Stillbirths are largely invisible as a social and public health problem, particularly in low-income and middle-income countries. The global burden is vast with an estimated 2.6 million stillbirths each year. Nearly 45% of stillbirths occur during labour. There are proven, cost-effective interventions that could significantly reduce this burden, including providing emergency obstetric care and ensuring that a skilled professional attends births. Delivering on related commitments to the UN Secretary-General’s Global Strategy for Women’s and Children’s Health will have triple benefits: reducing not only maternal and newborn deaths, but also stillbirths.
What is the problem?

Stillbirths are largely invisible as a social and public health problem, particularly in low-income and middle-income countries. The Millennium Development Goals do not count stillbirths, nor do global health tracking initiatives such as the Countdown to 2015. Social stigma about stillbirths and a lack of public awareness contribute to the silence.

New estimates highlight the global burden of stillbirths

For the first time, researchers from leading organizations worked with the World Health Organization (WHO) on a comprehensive set of stillbirth estimates by country (see Figure 1). The Lancet Series on Stillbirths, April 2011, draws on these data. Every day there are more than 7,300 stillbirths in the world; each year this amounts to 2.6 million stillbirths.

The disparity in stillbirth rates between countries is vast

About 98% of stillbirths happen in low and middle-income countries and most (75%) of them are clustered in South Asia and sub-Saharan Africa. The highest stillbirth rates of 46 and 41 per 1,000 births are in Pakistan and Nigeria respectively; the lowest rates are in Finland and Singapore (2 per 1,000 births).

Disparities exist within regions and between rural and urban settings

Within sub-Saharan Africa, countries such as Mauritius and Seychelles have fewer than 10 stillbirths per 1,000 births, but in Somalia or Sierra Leone, stillbirth rates are higher than 30. In India, although the overall stillbirth rate is 22 per 1,000 births, some states record more than 60. In China, rural areas report a three times higher stillbirth rate than urban areas. Rural families in South Asia and sub-Saharan Africa experience 55% of all the world’s stillbirths.

There is a need for reliable, real-time data

In sub-Saharan Africa and in south Asia, where most stillbirths are estimated to occur, many are not counted. The recent estimates of stillbirth rates, draw on vital registration data (from 79 countries), national surveys (from 39 countries), and 113 studies (from 42 countries), and use statistical modelling to assess the trends from 1995 to 2009. Better health information systems are required to better understand when and where stillbirths occur.

Box 1 – Defining stillbirths

The definition of a stillbirth varies across countries. A woman usually undergoes labour (normally or induced) during a stillbirth. In many high-income countries, stillbirths include all pregnancy losses after 22 weeks of pregnancy, or a birth-weight of at least 500 g. In many low-income and middle-income countries, counting stillbirths is a challenge. Systems to monitor pregnancies and to register births and deaths are weak. So for international comparisons, WHO considers stillbirths as pregnancy losses at or after 28 weeks of pregnancy, or a birth-weight of at least 1000 g. To make stillbirths count, a universal definition and systems for monitoring are required.
Why do stillbirths occur?

**Lack of quality care during childbirth**

Around 1.2 million or 45% of stillbirths every year occur due to problems during labour and delivery, and because of inadequate or inappropriate care. Most maternal and newborn deaths also happen in similar circumstances. The high burden seen in rural areas, and in sub-Saharan Africa and South Asia, corresponds to the low coverage of facility births and access to emergency care in these areas.

**Specific conditions**

Stillbirths are also associated with specific conditions such as congenital abnormalities, infections, and restricted fetal growth. However for a large number of stillbirths the cause is still unknown.

**Lack of quality antenatal care and poor maternal health**

During pregnancy, infections such as syphilis or malaria, as well as conditions such as high blood-pressure, diabetes and pre-existing health conditions can lead to stillbirths, if not effectively identified and managed during the antenatal period.

**More research is required**

Much is still unknown as to the causes of stillbirths. This is partly because of the different approaches to classifying stillbirths; some look at fetal causes whilst others examine maternal causes. Some conditions may require complex medical examinations, which are not always feasible in low and middle-income country settings.

What works?

**Integrated care along the continuum of care is important**

To prevent stillbirths, pre-pregnancy and pregnancy care such as nutritional interventions (e.g. folic acid and other micronutrient supplementation) are important. Screening during pregnancy for infections, high blood pressure and diabetes can reduce stillbirths by between 10% and 20% on average. Better family planning services can also save lives through fewer pregnancies. During labour and delivery, emergency obstetric care and having a skilled professional attend births are critical to prevent stillbirths as well as maternal deaths and newborn deaths.

