

“Social Marketing” for Early Neonatal Care: Saving Newborn Lives in Pakistan

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Abstract

According to the World Health Organization and the United Nations Children’s Fund, developing countries carry a large share of neonatal mortality in the world. According to UNICEF, almost 450 newborn children die every hour, mostly from preventable causes. Restricted access to quality and hygienic delivery services and limited knowledge about handling the newborn aggravate the situation. South Asia, and Pakistan in particular, have reduced their child and infant mortality during the last decade; however, neonatal mortality still remains unacceptably high. There are multiple reasons, mainly related to practices and behaviours of communities and traditional birth attendants. Rural and poor populations suffer most in Pakistan, where three out of five deliveries still occur at home. Traditional community practices and conservative norms drastically affect neonatal health outcomes. Preventing sepsis at the umbilical cord, keeping the baby at the correct temperature after birth and early initiation of exclusive breastfeeding are three simple strategies or messages that need to be disseminated widely to prevent many neonatal mortalities and morbidities. Since inappropriate practices in handling newborns are directly linked with persistent and unremitting behaviours among health providers and the community at large, we suggest doing robust “social marketing” for saving newborn lives. The objective of the paper is to present a social-marketing strategy and a marketing mix that will help address and surmount actual barriers and promote alternative behaviours in early neonatal care.

Introduction

Pregnancy, childbirth and motherhood can be made safer in an enabling and health promoting environment ensured jointly by family household members, healthcare providers and the community. Among other challenges to maternal and child health, the most daunting has been the proportion of unsafe deliveries followed by inadequate postnatal follow-up services. This has contributed grossly to the high rates of neonatal mortality around the globe, particularly in poor and developing countries. According to the World Health Organization (WHO), an estimated 298,000 neonatal deaths occur annually in Pakistan (WHO 2005). Neonatal mortality is the probability of dying within the first month of life, and the latest statistics show that nearly four million newborns die within that period around the globe. These deaths are far greater in number in developing countries than in industrialized ones. Almost 40% of under-five deaths occur in the first 28 days of life, and three quarters of neonatal deaths take place in the first 7 days. Maternal complications in labour predispose neonates to a greater risk of death, compounded by poverty, in developing countries. Almost 450 newborns die every hour, mostly from preventable causes. Two thirds of the world's neonatal deaths occur in just 10 countries, mostly in Asia (United Nations Children's Fund [UNICEF] 2009). Limited understanding of the urgency attached to newborn illnesses, traditions of seclusion of mother and newborn, belief in evil spirits and the family's inability pay for care and transport can delay the decision to seek care (UNICEF 2004). Although childhood and infant mortality in South Asia has been reduced substantially during the last decade, the rate of neonatal mortality is still high (Lawn et al. 2005). Pakistan is ranked third among these 10 countries and accounts for 7% of global neonatal deaths.

This paper focuses on the importance of safe delivery and, even more importantly, on the significance of early neonatal care in this critical time for reducing neonatal mortalities, by presenting a social marketing strategy and a workable marketing mix. Neonatal mortalities are a major public health problem and should be addressed by a multi-pronged strategy. Among the various causes and determinants of neonatal mortality, most emerge from behaviours and inappropriate practices of women and caregivers. Therefore, this paper attempts to make a case for social marketing as the most versatile strategy for addressing this intricate issue and promoting some key practices vital for neonate survival.

Postnatal Care and Neonatal Mortality in Pakistan: Findings from PDHS 06-07

According to the Pakistan Demographic and Health Survey of 2006–07 (National Institute of Population Studies and Macro International [NIPS/MI] 2008), 61% of expectant mothers received prenatal care; however, only 34% delivered at a facility (11% at a public and 23% at a private facility). Among these, 25% received postnatal care within 4 hours of delivery, 6% within the first 4 to 23 hours, 7% received care 1 to 2 days after delivery, and 3% between 3 and 41 days. Three of every five women reported not having a postnatal visit. Twenty-seven percent of those who did have postnatal visits received care from a skilled health provider, while 16% received care from a traditional birth attendant. Three out of five deliveries took place at home, attended by a relative or unskilled birth attendant. The Pakistan Demographic and Health Survey of 2006–07 quotes neonatal mortality as 54 deaths per 1000 live births. This rate has remained unchanged since the survey of 1992–96 which was 56 deaths per 1000 live births (Hakim et al. 1998). When viewed by socioeconomic characteristics, newborn death rates are highest for mothers who have no education and are in the lowest wealth quintile. Thirty-two percent of women whose last child was not delivered in a health facility used a safe delivery kit. The urban–rural differential is quite high, with 42% of urban women using safe delivery kits compared with 29% of rural women. Around 79% of those who did not deliver in a health facility used non-boiled thread to tie the cord. Among these, 82% of rural women were more likely to use non-boiled thread than women in urban settings (NIPS/MI 2008). Newborn deaths resulted from a combination of medical causes, social factors and health system failures that varied by context and culture. Not complying with standard practices and continuing with traditional modes of handling newborns has shown the dire need to introduce behaviour-change strategies among the vulnerable communities in Pakistan, both in rural and urban settings.

