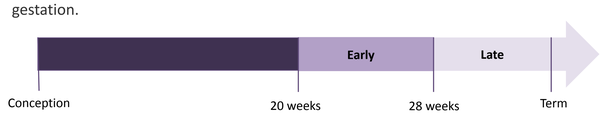
Global Stillbirth: A Crisis Left Invisible

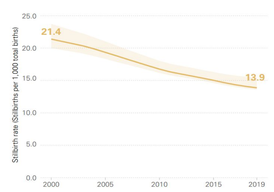
CSIH MentorNet 2020

WHAT IS STILLBIRTH? (1,12)

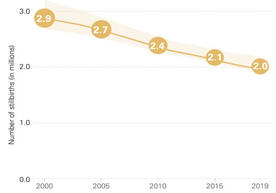
Stillbirth is the birth of an infant with no signs of life after a specified threshold. It can be classified as early or late depending on gestational age. The definition recommended by the WHO for international comparison is a baby born with no signs of life at or after 28 weeks' gestation.



2a) Stillbirth rate



2b) Number of stillbirths



Note: The solid line represents the median and then shaded area represents the 90% uncertainty around the median value.

Source: United Nations Inter-agency Group for Child Mortality Estimation (UN IGME), 2020. A Neglected Tragedy: The global burden of stillbirths. United Nations Children's Fund.

WHY DOES IT MATTER? (1,3)

2 million stillbirths in 2019
20 million stillbirths estimated by 2030

4 stillbirths every minute
5,400 ***every day***

Every Newborn Action Plan aim for all nations: 12 or fewer stillbirths per 1,000 total births

High **global inequity**: rates of stillbirth range from 1.4-32.2 per 1,000

84% Occur in **low & lower-middle income** countries

Over 40% of stillbirths occur during labour

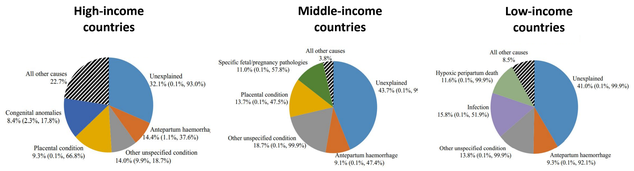
Majority ***preventable*** with high quality health care

56 countries will ***not*** reach target by 2030, majority **not even by 2050**

Exacerbated by gender inequity, power imbalance, restricted autonomy of women

Stillborn delivery followed by **grief, depression, stigma and isolation** among women

CAUSES AND RISK FACTORS (2)



Source: Reinebrant et al., 2018. Making stillbirths visible: a systematic review of globally reported causes of stillbirth. *BJOG: An International Journal of Obstetrics & Gynaecology*, *125*(2), pp.212-224.

WHAT ARE THE KEY CHALLENGES? (1,2,4,6-10)

Under reporting
- Inadequate recording
- Failure to classify and record
- Health workers' fear of blame

Unexplained causes
- Large proportion classified as "unexplained" or due to "other unspecified conditions"
- Many different systems of categorizing cause of death and only one aligned with ICD-PM, the WHO standard for classifying perinatal mortality
- Inadequate attention to understand the causes or taking actions to address them

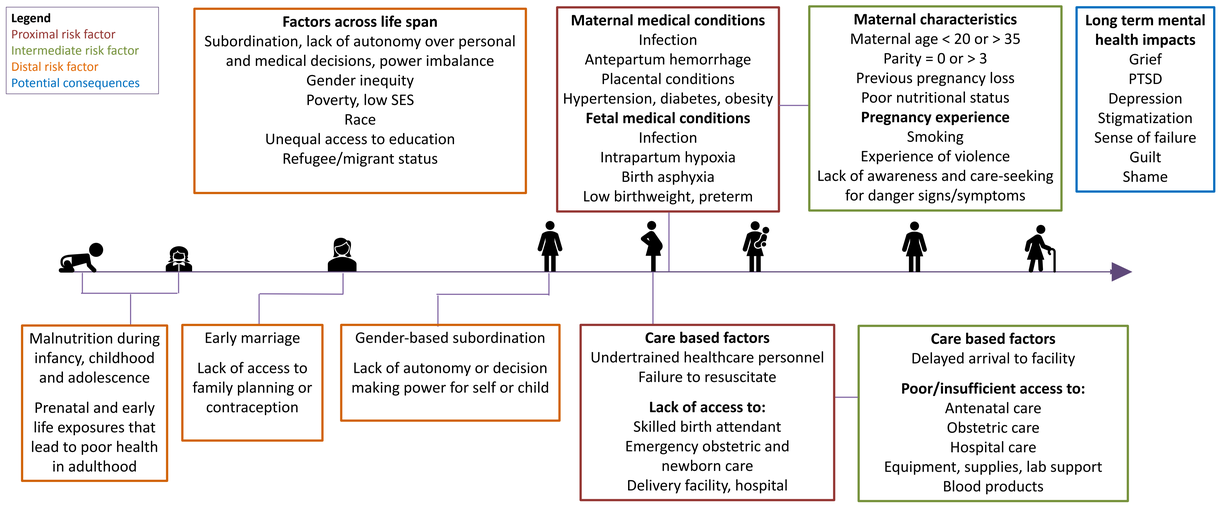
Inconsistent definitions and classifications
- Cross-country variation in thresholds of birthweight, length, and/or gestational age
  - Gestational age thresholds vary from 20 – 28 weeks
- Misclassification of stillbirths with abortion and early neonatal deaths

