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Chapter

Perspective Chapter: Contemporary Challenges in Postnatal Care in Low- and Middle-Income Countries

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Abstract

The postnatal phase is the first six weeks after delivery and is a critical time for mothers, newborns, and other caregivers as a highly neglected phase of a transition period. Almost all maternal and neonatal deaths occur in low- and middle-income countries, where fewer services are provided for mothers after the delivery period, which constitutes a tremendous challenge facing mothers in these countries. Barriers were markedly observed in low- and middle-income countries as a result of financial constraints, distance from the health center, poor programming for postnatal care, negative childbirth experiences, and cultural constraints. Moreover, the improper advocacy of contraceptive use during the postpartum period impacts prolonged interpregnancy intervals and indirectly increases postpartum complications mainly in low- and middle-income countries. The importance of the quality of postnatal care was frequently addressed to answer the required interventions that should be implemented at the level of healthcare facilities, household, and community levels as part of the process of reducing the impact of postnatal complications, disabilities, and maternal mortality.

Keywords: women, postpartum, mothers, maternal mortality, reproductive program

1. Introduction

The World Health Organization (WHO) has defined the postnatal phase as the first six weeks after delivery, which is a critical time for mothers, newborns, partners, parents, caregivers, and families; however, this period of significant transition remains the most neglected phase in quality maternal and newborn health care [1].

Therefore, this chapter will discuss the impact of postnatal care in low- and middle-income countries and the main challenges they face. Moreover, the chapter will highlight the importance of the quality of postnatal care required at the level of the facility, household, and community levels as part of the process of reducing the impact of postnatal complications. Such services should be provided for every woman on this globe with more empathy for those in low- and middle-income countries. In addition, this chapter will address the quality of care needed based on the positive

postnatal experience, factors influencing the positive birth, and finally the role of contraceptives in reducing maternal complications.

As per the use of the World Bank Atlas for the year 2023 to define low- and middle-income countries are those with a Gross National Income (GNI) per capita between \$1086 and \$4255 [2].

Despite the global achievements found during the implementation of the Millennium Development Goals and impressive reductions in maternal and under-5 mortality rates, neonatal mortality reduction continues to lag behind [2]. Moreover, maternal and neonatal mortality and morbidity burdens remain unacceptably high, and opportunities to increase maternal well-being and support nurturing newborn care have not been fully utilized [1]. Therefore, the global health community has worked hard to make good achievements over the past decades and has continuous challenges in the future to accomplish the sustainable development goals (SDGs) by the end of 2030 [3].

2. Definitions

Postnatal care (PNC) ensures early assessments for pregnancy danger signs during the postpartum period and is to be provided within 24 hours of birth, 48–72 hours, 7–14 days, and 6 weeks after birth [1]. Therefore, postnatal care services are a fundamental component of the maternal, newborn, and childcare continuum and are key to achieving the sustainable development goals (SDGs) on reproductive, maternal, and child health, including targets to reduce maternal mortality rates and end preventable deaths of newborns [1]. Moreover, in line with the SDGs, postnatal care efforts must expand beyond the optimum coverage by maternal services and survival alone to include quality of care.

Although postnatal care services are a fundamental element of the continuum of essential obstetric care and were implemented to play a role in decreasing maternal and neonatal morbidity and mortality, particularly in low- and middle-income countries still, almost 40% of women experience complications after delivery and an estimated 15% develop potentially life-threatening problems [4–6]. As almost all (99%) of maternal and neonatal deaths occur in developing countries [7], inequality is a prominent matter among high-income and low- and middle-income countries where almost three out of four women had \geq one symptom (73.5%), abnormalities on clinical examination (71.3%), or laboratory investigation (73.5%) after delivery mainly in the postnatal period [8]. Moreover, maternal morbidity was not limited to a core “at-risk” group; only 1.2% of women had a combination of four morbidities.

