HEART
HEALTH & EDUCATION ADVICE & RESOURCE TEAM

Helpdesk Report: The Political Economy of NCDs in Low- and Middle-Income Countries

Date: 5 December 2014

Query: Produce a report looking at the political economy of non-communicable diseases (NCDs) in low- and middle-income countries. Specifically, focus on how rising rates of NCDs, which tend to be highly prevalent in wealthier socio-economic groups, may influence:
a. The discourse on health priorities in low/lower-middle income countries where the wealthy tend to capture more than their fair share of services.
b. The allocation of expertise and resources in countries. Is there a danger that communicable diseases and reproductive maternal and child health will receive lower priority for resource allocation as a result?

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Content

1. Overview

There is a growing movement advocating for an increased focus on resourcing the control and treatment of NCDs, ie The Lancet NCD Action Group and the NCD Alliance. The proponents of tackling NCDs often quote figures for NCD impact in LMICs without discussing disparities between socio-economic groups. For example:

"deaths from cardiovascular disease, cancer, chronic respiratory disease and diabetes accounted for 63 per cent of global mortality in 2008, of which 80 per cent was in LMICs. The NCD burden is projected to increase: by 2030, NCDs will be the greatest killer in all LMICs." (Robinson and Hort, 2011, p.1)

However, the rapid search for this report identified some literature that questions the notion that NCD rates are more prevalent in wealthier socio-economic groups (Ataguba et al 2011, Stuckler et al 2011). Schneider et al (2009) find that in South Africa NCDs accounted for 39% and 33% of premature mortality in rich and poor districts respectively; higher for the rich but a marginal difference. Other researchers debate the notion.

With regards to access to NCD services Xie et al (2014) used Chinese National Health Survey data and identified substantial pro-rich inequity in health services among NCD

patients in China. Inequality has also been identified in Vietnam where health care utilisation in favour of the rich was observed in the slum areas (Kien et al 2014).

The policy agenda for NCDs is explored by Mendis (2010) who proposes that national NCD policies can make a substantive impact on public health in LMIC if they are geared to addressing primary prevention and equity of health systems. Health systems need reconfiguration to ensure equitable access to essential NCD interventions. Context-specific research is identified as a requirement to address implementation gaps in NCD policy, as policy development and implementation are driven by political realities and cultural specificities.

Maher and Sridhar (2012) use a political policy priority framework to look at why funding for NCDs is inadequate and why plans to stop the spread of NCDs has been so difficult. They find that struggles for influence and determining which issues to champion is "informed by subjectively held notions of the right, the good, and the just".

Negin and Robinson (2010) compare funding for HIV and NCDs to disease burdens in the Pacific Region. They find higher rates of mortality for NCDs but higher external funding for HIV. The authors do not investigate socio-economic groupings within this. A medical student, Roberts (2013) expresses concern that a funding shift away from neglected tropical diseases towards NCDs may widen the wealth gap and increase the inequity in distribution of healthcare.

On a more practical level, Stenberg and Chisholm (2012) review various investment strategies related to prevention and control of NCDs. They suggest integrating NCDs into the process for national strategic health planning. Miranda et al (2008) propose reintegration of current vertical programmes (e.g. for malaria, polio, tuberculosis, HIV) into novel forms of family-orientated primary care to include NCDs. HIV advocates (ICSS post-2015 consultation 2013) reject attempts to create divisions and competition between health agendas. They aim to communicate and reinforce coalitions with allied agendas, including coalitions focused on other diseases.

2. NCD prevalence in different socio-economic groups and inequality in access to services

Socioeconomic-related health inequality in South Africa: evidence from General Household Surveys
Ataguba JE, Akazili J, McIntye D. (2011) International Journal for Equity in Health
http://www.equityhealthj.com/content/10/1/48

Background
Inequalities in health have received considerable attention from health scientists and economists. In South Africa, inequalities exist in socio-economic status (SES) and in access to basic social services and are exacerbated by inequalities in health. While health systems, together with the wider social determinants of health, are relevant in seeking to improve health status and health inequalities, those that need good quality health care too seldom get it. Studies on the burden of ill-health in South Africa have shown consistently that, relative to the wealthy, the poor suffer more from more disease and violence. However, these studies are based on selected disease conditions and only consider a single point in time. Trend analyses have yet to be produced. This paper specifically investigates socio-economic related health inequality in South Africa and seeks to understand how the burden of self-reported illness and disability is distributed and whether this has changed since the early 2000s.

