well-being, and family planning and continuity of care. More significantly, it provides an approach that bridges the 'know-do' gap through demonstration, personalised counselling, problem-solving, family support and follow-up.

Bridging this knowledge–practice gap is especially important for nurses and midwives. This ongoing engagement with mothers provides an opportunity to understand learning needs, model key skills, clarify misconceptions, and boost confidence in mothers. The healthcare institutions need to facilitate this role by establishing standardised procedures, providing sufficient facilities and incorporating education in the normal treatment process.

The spotlight needs to shift increasingly from coverage to quality, from isolated teaching to continuity and from information delivery to maternal empowerment; within the Indian context and especially in a healthcare environment like Kerala where institutional delivery and health-service coverage are relatively good. Structured postnatal education provides a possible means of making this transition.

In sum, comprehensive postnatal education is not just an educational intervention that can empower mothers. It's an investment in women's health, newborn welfare, household resilience, and the overall maternal and child health services. A mother who is knowledgeable about her health and knows what to look for, who has the right skills to care for her baby and who understands where and

when to get help is more likely to make good decisions about herself and her baby. Enhancing comprehensive and continuous education in the postpartum period should thus continue to be a focus for nursing practice, maternal healthcare and future research.

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