

The Social Determinants of NCDs

Authors: Kira Fortune, Nelly Salgado de Snyder, Luiz Augusto Cassanha Galvão and Matthew Murphy

Introduction

During the past two decades, the Latin American and Caribbean Region (LAC) has experienced a period of unprecedented economic growth and political stability. At the same time, the region has made great progress in attaining the UN's Millennium Development Goals (MDG). However, the region also continues to be one of the most unequal in terms of income distribution and economic and health improvements have not been equitably distributed among the population. This is reflected in the intercountry variability in the epidemiologic transition and the coexistence of a high regional burden of both communicable as well as non-communicable diseases (NCD). Currently, NCDs have overtaken other causes of morbidity and mortality to become the primary threat to the health and well-being of the area's population. PAHO's Regional Strategy for the prevention and Control of NCDs acknowledges that three out of every fourth deaths can be attributed to chronic disease. There are an estimated 1.9 million deaths annually from Cardiovascular Disease (CVD), 1.1 million deaths from neoplasms, 260,000 deaths as a result of diabetes and 240,000 from chronic respiratory diseases. In fact 7 of the 10 leading causes of mortality can be attributed to chronic disease and the resulting economic consequences are staggering. In just four countries within the LAC region during the period of 2006-2015, there was an estimated \$13.5 billion reduction in GDP due to NCDs largely resulting from lost productivity and the necessary treatment costs. The goods and services needed to treat just one of the prominent chronic conditions, diabetes, cost the region \$65 billion dollars in the year 2000 alone.

Addressing health challenges of this scale will require a comprehensive framework for action that can be implemented at the regional, national as well as local levels to confront the growing challenge of NCDs. There have been several major policy documents as well as political declarations that acknowledge that the causes of health and well being often lie outside of the health sector requiring a multisectoral response. The environmental, transportation and agricultural sectors as well as many others play a central role in determining the health of a population and are represented by actors both in the public as well as private sector. All of these sectors will need to be involved in developing, implementing and evaluating policies aimed at both preventing and controlling the negative health and economic impact of chronic diseases.

The Social Determinants of Health

Negative health consequences which are preventable and are rooted in socioeconomic inequalities as opposed to biological causes are described by the WHO Commission on the Social Determinants of Health as health inequities. The avoidable inequalities result from structural determinants of health, which include macroeconomic factors, governance and public policies that translate into social stratification based on socioeconomic status, education level or other characteristics such as gender and race. These in turn modulate the intermediate determinants of health such as behaviors, material circumstances and psychosocial factors. The complex interplay of these health determinants have a profound impact on the global population with unjust consequences for the most disadvantaged groups

who can expect to experience a shorter life expectancy, higher infant and maternal mortality rates as well as a higher prevalence of both communicable as well as noncommunicable diseases.

Some of the most referenced examples of the health inequities that exist globally are those that exist between countries, such as average life expectancy in Canada (82) versus Haiti (62). They underscore the profound differences in the economic, political and governance context within the global community. However, equally as striking is the deep divide that exists within countries. As many countries in the Americas have witnessed a notable increase in GDP coupled with remarkable political stability, the most socioeconomically disadvantaged groups have not seen significant increases in their wages or purchasing power. The gap in earnings between the wealthiest and the poorest continues to grow and certain populations such as ethnic minorities and the indigenous continue to be excluded from the political process and economic development. This translates into important inequalities in living and working conditions, education levels and behaviors often coupled with greater limitations in accessing health services and high quality medical care.

While these inequalities are ultimately linked to the development of disease and a shorter life expectancy, they also come at a significant economic cost to the individuals and communities affected. They place a drag on economic development, prevent populations from fully participating in a country's economy and social institutions all while diverting resources to costly treatment regimens provided by ever-growing health systems. This is of particular concern, especially in the area of NCDs, as treatment can be life-long, medically complex and frequently preventable.

NCDs and its Social Determinants of Health

While NCDs have historically been linked with high-income countries and a higher socioeconomic status, recent epidemiologic trends in the America's reveals a more complex picture. Middle and lower-middle income countries are seeing a shift in their disease profiles as they experience economic growth and health system development. Similar to higher income states, the burden of infectious disease and perinatal mortality is receding and chronic disease is becoming increasingly more common. Additionally, the socioeconomic gradient of disease distribution also tracks with this shift as populations of a higher socioeconomic status benefit from healthier lifestyles, work and living situations yet those of a lower socioeconomic status are negatively impacted by structural determinants of health similar to more developed countries. While the amount of evidence linking the social determinants of health and NCDs in the developing world in general and the Americas in particular, is limited, the complexity of the current situation is apparent.

