

A Public Health Research Agenda for Equity in Trinidad and Tobago

Visit of Michael Clarke to the Faculty of Medical Sciences, St. Augustine Campus, University of West Indies

February 13-20, 2017

Purpose of Visit

The purpose of the visit was to gather information and evidence to inform the development of a long-term regional plan for public health research based at UWI (St. Augustine). The visit, hosted by the Dean of the Faculty of Medical Sciences at UWI, was a follow-up from a previous meeting between the Dean, Principal Copeland and the Ministry of Health wherein the Ministry requested that FMS refocus its research toward research problems being faced by the Local Health Authorities.

One of the key strategies of the WHO is that governments must be aware of the need for "Health In All Policies" (HIAP), a process that places the protection and promotion of health as a priority in the development and implementation of all policies (Lin, Jones, Wang, & Baris, 2014; Ståhl, Wismar, & Ollila, 2006). When "Health In All Policies" (HIAP) is implemented at the level of national or sub-national governments, it is structured as a "Health Impact Assessment" (HIA) (Forsyth, Slotterback, & Krizek, 2010) process that ensures that all legislation and policy coming before elected representatives has been assessed for its potential impact, intentional or otherwise, on the health of citizens affected by the legislation or policy (Delany et al., 2014).

Thus, through a HIA process, government initiatives across all sectors are informed by current knowledge and research on preventative health measures so that no harm is done and that healthy policies and populations are the outcome (Organización Panamericana de la Salud. Organización Mundial de la Salud-Oficina Regional para las Américas, 2014).

To support a HIA process in Trinidad and Tobago, a rigorous research enterprise that engages researchers across all fields of inquiry that comprise the social determinants of health is needed. This report summarizes the findings from meetings held in Trinidad and Tobago from February 13-20, 2017 to explore the potential for establishing such a research centre that would be affiliated with the St. Augustine campus of the University of the West Indies.

Findings

Meetings with the Faculty of Medical Sciences Executive Committee revealed several as yet unexplored opportunities for collaborative research among the various schools and departments in the Faculty. As one example, Dr. Ocho, School of Nursing, described research on understanding the underlying challenges for patients adhering to their prescription medication regimes while Dr. Rajiv Dahiya from the School of Pharmacy described ongoing research on more acceptable formulation of medicines. Several areas of research deal directly or indirectly with equity issues in health, particularly with the obesity

epidemic, its contribution to the rapid increase of Type II diabetes, dental decay, demand for bariatric surgery

An outstanding example of research based on a social determinants of health framework and that directly benefitted communities was the “Break the Silence” work described by Dr. Reid. The goals, methods and governance of this work sets a global standard for the approach advocated by Sir Michael Marmot when he spoke on HIAP at a recent research meeting of the Trinidad and Tobago Medical Association and to which The Association referred when I met with them and representatives of the Faculty of Medical Sciences.

Critical issues impeding the contribution of research to health policy include the dearth of accurate and current health statistics and data, inaccessibility to data collected by the private sector healthcare system, the over-the-counter sale of prescription drugs, there is currently no legislation regulating the use of human participants in clinical research, and the fact that medical diagnostic laboratories are not regulated or certified. As well, the 1994 national legislation that led to the creation of the Regional Health Authorities has to this date not been evaluated for either its costs nor its impact on public health outcomes.

The range of research experience and expertise across the five (Med, Vet, Dent, Phar, Nurs) schools within the Faculty (Medicine, Veterinary Medicine, Dentistry, Pharmacy and Nursing) represents an opportunity for transdisciplinary research programs. Understanding and reducing the obstacles or lack of incentives for collaboration across departmental and bureaucratic boundaries is needed to build the capacity for a HIAP / HIA process.

However, comprehensive health systems research must engage expertise from outside the immediate domain of medicine and health sciences. As this project moves forward, it will be necessary to include active participation from researchers in the social, applied and basic sciences.

Beyond the university itself, representatives from regional entities with interests and mandates in public health presented their roles and resources in a multi-stakeholder meeting on February 16 this year. This meeting clearly indicated the important contributions that the Pan American Health Organization, the Trinidad and Tobago Medical Association, the Trinidad and Tobago Manufacturers Association, the Health Economics Unit of The UWI and the Caribbean Public Health Agency would make to a HIA process.

