EDITORIAL

How Should We Approach the Prevention of NCDs?

Abraham Haileamlak, MD, Professor of Pediatrics and Child Health

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Chronic noncommunicable diseases (NCDs) are the number one cause of death and disability in the world, but they are worse among the poor and vulnerable populations. The World Health Organization (WHO) estimates that NCDs kill more than 41 million people annually, which accounts for 71% of global deaths. Over 15 million people, 85% of them in low-and middle-income countries, prematurely before the age of 70 years (1).

Several non-modifiable factors (age and sex) and modifiable behaviors such as tobacco use, physical inactivity, unhealthy diet, and the harmful use of alcohol are all known to increase the risk of NCDs. Tobacco use accounts for over 7 million deaths every year; over 4 million annual deaths have been attributed to excess salt intake, over 1.6 million annual deaths attributable to alcohol use are from NCDs, and over 1.6 million annual deaths are ascribed to insufficient physical activity (2-4).

Despite NCDs prevention efforts, the burden of NCDs and its consequences are increasing each year globally which implies that there is a missing link. Understanding behavioral risk and protective factors could positively influence the development of intervention programs (5). The risks for NCDs starts in utero and continue growing thereafter. Babies born to women with diabetes and cardiovascular diseases, early childhood under-nutrition, and increasing rates of childhood obesity are all associated with increased risk of acquiring NCDs, perpetuate the burden of disease across generations. Many unhealthy behaviors that underlie NCDs including the main modifiable NCD risk factors like physical inactivity, tobacco use, unhealthy diets, and the harmful use of alcohol start during the childhood and adolescent ages.

Therefore, a life course approach with a combination of population-based and high-risk strategies is advisable considering their synergistic, complementary, cost-effective, and sustainable impact on reducing NCD burden.

A “life course approach” is essential for the prevention and control of NCDs in populations. This approach starts with maternal health, prenatal nutrition, pregnancy outcomes, proper feeding practices in infancy, and child and adolescent health through reaching children at school, youngsters at college, followed by interventions targeting adults to encourage healthy diet, regular physical activity, and avoidance of tobacco from youth into old age. In addition, those with manifest disease will need cost-effective medical interventions. With the trajectory of NCD risk starting early in the life-course, early intervention will have the greatest impact, especially given that interventions targeted only at modifying behaviors in adulthood have had variable and disappointing results.

In addition to actions on prevention, access to early diagnosis, treatment and care of children and adolescents with NCDs is also vital and has a direct impact on the reduction of preventable death and disability. Simple and cost-effective public health measures including provision of sustainable newborn screening and education programs can have a major positive impact on health outcomes. Intervention to promote healthy development through childhood and adolescence and to encourage healthy behaviors in adults are not alternatives: they are inextricably linked because a healthy start to life will favor better responses to later interventions.

The “population approach” aims at reducing the risk factor levels in the population as a whole through community action. Since there is a continuum of risk associated with most NCD risk factors, this mass change is expected to result in mass benefit across a wide range of risks (6,7). The “high-risk approach” aims at identifying
persons with markedly elevated risk factors, and also for people who have had an event and, therefore, at the highest risk of diseases. These individuals are then targeted for interventions to reduce risk factor levels. While many consider that the overall benefits to society are limited in terms of deaths or disability avoided as the number of such persons is proportionately small in comparison with the total number at risk. However, given the rising burden of NCD risk factors, the high-risk approach also has a role to play and should constitute a major component of public health interventions.

The current issue of the Ethiopian Journal of Health Sciences, the fourth regular issue for the year 2023, contains an editorial, sixteen original articles and a review article. Many of the articles in this issue, in one way or in other, talks about NCDs which is a global agenda.

I invite readers to read through these articles and appreciate or utilize the contents. I also urge readers to forward comments and suggestions to the editor or the corresponding authors.

REFERENCES