One of the important "megatrends" in the region that is an influential determinant of health is the urbanization taking place in the Americas. Already the most urbanized region in the world, there continues to be a significant population movement from rural to urban areas. As urban populations increase in size, so do population inequities. While regionally, the relative incidence of urban poverty has fallen from 41% to 29%, the absolute number of the urban poor has increased from 122 million to 127 million people. The poorest residents of cities often experience an "urban penalty" as they adopt unhealthy lifestyles but do not have access to the health services and infrastructure available to the rest

of the population. Recent studies have shown a rapid increase in chronic disease and their associated risk factors in urban Latin America.(J. Escobedo et al, 2009) One study on urban populations in Argentina revealed that “inverse socioeconomic patterning became stronger or only emerged in more urban settings” (Fleisher et al, 2011). Research in the region also confirms McLaren’s postulate of the gradual reversal of the social gradient in weight seen in urban regions. Countries with a greater Human Development Index are more likely to see an inverse relationship between socioeconomic status and Body Mass Index, an important risk factor for many chronic diseases. (Boissonnet C et al, 2011)

Studies have also shown that the development of risk factors as well as chronic disease has a differential impact based on gender. In the Americas, 15% more men die annually from NCDs than women. There are also significantly more preventable deaths of men from NCDs as compared to women. However, the intermediary social determinants of health that include behavior and living conditions reveal a much more complex picture of the risk factors associated with chronic disease. Throughout the region, men are more likely to use tobacco products and drink alcohol excessively while women are much more likely to be obese. At the same time, there is considerable intercountry variability in other areas including sedentary lifestyle, diet and stress levels where men and women face different levels of risk.

Responding to the Challenge of the NCDs in the Region of the Americas

In October 2011, the World Health Organization convened the World Conference on the Social Determinants of Health in Rio de Janeiro, Brazil. The conference was a result of the growing consensus that inequalities pose a threat to health and wellbeing on an international scale. The complex nature of this challenge meant that a new approach needed to be formulated and articulated to the world. The resulting political declaration claimed that the signatories were determined to achieve social and health equity through action on social determinants of health and well being by a comprehensive intersectoral approach. The emphasis on the determinants of health as well as incorporating actors from outside of the health sector were key to defining a new framework for action and policy development both in the Americas and elsewhere. The declaration also identified 5 areas critical to addressing health inequities, namely:

- Better governance for health and development
- Promoting participation
- Reorienting the health sector towards reducing health inequities
- Strengthen global governance and collaboration
- Monitoring progress and increasing accountability

The Declaration highlighted the Health in All Policies approach as a possible vehicle to implement intersectoral action. Health in All Policies builds upon a rich history of ideas, actions and evidence that have emerged since the Alma Ata Declaration on Primary Health Care (1978) and the Ottawa Charter for Health Promotion (1986). Defined as an approach to formulating public policies that cuts across sectors seeking synergies in order to ultimately improve population health and health equity, Health in All Policies attempts to build on the successes of previous health promotion frameworks by using the

social determinants of health as well as equity as guiding principles. The Health in All Policies Framework for Country Action (WHO, 2014) has developed six specific lines of action for countries to consider when developing public policy that include:

- Establishing the need and priorities for HiAP
- Framing planned action
- Identify supportive structures and processes
- Facilitating assessment and engagement
- Ensure monitoring, evaluation and reporting
- Building capacity

The need for intersectoral interventions underscores the all-encompassing nature of the determinants of health, most of which fall outside of the health sector. Historically, the health sector was seen as the primary vehicle of protecting, improving and promoting health. While access to the health system and health services of high quality and efficacy is an important determinant of health, it is only one of many determinants that also implicate the economic, transportation, education as well as many other sectors. However, the health sector does have an important and unique role within the Health in All Policies framework and the development of healthy public policies. The health system can work to counteract the social inequities through more equitable targeting and distribution of services and goods. It can also act as a facilitator of policy development by building a knowledge and evidence base, assessing and evaluating the health consequence of policy implementation as well as creating forums for dialogue between the population and the different sectors involved.

There are many examples of HiAP being put into practice in the Americas as well as in the rest of the world as seen in the case of South Australia, where a model has been developed to work across government to better achieve public policy outcomes and simultaneously improve population health and wellbeing, and in Finland where policies have been developed to improve public health by impacting broadly on those determinants of health on which the health sector has a limited influence. The effort to control tobacco usage in Brazil is an illustrative case of Health in All Policies in action to address a pressing health need related to the determinants of health. Brazil was one of the early signatories of the Framework Convention on Tobacco Control and decided to address the issue of tobacco usage through the creation of an intersectoral commission named National Commission for Implementation of the Framework Convention on Tobacco Control and its Protocols. The commission included representatives from 18 different governmental sectors tasked with developing and implementing policies aimed at reducing tobacco consumption. The resulting National Policy for Tobacco Control as well as other legislative efforts led to changes in regulations of tobacco marketing, price increases on tobacco products, financial and technical support for small scale tobacco farmers to diversify their crop production as well as other intersectoral actions. These efforts have been lauded for decreasing tobacco usage and have been linked with the decreased mortality from cardiovascular disease, chronic respiratory disease and neoplasms.

Conclusion

There are many other examples within LAC of intersectoral action to tackle NCDs and their related determinants of health. Greater information sharing of these activities is key to promoting their success both in the region and globally. Ensuring that policy makers at the local and national level have access to the tools and technical support needed for the successful implementation of health public policies is vital to future progress. Additionally, the development of comprehensive data and research around the health benefits and the cost-effectiveness of this approach is central to evaluating and disseminating effective strategies to combat NCDs while addressing the social determinants of health.

