BRIEF COMMUNICATION

TOWARDS A 'GLOBAL' STRATEGY FOR TACKLING THE GLOBAL BURDEN OF COMMUNICABLE AND NON-COMMUNICABLE DISEASES IN RESOURSE-LIMITED SETTINGS.

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ABSTRACT

The global burden of communicable diseases (CD) and non-communicable diseases (NCD) in low and middle-income countries (LMICs) likely stems from a common substratum of societal and system inadequacies. In order to appropriately control these conditions and to manage the determinants and deterrents of both CDs and NCDs related deaths and disabilities, joint strategies aimed at both systemic and population levels are warranted.

Although deficiencies exist within the health systems of LMICs, assets which could be leveraged efficiently to produce desirable outcomes also abound. Significant changes are already taking place through health initiatives within LMICs, opening up opportunities for further success through the involvement of international agencies. The role of these agencies, including donor countries and LMICs' Diaspora, is to strengthen and support the opportunities offered by on-going changes at the country level.

There is a need to better understand and support the drivers and processes of positive change within LMICs in order to harness them for more widespread benefit through scale-up efforts. Strategies for addressing CDs and NCDs should be devised and implemented as complementary rather than competing 'sides of the same coin'.

INTRODUCTION

The current status of global health is characterised by a double burden of disease due to the ongoing epidemiologic transition in low and middle income countries (LMIC), largely in Asia and Africa. Traditionally, communicable diseases (CDs) such as malaria have been the scourge of public health and clinical care for these countries. However, recognition of an increasing burden of non-communicable diseases (NCDs) is now growing: these include cardiovascular disease, cancer, diabetes and other chronic conditions. Accordingly, high-level national, regional and international initiatives are underway to tackle NCDs (1) at preventive and curative levels. These will assume greater importance and urgency as the threshold of the 2015 timeline for the Millennium Development Goals (MDGs) is crossed.

Although the increasing excess toll of diabetes and other NCD-related death and disability in LMIC is now well recognised (2), international funding resources may not be commensurate to this trend. The very nature of NCDs are such that the time delay between intervention and the onset of health benefits accruing due to disease control is less likely to sustain the interest and motivation of international donors than CDs. Given the strong focus and effort being deployed for tackling emerging Communicable Diseases such as Ebola and residual hurdles in the control of HIV/AIDs and malaria, a significant change in the funding situation in the near future is not evident. However, transferring money away from the control of CDs in order to fund the control of NCDs only amounts to 'robbing Peter to pay Paul'; this is neither a viable nor sustainable option and may have dire consequences for the overall health of LMIC populations. The danger of such an approach in global health was recently highlighted in a speech by Her Imperial Majesty the Queen in the United Kingdom and supported by expert opinion (3).

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Ultimately, the dividing line between NCDs and CDs is artificial: the success of ART now means many survivors living with HIV/AIDS are at risk of the residual NCD-type effects of previous damage to organ systems such as kidney and bone-marrow resulting from the disease as well as ART use. Also it has been shown that the rising cardiovascular burden in LMIC due to ischaemic heart disease is occurring against the backdrop of a far greater burden of CDs-related valvular heart disease (4), the majority of which is rheumatic.

Tackling the current scenario clearly calls for fresh, 'outside-the-box' thinking in terms of research, policy and practice. This must take into consideration not only disease control per se, but also the systems and structures in place for improving chronic health and well-being. Such structures must aim to increase the sense of ownership over their own health among populations in LMIC, including awareness of potential NCD conditions and a willingness to take part in prevention efforts. This paper attempts to describe the global strategies for tackling the global burden of communicable and non-communicable diseases in resource limited settings.

METHODS AND MATERIALS

Over the past decade there have been a myriad of widely publicised initiatives for global health concerns other than NCDs among governmental, intergovernmental and non-governmental organisations (NGOs) (1). Back in April 2013, members of The Health Network for Health and Development met with researchers and policy makers in Copenhagen to deliberate on new approaches which aim at synergies rather than competition between strategies for the control of NCDs and CDs in LMIC. A broad range of strategies were addressed, including work force development, rights-based approaches, community ownership and individual responsibility, and how to "break the silos of NCDs and CDs". The main thrust of the deliberations was "bridge building" between NCDs and CDs, starting with prevention and carrying through treatment and into rehabilitative care.

During five series of annual symposia in the United Kingdom at the University of Swansea, organised by Health Works International Support Systems (HISS) from 2006 through to 2010, we proposed a shift in the international health paradigm of aid and assistance to one of enhancing health in disadvantaged regions through systematic sourcing, sharing, and sustaining of success stories in health care initiatives emanating from those same regions. Building on the work of HISS, we undertook an exploratory ethnographic effort focused on the physical state of communities, human interactions, and their activities and voiced aspirations. We then worked through health care settings, schools, social milieu and events such as churches and cultural celebrations over a two-month period, culminating in a street campaign that promoted renal and general health awareness. The campaign, which targeted both CDs and NCDs, focused on the behavioural risks for both high blood pressure and poor hand hygiene. Demonstrations and displays highlighted safe dietary practices (reducing salt intake) as well as methods by which personal and hand hygiene can be maintained.

