

## Social Class and Mortality

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The United Nation, High Level Meeting (UN-HLM) on deaths and disability due to non-communicable diseases (NCDs), was important to emphasize the Millennium Development Goals for reducing avoidable mortality due to NCDs by 25% by 2025 (the 25 by 25 goal) [1-3]. The basic societal risk factors resulting in to death and disability and discussion on existing health promotion policies in the developed countries, which are also followed by the developing countries, need further consideration [3-5]. Mortality and burden of disease estimates for WHO, revealed that 36.1 million deaths per year occur as a result of NCDs, which are mainly due to cardiovascular diseases (CVDs) [5]. Approximately, 63% of premature deaths in adults (aged 15–69 years), and three out of four of all adult deaths are attributable to NCDs. However, some experts during the UN-HLM, proposed that, of total deaths, 22.4 million arise in the poorest countries, and 13.7 million in high-income and upper-middle-income countries and therefore poverty may be the major cause of NCDs (Figure 1) [3,5]. One Indian study shows that 57.0% of deaths in adults (aged 25–64 years) were due to NCDs, (including 31.0% due to CVDs), 25.5% due to communicable diseases, and 15.9% due to injury and accidents, indicating that our findings on deaths due to NCDs are similar to WHO estimates [6-8]. This study showed that social classes 4,5 had lowest prevalence of deaths and social classes [1-3], having greater income had highest prevalence of deaths due to NCDs (Figure 2). In 1980s, in Kerala State, India, maternal and child mortality rates were lowest and life expectancy and literacy rates were as good as in developed countries in association with rising prevalence of CVDs, but the people were not very wealthy compared to other states of India [9,10].

The epidemic of poor cardiovascular health behavior continue to be common in USA because Americans may have wealth but there is no health compared to 15 other western countries [4,7]. In a recent report of American Heart Association [7], after adjustment, population

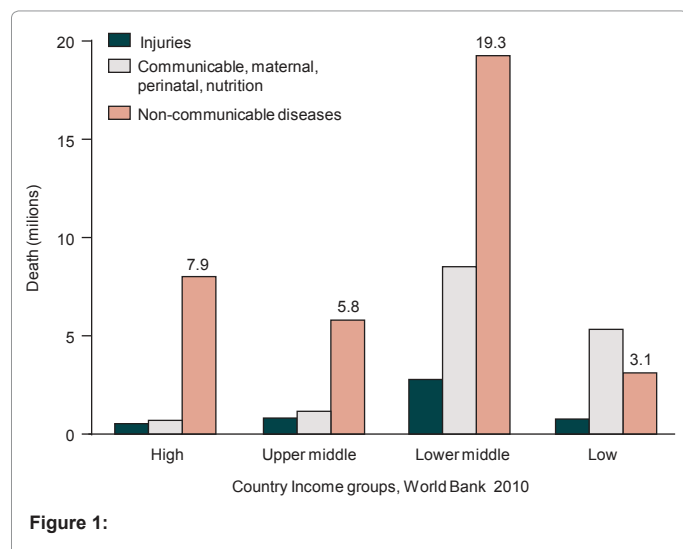


Figure 1:

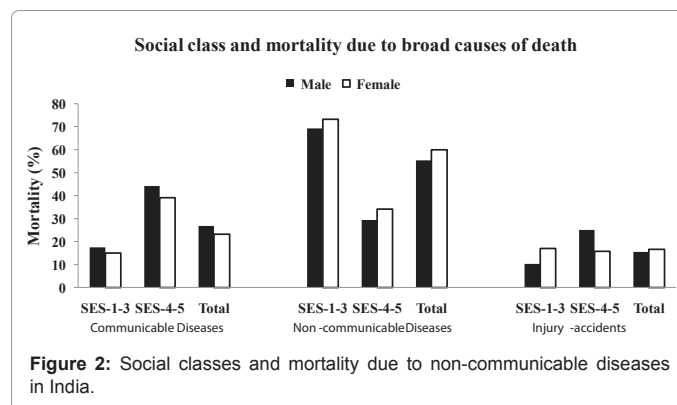


Figure 2: Social classes and mortality due to non-communicable diseases in India.

attributable fractions for CVD mortality were as follows; for high blood pressure, 1: 40.6% (95% confidence interval [CI], 24.5–54.6); for smoking 13.7% (95% CI, 4.8–22.3); for unhealthy diet 13.2% (95% CI, 3.5–29.2); for sedentary behaviour 11.9% (95% CI, 1.3–22.3) for high glucose; 8.8% (95% CI, 2.1–15.4).

These findings further confirm the old hypothesis that emergence of NCDs may have a sequence during transition from under-nutrition and poverty to affluence; Overweight and central obesity come first in conjunction with deficiency of certain lifestyle related biomarkers having adverse effects on emergence of NCDs. This sequence of development of NCDs may be altered by learning and regular practice of methods of prevention by alteration in public health policies for achieving total health including social, mental and spiritual health, apart from the physical health [10-12].

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