

The West Indian Medical Journal and the non-communicable diseases (NCD)

The next 60 years

By

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The West Indian Medical Journal (WIMJ) deserves hearty congratulations on 60 years of uninterrupted publication and for having maintained its status as the flagship medical scientific publication in the Caribbean. The Editorial for the first issue of the journal identified its remit as being a “reference journal of the diseases of the Caribbean” - a remit which it can proudly say has been discharged faithfully. The pattern of disease in the Caribbean has changed over the years so it is gratifying to see that this anniversary issue is being dedicated to non-communicable diseases (NCDs) the major public health challenge of our time. NCDs (primarily cardiovascular disease, cancer, diabetes and chronic respiratory disease) have tremendous consequences for both personal and population health. They have assumed a prominent role in Caribbean thinking and practice because they impact on many and varied aspects of regional development. While there are other important chronic NCDs, as well as chronic communicable diseases these four diseases account for the greatest share of mortality and disability globally, and especially so in the Caribbean. Plus they share common risk factors.

The contents of the WIMJ over the years give some idea of the changes in disease patterns. In the first volume of the Journal 12 of the 29 papers were on infectious disease, with a single paper on cancer. However, even in those early years, John Tulloch, the first editor of the Journal wrote extensively in it on diabetes and cardiovascular disease. In the first decade of the journal's life, Tulloch reckoned that there were 10,000 adult diabetics in Jamaica (prevalence rate approximately 1%) and 60 % were not recognized.¹ Myocardial infarction was “rare in Jamaica compared with Britain and America”². Diabetes prevalence among adults in Jamaica is now 8%, 150,000 persons ³ and Caribbean countries have the highest recorded prevalence of diabetes in the Americas. Barbados has been described as the “amputation capital of the world” and age adjusted diabetes mortality in Trinidad and Tobago is 600% higher

¹ Tulloch JA. Aspects of diabetes mellitus in Jamaica. West Indian Med Journal. 9;142: 1960

² Tulloch JA. Some aspects of myocardial infarction in Jamaica. West Indian med Journal. 7; 235-243: 1958

³ Wilks Rainford, Younger Novie, Tulloch-Reid Marshall, McFarlane Shelly and Francis Damian. Jamaica Health and Lifestyle Survey 2007-8. Epidemiology Research Unit, Tropical Medicine Research Institute, University of the West Indies, Mona.

than in North America (115.5 vs. 16.1/100,000 population)⁴. Myocardial infarctions are no longer rare. Cardiovascular disease - heart disease and stroke - is now the leading cause of death in the Caribbean. The age adjusted mortality from stroke is 300% higher in Suriname than in North America (126.5 vs. 30.9/100,000)⁵.

This increase in NCD has many causes. Our life expectancy at birth has increased by 9 years in the past 50 years. In 1960⁶ life expectancy was 63 years increasing to 72 years in 2009⁷ and NCD prevalence increases with age. Further, there is now greater exposure to the risk factors of NCD-tobacco, unhealthy diet, low physical activity and harmful use of alcohol in our populations due in no small measure to globalization, which brings increased interconnectedness and attraction to the propaganda from foreign cultures and their media which actively promote unhealthy behaviors. .

The journal has been faithful in recording the research activities of the Caribbean particularly the reports of the Scientific Sessions of the Caribbean Health Research Council (CHRC) which has also reflected the changing face of disease. There are now multiple sessions on chronic disease at every meeting of the CHRC and 20% of the papers presented at the 2009 scientific meeting were on NCD.

There is and will continue to be need to document the changing epidemiology of disease, and in the face of the gravity of the current epidemic of NCD, perhaps equal attention should be given to solutions. The consequences of inattention are grave. With an increasingly older population and if there is no attempt to address the risk factors and thereby prevent many of the NCD, there will be significant micro and macroeconomic consequences. The clamor for attention to advanced disease spurred on by an increasingly knowledgeable public will place a major strain on the public purse which is being stretched even now with programs that supply drugs for NCD free to the public and struggle to provide renal dialysis for patients with the late stage complications of NCD.

The first major challenge is the need to seriously address both the individual patient living with NCD, as well as primary prevention at the population level. The success of the Caribbean in controlling severe malnutrition and the elimination or control of the major childhood infectious diseases has been achieved through its Primary Health Care services.

⁴ PAHO Health Situation in the Americas. Basic Indicators 2009

⁵ PAHO Health Situation in the Americas. Basic Indicators 2009

⁶ Harewood, Jack (1976). *Caribbean Demography Workbook*. Institute of Social and Economic Research. Trinidad and Tobago: The University of the West Indies.

⁷ PAHO Health Situation in the Americas. Basic Indicators 2009

However this has yet to be parlayed into similar success in managing the NCD. There can no longer be the false binary thinking that separates attention to the communicable diseases from that given to the NCD. The Caribbean health services like most colonial services were predicated on the free public assistance model in an era when life expectancy was short. Attention was given to persons who came for treatment usually of an acute time- limited illness. Given that few NCD have acute early external manifestations, the majority of them were discovered late. Screening for disease did not enter the armamentarium of the services. The NCD were treated poorly and even when the therapeutic possibilities increased, the levels of adherence were low and the results of treatment were poor.

