

Addressing Non-Communicable Diseases: Unveiling “Collateral Damage” and Pursuing Solutions at the Grassroots

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ABSTRACT

Public health professionals are crucial in developing strategies to prevent and manage diseases while promoting overall population health. Despite some successes in controlling diseases like smallpox and polio, the 21st century has seen a shift in disease dynamics, with non-communicable diseases (NCDs) disproportionately affecting low- and middle-income countries. These nations bear over three-quarters of global NCD-related deaths annually, posing a significant challenge to healthcare administrators. It's essential to view NCDs as unintended consequences of lifestyle decisions, allowing policymakers to reformulate policies accordingly. “collateral damage”, whether in military contexts or medicine, refers to unintended harm or negative consequences. Adverse effects like antibiotic resistance or antibiotic-associated diarrhoea illustrate this concept in healthcare. Furthermore, NCDs often result from factors outside the healthcare sector, such as poverty-driven dietary choices or inadequate urban planning, leading to sedentary lifestyles. Globalisation exacerbates NCDs by promoting unhealthy Western lifestyles, including the consumption of fast foods with inferior quality in low-income countries. Uncontrolled urbanisation further compounds the issue by fostering unhealthy behaviours. Aging populations also contribute, with elderly individuals adopting sedentary lifestyles that increase their risk of NCDs. Health promotion offers a proactive approach to address “collateral damage”, emphasising action through advocacy, policy formulation, and health education. Effective control of NCDs requires primary prevention measures like healthy diets and physical exercise, alongside public health legislation and collaborative efforts among various sectors. Preventing NCDs necessitates auditing decisions across industries to assess potential “collateral damage”s, involving the Ministry of Health and Family Welfare(MOHFW) in authorising new ventures like liquor shops or fast-food centres. While the battle against NCDs has yet to begin, concerted efforts are required to implement strategies and actions effectively and efficiently. This paper discusses innovative grassroots strategies and intersectoral collaborations that have shown promise in combating NCDs, aiming to inspire actionable solutions.

KEYWORDS

Non-Communicable, Collateral Damage, Health Promotion, Health Promotion

INTRODUCTION

Public health professionals devise strategies to prevent and manage diseases while promoting overall population health. Non-communicable diseases (NCDs) have emerged as a global health crisis, disproportionately impacting low- and middle-income countries. The complexity of NCDs necessitates a comprehensive approach, integrating health promotion, disease prevention, and multisectoral cooperation. Some successes have been achieved in certain areas like “smallpox, guinea worm disease, leprosy, polio, neonatal tetanus, yaws, and syphilis.” (1) However, disease dynamics have shifted in the 21st century, with both non-communicable diseases (NCDs) and infectious diseases disproportionately impacting low- and middle-income countries. These nations bear the brunt of over three-quarters of global NCD-related deaths, totalling 32 million annually. Consequently, NCDs pose a significant challenge to healthcare administrators at present. (2) It's imperative to approach this issue from a fresh perspective, considering NCDs as unintended consequences of lifestyle decisions. By viewing NCDs as “collateral damage” stemming from lifestyle choices, policymakers can reformulate policies to better control this category of diseases.

THE “COLLATERAL DAMAGE”

“collateral damage” refers to any unintended harm or negative consequence inflicted on individuals or entities. (3) The term 'collateral damage' in this context refers to the unintended health consequences of societal progress, such as increased sedentary lifestyles and unhealthy dietary patterns. For example, rapid urbanisation has led to decreased physical activity and access to processed foods, significantly contributing to the rise in NCDs. In military contexts, It refers to unintended harm or destruction to property that may occur during attacks on valid military objectives. Antibiotic-associated diarrhoea is a classic example of “collateral damage” in tropical medicine. (4) Death from obstructive lung

disease due to second-hand smoke exposure is another example. The lack of financial means to purchase nutritious foods such as fruits and vegetables results from poverty, resulting in unhealthy processed foods. A trend known as “Sanskritization” in India involves the lower socioeconomic strata adopting the behaviours of wealthier social groups, potentially leading to the onset of non-communicable diseases (NCDs). (5) Inadequate policies and practices that result in the lack of playgrounds for children, leading to increased childhood obesity. (6) It signifies unintended harm from prioritising modernisation or Westernization over traditional cultural values. Youth unemployment, fostering frustration and driving them towards alcoholism, smoking, and other detrimental habits, epitomises the secondary effects of flawed national policies. Moreover, the lack of environments conducive to the elderly and infrastructural impediments compel seniors into sedentary routines, heightening their susceptibility to non-communicable diseases (NCDs). (7) This is another example of “collateral damage” from inadequate national-level policies.

