EDITORIAL

Addressing the Social Determinants of the NCD Epidemic in Caribbean Countries

CA Cunningham-Myrie

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The success of antibiotics and high vaccination coverage against infectious diseases, during the 20th century, has contributed to populations ageing in the Caribbean Region. Given that age is a non-modifiable risk factor, it should therefore not be a surprise that non-communicable diseases (NCDs) have accounted for the highest prevalence of morbidity and mortality in the region over the past four decades (1, 2). Some may argue this is not necessarily a bad thing as no one is expected to live forever and must die of some cause. However, where it has become a great concern is that the NCDs and their complications are resulting in higher than desired levels of morbidity and premature mortality (defined as unconditional probability of death between ages 30 and 70 years from cardiovascular diseases, cancer, diabetes, and chronic respiratory diseases) (3). In addition, disease-control levels are poor. Such is the case in Jamaica, for example, where low control levels have been documented for common conditions such as hypertension (4) and diabetes (5).

It has been over a decade since Caribbean governments committed to halting the epidemic of chronic NCDs, signalling this bold intent with the landmark Port of Spain (POS) Declaration in 2007 (6). The Declaration included several mandates with commitments to also address the upstream social determinants of the four key modifiable risk factors, namely, unhealthy diets, physical inactivity, harmful alcohol consumption and tobacco use; these are well-known components of epidemiological causal pies driving the current NCD crisis. Monitoring and evaluation exercises completed since the implementation of the Declaration have revealed that over a decade later, the majority of countries within the Caribbean region are not on track to fulfill the POS Declaration mandates, or the World Health Organization (WHO) target of 25 × 25 (a global target of a 25% relative reduction in mortality from non-communicable diseases by the year 2025), or the Sustainable Development Goals 3.4 target of one-third reduction in premature mortality from NCDs by 2030 (7, 8). Beyond rising morbidity and mortality rates, there are serious economic consequences, as highlighted by Jamaica's Minister of Health and Wellness who lamented that with regard to NCDs and their risk factors, the country has 'a sick profile that is alarming and getting worse'. He also cautioned that there would never be enough money, if the public health response is solely to put more money into curative measures, *eg*, prescription drugs (9).

It bears repeating that any meaningful response to the current NCD epidemic in the region requires a multisectoral and 'whole of society' approach, a mammoth task which is far easier said than done. Reducing inequities which drive the offending modifiable risk factors and burdensome NCD outcomes needs greater understanding of much more than the proximal individual biological and behavioural determinants, but also and concurrently, the distal structural determinants inclusive of the effects of globalization, politics, economics, housing, sociocultural norms and health systems which include service delivery types, times and quality; barriers to optimal care, control and prevention of ill-health; health education/promotion and adequacy of human resources in health (*eg*, staff to patient ratios). The WHO Commission on the Social Determinants of Health provided a framework for understanding how these inequities in both the structural and intermediate determinants, linked by social cohesion and social capital, may lead to undesirable health outcomes such as NCDs (10). The Commission

From: Department of Community Health and Psychiatry, University of the West Indies, Mona, Jamaica, West Indies.

Correspondence: Colette Cunningham-Myrie, Department of Community Health & Psychiatry 3 Gibraltar Camp Way, The University of the West Indies, Kingston 7, Jamaica, West Indies. Email: colette.cunninghammyrie@uwimona.edu.jm

also had as one of its key overarching recommendations, the need to 'measure and understand the problem and assess the impact of action', signalling the importance of research in garnering the evidence to inform and evaluate action (11). Researchers within the Caribbean have contributed evidence towards understanding the determinants of NCDs with increased focus on investigating upstream factors inclusive of work on the influence of determinants such as geographic location, social factors, health economics, racial disparities and gender (12–20). Most of these studies have used quantitative methodologies and include recommendations that further research should be done to gain better insights into the factors driving the associations seen with the NCD outcomes.

Given the shortfall in achieving local, regional and global targets for control of NCDs, it is important that policymakers, health practitioners and civil society organizations identify and understand what drives behaviour change of the intended beneficiaries, the populace, in order to formulate potentially successful policies, programmes and other interventions that will change behaviours, especially in an environment of political democracy and respect of individual human rights. Using diet as an illustration, many unanswered questions remain for the Caribbean context with regard to health-promotion strategies as outlined in the Caribbean Charter for Health Promotion (21). For example, do persons in the Caribbean Region understand the concept of 'a healthy diet'? Are perspectives similar across the region, in terms of its association with decreasing NCDs? Will Front of Package Warning Labels change food purchasing and dietary intake practices in the Caribbean? Are supportive environments adequate for dietary changes, given the diverse cultural and social norms of the Region? Have health services been reoriented that there is now increased numbers of human resources for health to provide one-on-one dietary consultations, such as dieticians/nutritionists? If yes, are the interactions meaningful, of an acceptable frequency and duration? What of issues around affordability and accessibility? Are personal health skills improving with regard to purchasing choices, knowledge of food groups, healthy meal preparation given cultural palates, self-assessment of caloric intake and nutritional balance? Are we sufficiently leveraging print, broadcast and Internet media with health promotion through social marketing that is innovative, contemporary and which targets all ages across the lifespan? How are efforts being monitored and evaluated and timely feedback provided to the various stakeholders?

Although more labour and time intensive, rigorously conducted qualitative research can provide good evidence beyond the traditional quantitative methodology, by investigating knowledge, attitudes, beliefs and perspectives of multisectoral stakeholders, health care practitioners and most importantly the general populace, in a way that is different from and not easily addressed by quantitative studies (22). This methodology usually provides deeper and richer insights by utilizing techniques such as direct observation, in-depth interview and group discussion that facilitates the use of follow-up questions to initial ones asked and probes on topics being discussed (23). However there has been a comparatively, fewer qualitative or even mixed methods studies investigating NCD outcomes and associated risk factors conducted by the Region's researchers (24–29), most of whom lack the competencies necessary for evaluating and addressing the social determinants of health from a qualitative perspective.

Having led the global efforts in advocacy for prevention and control of NCDs, the Caribbean Community can ill afford to fall behind in its quest to stem the inequities driving the NCD epidemic. Caribbean governments and tertiary training institutions need to invest much more time, effort and finances in interdisciplinary training programmes and the conduct of research, inclusive of qualitative and/or mixed methods, that investigates both intermediary and structural social determinants of NCDs in the Region. The time to act is now.

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