Visits to acute-care hospitals (Sangre Grande, San Fernando and Scarborough) and primary care clinics (Oxford St.) showed a very high level of clinical competency and organizational efficiency. Particularly impressive were the preventative health programs at the Oxford St. clinic and a clear focus on aligning these with the demographic profile of the patient catchment area. When a public health research program refers to “upstream” it relates to being upstream from the point of care – and, therefore, engaging care providers who are delivering health services directly to patients must also be involved in a health systems initiative.

Background

Trinidad is a transition state having moved from a middle income to a high-income country according to World Bank rankings. This status implies that the country is ineligible for many international assistance programs from donor countries. Therefore, government interventions in advancing public health must be financed for the most part from domestic funds allocated in its national budgets.

The national economy is solidly based on the extraction, processing and export of fossil fuels and their derivative products, mainly natural gas, fertilizers and chemicals which collectively represent approximately 80% of total GDP. The economic health of the country is, therefore, highly dependent on the global demand for these products.

Trinidad's economy is therefore directly impacted by the global demand for non-renewable fossil fuels (Figure 1). It is important to note that the increase in GDP since 2003-4 (due to the global market price of fossil fuel products) has not translated into growth in employment. The recent decline in global crude oil prices has led directly to both a decline in GDP and an increase in unemployment (Figure 2).

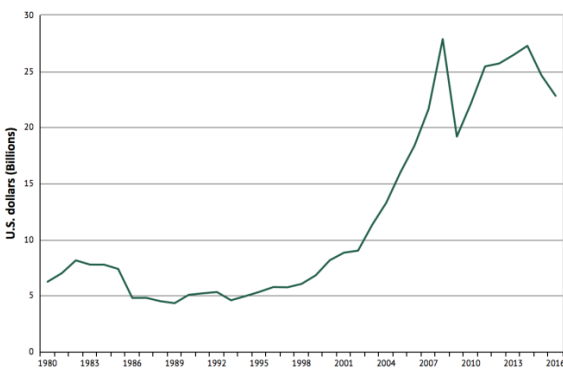


Figure 1 (Trinidad & Tobago GDP: <http://bit.ly/2nzf6y3>)

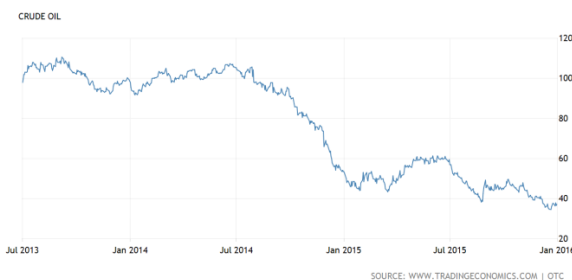


Figure 2: Left – global crude oil \$ per barrel. Right: Trinidad and Tobago unemployment rate.

It has been noted that one of the factors that is constraining the diversification of the economy is the need to improve standards and quality of the secondary and tertiary education systems as well as to invest in a domestic research and development program (Carneiro, Longmore, Cazorla, & Jaupart, 2014).

Despite its high-income status, Trinidad still retains residual high levels of poverty and poor health among specific populations, particularly among African-Trinidadian communities in large urban centres. In 2007, approximately 17% of the population of Trinidad lived below the poverty line whereas in 2002 it was estimated that 70% of the population in Suriname was below the poverty line as was 35% of those living in Guyana in 2006 (CIA World Factbook, accessed 2017-03-30; <http://bit.ly/2nzC3ky>).

Consequently, poverty related health issues prevail in this large segment of the population as well as in growing middle and upper income groups experiencing rapid changing dietary customs. These poverty-related health issues are mainly due to non-communicable diseases (NCDs) however, certain infectious diseases (IDs) pose a possible risk because of harmful anthropogenic environmental changes (eg. mosquito-borne diseases).

Health Impact Assessment

The goal of HIA is to focus on the preventative “upstream” side of healthcare to ensure that government policies and practices do not unintentionally cause harm but do act to promote and improve public health at the population level. Since approximately 50% of all illness results from unintentional consequences of public policies (Raphael & Brassolotto, 2015), HIA fully implemented will have a dramatic positive impact on both social and economic development in Trinidad and Tobago.

