

# Identifying Maternal Health Problems: India

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The most common maternal health issues which contribute to high rates of maternal mortality in Uttar Pradesh are haemorrhaging, unsafe abortions, eclampsia (and pre-eclampsia), obstructive labour, anaemia, and infections. Most of these complications develop during pregnancy, although they can exist beforehand, and worsen during the course of pregnancy. The majority of women die from haemorrhaging which is severe bleeding during labour. More than 50% of women in India are anaemic; a disorder of the blood that results in a lack of red blood cells which further increases the risk of haemorrhaging during pregnancy (WHO, 2012). Pre-eclampsia is a medical condition in which hypertension (high blood pressure) arises in pregnancy which can develop into eclampsia, a condition that induces seizures during pregnancy (WHO, 2012). Signs that precede seizures or convulsions are nausea, vomiting, headaches and cortical blindness. Obstructed labour can occur if the baby's head is too big for the mother's pelvis or if the baby is positioned abnormally for birth which usually results in the need for a caesarean section to be performed (WHO, 2012). Unsafe abortions can be attributed to impoverished conditions, lack of health care professionals/clinics and access to family planning as well as lack of quality pre and post abortion care. Infections such as sepsis can occur due to unhygienic environments which is an entire body inflammatory state that can lead to severe sepsis; a condition that includes infection and the presence of organ dysfunction (WHO, 2012). Most complications that lead to maternal death are

avoidable as health care solutions are well known, but it is the lack of access to antenatal care and support after childbirth which contributes to high rates of mortality.

In order to identify health challenges we must break down the conditions and what can be done to prevent or manage complications before, during and after pregnancy. Prior to pregnancy or in the initial stages of pregnancy, family planning is necessary to combat issues or questions of safe pregnancy practices such as maintaining a healthy diet, as well as any inquiries surrounding abortion. It is important that men be equally included in all parts of the family planning process to ensure a safe foundation to raise a child. At this stage, it is necessary to address what pregnancy means in terms of changes in the menstruation cycle, bodily changes, morning sickness and what are normal pains versus what are indicators of more serious complications. Asking about the medical history of the patient is important to address any history of sustained illness which may affect and or hinder a healthy child birth. A urine test can be used to determine pregnancy, which can be done easily in low-resource settings rather than trying to gain access to a health clinic. Throughout the trimesters blood pressure should be taken frequently, in which readings of 140/90 can be considered abnormal. Prenatal exercises/activities should be encouraged to ensure a healthy birth. During labour/birth close attention needs to be attributed to timing contractions, whether or not the water breaks or needs to be broken by the village health care worker and whether there are increases in blood pressure. Furthermore, the place where the delivery takes place needs to be sanitized and hygienic in order to ensure a healthy birth. Post birth is an important stage in terms of further family planning and how to properly care for the baby, addressing any post-haemorrhaging, and the full recovery of the mother.

Although most complications leading to maternal and infant death are detectable and preventable in a developed country setting, it is not the case in Uttar Pradesh (Caleb, Ramarao, & Townsend, 2001, pg. 256). This is due to a large variety of socio-economic factors that limit the quality, accesses, and availability of both basic and emergency maternal and infant health care. There are widespread and disproportionate shortages in the health care sector, with a concentration of health care workers in urban areas, often due to the refusal to work at the village level which is lacking in social and medical infrastructure at rural facilities (Chatterjee & Paily, 2011, pg. 52). The doctor to patient ratio for India on a whole is 1:1722, but in rural areas it can be as high as 1:25,000 (Chatterjee & Paily, 2011, pg. 51). India has one of the lowest investments in public sector health in the world, at only 0.9 percent of GDP, while 3.5 percent of health expenditure is in the unregulated private health sector (WHO, 2011, pg. 26). With a lack of government funding of public health care, the majority of the health care costs are a burden to society causing an increased impoverishment of 2.2 percent of the population annually (WHO, 2011, PG. 14).