**Interventions to prevent stillbirths have a triple benefit - they prevent maternal deaths and newborn deaths too**

If an integrated package of 15 priority interventions were available to 99% of pregnant women, 1.1 million (45%) stillbirths, 201,000 (54%) maternal deaths, and 1.4 million (43%) neonatal deaths could be saved per year (see Figure 2).

**An integrated package of interventions is cost-effective**

Providing an integrated package of 15 priority interventions to prevent stillbirths and promote women’s and children’s health would cost an additional US$2.32 per person in the general population. This estimate is lower than the WHO and World Bank criteria for cost-effectiveness. If ten stillbirth-specific interventions are provided, the cost per maternal and neonatal death and stillbirth averted is US$4,762. When an additional five interventions that improve maternal and newborn health are added, the cost per death averted drops to US$3,920.

---

**Figure 2**

Number of maternal and neonatal lives saved, and stillbirths prevented in 2015 at full (99%) coverage

Adapted from the Lancet. Series on Stillbirths, 2011.
Meeting commitments to the UN Secretary General’s Global Strategy for Women’s and Children’s Health

Public and private actors made commitments to the Global Strategy to increase antenatal care coverage, skilled attendance at birth, access to emergency obstetric services and other interventions that are also essential to prevent stillbirths. Particularly important are commitments to address the shortage of over 3 million health workers worldwide, including community health workers, doctors, midwives and nurses.6,7

Public awareness and support can help families acknowledge and cope

Public recognition of stillbirths and support for bereaved families is important.1,8 In many settings, stigma is attached to stillbirths and families’ grief is not recognized (See Box 2). These are barriers to any action to prevent stillbirths. Research alliances and support organizations such as the International Stillbirth Alliance, Saving Newborn Lives/Save the Children, Global Alliance to Prevent Prematurity and Stillbirth and others have helped to highlight the gravity of this problem and parents’ grief is now increasingly being recognized. A recent study of 13,000 women in the UK, found that a stillbirth can affect mothers psychologically even years later.9 Such studies can help raise awareness and catalyze progress to provide the required support and preventive measures.

Conclusion

Stillbirths count for families and counting them in policy and programs is important. The first step towards this should be to include stillbirths in all pregnancy- and childbirth-related tracking mechanisms and relevant reports. Meeting commitments to the Global Strategy for Women’s and Children’s Health will help prevent maternal, newborn and child deaths as well as stillbirths.

Box 2 – Stillbirths: hidden and misunderstood8

Two web-based surveys looked at the common perceptions about stillbirth among health professionals and parents. Surveys of health professionals and parents included respondents from 135 and 32 countries respectively. These surveys found that:

- Stillborn babies do not get much societal or family recognition. They are rarely named, or are held or dressed by the mother, or have funeral rites. One in four stillborn babies is not seen by either the parents or family.
- In many settings the mother is considered to have ‘failed’ and the stillbirth is considered her fault, a consequence of her sins, lifestyle or diet, or due to evil spirits.
- Many people believe that stillbirth is a natural selection process and that the baby was not destined to live.
- Some health workers think that stillbirths cannot be prevented and therefore do not consider this a public health priority.
- Two out of every three stillbirths seem to occur in places where there is little understanding about stillbirths and where no national or international institution promote stillbirth prevention measures.5

References and acknowledgements

1 The Lancet Series on Stillbirths, April 2011. Executive summary and papers are available at: www.thelancet.com/series/stillbirth
5 Pattinson R et al (2011) “Stillbirths: how can health systems deliver for mothers and babies?” The Lancet, Published Online April 14, 2011.
7 Global Strategy for Women’s and Children’s Health: Tracking commitments www.who.int/pmnch/activities/jointactionplan/jap_constituencycommitments/en/index.html

Other resources

- Global Alliance to Prevent Prematurity and Stillbirth (GAPPS) www.gapps.org/resources
- Including Global report on preterm birth & stillbirth www.biomedcentral.com/1471-2393/10?issue=S1
- Healthy Newborn Network www.healthynewbornnetwork.org
- International Stillbirth Alliance www.stillbirthalliance.org
- First Candle www.firstcandle.org
- March of Dimes www.marchofdimes.com

Acknowledgements

Shani Mahendra (science writer), Roberta Annovi (design), and contributions to the development and review of this knowledge summary from (in alphabetical order): Hannah Blencowe; Andres de Francisco; Tracey Fyfe; Wendy Graham; Mary Kinney; Shyama Kuruvilla; Joy Lawn; Carole Presern; with inputs from WHO colleagues.