3. How to reach a positive postnatal experience?

A positive postnatal experience is recognized as a significant endpoint for all women giving birth and their newborns, laying the platform for improved short- and long-term health and well-being [9]. It is also defined as when women, newborns, partners, parents, caregivers, and families receive information, reassurance, and support consistently from motivated health workers; where a resourced and flexible health system recognizes the needs of women and babies and respects their cultural context. Moreover, the positive birth experience promotes a sense of achievement, enhances a feeling of self-worth, and facilitates confidence; all of which are

important for a healthy adaptation to motherhood and psychological growth [10]. Understanding what constitutes a positive birth experience is critical to providing maternity care that meets childbearing women's individual needs, preferences, and priorities. Likely wise, any satisfaction with birth has been associated with several factors and the Psychosocial dimensions of care have been shown to influence women's overall assessment. Individualized emotional support empowers women and increases the possibility of a positive birth experience [11].

Therefore, the human reproductive program initiated by the World Health Organization has developed a comprehensive set of recommendations for care during the antenatal and postnatal period, focusing on the essential package that all women and newborns should receive, with due attention to the quality of care, that is, the provision and experience of care and management of postnatal complications [1].

4. Factors influencing positive birth and postnatal care

It was found that most women lacked awareness about the services given in a postnatal clinic and long waiting times, and cultural beliefs were among the factors that affected utilization of postnatal care in many countries with severe situations in low-income countries. The care during puerperium for the woman has an influence on maternal health if the woman does not attend postnatal care services and yet this is one of the most important maternal health-care services for not only prevention of impairment and disabilities but also reduction of maternal mortality.

One of the most important events in a woman's life is to giving birth, which is a highly individual experience [12]. Childbirth by itself is an experience of how first-time mothers will develop good self-esteem [13], positive feelings for the baby, an easier adjustment to the motherhood role [14, 15], future childbirth experiences [11], and better acceptance of the maternal role [16].

Being with positive birth is also influenced by other factors including the sociodemographic factors from one country to another. For example, in high-income countries, women's birth experiences changed over time, and most became more positive after 1 year [10]. Factors associated with a very positive birth experience and reduction of the impact of postnatal complications were related to women's prenatal attitudes, intrapartum procedures, pain relief used, and care received during labor and birth. Many of these factors were struggled to find low-income countries where there are poor services, lack of preparatory sessions for mother and her partner, lack of access to healthcare services on time, and cost-wise factor. Therefore, negative and traumatic birth experiences are a marked trend in women living in low-income countries mainly during prenatal and intrapartum practices [17].

The rate of psychological birth trauma including poor maternal feelings was also found high, as poor quality of maternity care and, consequently, chronic psychological complications, receiving of inaccurate information, and inadequate feeling of respect, all were also found high in low- and middle-income countries compared to high-income countries [18]. Some description of such conditions as due to lack of adequate and timely procedures beginning with admission to postpartum care resulted in poor quality of care for the mother and her baby, ranging from negligence to severe complications [19]. Sociocultural barriers are also considered to play role in hindering mothers from receiving care in hospitals [20]. For instance, women preferred not to be examined by male health providers, for cultural reasons

preferred a particular position in which to deliver, or for religious reasons did not divulge information that was needed for their care [21, 22]. Moreover, some communities in low- and middle-income countries reported mistreatment of mothers during labor, violation of women's rights, and a notable barrier to institutional delivery [18].

5. Trends in contraceptive use

According to the WHO, postpartum family planning (PPFP) is defined as the prevention of unintended pregnancy and closely spaced pregnancies through the first 12 months following childbirth [23]. The proper practice of contraceptives during the postpartum period has its impact on prolonging interpregnancy interval and indirectly reduces postpartum complications and other consequences [24]. Therefore, contraceptives help in the prevention of unwanted pregnancies among couples and, therefore, promote planned family size and time of birth for improved reproductive well-being of the women. Voluntary family planning practices include the promotion of maternal and child health, human rights, population and development, and environmental sustainability and development of a nation. However, the use of contraceptives was found with marked variation between developed and developing nations, across nations, and within nations. Despite the United Nations (2015) report on the trend of contraceptive use among women of the reproductive age group, who are either married or in a union, in almost all regions of the world reached up to 64% [23]. At the end of the millennium development goals, the United Nations report showed that contraceptive use was much lower in the least developed countries with an estimate of 40.0% with the African continent had the lowest estimated at 33.0% [24]. In Nigeria for example, only 14.5% of women use modern contraceptive methods according to the estimation from the national population commission [25]. Moreover, over 83% of women were not using any form of contraceptives in 2018 with a geographical variation within the country [26]. Regional averages hide some of the more dramatic variations in contraceptive sources at the country level [27]. More than half of women in low- and middle-income countries using modern contraception go to private sector sources than public sources [28].