As the international community completes the timeframe of the Millennium Development Goals and enters into the post-2015 agenda, it will be a time for reflection on the successes and continued challenges facing global health and development. Significant improvements in living conditions, more disseminated economic growth and reductions in maternal mortality and mortality from infectious diseases have changed the landscape of population health. In order to ensure healthy lives at all ages and for all socioeconomic groups, the post-2015 agenda include ambitious goals for combating NCDs. The SDGs represent an important transition facilitated by the success in meeting the MDGs and demanded by the recent political declarations and changes in public health needs. The region of the Americas is well positioned to meet those demands as well as benefit from the renewed push to prevent and control the growing challenge to population health, well-being and economic sustainability.

Bibliography

1. Dele O Abegunde, MScA, Dr Colin D Mathers, PhD, Taghreed Adam, PhD, Monica Ortegón, DSc, Kathleen Strong, PhD; The burden and costs of chronic diseases in low-income and middle-income countries; *The Lancet*, Volume 370, Issue 9603, 8–14 December 2007, Pages 1929–1938
2. De Maio Globalization and Health 2011, 7:36
<http://www.globalizationandhealth.com/content/7/1/36>
3. UNDP; Discussion Paper: Addressing the Social Determinants of Non-Communicable Diseases; October 2013;
http://www.undp.org/content/dam/undp/library/hivaids/English/Discussion_Paper_Addressing_the_Social_Determinants_of_NCDs_UNDP_2013.pdf
4. PAHO, Non-communicable Diseases in the Americas: Cost-Effective Interventions for Prevention and Control;
http://www.paho.org/hq/index.php?option=com_docman&task=doc_view&gid=16220&Itemid=
5. WHO, Adelaide Statement on Health in All Policies;
http://www.who.int/social_determinants/hiap_statement_who_sa_final.pdf
6. WHO, Global Burden of Disease: DALYs 2004,
http://www.who.int/healthinfo/global_burden_disease/GBD_report_2004update_part4.pdf
7. Goldblatt, Peter et al; Improving health equity through action across the life course: Summary of evidence and recommendations from the DRIVERS project ; http://health-gradient.eu/wp-content/uploads/2015/02/DRIVERS_Recommendations_rel2.pdf
8. PAHO, Regional Strategy and Plan of Action on an Integrated Approach to the Prevention and Control of Chronic Diseases, 2007
9. WHO, 2008-2013 Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases; http://www.who.int/nmh/publications/ncd_action_plan_en.pdf

10. PAHO, Strategy for the Prevention and Control of Noncommunicable Diseases, September 2012; http://www.paho.org/hq/index.php?option=com_docman&task=doc_view&gid=21345&Itemid
11. United Nations General Assembly, Resolution 66/2 Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases, September 2011; http://www.who.int/nmh/events/un_ncd_summit2011/political_declaration_en.pdf
12. PAHO; Health in the Americas 2012 Chapter 2 Health Determinants and Inequalities; <http://www2.paho.org/saludenlasamericas/dmdocuments/hia-2012-chapter-2.pdf>
13. PAHO; Health in the Americas 2012 Regional Outlook and Country Profiles; <http://www1.paho.org/saludenlasamericas/docs/hia-2012-summary.pdf>
14. Leppo, Kimmo et al; Health in All Policies: Seizing Opportunities, Implementing Policies; 2013; http://www.euro.who.int/_data/assets/pdf_file/0007/188809/Health-in-All-Policies-final.pdf
15. World Conference on Social Determinants of Health; Rio Political Declaration on Social Determinants of Health; October 21st 2011; http://www.who.int/sdhconference/declaration/Rio_political_declaration.pdf?ua=1
16. Rio+20 Conference; The Future We Want; 2011; http://www.un.org/disabilities/documents/rio20_outcome_document_complete.pdf
17. WHO; Health in All Policies: Helsinki Statement Framework for Country Action; 2013; http://apps.who.int/iris/bitstream/10665/112636/1/9789241506908_eng.pdf
18. PAHO; Health in All Policies: Case Studies from the Region of the Americas; 2014
19. PAHO; Advancing the Health in All Policies Approach in the Americas: What is the Health sector's Role? A Brief Guide and Recommendations for Promoting Intersectoral Collaboration
20. Fleischer et al; Socioeconomic Gradients in Chronic Disease Risk Factors in Middle-Income Countries: Evidence of Effect Modification by Urbanicity in Argentina; American Journal of Public Health, February 2011, Vol. 101, No.2
21. J Escobedo et al; High prevalence of diabetes and impaired fasting glucose in urban Latin America: the CARMELA Study; Diabetic Medicine 2009, 26, 864–871
22. Boissonnet C et al; Educational inequalities in obesity, abdominal obesity, and metabolic syndrome in seven Latin American cities: the CARMELA Study; European Journal of Cardiovascular Prevention & Rehabilitation 2011 18: 550