The causal connection between public health and economic wellbeing is clear (Epstein, Jiménez-Rubio, Smith, & Suhrcke, 2009; Suhrcke, Nugent, Stuckler, & Rocco, 2006), targeted financial allocations to improve public health can have a direct and significant positive impact on the national economy.

In this sense, evidence-informed policy that has been shown to promote health is good economic policy and expenditures on healthy policy are truly investments with both real economic and social returns.

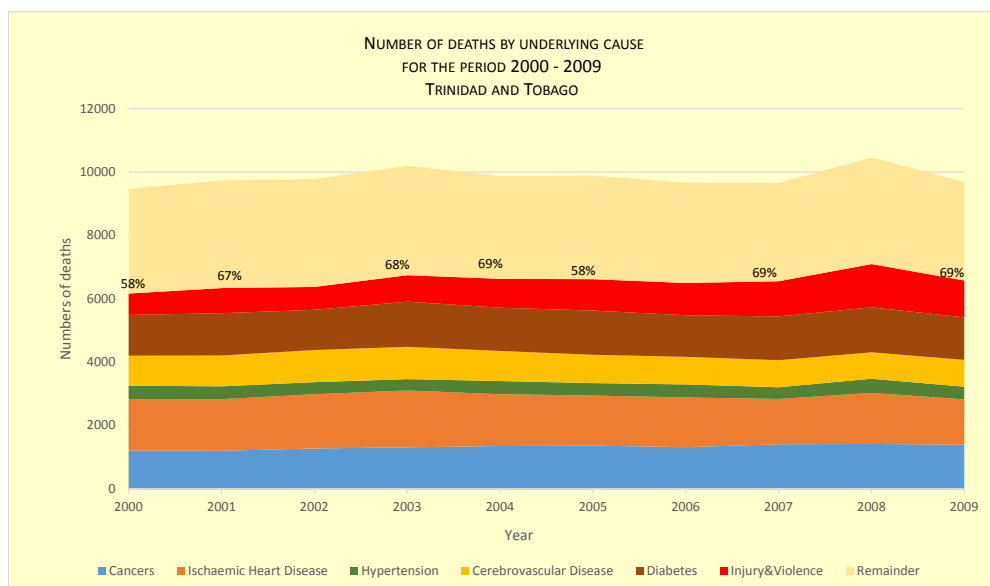
This is nowhere more evident than in the current “epidemic” of non-communicable disease (NCDs) that is causing great harm not only to the people of Trinidad and Tobago but also to national economies of the third world (Cecchini et al., 2010; Krishnadath, Toelsie, Hofman, & Jaddoe, 2016).

Given the vulnerability of Trinidad and Tobago’s national economy to global demand for non-renewable fossil fuels, investments in health that target NCDs can be realistically seen to be a smart strategy for diversifying the national economy.

The priority for examining the impact of government legislation on NCDs should be on addressing the tragedy of the current **obesity** epidemic (Figure 3) which, from both public health and economic impact perspectives, is the most significant contributor to ill health and economic impairment and, at the same time, the most easily addressed through evidence-informed public policy.

Non-communicable diseases. Although NCDs have risen high on the health agenda of most Member States of the Americas, including Canada, there still is a lack of in-depth qualitative analysis of NCD prevention policies, health system response and case studies, that can aliment the general discussion on how to respond to the growing NCD problems faced by countries and that can inform government policies and plans.

(Canada-PAHO Biennial Workplan, 2016-17)



Note: More than 2/3 of deaths are due to non-communicable diseases with Ischaemic heart disease the largest contributor.

Figure 3 Obesity is the leading risk factor for cardiovascular disease, diabetes and hypertension (<http://bit.ly/2odYE8W>)

Effective cross-sectoral implementation and evidence-informed assessment of public policy on obesity will reduce the direct costs to the healthcare system (primary through tertiary) as well as the improving workforce productivity, school attendance and, most importantly, addressing the critical **equity** issue of how socio-economic status is the most significant social determinant that contributes to the obesity crisis (Mendenhall, Kohrt, Norris, Ndetei, & Prabhakaran, 2017). Obesity is most prevalent in lower socio-economic populations although, for different reasons, it is also an increasing problem in middle and high-income social classes.