The sustainable development goals (SDGs) target 3.7 calls on all countries "by 2030 to ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programs" [29]. The assessment of progress toward this target requires monitoring of key family planning indicators, including the range and types of contraceptive methods used [27]. There are several barriers to using effective methods in low- and middle-income countries including the desire for more children, partner disapproval of contraceptive use, religious and cultural bias, educational qualification of women, lack of knowledge on contraceptives, and wealth index [30]. Additional factors reported, such as concerns about the side effects of contraceptive methods, women's or their family's opposition to contraception, lack of access to supplies and services, and especially financial barriers, are often reported [31]. Consequently, a trend of high family sizes of up to seven or above is common in many regions of low- and middle-income countries.

6. Unmet need for family planning due to poor postpartum period education

The unmet need for family planning as a crucial factor in determining equity among women at the postnatal time is almost linked mutual with the use of contraceptives. Mothers, since the first days after delivery, should be equipped with proper information on the use of contraceptives to avoid the condition unmet for family planning and arrange their next pregnancy with adequate time [29]. At least one in ten married or in-union women in most regions of the world have an unmet need for family planning. Worldwide, in 2015, 12% of married or in-union women are estimated to have had an unmet need for family planning; that is, they wanted to stop or delay childbearing but were not using any method of contraception. Estimates of the percentage of women aged 15–49 years who use contraception or who have an unmet need for family planning, by region, for the year 2020 showed that only 35.9% of women in Northern Africa and West Asia compared to 60% in Europe and Northern America [29]. The level was much higher, 22%, in the least developed countries. Many of these countries are in sub-Saharan Africa, which is also the region where the unmet need was highest (24%), double the world average in 2015 [24]. Unmet need is generally higher among younger women in the poorest households and among those who have less education and live in rural areas. Despite efforts and availability of contraceptives in low- and middle-income countries, uptake continues to be low because of several barriers [32, 33].

7. Role of adverse events (AEs)

Good postnatal care is crucial to prevent adverse maternal and neonatal outcomes and provide support during motherhood adjustment for first-time mothers. Adverse events (AEs) are outcomes of treatments below the current expected medical standard that result in temporary or permanent harm to patients. Unplanned, adverse events during labor or delivery may generate a negative response during the early postpartum period, resulting in disruption of usual functioning and mood. Most maternal and neonatal adverse events occur in the immediate postnatal period [34]. The provision of evidence-based postnatal care with adequate quality during this period is vital to ensure uncomplicated recovery of the mother and the baby. In some low- and middle-income countries, AEs episodes were identified among both mothers and newborns with an overall prevalence of 12.7% [35].

High levels of maternal depressive symptoms during the postnatal period are associated with parenting, infant attachment, behavioral problems, and cognition [36]. In many low- and middle-income countries, woman's dissatisfaction status with their own childbirth experience was less likely reported, however, the severe depressive state could be noticed as accompanying emotional unwillingness to have another baby due to such malpractices occurring either in healthcare settings or in-home births [32, 33]. Such preventable adverse events were reported as complicating the postnatal period including the postpartum length of stay for more than 3 days after vaginal birth and delayed intervention in case of postnatal hemorrhage (PPH) with a decision-delivery time of more than 30 minutes [37]. Prolonged (labor) second stage was found strongly associated as a risk factor during childbirth with multiparous mothers, the use of uterine fundus pressure as one of the intervention methods during labor was associated with AEs among mothers [35, 38].

Many women recognized the specific challenges of the postnatal period and emphasized the need for emotional and psychosocial support in addition to clinical care. Postnatal care programs and related research should consider these multiple drivers and multifaceted needs, and the holistic postpartum needs of women and their families should be studied in a wider range of settings [32].

