

PAA Extended Abstract

Birth preparedness and complication readiness: Perception, Practices and its linkages with maternal health: A study in most populous state (Uttar Pradesh) of India*

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150 word Abstract

Birth-preparedness and complication readiness (BP/CR) is a comprehensive strategy aimed at promoting the timely utilization of skilled maternal and neonatal health care. The key elements include: knowledge of danger signs; plan for where to give birth, plan for a birth attendant, for transportation, for saving money, for potential blood donor and plan for a decision maker as well. This paper analyzes the individual, familial and contextual factors affecting the BP/CR in most populous state of India. Based on data and enough evidences available from surveys reveals that government health facility was not the preferred choice for obstetric emergency by majority of mothers. Every eight families out of 10 saved money for delivery. Preparedness for transport was found low due to easy availability of local transport but again lack of maintained roads is a matter of concern for delays in study area. Only few families identified potential blood donor for emergency.

Key words: *Birth-preparedness and complication readiness (BP/CR), save money, Transportation, Safe delivery, Potential blood donor.*

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Importance of the problem

The birth of a baby is a major reason for celebration for thousands of women each day around the world. Societies expect women to bear children and honour women for their role as mothers. Yet in most of the world, pregnancy and childbirth is a perilous journey (Ransom et al). World Health Organization (WHO) estimated that 529,000 women die annually from maternal causes. Ninety-nine percent of these deaths occur in the less developed countries. Every pregnant woman faces the risk of sudden, unpredictable complications that could end in death or injury to herself or to her infant.

Globally 40% or more of pregnant women may experience acute obstetric problems. The WHO estimates 300 million women in developing world suffer from short term or long term illness brought about by pregnancy and child birth. Most of the maternal deaths occur in the developing world. This is because of several reasons one of which is inadequacy or lack of birth or emergency preparedness, which is a key component of globally accepted safe motherhood program. (WHO1994). Birth Preparedness helps ensure that women can reach professional delivery care when labour begins and reduces the delay that occurs when women experience obstetric complications. (JHPIEGO: 2001)

Birth-preparedness and complication readiness is a comprehensive strategy aimed at promoting the timely utilization of skilled maternal and neonatal health care. *The key elements include: knowledge of danger signs; plan for where to give birth; plan for a birth attendant; plan for transportation and plan for saving money. In addition, a potential blood donor and a decision maker need to be identified.* This is because every pregnant woman faces the risk of sudden, unpredictable complications that could end in death or injury to herself or to her infant.

Birth preparedness helps ensure that women can reach professional delivery care when labour begins. In addition, birth preparedness can help reduce the delays that occur when women experience obstetric complications, such as recognising the complication and deciding to seek care, reaching a facility where skilled care is available and receiving care from qualified providers at the facility.

In 1987, for the first time, the international public health community publicly recognized and agreed to address a long-neglected, little-understood problem, the dramatically high rates of maternal death and disability prevalent in the developing world, especially in sub-Saharan Africa and South Asia.

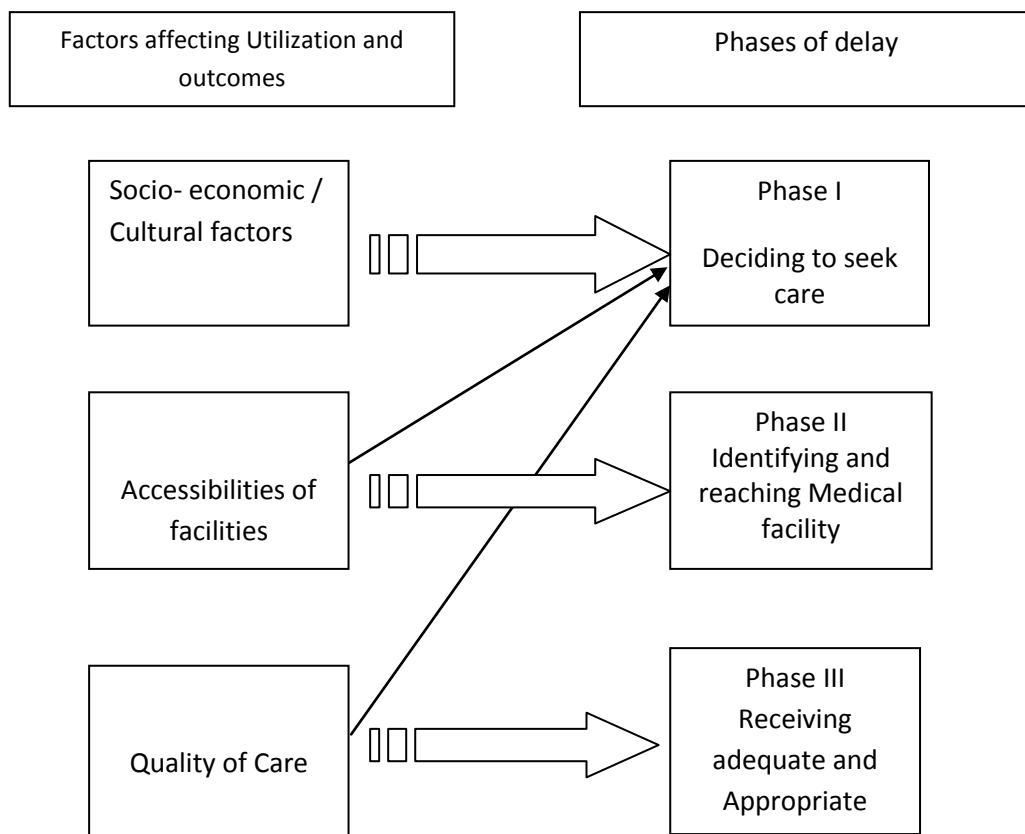
Three delay Model: *Thaddeus and Maine (1994)* have provided the safe motherhood community with an explanatory model of maternal mortality that identifies delay in seeking, reaching and obtaining care as the key factor leading to maternal death. This explanatory model, known as the three delay model, categorizes delays into three types: delay in seeking care, delay in reaching care and delay in receiving care once at the point of service.