The underlying root causes of obesity lie well beyond the medical and healthcare systems. To fully reveal and address the many social determinants of obesity, we require an understanding of how each of the many determinants interact to, ultimately, result in too many calories being consumed and too few calories being burned.

A formal program of research that provides the evidence to policy-makers in a meaningful and useful way is a well documented approach to solving the research to policy gap. By initially focussing on obesity and its many clinical manifestations, this research enterprise will be well equipped to address other social, economic and health (such as trauma from violence and traffic accidents, mosquito-borne diseases and antibiotic-resistant bacteria) issues that currently face Trinidad and Tobago and beyond.

Recommendations

The proposed research program must necessarily be based on a sound and mutually reinforcing partnership among the stakeholders which includes the Ministry of Finance, the Ministry of Health, the University of the West Indies, the Pan American Health Organization and the Caribbean Public Health Agency within Trinidad and Tobago. Most importantly, civil society organizations with direct and vested interests as beneficiaries must be included in the partnership. The private sector must also be engaged but only and entirely on the terms and conditions laid down by the public agencies who have ultimate responsibility for public health.

However, it is recommended that this research program assumes a mandate beyond the country itself to include the Southern Caribbean, specifically Suriname and Guyana. Therefore, the partnership should involve stakeholders from these countries as well.

It is recommended that a **Southern Caribbean Centre for Health Systems and Policy Research** (SCCHSPR) be established with initial oversight from UWI, leadership from the Faculty of Medical Sciences and representation from all academic research groups including political science, sociology, anthropology, epidemiology, mathematics, environment and biology, chemistry, engineering, computer science, education and, most importantly, health economics.

Research capacities in all these fields are in place within the UWI system in Trinidad. Similar research programs at Anton de Kom University in Suriname and the University of Guyana should be brought into the partnership.

The programs within the Centre will address the priorities of the national governments of Trinidad and Tobago, Suriname and Guyana since the Centre's mandate will include direct support to the governments by providing rigorous research evidence to national Health Impact Assessment processes. In addition, researchers will be expected to meet the standard expectations of an academic centre of excellence (grant support, peer-reviewed publications and community service). Representatives from Ministries of Health and national statistics offices in the three countries should be included in the Centre, most appropriately at a high level of governance in an oversight (i.e. Board of Directors) capacity.

Finally, the Centre would need representation and support from national and regional health care advocacy groups at the appropriate level (operational or governance) for a regional effort to support HIA in low-income countries in the Southern Caribbean (Suriname and Guyana). Global funders of health systems research should also be approached (eg. World Bank, DfID, NoRAD, IDRC, SSHRC, USAID) for financial support.

Outcome

The opportunity to support the development and evaluation of public health policy in the Southern Caribbean is clear. The right stakeholders and resources are in place in Trinidad to demonstrate global leadership in establishing a research centre that would support a "Health in All Policies" approach to national governments through a health impact assessment process.

Such an approach to effective public health through evidence-informed "upstream" policy development, implementation and evaluation would situate Trinidad as a global leader in health systems strengthening.

The priorities for research should be firmly aligned with the public health priorities of the national governments and should be based on the principle of **equity**, ensuring that the root causes of disparities in health status in their populations are fully understood and that this knowledge is used directly to inform government policy to reduce or eliminate these disparities. In addition, the economic benefit that would accrue from reducing the impact of public health challenges should be an integral component of the research to policy nexus (Beckfield & Krieger, 2009; Culyer, 2015).

Next Steps

It will be essential that planning to establish a health systems policy research centre be a collaborative exercise involving stakeholders from all constituencies and that these same constituencies take full ownership of the outcome. There are two aspects of ownership that must be made clear: first is that ownership implies contribution and, second, responsibility.

How stakeholders make their contributions and exercise their responsibilities must be negotiated and agreed upon.

It is recommended to develop a plan for a two to three-day retreat at which invited representatives of the various stakeholder groups establish the terms and conditions for the partnership that will lead ultimately to the formal establishment of an inclusive health systems and policy research group.

