Why Mortality Surveillance Matters: A Lifesaving Tool for Public Health and Development Planning?

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Have you ever wondered how health experts track diseases, evaluate healthcare programs, or detect emerging health threats? One of the most powerful tools at their disposal is mortality surveillance, the systematic collection and analysis of death-related information (Rao et al., 2025). This data helps us understand trends in causes of death, measure the impact of public health interventions, and allocate resources effectively to improve healthcare services (Chanda et al., 2024). Without it, many deaths would go unrecorded, making it difficult to prevent future losses and improve health outcomes.

Mortality surveillance plays a crucial role in detecting emerging health threats, such as outbreaks of infectious diseases, and ensuring that life-saving interventions reach those who need them most. It relies on multiple data sources, including hospital and community death records, civil registration systems, medico-legal investigations, complete diagnostic autopsies, and verbal autopsies conducted through interviews with family members (Rao et al., 2025). However, in many parts of the world, especially in Africa, mortality data collection systems remain underdeveloped or incomplete.

The Challenge: Gaps in Mortality Data

Accurate death records are essential for effective public health planning, yet many African countries struggle to collect reliable mortality data. According to a 2016 Global Burden of Disease (GBD) study, African nations scored just 8.3% in mortality data accuracy and completeness, far below the global average of 46.9%. Between 2010 and 2016, 69% of African countries failed to produce reliable cause-of-death data (World Health Organisation, 2020). A 2020 report from the World Health Organization (WHO) further

revealed that only 10% of deaths in Africa are officially registered, compared to over 90% in Europe and the Americas (World Health Organisation, 2020).

To bridge this gap, mortality surveillance has become a critical complementary strategy to ensure that deaths and their causes are properly documented. By strengthening these surveillance systems, countries can improve healthcare planning, prevent future deaths, and respond more effectively to public health emergencies.

How Do We Determine the Cause of Death?

Determining why someone has died is essential for public health research and policymaking. The gold standard for establishing the cause of death is a complete diagnostic autopsy (CDA), but this method is often unavailable or unaffordable in many healthcare settings. In hospitals, medical professionals typically rely on medical certification of cause of death (MCCOD), which uses patient records and medical history to determine the cause (Blum et al., 2020).

In rural areas and low-resource settings, where autopsies and certified medical records are rare, the WHO recommends verbal autopsy (VA) (Soleman et al., 2006). This method involves structured interviews with the deceased's family members or caregivers to gather information about the symptoms and circumstances leading to death. The data is then analysed by trained physicians or computer algorithms to assign a probable cause. While VA has some limitations at an individual level, it remains an essential tool in low- and middle-income countries (LMICs), where civil registration systems are still developing.

Zambia's Commitment to Strengthening Mortality Surveillance

Recognizing the importance of accurate mortality data, Zambia has taken bold steps to enhance its surveillance efforts. In 2022, the Zambia National Public Health Institute (ZNPHI) launched a routine mortality surveillance program by establishing a dedicated mortality surveillance unit within the Surveillance and Disease Intelligence Cluster (Chanda et al., 2024). This initiative aims to expand mortality data collection nationwide, ensuring that Zambia can track deaths more effectively and better understand health trends across the country.

A key focus of this program is scaling up VA methods from small-scale sentinel sites to a broader, population-wide system. By integrating different data sources and bringing together key stakeholders, Zambia is working toward a more comprehensive, real-time mortality surveillance system that will drive

The Road Ahead

Reliable mortality data is the foundation of a strong and responsive public health system. Without it, governments and health organizations are left making decisions in the dark, unable to allocate resources effectively or respond to emerging threats on time. Strengthening mortality surveillance, particularly in low-resource settings, is key to ensuring better healthcare, more effective disease prevention, and ultimately, saving lives.

As Zambia continues to lead the way in improving mortality surveillance, it serves as an example for other countries seeking to enhance their health systems. By prioritizing accurate death registration and cause-of-death reporting, we can build a future where no life is lost without a trace, and where every death provides valuable insights to protect and save others.

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