But even when there have been increases in government funding and more doctors in rural areas, there continues to be a low utilization of women's health care services due to the social context in India where pregnancy is not considered to require any special medical attention. As well, reflecting the lack of power women have in the household, 41 percent of women do not seek out antenatal care because their husband, or their mother in law, did not think it was important or did not allow the women to access the care that was available (Chatterjee & Paily, 2011, pg. 51). Traditional beliefs in India also limit the proper utilization of maternal and infant health care, where even in

emergency situations, women will not leave their home during the early postpartum period to protect themselves from contamination (Caleb, Ramarao, & Townsend, 2001, pg. 256). Due to cultural taboos and lack of awareness, only 55 percent of infants are exclusively breastfed up to 4 months, which is a contributing factor to over 50 percent of child deaths due to malnutrition (WHO, 2011, PG. 20). Both high levels of illiteracy and young age of marriage in rural areas contribute significantly and negatively to maternal and infant health, with the IMR (Infant Mortality Rate) at 77 in teenage mothers versus 55 in post-teenage mothers, and illiteracy in mothers doubling the IMR (Chatterjee & Paily, 2011, pg. 51). The preference for sons due to cultural and economic factors leads to unsafe abortions, as well as an increased death rate for female infants due to neglect, which impacts the child-sex ratio of 927 girls per 1000 boys (WHO, 2011, PG. 21). All of these socio-economic factors are complex in nature and contribute to a high maternal and infant death rate in rural India.

Looking specifically at Uttar Pradesh, the following are direct barriers that will hinder the identification of issues and preventative measures for maternal and infant health. In order to protect against tetanus contracted in unhygienic delivery conditions, tetanus toxoid injections are recommended, but on average only 40 percent of women in Uttar Pradesh have the injection administered (Caleb, Ramarao, & Townsend, 2001, pg. 258). In relation to the early detection of pre-eclampsia, basic blood pressure measuring equipment such as sphygmomanometers are not available at almost half health care centers (Caleb, Ramarao, & Townsend, 2001, pg. 258). The alternative indicator of blood pressure is testing urine for sugar and albumin, but only 1/3 of primary health care centers have the capacity to perform urine tests (Caleb, Ramarao, & Townsend, 2001, pg.

258). If haemorrhaging is not preventable and it occurs during delivery it should be treated with oxytocin, which is only available at large, higher level facilities that the patient must be transported to, which is often an unavailable option due to lack of ambulances (Caleb, Ramarao, & Townsend, 2001, pg. 259). Indicators that may cause obstructed labour must be identified early on in order to plan for the possibility of a caesarean section, which requires a gynaecologist, anesthetists, drugs, emergency supplies, and facilities that are not available last minute in a rural setting (Caleb, Ramarao, & Townsend, 2001, pg. 259).

Anaemia is an indirect cause for many maternal health issues, and can be treated with diet and iron and folic acid tablets, which are available in most rural health centers. Although the treatment of anaemia is available, the equipment for testing for it is not, with most rural facilities unable to test the blood for haemoglobin levels, and less than 10 percent of sub-centers with adult weighing scales to indicate nutritional status (Caleb, Ramarao, & Townsend, 2001, pg. 260). Although many maternal and infant health complications are preventable, their treatment and identification is often limited in rural areas of Uttar Pradesh due to a lack of funding and a variety of complex socio-economic factors. If a village health worker is aware of these barriers, they can understand their limits and provide referral recommendations and proper planning at the early stages to avoid emergency situations that they do not have the resources or skills to attend to. Furthermore, it is also important to prevent unwanted and too-early pregnancies, which is why there is such a heavy importance placed on the use of family planning as abortions are the third leading single cause of maternal mortality (Caleb, Ramarao, & Townsend, 2001, pg. 256). Continuous contact with the health care system is useful for detecting and

treating conditions such as anaemia, malnutrition and pre-eclampsia as well as for monitoring foetal growth (Caleb, Ramarao, & Townsend, 2001, pg. 256). The early detection of complications can act as a preventative means to reducing further maternal deaths.

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