Lack of quality care
- Intrapartum stillbirth is linked to inadequate quality of care during labor and delivery
- Women in low and middle income countries or LMICs often lack access to quality healthcare

Barriers to routine care
- Lack of access to routine services and care for maternal complications, especially among the hard to reach population
- Disruption of services and during emergencies and humanitarian or environmental crises (e.g. COVID-19)

Inadequate resources and political will
- Highest burden in low-middle income countries: Sub-Saharan Africa and South Asia
- Bias in funding towards solutions for issues in HIC compared with LIC (e.g. NICU care vs intrapartum care)
- Disparities exist between and within countries so action is needed from all countries

RISK FACTORS ACROSS THE LIFESPAN (1,2,5-7,11,12)



WHAT SOLUTIONS EXIST? (1-3,5,6,9,12-15)

Applying the Ecological Model and Systems Thinking to Recommendations for Action On Global Stillbirth

POLICIES AND SYSTEMS	• Introduce or maintain requirements for registration of stillbirths as part of vital statistics • Set a specific target for stillbirth reduction, locally and nationally • Allocate resources for the improvement of health systems, increased health personnel, and necessary medical equipment to ensure high quality care in a timely manner • Ensure pregnant women and newborns are included in emergency preparedness (e.g. humanitarian crises, epidemics) and response plans to avoid disruption of essential routine care; set clear guidelines for continued antenatal care and delivery services • Ensure universal access to and affordability of antenatal care, sanitary facilities, medication and equipment • Develop a system of accountability and review of stillbirths • Develop targeted action for settings of crisis, conflict, and extreme poverty • Increase public health funding for primary prevention of infectious and chronic diseases • Provide legal protection for women's rights, including reproductive rights and access to safe abortion • Bring gender equality in positions of power, decision-making and policy-making • Invest in context-specific research, investigating legacies of racism, sexism, colonialism, and historical oppression
INSTITUTIONS	• Collaborate across disciplines for collective agenda setting and multisectoral action: e.g. schools, community health centres, hospitals • Develop an integrated approach to continuum of care, from preconception to postnatal care • Integrate data sources: registration systems, health management systems, household surveys, population studies, and community health workers' reports
Hospitals	• Share clear definition and classification guide for stillbirth (as per ICD-PM) • Improve and retain skills among obstetricians, nurses, midwives, and birth attendants in both preventative and curative care
Schools	• Strengthen sexual and reproductive health education through dialogic teaching, peer learning • Promote mental health education and counseling
INTERPERSONAL	• Raise awareness about risk factors for stillbirth, misconceptions about stillbirth, and issues of gender inequity • Remove stigma towards women whose deliveries are stillborn and health workers supporting them • Advocate with marginalized communities for quality health care services • Identify barriers associated with intersectional identity (gender, SES, race)
INDIVIDUAL	• Improve access to higher education • Improve employment or small business opportunities; teach or nurture skills for earning a livelihood
Preconception	• Improve maternal nutrition • Ensure access to sexual and reproductive health care and education • Ensure safe and affordable access to family planning
Pregnancy and labour	• Ensure 4(+) antenatal care contacts • Improve quality of care, intrapartum monitoring, and management of complications • Ensure high quality antepartum and delivery care, attended by skilled health personnel
Post-stillbirth delivery	• Ensure postnatal care within 2 days • Provide counseling for women and their family, culturally sensitive mental health care, and validation of grief response • Explain to families the cause of baby's death and preventative steps for the future