The use of health services is known to depend on the physical, economic and social accessibility of the offered services, as well as on the perceived benefit compared with other opportunity costs (Shaikh and Hatcher 2005). Among factors related to health systems, studies indicate that substandard care, inadequate training, low staff competence and lack of resources – including equipment and medication – all contribute to neonatal death (Hasan and Khanum 2000; Korejo et al. 2007). Low attendance of women at the postpartum visit could be attributed to the fact that most of our primary healthcare facilities are not responsive enough to women's healthcare needs. These facilities lack female healthcare staff as well as adequate privacy and a socio-culturally acceptable environment for women clients (Shaikh et al. 2008).

Lessons from the Region

Studies have reported on successful interventions in a number of countries in the region. In India, female village health workers with 5 to 10 years of schooling learned to deliver a package of home-based newborn-care services. By the third year of the program, neonatal mortality was 62% lower than in control villages (Bang et al. 1999). Another study showed remarkable results for home visits by community health workers in increasing mothers' knowledge of maternal and newborn care and in reducing neonatal mortality (Baqui et al. 2008). In Bangladesh, mothers' knowledge of essential newborn-care practices such as drying and wrapping the baby immediately after birth, initiating breast milk within 1 hour of birth and having early postnatal newborn checkups improved neonatal health outcomes (Syed et al. 2006).

Traditionally, the cord is usually cut with a razor blade, knife, sickle or even a piece of wood, none of which is generally sterile. In some cultures, the cord is not cut until the placenta is delivered, and then only after cord pulsation stops upon delivery of the placenta (Sreeramareddy et al. 2006). In Nepal and Turkey, health education aimed at behaviour has worked through changing mothers' postpartum practices and beliefs (El-Mouelhy et al. 1994; Turan and Say 2003). In Pakistan, pre-lacteal feeding is quite common (Fikree et al. 2005). Other practices would not be so different from those cited above; therefore similar interventions would work. An effective postnatal care package for mothers and newborns would necessitate a continuum of preventive and curative care to improve maternal health and child survival, from home, to a first-level care facility, to hospital (Kerber et al. 2007).

Early Neonatal Care: The Crucial Time

The first two days are crucial for monitoring complications arising from the delivery. As defined by the WHO (2009), the standard time of early neonatal care is within 24 hours of childbirth. Essential newborn care must include the following:

- Hygiene during delivery, including cord care
- Keeping the newborn warm
- Early initiation of breastfeeding and exclusive breastfeeding
- Immunization
- Care of the eyes
- Care during illness
- Care of low-birth-weight newborns

Barriers in Seeking Postnatal and Early Neonatal Care

Access to quality, convenient and responsive care encourages healthcare seeking and utilization among women. However, access is limited by a number of factors:

- The cost (monetary and non-monetary) attached to seeking quality care is an important determinant in making the decision to do so;
- Physical distance matters, because it involves the transportation fare to the health facility;

- Access for the woman is defined by societal norms and most of the time is constrained because of family objections and cultural embargoes on seeking the healthcare of her own choice;
- The gender of the healthcare provider is a long-standing issue; there are not enough female practitioners, particularly in rural areas (Shaikh and Hatcher 2005; Shaikh et al. 2008).

Access to healthcare is further complicated and quite often delayed because of the prevailing traditional practices and home remedies of the conservative communities that compete strongly with health promotion and education.

"Social Marketing": Changing Behaviours for Early Neonatal Care

It is important to understand that people do not change behaviours easily. In fact, people are more likely to take on a new idea quickly if it exhibits characteristics such as the following: the proposed behaviour has a relative advantage over what exists; it is compatible with social norms; it is not too complex; it can be tried out; and, more importantly, others are doing or using it. The key concepts of "social marketing" include bringing about voluntary behaviour change, prioritizing a specific audience and focusing on personal welfare and that of society. The ultimate goal is to bring about shifts in social norms. Social marketing is critical because it looks at the provision of health services from the viewpoint of the consumer (Kotler et al. 2002). It is not a new phenomenon in Pakistan; promotion of contraceptive use for furthering family planning, increased utilization of safe delivery kits, use of oral rehydration salt to reduce childhood mortality from diarrhea and use of iodized salts in goitre-endemic areas are some of the successful campaigns in which the government and the private sector have been involved (Greenstar Social Marketing 2000; Khan 2008).