8. Barriers

Improvements in the services related to postpartum were noticed worldwide despite the variation between countries or within the country regions. However, barriers were markedly observed in low- and middle-income countries where postnatal care utilization was low at village levels and where 70% of the mothers were settled down [39]. Financial constraints, distance from the health center, poor programming for postnatal care, women's experience during childbirth, cultural constraints, mother and family members' health literacy on postnatal care, feeling that postnatal visits were not necessary, sociocultural beliefs, and practices, which hindered mothers from utilizing postnatal care and from having adequate nutritional intake during the postnatal period [39, 40]. Other factors were related to the health system such as insufficient staff, poor reception of clients, lack of trust and confidentiality between clients and health care providers, lack of sensitization and information, and midwives' workloads [41]. In addition, patient-centered care practices, capacities to conduct postnatal information, education, and counseling are considered among the main barriers to the use of proper postnatal care mainly in remote areas of low- and middle-income nations [39, 42].

9. Advocate for best practices in the postpartum period

Changing behavior to promote a positive attitude in low- and middle-income countries is an element that should be practiced at the base of primary healthcare settings and referred obstetric hospitals. The duty of the healthcare services is to provide adequate care for women during the postpartum period. Designing effective interventions based on practically sound activities related to the postpartum period, accepted by the local communities and adopted to sustain the well-being of women and their families is a crucial step to maximize engagement and outcomes in these communities.

Such required activities and practices focus on behavioral change and address factors related to effective knowledge, attitudes, and norms as part of the interventions. The World Health Organization guidelines addressing postpartum care are well-defined and able to apply and accommodate such communities with low resources [41]. These interventions often complement and enhance the role played by services such as health promotion and education for health care services like family planning, antenatal care, delivery in a skilled birth attendant, and postnatal care [25, 42]. Social and behavior change interventions are critical to ensure that populations that are most in need can access available services and products. This is often achievable through a well-planned and systematically implemented social and behavior change intervention that is based on formative research. In addition, a good, strategic plan that is based on identifying the barriers, mode of communication to the population, and tailored messages to address specific behaviors to enhance the proper practices of women, family, and healthcare services toward improving the impact of postnatal

practices in low- and middle-income countries is crucial [41]. However, implementing best-practice for postnatal activities may require a better understanding of the situation by the health authorities and relevant stockholders working in the area of health services and care. In addition, it is wise to design a focused strategy, developing interventions and materials, and implementing, monitoring, evaluating, and adjusting the planned strategies [43]. Various activities could be included in this planning strategy such as raising awareness, reducing misinformation, and addressing barriers to various lifesaving and health-promoting interventions among individuals, families, and communities.

10. Conclusion

This chapter discussed the impact of postnatal care in low- and middle-income countries and the main challenges they face. Moreover, the importance of the quality of postnatal care was also addressed as well as the required interventions that should be implemented at the level of the facility, household, and community levels as part of the process of reducing the impact of postnatal complications. Such services should be provided for every woman on this globe with more empathy for those in low- and middle-income countries.

As almost all maternal and neonatal deaths occur in developing countries, inequality is a prominent matter among high-income and low- and middle-income countries where fewer services were reported after delivery in the postnatal period. The care during puerperium for the woman has an influence on maternal health, which is considered the most important maternal health-care service not only for prevention of impairment and disabilities but also for reduction of maternal mortality.

Barriers were markedly observed in low- and middle-income countries where postnatal care utilization was low as a result of financial constraints, distance from the health center, poor programming for postnatal care, women's experience during childbirth, cultural constraints, and many others. Other factors related to the health system, such as insufficient staff, poor reception of clients, and lack of trust and confidentiality between clients and healthcare providers, were considered among the barrier to giving attention to postpartum care.

Guidelines and recommendations on a reproductive program initiated by the World Health Organization have developed a comprehensive set of plans for care during the antenatal and postnatal period, focusing on the essential package that all women and newborns should receive, with due attention to the quality of care, that is, the provision of and experience of care and management of postnatal complications. The contraceptives for the family program were linked with women's health, which helps in the prevention of unwanted pregnancies among couples and therefore promotes planned family size and time of birth for improved reproductive well-being of the women.

Strengthening health systems is crucial for improving the quality of care for mothers and neonates. To increase the responsiveness of systems and improve quality, it is essential to improve infrastructure and equipment; access to energy, water, and sanitation; and recruitment, training, and retention of health workers.

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