Delays in deciding to seek care may be caused by failure to recognize signs of Complications, failure to perceive the severity of illness, cost considerations, previous negative Experiences with the health care system, and transportation difficulties.

Delays in reaching care may be created by the distance from a woman’s home to a facility or provider, the condition of roads, and a lack of emergency transportation.

Delays in receiving care may result from unprofessional attitudes of providers, shortages of supplies and basic equipment, a lack of health care personnel, and poor skills of health care providers. The causes of these delays are common and predictable. However, in order to address them, women and families and the communities, providers, and facilities that surround them must be prepared in advance and ready for rapid emergency action.

Figure 1.



Source: Thaddeus and D Maine. 1994. Too far to walk: maternal Mortality in context.

Need for the study

Birth preparedness is not easy to achieve. Many people in developing countries live on less than US\$1 a day, which is hardly sufficient for them to feed and clothe themselves but not sufficient to save for obstetric emergency in future. In rural areas the situation is even more complex even if transportation is available in the case of an obstetric emergency, distance and lack of maintained roads may still cause delays, sufficient to put the life of the women in danger. (Kureshy N. et al, 2000).

Birth preparedness is one of the important factors in determining the maternal health outcomes. According to SRS estimates 2007-09 maternal deaths in Uttar Pradesh are 2.5 times more as compare to national estimates and 5 times high as compare to southern states of India. Maternal deaths in Uttar Pradesh are more prominent due to inappropriate planning for births, at the time of delivery, pregnancy complications and postpartum period. In this regard, there is a need to highlight the process and issues especially in the demographically and economically backward state like Uttar Pradesh where in spite of various government health schemes and programs we are far from attaining the MDG of maternal health and despite of continues efforts the programmes are failing in bringing out the desired changes in birth preparedness.

Objectives

Main objective of this study is to understand the Knowledge, beliefs and practices about BP/CR and to study the individual, familial and contextual factors affecting the BP/CR in most populous state (Uttar Pradesh) with 200 million population of India

Data source

The study is based on the data and evidences available from existing studies on Birth preparedness and complication readiness in some selected Indian cities and abroad. The findings from different studies carried out in India and abroad has been utilize in order to bring out the perception and practices for BP/CR in India

Preliminary results

Several important findings emerged from these studies. Primary Findings of a study in indoor city reveals that nearly 70 percent mothers identified a trained birth attendants (TBA) for delivery, rest of mothers who did not identified for them most predominant reason reported were economic scarcity and lack of perceived need. Nearly 64 percent of mothers identified a health facility for obstetric emergency and that are private hospitals and thus government health facility were not the preferred choice for obstetric emergency. Large proportion 78 percent families saved money for delivery and 23 percent who did not saved money, the reason reported household purchase and husband spend money on liquor. Preparedness for transport was low 30 percent due to easy availability of local transport in the community.