Methods

Several rounds (2002, 2004, 2006, and 2008) of the South African General Household Surveys (GHS) data were used, with standardised and normalized self-reported illness and disability concentration indices to assess the distribution of illness and disability across socio-economic groups. Composite indices of socio-economic status were created using a set of common assets and household characteristics.

Results
This study demonstrates the existence of socio-economic gradients in self-reported ill-health in South Africa. The burden of the major categories of ill-health and disability is greater among lower than higher socio-economic groups. Even non-communicable diseases, which are frequently seen as diseases of affluence, are increasingly being reported by lower socio-economic groups. For instance, the concentration index of flu (and diabetes) declined from about 0.17 (0.10) in 2002 to 0.05 (0.01) in 2008. These results have also been confirmed internationally.

Conclusion
The current burden and distribution of ill-health indicates how critical it is for the South African health system to strive for access to and use of health services that is in line with need for such care. Concerted government efforts, within both the health sector and other social and economic sectors are therefore needed to address the significant health inequalities in South Africa.

Horizontal inequity in public health care service utilization for non-communicable diseases in urban Vietnam
Kien VD et al. (2014) Global Health Action
http://www.globalhealthaction.net/index.php/gha/article/viewFile/24919/pdf_1

Background:
A health system that provides equitable health care is a principal goal in many countries. Measuring horizontal inequity (HI) in health care utilisation is important to develop appropriate and equitable public policies, especially policies related to non-communicable diseases (NCDs).

Design:
A cross-sectional survey of 1,211 randomly selected households in slum and non-slum areas was carried out in four urban districts of Hanoi city in 2013. This study utilised data from 3,736 individuals aged 15 years and older. Respondents were asked about health care use during the previous 12 months; information included sex, age, and self-reported NCDs. We assessed the extent of inequity in utilisation of public health care services. Concentration indexes for health care utilisation and health care needs were constructed via probit regression of individual utilisation of public health care services, controlling for age, sex, and NCDs. In addition, concentration indexes were decomposed to identify factors contributing to inequalities in health care utilisation.

Results:
The proportion of healthcare utilisation in the slum and non-slum areas was 21.4 and 26.9%, respectively. HI in health care utilisation in favour of the rich was observed in the slum areas, whereas horizontal equity was achieved among the non-slum areas. In the slum areas, we identified some key factors that affect the utilisation of public health care services.

Conclusion:
Our results suggest that to achieve horizontal equity in utilisation of public health care services, policy should target preventive interventions for NCDs, focusing more on the poor in slum areas.

Commentary: UN high level meeting on non-communicable diseases: an opportunity for whom?
Stuckler D, Basu S, McKee M. (2011) BMJ 2011, 343.
http://www.bmj.com/content/343/bmj.d5336.full

Non-communicable diseases remain neglected despite their social parallels to HIV. As with HIV, discussions are plagued by misconceptions. Although they have been thought of as diseases of the wealthy, this is simply incorrect. The common non-communicable diseases increasingly affect the poorest in low and middle income countries, just as in high income nations. Women aged 15-49 in sub-Saharan Africa are four times more likely to die or experience disability from a non-communicable disease than women in high income countries.

Pervasive fallacies have led to serious under-budgeting for non-communicable diseases. As the health minister of Uganda put it, "We know what to do [but] we have no budget." One survey of health ministers worldwide found that only about a third had even a single budget line for non-communicable diseases. Overall, less than 3% of global health aid has been designated for non-communicable diseases. WHO—which has provided the strongest support to NCDs among global institutions—allocates less than 10% of its budget to these diseases.

