

## National Data Management Center for health (NDMC)

# Forecasting Disease Burden for Ethiopia's Envisioning Strategy

Ethiopia is making great strides in improving life expectancy, but faces new challenges. The Global Burden of Disease (GBD) study, provides new insights into the changing burden of disease for the country's envisioning strategies. This brief presents diseases and injuries that causes premature death from 2017-2040.

### Ethiopians life expectance by 2040

- Life expectancy is expected to increase to 74 years in 2040 from 66 years in 2017
- Female life expectancy expected to increase from 67 in 2017 to 76 years in 2040
- Life expectancy gain for Ethiopia is expected to be higher than many lower middle income countries (LMIC) by 2040

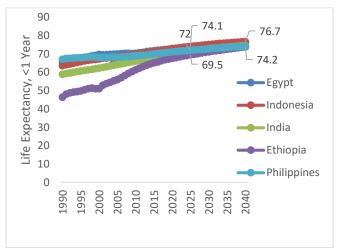


Fig 1. Life Expectancy, 2017-2040

# Increasing importance of Non-Communicable Diseases (NCDs)

- In 2040, deaths caused by NCDs are expected to account for 61% of all deaths, Communicable maternal neonatal and nutritional diseases (CMNN) combined account only for 28%
- Cardiovascular diseases, including heart disease and stroke, expected be a major killer in 2040

- Cancer is expected be the second leading cause of death in 2040 (causing 137.8 death per 100,000) and the third leading cause of premature death. Prostate, cervical, colon and rectum, liver, and breast cancer are some of the leading drivers of poor health from cancer.
- In 2040, **diabetes** is expected be the fourth leading cause of death in Ethiopia (causing 64 deaths per 100,000), and the fifth leading cause of premature death

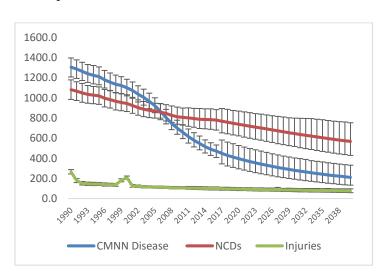


Fig 2. Causes of death for both sex and all age groups by major category in Ethiopia

# Improvements and challenges with common infectious diseases

 Lower respiratory infections, diarrhea, and other common infectious diseases expected to remain major causes of death for children and adolescents.

• However, they cause 67% less deaths for children under 5 in 2040 than in 2017 (from 377 deaths per 100,000 in 2017 to 126 in 2040).

#### Improvements in nutritional deficiency

• **Nutritional deficiency** is expected to decline by 69% (from 29 deaths per 100,000 in 2017 to 10 deaths in 2040)

# Progress in combatting HIV/AIDS, tuberculosis, and malaria

- Death from **malaria will** fall by 56% between 2017 and 2040 (from 1.3 deaths per 100,000 in 2017 to 0.5 in 2040)
- Death from **HIV/AIDS** will fall by 35% in the same period (from 19 per 100,000 in 2017 to 13 in 2040)
- Death from **tuberculosis** is expected to decline, by 76 %, from 93 deaths per 100,000 in 2017 to 23 in 2040)

### Injuries and the effects of violence

- **Injuries** are expected to account for 11% of all deaths in Ethiopia
- It affects men more than women i.e., 11% of total death for men and 7% for women in 2040

• 9005 people are expected to die from **transport injuries** in 2040, and 6289 from **self-harm and interpersonal violence**.

## **Policy Implication**

- Ethiopia's envisioning strategies need to consider such forecasted evidences to set targets
- The Envisioning strategy need to take into consideration the major gain in life expectancy attributed to reductions in under 5 mortality and decline in major communicable, maternal and nutritional diseases through 2040.
- More gains would be expected through averting deaths from NCDs and injuries.

#### **About NDMC**

The NDMC at EPHI works in collaboration with the Global Burden of Diseases study group at the Institute for Health Metrics and Evaluation at the University of Washington.

The GBD study is a systematic, scientific effort to quantify the comparative magnitude of health loss from diseases, injuries, and risks by age, sex, and population over time. The study includes contributions of more than 450 Ethiopian researchers. The goal of the study is to provide decision-makers with the best possible and most up-to-date evidence on trends in population health.

#### Acknowledgment

Ethiopian Public Health Institute (EPHI) would like to acknowledge Inistitute for Health Metrics and Evaluation (IHME) for the collaboration to generate burden of diseases and to strengthen evidence informed health decion in Ethiopia

#### For more information, contact

#### Awoke Misganaw (PhD)

Advisor for NDMC at EPHI Clinical Assistant Professor, IHME

Email: <a href="mailto:awoket@uw.edu">awoket@uw.edu</a>
Cell Phone: 251989966483