Table1: Evidences based on studies in India

Studies in Indian Context			
Author/Organization	State/District	Year	Sample size
<i>Agarwal S. et al.</i>	<i>M.P./Indore District</i>	<i>2006</i>	<i>312</i>
<i>Deoki Nandan at al</i>	<i>M.P./Riwa District</i>	<i>2008-09</i>	<i>2022</i>
<i>PFI, India</i>	<i>South Asian Countries</i>	<i>2010-2011</i>	<i>N.A.</i>

Result of another study conducted in Riwa district reveals that (Table 2 and figure 1) all the seven indicators of Birth preparedness and complication readiness which is adopted in this study shows that Index does not differ significantly between pregnant women and recently delivered mothers. As the year of schooling increasing from illiterates to more than 10th slandered, the BP/CR index shows significant difference and it comparatively higher in those women who have studied 10 and above standard.

Table 2:

Number	Indicators of Birth Preparedness and Complication Readiness	Recently Delivered	Pregnant Women
1*	% of the women who knew Less than 8 danger signs of pregnancy	21	14
2*	% of the women who knew about transportation services by government in Janani Express Yojana	20	16
3*	% of the women who knew about financial assistance provided in Janani Suraksha Yojana.	78	79
4*	% of the women availed ANC in 1st trimester by skilled provider	26	21
5*	% of the women who identified skilled birth attendant for delivery	67	76
6*	% of the women who identified mode of transportation	77	82
7*	% of the women who are saving money/saved money to pay for expenses	46	41
	BP/CR Index	48	47

$$\text{Mean} = \frac{\sum \text{Indicators}}{7}$$

Figure 1:

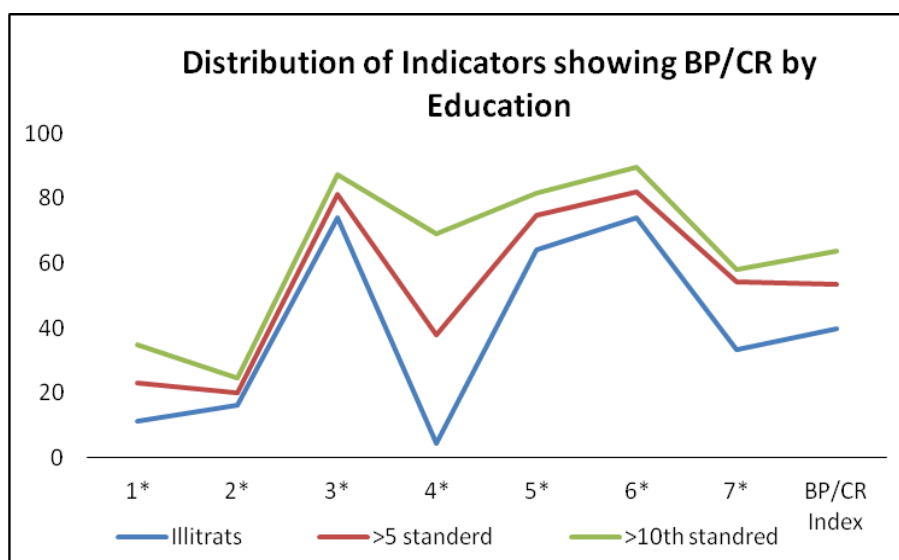


Table 3: Evidences based on studies out of India

Studies carried out of India			
Author	Country/District	Year	Sample size
Save the Children-Kathmandu/Nepal	Nepal/Siraha district	2003-04	600
David P. Urassa et al.	Tanzania/Mpwapwa district	2005	600
A.Sham et al.	Hong kong	2006	N.A.
Mesay Hailu et al.	Southern Ethopia/Aleta Wondo district	2007	812

*JHPIEGO, WHO, USAID tools for BP/CR has been also considered as a reference to develop a tool for the current study

** Figure 2: A framework has been given in the end of the extended abstract to develop a concept for the current study

Birth preparedness Index (BPI) was originally conceptualized in a study conducted in Siraha district Nepal by seven discrete, equally-weighted variables that measure different aspects of the birth-preparedness process. The BPI is calculated at the level of the individual as the percentage of the following components that the mother reports regarding her most recent pregnancy/delivery: (1) received antenatal care at least once from a trained provider; (2) names prolonged labour as a danger sign during delivery; (3) names excessive bleeding as a danger sign during delivery; (4) made financial preparations for emergencies during pregnancy; (5) made preparations for emergency transportation during pregnancy; (6) delivery attended by a SBA; and, (7) received postpartum care from a trained provider within six weeks of delivery. The result of this study was that BPI increased from 33% at baseline to 54% at endline. Increases in six of the seven components of the BPI were statistically and practically significant.

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Figure 2: Conceptual framework

