

## Myanmar mortality registration: an assessment for system improvement

<sup>1</sup>Myitzu Tin Oung, <sup>2</sup>Kerry Richter, <sup>2</sup>Pramote Prasartkul, <sup>3</sup>Viroj Tangcharoensathien

<sup>1</sup>Department of Medical Research (Pyin Oo Lwin Branch), <sup>2</sup>Institute for Population and Social Research, Mahidol University, <sup>3</sup>Ministry of Public Health, Thailand

### Abstract

**Background:** The vital registration system in Myanmar has a long history and geographical coverage is currently high. However, a recent assessment of vital registration systems of 148 countries showed poor performance of the death registration system in Myanmar, suggesting the need for improvement. This study assessed the quality of mortality data generated from the vital registration system with regard to mortality levels and patterns, quality of cause of death data, and completeness of death registration in order to identify areas for improvement.

**Methods:** The study used registered deaths in 2013 from the vital registration system, data from the 2014 Myanmar Population and Housing Census, and mortality indicators and COD information for the country estimated by international organizations. The study applied the guidelines recommended by AbouZahr et al. 2010 to assess mortality levels and patterns and quality of cause of death data. The completeness of death registration was assessed by a simple calculation based on the estimated number of deaths.

**Results:** Findings suggested that the completeness of death registration was critically low (less than 60%). The under-registration was more severe in rural areas, in states and regions with difficult transportation and poor accessibility to health centers and for infant and child deaths. The quality of cause of death information was poor, with possible over-reporting of non-communicable disease codes and a high proportion of ill-defined causes of death (22.3% of total deaths).

**Conclusion:** The results indicated that the vital registration system in Myanmar does not produce reliable mortality statistics. In response to monitoring mortalities as mandated by the Sustainable Development Goals, a significant and sustained government commitment and investment in strengthening the vital registration system in Myanmar is recommended.