



POSITION STATEMENT:

Include Behavioral Scientists in the Implementation of the Global Action Plan for the Prevention of Non-Communicable Diseases in Low- and Middle-Income Countries

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THE PROBLEM

Globally, non-communicable diseases (NCDs) are the leading cause of death and disability and are projected to account for seven out of every 10 deaths by 2020.^[1] The majority (82%) of NCD deaths occur in low- and middle-income countries (LMICs) and are premature. Almost half of all deaths in Asia are attributable to NCDs, and Africa is projected to bear the greatest regional increase (27%) in NCD burden by 2025^[1,2]. The World Health Organization's (WHO) 2030 Agenda for Sustainable Development recognizes NCDs as a major challenge to sustainable development and set a major goal of reducing by one-third, premature mortality from NCDs by 2030^[3]. The World Economic Forum currently ranks NCDs in the top five threats to global economic development worldwide. The financial implications of disease and disability due to the NCDs, combined with the costs of long-term management, are major causes of impoverishment and barriers to socio-economic development. The annual financial burden of NCDs among LMICs countries is estimated at \$500 billion. Every 10% increase in mortality associated with NCDs reduces overall economic growth by an estimated by 0.5%^[4,5].

Non-communicable disease drivers are increasing most rapidly in low- and middle-income countries (LMICs).

The transition from infectious diseases to NCDs as leading causes of mortality in LMICs is driven by several factors primarily increasing globalization, urbanization, ageing of populations and economic development. In most of these countries, the prevalence of modifiable risk factors such as tobacco use, unhealthy diet, physical inactivity, harmful use of alcohol, and obesity are increasing and are targeted by WHO as "best buys", (cost effective) interventions to prevent or delay most premature NCD deaths^[6].

- Of the estimated 1.2 billion smokers in the world, most live in LMICs, where tobacco use is rising by 3% per year, while the uncontrolled and aggressive tobacco industry's attempts continue to normalize smoking in many emerging LMICs economies^[7,8,9].
- People living in LMICs increased their consumption of meat, eggs, and milk by 50% on average over the past five decades^[10,11].
- Sales of nutrient poor, energy dense foods including sugar-sweetened beverages and processed foods that are high in salt, saturated fats, and refined sugars are increasing as personal incomes rise and these countries advance in development^[10,11].
- Physical inactivity and sedentary lifestyles are increasing^[10].



Responding to these challenges will require local and comprehensive primary and secondary prevention efforts.

- Despite the unprecedented growth in NCDs in LMICs, research infrastructure and dissemination in these countries to drive prevention efforts have been limited, and the available data documenting any existing efforts in these settings are scarce^[5,12].
- National governments are not keeping pace with the expanding need for policies, legislation, and the infrastructural development necessary for prevention and control of these diseases and their risk factors in these countries^[5,13].
- Prevention interventions will need to be driven by in-country knowledge bases that consider the socio-demographic and cultural context, as well as available resources to prevent NCDs^[5].

Global Action Plan for the prevention of NCD's 2013-2020 and challenges with implementation in LMIC's.

In 2013, to strengthen global and national efforts to address the burden of NCDs, the 66th World Health Assembly (WHA) endorsed the WHO Global Action Plan for the Prevention and Control of NCDs. The UN General Assembly reaffirmed endorsement of the Global Action Plan in 2018 and WHO's leadership and coordination role in promoting and monitoring global action against NCDs^[14]. This plan provides a road map and an array of policy options to achieve the nine voluntary global targets by 2025. This plan recognizes the primary responsibility of governments in responding to the challenge of NCDs and the important role of international cooperation to support national efforts. However, many LMIC countries have yet to take specific actions to actualize the achievement of these nine targets^[2,14].



RECOMMENDATIONS

Global Action Plan:

The implementation of policies to prioritize the prevention of NCDs will create an environment in which the rising trend of the NCD burden could be halted and reversed. When developing these policies, international agencies, national governments, scientific associations, and donors should consider these following strategies which can be implemented by multidisciplinary teams that are led or have the participation of behavioral medicine scientists:

- Support multidisciplinary teams to develop and evaluate evidence-based public health policies to address the NCD risk factors, national screening programs and treatment of detected cases.
- Develop and implement global scientific collaborations to address gaps in knowledge regarding prevention, screening and care of NCDs.
- Capitalize and seek collaborations from successful infectious disease programs (e.g., HIV/AIDS).
- Support international efforts in vaccination of infection-related cancers.
- Promote programs that include and track indicators of the nine targets of the global action plan in national surveillance and monitoring systems.
- Support studies that aim at understanding local and/or regional sociocultural and other contextual factors that promote or hinder implementation of preventive practices for NCDs

Incorporating behavioral medicine into the prevention and management of NCDs and the Global Action Plan: Behavioral medicine strategies should be incorporated into the policy and intervention framework developed to target NCDs in LMICs. Failure to adequately consider behavioral and social factors can diminish the impact of even the best interventions ^[15]. Behavioral medicine scientists can:

- Promote behavioral medicine approaches including adherence interventions to medical regimens, crucial to the management of NCDs and the prevention of comorbidities and complications ^[16].
- Implement behavioral medicine interventions to effectively encourage health behavior change in a variety of populations ^[17].
- Provide interventions that are theory- and evidence-based and incorporate techniques that promote healthy behaviors that promote disease prevention and control ^[18].

Authors declare they have no conflicts of interest.

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