The goal of this workshop is to produce a formal agreement among the partners that will essentially be a business plan for the centre, including a declaration of the centre's values, vision and mission statements, a clear presentation of the intended purpose of the centre and how the centre will be governed, operated and sustained.

The business plan will be used to attract funders, both local and international, to provide the financial support needed to get the centre established and to sustain it over the long term.

Indeed, the workshop itself will need to have a succinct business plan to attract funding for this first step. It is recommended that the planning, organizing and facilitation of the workshop be carried out by a qualified, professional facilitator who has no vested interest in the process. The plan for the workshop should take the form of a concept note that will be used to seek funding.

The first step is, then, to prepare a concept note that will outline the nature, purpose, goals and costs of the workshop. A suggested template for the concept note provided by Canada's International Development Research Centre is attached in the Appendix.

A small (<10 persons) working group should be struck to write this concept note and to identify possible funders for both the workshop itself and for the larger proposal to establish the SCCHSPR.

Summary

There is a real opportunity to establish a health systems and policy research centre that provides direct support to the national governments of Trinidad and Tobago, Suriname and Guyana. The essential components of such a centre are available – both in terms of research expertise and buy-in from government (at this point, from the Trinidad and Tobago Ministry of Health) and collaborating regional partners (CARICOM, PAHO, CARPHA).

The remaining elements are the will and means to proceed to bring this vision to a reality. This will be the challenge for all partners including UWI who understand the nature of such a collaboration where all partners are of equal status and that consensus and mutual support are the *modus operandi* of an effective, multi-stakeholder collaborative.

The potential contribution of this initiative to the economy of Trinidad and Tobago is real (Wang, 2015). The research conducted in the proposed Centre should have at its core a thorough analysis of the returns, both social and economic, arising from healthy public policies. Healthcare costs are escalating at rates that exceed growth in GDP for the foreseeable future. Clearly, this is unsustainable and either services levels are reduced on a cost-basis only or efficiencies are introduced into the system that are based on rigorous evidence and knowledge gained through research.

. The inclusion of both Suriname and Guyana in this initiative brings a focus not only regionally to the southern Caribbean but also to their economic fundamentals which are quite differentiated from Trinidad and Tobago. Additionally, the health issues facing the three countries reflect the entire spectrum of the social determinants underlying preventable morbidity and mortality. A joint health systems and policy research program would benefit from broad research expertise across the three countries that addresses common challenges in public health.

It is well known that enhancing the health status of a country contributes directly to its economic wellbeing in terms of productivity, lower healthcare costs and social stability (Bershteyn, Lyons, Sivam, & Myhrvold, 2015; Cecchini et al., 2010; Vollmer et al., 2015).

Prioritizing equity in the health system will lead to an overall increase in the quality of both population health status at the national level and enhanced quality at the point of care (Culyer, 2015). The ultimate goal of this research program is nothing less than improved equitable health outcomes for the people of the Southern Caribbean region and, consequently, real and measurable progress in social and economic development.

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Signed:

Authored by:

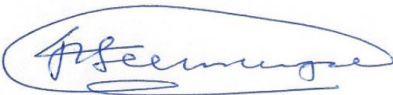


Michael W. Clarke, PhD

May 2, 2017

Date

Approved by:



Prof. Terence Seemungal, Dean Faculty of Medical Sciences, UWI

8 May 2017

Date

CONCEPT NOTES — GENERAL GUIDELINES

CONTENT

COVER PAGE

The concept note must have a cover page that includes the following:

- Project title
- Lay project title: *Please provide a short title suitable for communication purposes (maximum of 14 words)*
- Country or countries where the research is taking place
- Name and full address of the organization/institution that will administer the project funds
- Total amount of funding requested in local currency (**preferred**) or Canadian dollars
- Duration of the research project
- Name, title, work affiliation and email address of the principal investigator

CONCEPT NOTE

The concept note **must** include the following items, within 5 pages:

- Research problem and justification
- Objectives
- Methodology
- Gender and equity considerations
- Dissemination strategy and anticipated outcomes and impact
- Preliminary schedule
- Tentative budget

The tentative budget should state the total amount of funds requested over the total duration of the grant. The following format may be used:

Total budget in local currency: _____