RESULTS

Overall, we found both significant untapped opportunities for learning within the health care system and the community and also key psychological and social obstacles to the attainment of renal and general health. Ordinary and uneducated members of the community were very willing to acquire new knowledge and skills about disease control and to participate in the process of health improvement. However, we also noted inaccurate perceptions of the cost of personal preventive primary health care, even among the educated members of the community. A short questionnaire on risk factors and awareness of renal and related health conditions identified these concerns among 5-11% of 213 participants from the streets and health centres. In the two-month campaign, we were also able to create crucial connections between the Health Service in Northern Ethiopia and their descendants in the Diaspora who have expertise in health care.

GHANA: Electronic Health Records: In Ghana, electronic health records have been implemented using a system that was rigorously tested at Korle Bu University Teaching Hospital. The WHO supported project provides customised software that allows for real time collection of health information. The Ghanaian Health Ministry recognizes that electronic health records hold promise for the improvement of health care improvement and avoidance of waste (5).

NIGERIA: National Health Bill 2014 and Epidemic Control: After its tempestuous ten-year passage

through the Nigerian legislative processes, a National Health Bill was passed in 2014. The newly defined roles and responsibilities and funding offered with robust governance requirements offer hope of lifting the delivery of primary health care out of dependence on Nigerian politics. An exemplary effort to contain the Ebola epidemic has also been widely hailed as a success story, as has continuing success in the control of residual endemic polio through the work of the Nigeria Primary Health Care Development Agency (NPHCDA) (6).

ETHIOPIA: Health Extension Workers: At this time last year Ethiopia was recognised by UNICEF to have achieved a marked reduction in child mortality to MDG targets through the deployment of Health Extension workers for the delivery of basic health care (7). The success of this program was also widely celebrated in the British lay press as well as in the House of Lords (8).

Mobile Technology for Health: In Ghana, Nigeria, Ethiopia, and Kenya, the emergence and growth of modern electronic technologies also provides hope for innovative opportunities to improve population health. These technologies may distribute educational messages in health promotion campaigns, aid in monitoring and managing disease, and assist in the provision of rehabilitative car.

DISCUSSION

Perhaps the need for innovative strategies has been most well captured in the work of Lord Nigel Crisp. In his extensive ground level consultations in LMIC, particularly sub-Saharan Africa, he identified a significant desire to take more ownership in the process of health care delivery amongst ordinary persons in local communities. He also recognized opportunities for researchers and health care workers to not only teach, but also to learn from these individuals. He continues to campaign for this novel mutual learning approach as a basis for international partnerships in improving global health (9), and recent developments in the attitudes, approaches and actions of opinion leaders in Africa have advocated similar ideas.

At the 58th Health Ministers Conference (HMC) for East, Central and Southern Africa (ECSA) , which included Health Ministers and senior executives from 11 countries (1-4) and several global health think-tanks, Omaswa, the founding Executive Director of the Global Health Workforce Alliance noted a "fresh

move in the right direction". He highlighted "the capacity and synergies of local institutions being strengthened, and the Health Ministers Conference embracing the relevance and importance of building stewardship and leadership capacities of the Ministers themselves and of their Ministries to support them". He further opined that "transformative and sustainable change is endogenous" and "that capacities of the institutions and individuals should built from what is already available" (10).

It is important that health systems be designed and delivered in line with humanitarian principles, but it should not be delivered solely as an emergent humanitarian response, as this may undermine long-term benefits. The health community must take advantage of existing assets to strengthen systems within LMICs and also seek new opportunities so that improved outcomes can be sustained; inter-sectoral leverages can contribute if necessary.

Overall, significant changes are already taking place through health initiatives within LMICs, opening up opportunities for further success through the involvement of international agencies. Clearly, maximizing the promise and full potential of these opportunities will require political power and support from leaders in LMICs. Attempts to capitalize on existing potential will also benefit from the collaboration of the international community, donors and Diaspora alike. These supporters can act as catalysts who help create and consolidate collective health consciousness and responsibility in communities and the political class in LMICs (11).

Considering the prevention and treatment of NCDs and CDs as synergistic rather than alternative strategies, rewarding demonstrable political will, and stimulating home-grown policy initiatives will all be crucial in successful implementation in the future. The role of the research community is to discover and highlight emerging examples of successful home-grown initiatives. Key questions that must be addressed about these programs include: "Why is this happening now? Why is this happening here (and not in other health sectors or other countries in the region)? How can inter-sectoral collaborative resources be used to further enhance positive changes and enable the systems to sustain them? How can the changes be supported, scaled up and sustained with input from international donors and the Diaspora?"

Raising and answering these questions may be one vital component of efforts to provide sustainable improvements in health in Africa and other LMICs.

It can also serve as a springboard for future efforts in international health and development. In conclusion, we urge the international health care community to envision health care plans for CDs and NCDs as synergistic rather than as competing priorities.

We call for a fresh focus on strengthening health systems and *outcomes* and offer renewed enthusiasm to proactively seek out existing *opportunities* to improve them, even in the under-resourced scenario of African and LMICs.

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