

Increasing trends in admissions due to non-communicable diseases over 2012 to 2017: findings from three large cities in Myanmar

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Abstract

Globally, cardiovascular diseases, chronic respiratory diseases, cancers, and diabetes are the four major non-communicable diseases (NCDs) contributing to more than 80% of mortality and morbidity due to NCDs. In Myanmar, the proportional mortality rate due to NCDs increased from 46.9% in 2000 to 68% in 2017. However, the trends and patterns of four major NCDs or their hospital admissions are not known. In this regard, we aimed to assess the trends and profile of admissions with four major NCDs using final diagnosis coded in International Classification of Diseases–2010 version (ICD–10) from medical record data of the large tertiary hospitals in different regions of Myanmar.

Of the 774,970 total admissions in the study hospitals, the median and interquartile range (IQR) age was 39 (25–55) years and 51.6% were males. Over a 6-year period, there was not only 2.2-fold increase in the number of admissions due to any of four major NCDs but also their proportion increased significantly from 18.8% in 2012 to 25.4% in 2017 (chi-square for trend, p value < 0.001). The number of admissions due to cancers, cardiovascular diseases, and chronic respiratory diseases also showed linear increasing trends at the rate of 1741 (95% CI 766 to 2715), 1797 (95% CI 345 to 3249), and 597 (95% CI 530 to 612) per year, respectively. Though the admissions with diabetes increased over the years, the rate of increase of 284 (95% CI – 60 to 628) per year was not statistically significant. Among cancer admissions, colorectal (13.1%), breast (13.0%), and lung (11.0%) cancers were the commonest. Stroke (30.6%) and ischemic heart disease (21.9%) admissions were the highest among the cardiovascular diseases. Chronic obstructive pulmonary disease (35.5%) and type 2 diabetes (53.9%) were commonest among chronic respiratory diseases and diabetes, respectively.

There was a disproportionate increase in NCD admissions which requires tertiary health facilities to increase their infrastructure and trained workforce to cater to such admissions. The primary health care facilities have to be strengthened for prevention, early detection, and efficient management of NCDs to prevent life-threatening complications requiring hospitalization.