Jumping the gun: the problematic discourse on socioeconomic status and cardiovascular health in India
Subramanian SV, Corsi DJ, Subramanyam MA, Smith GD (2013) Int. J. Epidemiol.
http://ije.oxfordjournals.org/content/42/5/1435.extract

This paper states that there has been an increased focus on non-communicable diseases (NCDs) in India, especially on cardiovascular diseases and associated risk factors. The authors scrutinise the prevailing narrative that cardiovascular risk factors (CVRF) and cardiovascular disease (CVD) are no longer confined to the economically advantaged groups but are an increasing burden among the poor in India.

They conducted review of studies reporting the association between socioeconomic status (SES) and CVRF, CVD, and CVD-related mortality in India. With the exception of smoking and low fruit and vegetable intake, the studies clearly suggest that CVRF/CVD is more prevalent among high SES groups in India than among the low SES groups. Although CVD-related mortality rates appear to be higher among the lower SES groups, the proportion of deaths from CVD-related causes was found to be greatest among higher SES groups. The studies on SES and CVRF/CVD also reveal a substantial discrepancy between the data presented and the authors' interpretations and conclusions, along with an unsubstantiated claim that a reversal in the positive SES-CVRF/CVD association has occurred or is occurring in India.

The paper concludes by emphasising the need to prioritise public health policies that are focused on the health concerns of the majority of the Indian population. Resource allocation in the context of efforts to make health care in India free and universal should reflect the proportional burden of disease on different population groups.

Commentary: Jumping the gun or asleep at the switch: is there a middle ground?
Smith JC (2013) Int. J. Epidemiol. (2013) 42 (5): 1435-1437.
http://ije.oxfordjournals.org/content/42/5/1435.short

Non-communicable diseases (NCD) are now widely recognised as constituting a majority share of global mortality, accounting for 65% of all deaths. An estimated 43% of all deaths in low-income countries and 75% of deaths in lower-middle-income countries can be attributed to non-communicable conditions. In this context, it has been hypothesised that NCD may no longer be confined to only the most affluent populations in low- and middle-income countries (LMIC). Instead, even populations with lower socioeconomic status (SES) within LMIC may be experiencing increasing risk for NCD or NCD risk factors. Support for this hypothesis has been documented in a number of LMIC.

The author scrutinises the viewpoints by Subramanian and colleagues who challenge the idea that NCD are disproportionately represented among populations with low SES in India. According to Subramanian et al, contrary to what has been hypothesised, cardiovascular risk factors (with the exception of tobacco use/smoking) are less prevalent among the lowest SES populations in India as compared with the highest.

There are several points that should be noted while interpreting these results. First, a stated goal of the paper by Subramanian et al is to determine whether NCD have increased among populations with low SES, as a means of judging the legitimacy of claims of such. However, the author argues that the review only specifically evaluates whether populations with low SES had a relatively higher risk or prevalence for each outcome than populations with high SES. NCD may pose a substantial disease burden for populations with low SES even if the prevalence is still lower than that in high SES populations. For instance, the prevalence of overweight/obesity among women in Mumbai is 25% for those living in slums and 30% for those living in non-slums. This would suggest a substantial burden of overweight/obesity among women who live in slums, even though overweight/obesity is more prevalent among women who do not live in slums.

The paper also states that the review Subramanian's paper also does not answer the question of whether NCDs have increased over time among lower SES populations in India. The resultant summary does not directly address the current state of associations between SES and cardiovascular risk factors or disease, nor does it address the extent to which cardiovascular risk factors or disease have changed over time.

Finally, the author concludes by reminding that behind general global trends of increasing NCD, there is substantial heterogeneity in the degree to which populations with low SES within LMIC are currently experiencing this increased burden. In some countries, this NCD burden may still be largely constrained to affluent populations

Commentary: Shielding against a future inferno: the not-so-problematic discourse on socioeconomic status and cardiovascular health in India
Narayan K.V, Ali K.M (2013) Int. J. Epidemiol. (2013) 42 (5): 1426-1429.
http://ije.oxfordjournals.org/content/42/5/1426.full

This paper again critiques the view held by Subramanian *et al.* and goes on to support the case that cardiovascular diseases (CVD) are no longer confined to affluent people, but are an increasing threat even for poorer sections of India.