Thus, the approach to these diseases at the individual level has to be different. There has to be a reconceptualizing of the PHC model that served the Caribbean well and was responsible for much of the health improvements over the last few decades. This reconceptualizing has to recognize the need to embrace both the episodes of acute illness as well as the long term attention needed to address the NCD. We should adapt and adopt the basic components of the chronic care model based on the Caribbean reality, while recognizing the fundamentals of patient-centeredness, the involvement of the community and the insistence on continuity of care are core essentials. It is necessary to address both the technical medical aspects of NCD as well as accepting that the primary care setting is the first point of patient contact and is one part of a system that involves secondary and tertiary levels. Secondary prevention / treatment of persons living with NCD will also depend on the efficiency of the health services.

Primary prevention requires addressing the dominant risk factors. While the Caribbean has invested heavily in health promotion focused on the individual, there must be more emphasis on changing the external environment to facilitate the desired change in individual behavior. For example, there should be full implementation of the Framework Convention on Tobacco Control. This calls for government resolve and courage to resist the blandishments and money of the tobacco industry. Alcohol abuse should be addressed. Changes in dietary practices need more than admonition to the individual. Food policies that are frustrated by the dictates of international trade have to be examined from the health point of view. Processed foods and fast foods should be trans-fat free, and low in salt, fat and sugars. Physical activity should be promoted through safe public spaces and community interventions. It is in the organization of the changes in public policy that we see the greatest need for multisectoral action involving all of government, led by the Prime minister or President, so that at the level of the cabinets, non-health Ministries assume the responsibility for the needed policy changes so as to “make the right choice, the easy choice”. It is also essential to engage the private sector and civil society, including academia.

Sustained political leadership is needed at the national as well as the regional level. Political leadership at the regional level reached its apogee in the now historic Port-of-Spain Summit of CARICOM Heads of Government in 2007. We continue to see political engagement with the NCD engaging not only the health sector, but Caribbean Ministers of Foreign Affairs and Caribbean ambassadors who are actively engaged in promoting global action in NCD. They have been successful in promoting United Nations resolution 64/265 which calls for convening a UN High Level Meeting in September 2011 to address the global problem of NCD.

But sustained political attention must extend beyond a regional or global summit. It must be shown in the implementation of the agreements made at these high profile events. A scorecard has been developed to track the extent to which the Caribbean governments comply with the Commitments they made in 2007 and the results still show deficiencies in key areas. Sustained political leadership and commitment has to be translated into provision of resources necessary to prevent and control NCD.

Political commitment must be fostered and maintained by presenting not only the mortality or morbidity data, but also by continuing to present and press the business case for investing in NCD prevention and control to the Caribbean leaders. The costs of the epidemic have been described in terms of the cost-of illness and productivity loss. Data from other sources show that addressing the risk factors can reduce morbidity and mortality and secondary prevention will certainly extend the period of disability-free life. What is less clear is the cost of applying the proposed interventions in the Caribbean, but there are enough data from other countries to show that raising taxes on tobacco to 66% of purchase price will increase government revenue and reduction of dietary salt can be budget neutral or cost saving. The cost of inaction also has not been calculated for the Caribbean but it is likely to be high and will impact not only on the general macroeconomic situation but will pose major fiscal problems for governments.

NCD prevention and control have to be included in the development planning of the Caribbean governments, not only by presenting economic data, but by also presenting NCD in terms of human development including implications for gender, education and the environment. The most urgent of the environmental concerns is now climate change. There is good evidence of the impact of climate change on NCD and conversely of the relationship between the reduction of NCD and the positive impact on climate change through the reduction of greenhouse gases. This can be accomplished through increasing public transportation and reducing the consumption of red meat. The Caribbean must ensure compatibility in its positions in the fora that deal with NCD and climate change and make the point of their interrelationship.

Sustaining political leadership and commitment will also depend on the extent to which the issue is kept before the public and how the need for concern is framed. Perhaps framing NCD as a human rights issue will garner more attention and support. This position has not yet been articulated in the Caribbean although the Caribbean countries are signatories to the American Declaration on the Rights and Duties of man states that “Every person has the right to the preservation of his health through sanitary and social measures relating to food, clothing, housing and medical care, to the extent permitted by public and community resources”.

Is there a role for the WIMJ over the next 60 years in ensuring that the Caribbean makes a determined effort to prevent and control NCD? The Port-of-Spain NCD Summit Declaration #13 specifically calls on the Universities to “establish ... programmes necessary for research and surveillance of the risk factors for NCDs”. We need to go even further, in prioritizing operational research that can guide improved alignment of clinical practice with evidenced-based guidelines, which is the intervention which has the potential for saving the greatest number of lives⁸. Given the complexity of the problem of preventing and controlling NCD with the concomitant need for good data derived from good research into several areas or disciplines, there must be a seminal role for academic scientific media, as they reach health professionals, many of whom have influence beyond their particular disciplinary practice. The Lancet in its recent series of papers and editorials provides an excellent example of mobilizing global opinion and hopefully action around NCD.

Similarly, the WIMJ might play a major role not only in encouraging and publishing research on NCD, but by being an advocate for an appropriate Caribbean response at both the technical as well as the political levels. It is certain that the problem will still be present in 60 years, but we do hope that it will have been mitigated by the effort of many interested individuals and organizations including the WIMJ.

There is much academic journalistic work to be done!

⁸ Lim SS, Gaziano TA, Gakidou E, Reddy KS, Farzadfar F, Lozano R, Rodgers A. Prevention of cardiovascular disease in high-risk individuals in low-income and middle-income countries: health effects and costs. *Lancet*. 2007 Dec 15;370(9604):2054-62.