The increase in cancer cases from consuming carcinogenic foods shows the “collateral damage” of neglecting disease caused by society, politics, and administration. Non-communicable diseases worsen due to unintended consequences from sectors like food and civil engineering, influenced by cultural norms. Healthcare often focuses on treating rather than addressing underlying factors, with limited health department capacity contributing to oversight, historically overshadowed by other sectors in healthcare reform. (8,9)

Understanding the root causes of non-communicable diseases (NCDs) in specific demographics is crucial. These causes, whether direct or indirect, encompass rapid urbanisation, unhealthy diets, inactive lifestyles, and ageing populations, leading to physiological effects such as high blood

pressure, elevated blood sugar, increased blood lipids, and obesity. (10) Non-communicable diseases (NCDs) can be viewed as unintended outcomes of decisions influenced by religious beliefs, cultural norms, professions, geographic location, genetics, government policies, market forces, and interests promoting unhealthy products. (11) Globalisation, a key focus for the global economy, emphasises interdependence among nations. However, its relevance diminishes during natural disasters, political upheavals, and poverty. Globalisation often imposes Western ideals on developing countries, compelling them to adopt Western socioeconomic and healthcare models. Many public health experts worry about its negative impact on developing nations' healthcare systems. (12) Globalization drives people to adopt Western diets, resulting in higher consumption of unhealthy fast food, sugary drinks, and processed foods with carcinogenic additives. In low-income countries, fast food is often of inferior quality, containing banned preservatives and artificial colours, with less stringent food safety regulations. (13) Globalization leads to consuming harmful substances disguised as regular food. It extends beyond economics to affect diets, lifestyles, and experiences. The rise of diabetes is linked to socioeconomic shifts. Prevention and control of non-communicable diseases (NCDs) can't solely rely on public or healthcare efforts. Globalisation fuels the NCD epidemic, impacting public health, economies, and healthcare systems. Tobacco and alcohol industries' activities hinder NCD prevention and control. (14)

Unregulated urban expansion poses a significant challenge, intensifying the impact of non-communicable diseases (NCDs). Numerous developing nations have experienced swift and unplanned urban growth, fostering unhealthy behaviours marked by inadequate diets, sedentary lifestyles, and substance misuse. Consequently, this has led to a heightened prevalence of NCDs within these communities. A research investigation in a northern Indian urban slum in 2018 highlighted that

inhabitants favour inexpensive, unhealthy local burgers over traditional foods like chapatti and sabzi, which were perceived as more costly. (15) The dietary shift illustrates how NCDs can result from urban development decisions. In many developing nations, sports grounds are replaced by buildings and malls, depriving people, especially children, of physical activity spaces. Limited access to recreational facilities due to cost worsens sedentary lifestyles, showing further consequences of urban planning. Despite efforts to introduce open-air gyms, their implementation remains inconsistent, mainly in major cities. Population growth and ageing contribute significantly to rising NCD prevalence, with ageing populations growing fastest in low- and middle-income countries. Some individuals, especially those aged 60 and above, see a sedentary lifestyle as deserved after years of hard work. (16) This belief is often passed down through generations in Indian families, where older individuals see it as their privilege not to work and instead focus on supervising and making decisions for the family. However, this sudden shift from an active to a sedentary lifestyle can lead to weight gain and increase the risk of NCDs such as diabetes mellitus and hypertension. Some elderly individuals, fearing falls, confine themselves to their homes and adopt sedentary behaviours like watching TV and consuming minimal or no exercise, making them vulnerable to these serious NCDs. These examples highlight how individual lifestyle choices can inadvertently contribute to "collateral damage".

POSSIBLE SOLUTIONS TO PREVENT THIS "COLLATERAL DAMAGE":

Health promotion extends beyond traditional epidemiology, emphasising action through policy, community resources, and education. Preventing NCDs involves healthy diets, exercise, and urban planning to combat various conditions. Early detection and treatment are vital, supported by public health laws like the US fat tax. Addressing NCDs requires collaboration among sectors and grassroots involvement. Grassroots strategies play a crucial role in NCD prevention.

Community-based interventions, such as local health education programs and urban gardens to improve access to fresh produce, have effectively promoted healthy lifestyles."It entails promoting healthy practices, auditing sector decisions, and involving health authorities in policy-making. A key to combating NCDs lies in intersectoral collaboration. The 'Health in All Policies' approach illustrates the power of integrating health considerations into planning and policies across sectors, from urban development to education, effectively reducing NCD risk factors. Overall, comprehensive strategies and actions are needed to tackle NCDs effectively.

AUTHORS CONTRIBUTION

All authors have contributed equally.

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CONFLICT OF INTEREST

There are no conflicts of interest.

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