



Addressing the Challenges of Noncommunicable Diseases: Women & Children's Health

*"Non-communicable diseases have emerged as growing health problems for countries in every corner of the globe."
- U.S. Secretary of Health and Human Services Kathleen Sebelius*

THE RISE OF NCDs

Noncommunicable diseases (NCDs) represent an urgent and growing global public health emergency, amounting to almost two-thirds of the world's deaths annually. Of these deaths, 80% occur in low- and middle-income countries. According to the World Health Organization (WHO), NCDs are responsible for 9 million premature deaths before the age of 60 annually.

Poverty, poor nutrition during pregnancy, and environmental toxins are all contributing factors to chronic disease development, particularly affecting women and children.

MATERNAL AND CHILD HEALTH

The state of a mother's health during pregnancy can have significant consequences for her offspring, and health interventions before and throughout pregnancy to encourage fetal health will reduce the risk of chronic disease for future generations. Many NCDs have their origins before birth, with evidence strongly suggesting a link to low birth weight (LBW) and NCD development. 16% of newborn infants, or more than 19 million babies, in developing countries are born with LBW. Defined as newborns weighing less than 5.5 pounds, LBW is associated with increased rates of hypertension, diabetes, stroke, and heart disease. LBW is often caused by low protein intake by the mother, which is found to be a significant problem for women in developing countries due to poverty and food insecurity. Evidence indicates that low maternal birth weight is linked to increased blood pressure in children, a known risk factor for

coronary heart disease and stroke. Also, babies born to women who developed diabetes during pregnancy, termed gestational diabetes, are at increased risk of developing obesity and type 2 diabetes as they grow up. Given the projected global increase in NCDs by 17% over the next decade, a life-course prevention approach starting with the health of the mother and during pregnancy are critical interventions.

INDOOR AIR POLLUTION

In developing countries, women and children receive the greatest exposure to indoor air pollution (IAP) from unventilated stoves using solid fuels, which kills 1.6 million people annually. WHO ranks IAP as the 2nd largest environmental risk factor for poor health. Consistently linked with NCDs, IAP results in lung cancer with coal usage and chronic obstructive pulmonary disease, which includes emphysema, chronic bronchitis, and in some cases, asthma in adults. IAP is also a major risk factor for acute lower respiratory infections and pneumonia in children, which are the most significant causes of death in children under five. IAP more than doubles the chances for pneumonia and is attributed to nearly half of the annual 2 million pneumonia deaths. IAP is also tentatively linked to cardiovascular disease, asthma, certain types of cancers, and low birth weight. Recognizing this disproportionate burden of disease in women and children, the U.S. has committed \$50.82 million, as well as ongoing technical and communications support, to the Global Alliance for Clean Stoves, a private-public partnership dedicated to reducing IAP-related illness and death.