The authors believe that, Subramanian *et al.*'s commentary-style comprehensive review falls prey to over-stretching interpretations of available data to make their point. For example, in arguing the pitfalls of the socioeconomic status-CVD gradient reversal, the authors attribute the lowering of mean serum low-density lipoprotein (LDL levels) in affluent groups in the USA to the diffusion of statins, disregarding a volume of literature that shows higher prevalence of dyslipidaemias among lower socioeconomic status (SES) groups even when defined based on self-report, measured lipid levels and/or cholesterol-lowering medication.

The picture of NCDs in heterogeneous and transitioning populations like in India is still unraveling, and the true degree of reversal of SES gradient in NCDs is hard to assess. NCDs are more palpable burdens—for example, CVD has become a leading cause of death, even in rural Bangladesh. We posit that it is not important to argue about whether or not NCDs affect the lower rungs of society, but more to acknowledge that the prevention of NCD burdens requires attention now, without at the same time ignoring the unfinished agenda of infectious diseases and under nutrition. In fact, without attending to NCDs, there may be a danger that we might set back progress on the unfinished agenda of poverty elimination, childhood mortality and under nutrition. Furthermore, several highly prevalent infections (e.g. tuberculosis, HIV, invasive group B streptococcus) which disproportionately affect lower SES groups, are commonly predisposed to by underlying NCDs. Therefore, the real policy challenge for all countries, rich and poor, will be to simultaneously tackle the unfinished agenda of infectious diseases and under nutrition alongside strategies to effectively deal with the rising threat of NCDs. Innovation in such integration is the need of the hour.

Poverty and non-communicable diseases in South Africa
Schneider M, Bradshaw D, Steyn K, Norman R, Laubscher R.,(2009) *Scand J Public Health* 2009 37: 176
http://sjp.sagepub.com/content/37/2/176.full.pdf

This paper discusses high levels of wealth inequality with improved health statistics in South Africa (SA) providing an important opportunity to investigate non-communicable diseases (NCDs) among the poor. It uses two distinct national data sets to contrast patterns of mortality in rich and poor areas and explore the associations between poverty, risk factors, health care and selected NCDs diseases in South African adults.

Causes of premature mortality in 1996 experienced in the poorest magisterial districts are compared with those in the richest, using average household wealth to classify districts. Logistic and multinomial regression are used to investigate the association of a household asset index and selected chronic conditions, related risk factors and healthcare indicators using data from the 1998 South African Demographic and Health Survey.

NCDs accounted for 39% and 33% of premature mortality in rich and poor districts respectively. The household survey data showed that the risk factors hypertension and obesity increased with increasing wealth, while most of the lifestyle factors, such as light smoking, domestic exposure to “smoky” fuels and alcohol dependence were associated with poverty. Treatment status for hypertension and asthma was worse for poor people than for rich people.

The study suggests that NCDs and lifestyle-related risk factors are prevalent among the poor in SA and treatment for chronic diseases is lacking for poor people. The observed increase in hypertension and obesity with wealth suggests that unless comprehensive health promotion strategies are implemented, there will be an unmanageable chronic disease epidemic with future socioeconomic development in SA.

The Burden of Disease among the Global Poor Current Situation, Future Trends, and Implications For Strategy
Gwatkin D and Guillot M. (2000) Washington DC: The World Bank
http://siteresources.worldbank.org/INTPAH/Resources/Publications/Seminars/burden.pdf

In 1990 communicable diseases were considerably more important for the world’s poor than global averages suggest. Noncommunicable diseases are correspondingly less important. The Projected 1990–2020 trend sees an accelerated overall decline in communicable diseases would benefit the world’s poor more than a faster global reduction in

noncommunicable disorders. A faster reduction in deaths from communicable diseases would also benefit the poor much more than it would the rich, and would thereby reduce global poor-rich differences in longevity. In contrast, the leading beneficiaries of a faster global reduction in deaths from noncommunicable disorders would be the rich. Such findings illustrate the importance of giving high priority to communicable diseases in strategies to improve the health of the poor and lessen poor-rich health differences.

