Making Sense of Disparate Data on Noncommunicable Disease Risk Behaviors among Youth in Low- and Middle-Income Countries

Toshiko Kaneda, PhD Senior Research Associate Population Reference Bureau

Introduction

Noncommunicable diseases (NCDs) are the leading causes of death globally, including in many low- and middle-income countries (LMICs). There are four key risk factors that account for the majority of deaths from NCDs: (1) Tobacco Use; (2) Harmful Use of Alcohol; (3) Unhealthy Diet; and (4) Physical Inactivity. These are all modifiable behaviors typically initiated or established in adolescence or young adulthood. Interventions targeting behavior change among today's large cohorts of youth is key to curbing the growing NCD epidemic in LMICs. Cross-country comparisons of prevalence are essential for informing policies and programs, yet they are hampered by scarcity of directly comparable data. In the proposed poster, I will compile prevalence data on the four key NCD risk behaviors among youth from a variety of sources for over 160 LMICs and use data visualization to synthesize the disparate data points into a single reference that facilitates comparisons of the risk behavior-levels across countries and regions. Preliminary findings based on the initial analysis of the data visualization for each risk behavior are as follows:

Preliminary Results

Tobacco Use

- Male tobacco use is higher than female tobacco use, nearly universally in all regions.
- In the Middle East, most of Latin America and the Caribbean, and Southeast Asia, cigarette use is generally higher than use of other tobacco products.
- In South Asia and much of Africa, use of other tobacco products is higher than cigarette use.
- With the exception of the island countries (Seychelles, Madagascar, and Mauritius), East and North Africa, and South Asia have the lowest rates of cigarette use, though the use of other tobacco products is higher.
- Very few females in Latin America and the Caribbean use other tobacco products.

Alcohol Use

- Overall, males have a slightly higher rate of alcohol use than females, but the difference is smaller than for tobacco use.
- The prevalence of current alcohol use is much higher in Latin America and the Caribbean, especially the Caribbean and South America, and relatively low in East and South Asia.
- The prevalence of current alcohol use in Africa varies by region and sub-region. Côte d'Ivoire, Burundi, the Seychelles, and Zambia have the highest prevalence of alcohol use.
- There is almost no data on alcohol use in some parts of the world (Middle East, Middle Africa, South Asia), though some evidence shows growing alcohol use in those regions.

Physical Inactivity

- Levels of physical inactivity are extremely high across all regions among both sexes, but particularly among females.
- Only a handful of countries have physical inactivity rates under 50% for either sex.
- The highest rates for physical inactivity are among females in the MENA region and Southeast Asia.
- There is a significant amount of missing data on physical inactivity in Africa, especially in Middle Africa.

Overweight and Obese

- Rates of overweight and obesity vary much more than rates of physical inactivity.
- The highest rates of overweight and obesity are in the Middle East, and then in Latin America and the Caribbean. Not a single country has rates of overweight and obesity under 10% for either sex in the Middle East. South Asia and Middle Africa are the only sub-regions with no countries reporting rates over 20% for either sex.
- In the Middle East, Central America, and South and Southeast Asia, rates of overweight and obesity tend to be higher among males than females, although the pattern is less consistent.
- In North Africa, rates of overweight/obesity are higher among females.
- Much of Africa is missing data on overweight and obesity for males in particular.

Preliminary Conclusion

The rates of the four key NCD risk behaviors are already high among youth in some LMICs and are expected to rise in many others if no actions are taken today. There are still countries where recent data on risk behaviors are not available. There is an urgent need to invest in systematic and regularly scheduled data collection on risk behaviors among youth and to harmonize the available data across countries to inform interventions, so that countries can take advantage of the window of opportunity to curb the growing NCD epidemic. The poster will include in-depth discussions of the implications of the results identified in the data visualization per region and possible intervention strategies.