Background
Safe motherhood programmes most often focus on reducing maternal death in developing countries, but rarely pay attention to the women who survive severe obstetric complications and the often inadequate care they receive.

To help these women who have long been neglected, Immpact, a global research initiative, sought to improve the design and evaluation of safe motherhood programmes by increasing the knowledge of the health, social, and economic consequences of pregnancy and delivery-related complications for women.

These consequences, or “outcomes after pregnancy,” include diagnosed and perceived illness or disability following pregnancy (including psychiatric illness) and social and economic consequences of pregnancy and delivery-related complications (see figure). The burden of disease from maternal causes has been underestimated due to lack of attention to outcomes after pregnancy. When planning or evaluating safe motherhood programmes, one must pay attention to the outcomes after pregnancy in addition to data on maternal death in order to create a more holistic and longer-term approach to maternal health.

Measuring Outcomes After Pregnancy
Immpact used multidisciplinary and complementary approaches to explore the consequences of pregnancy or delivery-related complications. It developed clinical indicators of maternal illness, injury, and disability that are directly related to pregnancy and delivery (including unsafe abortion) and questionnaires to capture women’s perceptions and experiences of adverse consequences of pregnancy, abortion, and childbirth. Researchers used ethnographic methods to define and investigate these outcomes and their social significance. Through literature reviews, secondary analysis of Demographic and Health Survey (DHS) data, and studies of women in Burkina Faso, Indonesia and Ghana, Immpact explored the consequences of pregnancy, abortion, and delivery, focusing on those women who survived near misses (life-threatening obstetric complications during pregnancy, delivery, or postpartum) and comparing them with women who had uncomplicated childbirth. A central component of this work was a study in Burkina Faso which followed more than 1,000 women for the year following their pregnancy.

Findings
After a near miss, women often face long-term illness, and both women and their babies face increased risk of death.
Women face lasting challenges following a life-threatening obstetric emergency. An Immpact study revealed that women who suffered a near miss suffered from more disabilities and ill health and were significantly more likely to die in the year following the complication than those who did not have a near miss. Furthermore, more than 10 percent of babies born to mothers who had a near miss died before reaching their first birthday. Women in Burkina Faso who suffered a near miss were also more likely to suffer episodes of depression, anxiety, or anaemia, and to experience intimate partner violence, particularly when their near-miss complications ended with an abortion, stillbirth, or death of the newborn.

The cost of obstetric care continues to pose a barrier to using services.
In Indonesia, Immpact found that the cost of obstetric care was a major concern for women and their families: Anticipation of problems paying for unexpected medical costs added to the social and logistical difficulties of responding to an obstetric emergency. Although most of the women were eligible for a health insurance programme for the poor that covered most of the direct costs of obstetric care, women and their families found it hard to obtain and use the programme’s membership card. Even those who used the insurance had to rely on savings and borrowed to cover costs not covered by the insurance programme.

Women who suffered from a near miss were poorer, yet faced higher hospital costs than women whose childbirth was uncomplicated, according to research in Burkina Faso. Women who suffered a near-miss complication
sought health care more often and spent more on care in the year following the pregnancy. However, many of these women delayed seeking care because of concerns about the high cost of care. Furthermore, many families of these women spent all their savings to get care and faced lasting debt.

Obstetric emergencies resulted in lasting health, social, and financial problems for women and families. Immpact research in Burkina Faso found that the social and financial strain of managing a medical emergency caused long-lasting financial difficulties, feelings of guilt, and changes to marital and other social relationships. Women’s social status—particularly their marital status—shaped their experiences in the postpartum period. Women reported that since childbearing is an essential part of married life, the birth of a baby could help consolidate a marriage and a woman’s acceptance into her husband’s family. A near miss often threatened social stability. This was especially apparent when the event ended in the death of the foetus or baby, was associated with high costs, or interfered with the woman’s ability to perform her domestic and productive activities. Many women reported problems negotiating sex and the use of contraceptives in the months following the end of the pregnancy. Unmarried women were particularly vulnerable, because their pregnancies were almost always unwanted, and they had few economic and social resources.

**Recommendations:**

- **Broaden the definition of maternal health.** Safe motherhood evaluations should broaden the definition of maternal health to include a range of pregnancy-related conditions and injuries experienced by women in the 12 months following the end of pregnancy, as well as the social and economic consequences of the pregnancy and delivery experiences.

- **Create specific interventions to address the physical, mental, social, and economic consequences of “outcomes after pregnancy.”** From a programmatic perspective, it may not be enough to save women from dying as a result of pregnancy or delivery. Safe motherhood programmes must consider the societal implications for women who survive life-threatening obstetric complications and develop ways to prevent or address these problems. Solutions could include financing mechanisms to reduce the burden of paying for obstetric care. These programmes could target the cost of obstetric services such as caesarean delivery; post-pregnancy follow-up visits, even for women whose pregnancy did not produce a live birth; psychiatric assessment and treatment during post-pregnancy checkup; and access to credit or loans to enable women to resume income-generating activities following severe obstetric complications.

For more information on Immpact, please visit www.immpact-international.org.