Identifying Determinants of Socioeconomic Inequality in Health Service Utilization among Patients with Chronic Non-Communicable Diseases in China
Xie X et al. (2014) PLOS One, 9(6).
http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0100231

Background:
People with chronic non-communicable diseases (NCD) are particularly vulnerable to socioeconomic inequality due to their long-term expensive health needs. This study aimed to assess socioeconomic-related inequality in health service utilisation among NCD patients in China and to analyse factors associated with this disparity.

Methods:
Data were taken from the 2008 Chinese National Health Survey, in which a multiple stage stratified random sampling method was employed to survey 56,456 households. We analysed the distribution of actual use, need-expected use, and need-standardised usage of outpatient services (over a two-week period) and inpatient services (over one-year) across different income groups in 27,233 adult respondents who reported as having a NCD. We used a concentration index to measure inequality in the distribution of health services, which was expressed as HI (Horizontal Inequity Index) for need-standardised use of services. A non-linear probit regression model was employed to detect inequality across socio-economic groups.

Results:
Pro-rich inequity in health services among NCD patients was more substantial than the average population. A higher degree of pro-rich inequity (HI = 0.253) was found in inpatient services compared to outpatient services (HI = 0.089). Despite a greater need for health services amongst those of lower socio-economic status, their actual use is much less than their more affluent counterparts. Health service underuse by the poor and overuse by the affluent are evident. Household income disparity was the greatest inequality factor in NCD service use for both outpatients (71.3%) and inpatients (108%), more so than health insurance policies. Some medical insurance schemes, such as the MIUE, actually made a pro-rich contribution to health service inequality (16.1% for outpatient and 12.1% for inpatient).

Conclusions:
Inequality in health services amongst NCD patients in China remains largely determined by patient financial capability. The current insurance schemes are insufficient to address this inequity. A comprehensive social policy that encompasses a more progressive taxation package and redistribution of social capital as well as pro-poor welfare is needed.

3. Policy discourse

Political priority in the global fight against non–communicable diseases
Maher A and Sridhar D (2012) J Glob Health. Dec 2012; 2(2): 020403.
http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3529321/

Background:

The prevalence of non–communicable diseases (NCDs) – such as cancer, diabetes, cardiovascular disease, and chronic respiratory diseases – is surging globally. Yet despite the availability of cost–effective interventions, NCDs receive less than 3% of annual development assistance for health to low and middle income countries. The top donors in global health – including the Bill and Melinda Gates Foundation, the US Government, and the World Bank – together commit less than 2% of their budgets to the prevention and control of NCDs. Why is there such meagre funding on the table for the prevention and control of NCDs? Why has a global plan of action aimed at halting the spread of NCDs been so difficult to achieve?

Methods:
This paper aims to tackle these two interrelated questions by analysing NCDs through the lens of Jeremy Shiffman's 2009 political priority framework. We define global political priority as 'the degree to which international and national political leaders actively give attention to an issue, and back up that attention with the provision of financial, technical, and human resources that are commensurate with the severity of the issue'. Grounded in social constructionism, this framework critically examines the relationship between agenda setting and 'objective' factors in global health, such as the existence of cost–effective interventions and a high mortality burden. From a methodological perspective, this paper fits within the category of discipline configurative case study.

Results:
The authors support Shiffman's claim that strategic communication – or ideas in the form of issue portrayals – ought to be a core activity of global health policy communities. But issue portrayals must be the products of a robust and inclusive debate. To this end, we also consider it essential to recognise that issue portrayals reach political leaders through a vast array of channels. Raising the political priority of NCDs means engaging with the diverse ways in which actors express concern for the global proliferation of these diseases.

Conclusion:
Ultimately, our political interactions amount to struggles for influence, and determining which issues to champion in the midst of these struggles – and which to disregard – is informed by subjectively held notions of the right, the good, and the just. Indeed, the very act of choosing which issues to prioritise in our daily lives forces us to evaluate our values and aspirations as individual agents against the shared values that structure the societies in which we live.