REFERENCES

1. United Nations Inter-agency Group for Child Mortality Estimation (UN IGME), 2020. A Neglected Tragedy: The global burden of stillbirths. United Nations Children's Fund.
2. Reinebrant, H.E., Leisher, S.H., Coory, M., Henry, S., Wojcieszek, A.M., Gardener, G., Lourie, R., Ellwood, D., Teoh, Z., Allanson, E. and Blencowe, H., 2018. Making stillbirths visible: a systematic review of globally reported causes of stillbirth. *BJOG: An International Journal of Obstetrics & Gynaecology*, *125*(2), pp.212-224.
3. UNICEF and World Health Organization, 2020. Ending preventable newborn and stillbirths by 2030: moving faster towards high-quality universal health coverage in 2020–2025.
4. Yoshida, S., Martines, J., Lawn, J.E., Wall, S., Souza, J.P., Rudan, I. and Cousens, S., 2016. Setting research priorities to improve global newborn health and prevent stillbirths by 2025. *Journal of global health*, *6*(1).
5. McClure, E.M., Saleem, S., Goudar, S.S., Garces, A., Whitworth, R., Esamai, F., Patel, A.B., Tikmani, S.S., Mwenechanya, M., Chomba, E. and Lokangaka, A., 2020. Stillbirth 2010–2018: a prospective, population-based, multi-country study from the Global Network. *Reproductive Health*, *17*(2), pp.1-9.
6. Saleem, S., Tikmani, S.S., McClure, E.M., Moore, J.L., Azam, S.I., Dhaded, S.M., Goudar, S.S., Garces, A., Figueroa, L., Marete, I. and Tenge, C., 2018. Trends and determinants of stillbirth in developing countries: results from the Global Network's Population-Based Birth Registry. *Reproductive health*, *15*(1), p.100.
7. McClure, E.M., Wright, L.L., Goldenberg, R.L., Goudar, S.S., Parida, S.N., Jehan, I., Tshefu, A., Chomba, E., Althabe, F., Garces, A. and Harris, H., 2007. The global network: a prospective study of stillbirths in developing countries. *American journal of obstetrics and gynecology*, *197*(3), pp.247-e1.
8. Liu, L., Kalter, H.D., Chu, Y., Kazmi, N., Koffi, A.K., Amouzou, A., Joos, O., Munos, M. and Black, R.E., 2016. Understanding misclassification between neonatal deaths and stillbirths: empirical evidence from Malawi. *PLoS One*, *11*(12), p.e0168743.
9. Statistics Canada, 2019. Vital Statistics – Stillbirth Database (CVSS). URL: https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=3234.
10. Allanson, E.R., Tunçalp, Ö., Gardosi, J., Pattinson, R.C., Francis, A., Vogel, J.P., Erwich, J.J.H., Flenady, V.J., Frøen, J.F., Neilson, J. and Quach, A., 2016. The WHO application of ICD-10 to deaths during the perinatal period (ICD-PM): results from pilot database testing in South Africa and United Kingdom. *BJOG: An International Journal of Obstetrics & Gynaecology*, *123*(12), pp.2019-2028.
11. Centers for Disease Control and Prevention, 2020. What is stillbirth? *National Center on Birth Defects and Developmental Disabilities.*
12. Halfon, N. and Forrest, C.B., 2018. The emerging theoretical framework of life course health development. In *Handbook of life course health development* (pp. 19-43). Springer, Cham.
13. Centers for Disease Control and Prevention. Health Equity Resource Toolkit for State Practitioners Addressing Obesity Disparities. National Center for Chronic Disease Prevention and Health Promotion Division of Nutrition, Physical Activity, and Obesity.
14. Naaldenberg, J., Vaandrager, L., Koelen, M., Wagemakers, A.M., Saan, H. and de Hoog, K., 2009. Elaborating on systems thinking in health promotion practice. *Global health promotion*, *16*(1), pp.39-47.
15. You and Lindt, 2020. Shrouded in silence: The untold story of stillbirths. *UNICEF Connect*. URL: https://blogs.unicef.org/evidence-for-action/shrouded-in-silence-the-untold-story-of-stillbirths/