Social marketing has not yet been tried on a mass scale to improve early neonatal care by creating a demand for postnatal services by pregnant women and their families (including mothers-in-law and husbands) in Pakistan. Newborn lives can be saved through increasing the practice and promotion of healthy behaviours at home and in the community. Reasons for not going for early neonatal and postnatal checkups have not necessarily been related to cost; instead, husband's opposition and distance to the facility were more frequently cited in studies (Lawn et al. 2005). Health education, communication strategies for behavioural change, social marketing of safe delivery kits and promoting the importance of postnatal care will eventually deliver better health outcomes for neonates. However, all these interventions ought to be fine-tuned, considering the contextual factors of the communities in focus. This would include looking at health service utilization patterns, availability of health personnel, cultural norms, traditional practices, status of women, and so forth (Victora et al. 2005). Social marketing is not only about communication and advocacy; it must ensure that products deemed necessary for promoting desired behaviours are accessible and available to the priority population. Another opportunity, therefore, would be to maximize the in-facility and outreach services for postnatal care for mothers and newborns. Behaviour-change interventions start at the family level and, as funds allow, work their way up to health-belief systems, symptom recognition and care seeking, provider preferences, perception and utilization of services, and household decision making (Seidel 2005).

The Audience

In promoting early neonatal care services, the primary audience will be pregnant women, as they are the prime caregiver to the newborn. Future mothers must be sensitized to the need for a postnatal checkup for themselves and the newborn. However, the picture in our setting is quite complex because of the people involved. Since most deliveries are conducted by traditional or non-skilled birth attendants (three out of five) (NIPS/MI 2008), these individuals should be engaged and informed about the importance of clean delivery, cord care and thermal regulation of the newborn. Furthermore, the social marketing campaign must recognize and involve a secondary audience – the key decision makers at the household level – mothers-in-law and husbands, who hold the finances as well. Involving and training traditional birth attendants to promote key practices for improved

peri-natal care has already been documented (Jokhio et al. 2005). Last but not least, skilled birth attendants would need refresher training to reinforce the concepts of early neonatal care.

Goal and Objectives

The ultimate goal is to reduce neonatal mortality resulting from lack of proper care during and soon after delivery. The objectives, however, are manifold:

Knowledge Objective

Since we have identified a primary as well as an equally important secondary audience, for the knowledge objective the social marketing campaign or program must focus on:

- Informing prospective mothers that delivery in the presence of a skilled birth attendant will increase the healthy well-being of their newborn;
- Sensitizing husbands and mothers-in-law to the need for early neonatal care as instructed by the skilled birth attendant will not only prevent the child's morbidity and mortality, it will also be cost-effective in the long run.

Belief Objective

The message promoting the importance of early neonatal care must strengthen the belief of the pregnant women, their husbands and mothers-in-law that all such instructions for care of the newborn are beneficial and necessary for his or her health outcomes later in life.

Behaviour Objective

After having created a reasonable demand on the subject, the social marketing campaign and program should make safe delivery kits available from the area's health providers and birth attendants, who should facilitate the sensitized mothers' use of them.

Marketing Mix

In order to achieve the goal and objectives of the social marketing program for early neonatal care, the marketing mix must be conceptualized with utmost care and understanding. A watchfully designed marketing mix will help in addressing and surmounting the actual barriers and promoting alternative behaviours in early neonatal care seeking.

- **Product:** In this scenario, the product would be a safe delivery kit containing a sterilized blade for cord cutting, a blanket for preventing hypothermia and other items such as soap (for emphasis on hand-washing), antiseptic bandages, cotton and a plastic sheet for delivery. As well, health messages for highlighting the importance of early initiation of and exclusive breastfeeding must be reinforced in the family and during the visit to the health centre for immunization.
- **Place:** The safe delivery kit can either be made available at the nearest health centre or distributed through women health workers to local birth attendants or pregnant women during household visits. This strategy would address the issue of how to acquire such kits.
- **Price:** Ideally, the safe delivery kit would be free; otherwise, a nominal subsidized cost could be charged to the community as a token of their contribution to the program.
- **Promotion:** Through use of social anthropology, behavioural psychology and the educational status of the priority audience, ways and means of promoting use of safe delivery kits and postnatal care can be worked out. Creating strong demand for such services can be accomplished through our vast network of local health workers. Behaviour-change messages should be delivered to the primary and secondary audiences in person. Moreover, mass media (electronic and print) can play a vital role in this context. Health education messages must aim to improve home care practices, creating demand for skilled care at time of delivery, and overall care-seeking behaviours, especially in the postnatal period (Darmstadt et al. 2005).

Conclusion

Research on health-seeking behaviours seems complex at times, requiring special expertise, time and money. But translating the results into practical program decisions would be worthwhile and fruitful, particularly in interventions that aim to eliminate myths among the communities and promote appropriate behaviours and practices (Qureshi and Shaikh 2006). Social marketing is a very useful approach if integrated with other strategies for bringing about change in community behaviours. Promoting safe delivery practices and the importance of early neonatal care could be instrumental in reducing the early neonatal mortality due to improper cord care and hypothermia, in initiating early breastfeeding and in going for routine immunization.

In diverse societies such as Pakistan, social marketing through a profound understanding and an intelligently designed program can affect the circumstances that facilitate adoption of health-oriented behaviours and practices, particularly for saving newborn lives. This paper will serve as a guide for policy makers and program managers in formulating action plans for promoting key practices to save neonatal lives. It will be encouraging to see such plans implemented and research studies published as a result.

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