The policy agenda for prevention and control of non-communicable diseases
Mendis S. (2010) Br Med Bull 96 (1): 23-43.
http://bmb.oxfordjournals.org/content/96/1/23.full

Robust national policies and strategies developed and owned by national authorities are fundamental for prevention and control of non-communicable diseases (NCDs). The objective of this paper is to address broad policy areas in respect of NCD prevention and control from a public health perspective, with a special focus on low- and middle-income countries (LMIC). The paper is a condensation of current World Health Organization (WHO) reports in this field supported by relevant literature obtained from a Medline search for the period 2000–2010. There is a strong evidence base that underpins the NCD policy agenda. National NCD policies can make a substantive impact on public health in LMIC if they are geared to addressing primary prevention and equity of health systems. National NCD policies help to catalyse, and coherently integrate regulatory, legislative and multisectoral actions across health and other health relevant sectors. Such multisectoral action is integral for creation of conducive environments to support healthy behaviours. There is agreement that health systems need reconfiguration to ensure equitable access to essential NCD interventions. Although the magnitude of the NCD burden is high and is growing in LMIC, international development assistance to address the burden remains negligible. How exactly gaps in

formulation, and implementation of NCD policies can be addressed when there are severe limitations in human resource capacity, financial resources and competing health priorities in LMIC is not clear. Context-specific research is required to address implementation gaps in NCD policy, as policy development and implementation are driven by political realities and cultural specificities. Research is also needed to develop innovative approaches for revenue generation for prevention and control of NCDs.

Priority actions for the non-communicable disease crisis
Beaglehole R et al. (2011) The Lancet, 377 (9775)
http://www.oecd.org/els/health-systems/47531330.pdf

The UN High-Level Meeting on Non-Communicable Diseases (NCDs) in September, 2011, is an unprecedented opportunity to create a sustained global movement against premature death and preventable morbidity and disability from NCDs, mainly heart disease, stroke, cancer, diabetes, and chronic respiratory disease. The increasing global crisis in NCDs is a barrier to development goals including poverty reduction, health equity, economic stability, and human security. The Lancet NCD Action Group and the NCD Alliance propose five overarching priority actions for the response to the crisis—leadership, prevention, treatment, international cooperation, and monitoring and accountability—and the delivery of five priority interventions—tobacco control, salt reduction, improved diets and physical activity, reduction in hazardous alcohol intake, and essential drugs and technologies. The priority interventions were chosen for their health effects, cost-effectiveness, low costs of implementation, and political and financial feasibility. The most urgent and immediate priority is tobacco control. We propose as a goal for 2040, a world essentially free from tobacco where less than 5% of people use tobacco. Implementation of the priority interventions, at an estimated global commitment of about US$9 billion per year, will bring enormous benefits to social and economic development and to the health sector. If widely adopted, these interventions will achieve the global goal of reducing NCD death rates by 2% per year, averting tens of millions of premature deaths in this decade.

The Growing Danger of Non-Communicable Diseases. Acting Now to Reverse Course
World Bank Human Development Network (2011)
http://siteresources.worldbank.org/HEALTHNUTRITIONANDPOPULATION/Resources/Peer-Reviewed-Publications/WBDeepeningCrisis.pdf

NCDs increasingly threaten the physical health and economic security of many lower- and middle-income countries. What makes the NCD challenge particularly daunting for many developing countries is that, compared to their higher-income counterparts, they will face higher levels of NCD at earlier stages of economic development, with fewer resources, and with less time to respond effectively.

Most countries lack the means to “treat their way out” of the NCD challenge. Rising trends in NCD prevalence and treatment costs will force countries to make deliberate and often very difficult choices in creating strategies to address NCDs in a sustainable way. In all countries, but particularly in those that are still facing major challenges to achieve the MDGs, such strategies should strongly emphasise prevention, alongside cost-effective, fiscally sustainable and targeted treatment.

The aim of this note is to support policy makers in lower-and middle-income countries, as well as the development community, in taking action across sectors to effectively address the growing crisis of NCDs amongst other national and global priorities. The World Bank’s support to policy makers in addressing the NCD challenge builds on its work in strengthening development and improving health outcomes in middle- and lower-income countries. This work complements the World Bank’s strong commitment to supporting the MDG agenda. The

Bank stands ready to help countries, particularly those dealing with a “double burden” of disease, to shape strategies to achieve their MDG targets, and build the evidence, for both middle and lower income countries, to effectively respond to the NCD challenge, while resolving the inevitable trade-offs that policymakers will face in allocating national health budgets.

Preventing chronic diseases: a vital investment
WHO (2005), Geneva: WHO.
http://www.who.int/chp/chronic_disease_report/full_report.pdf?ua=1

Deaths from chronic diseases are projected to increase between 2005 and 2015, while at the same time deaths from communicable diseases, maternal and perinatal conditions, and nutritional deficiencies combined are projected to decrease. This report makes the case for urgent action to halt and turn back the growing threat of chronic diseases; it presents a state-of-the-art guide to effective and feasible interventions; and provides practical suggestions for how countries can implement these interventions to respond successfully to the growing epidemics. In the section on the reality of health planning, it states that the priority accorded to different health programmes is partly a result of the broader political climate. It is important to identify, and ideally predict, the national or sub-national political climate and to capitalise on opportunities. Part Four of the document offers a framework for a flexible and practical approach to assist ministries of health in balancing diverse needs and priorities while implementing evidence based interventions.

Non-communicable diseases and health systems reform in low- and middle-income countries
Robinson HM, Hort K. (2011). Health Policy and Health Finance Knowledge Hub, The Nossal Institute for Global Health.
http://ni.unimelb.edu.au/__data/assets/pdf_file/0006/542409/HPHF_Hub_WP_13_Non_communicable_diseases_and_health_systems_reform.pdf

There is growing evidence that non-communicable diseases (NCDs) are a major health and socio-economic issue in low- and middle-income countries (LMICs). According to World Health Organization (WHO) estimates, deaths from cardiovascular disease, cancer, chronic respiratory disease and diabetes accounted for 63 per cent of global mortality in 2008, of which 80 per cent was in LMICs. The NCD burden is projected to increase: by 2030, NCDs will be the greatest killer in all LMICs. Thus, governments of these countries cannot afford to overlook policies in relation to NCDs.

Several cost-effective measures exist to prevent and control NCDs. These include both population-wide interventions such as tobacco control and targeted treatment for individuals at high risk. Experience from high income countries that have been able to control NCDs shows that responses must be comprehensive and multi-sectoral, integrating health promotion, prevention and treatment strategies, and involving the community as well as the health sector. Such a multi-faceted approach requires well-functioning health systems. In the majority of LMICs, however, health systems are fragile and will need to be adapted to address NCDs appropriately, while also continuing to tackle communicable diseases. We propose that the reform of health systems can occur in a four-phased approach in four areas: building political commitment and addressing health systems constraints, developing public policies in health promotion and disease prevention, creating new service delivery models and ensuring equity in access and payments. Several policy issues will also need to be addressed, including financing of NCD programs and the broadening of concepts of health and responsibilities for health. Adapting health systems to respond to NCDs will require a change in mind set and practices in programming for health, as well as substantial financial

resources. There is scope for development partners and global health initiatives to support LMICs in addressing NCDs.

4. Prioritisation and allocation of resources

Funding for HIV and Non-Communicable Diseases: Implications for Priority Setting in the Pacific Region
Negin J, Robinson M. (2010). The Nossal Institute for Global Health Working Paper Series: health planning and finance knowledge hub.
http://ni.unimelb.edu.au/__data/assets/pdf_file/0004/331753/HPHF_hub_WP1.pdf

Objectives
There has been increasing global interest in documenting funding flows for health, but none of that work has focused on the Pacific region. This paper outlines external funding for two specific areas of overseas development assistance (ODA) for health in the region—HIV/AIDS and non-communicable diseases (NCDs) — during 2002-09. These are compared to the comparative disease burdens, and some initial thoughts are presented on the dynamics of setting donor health priorities in the Pacific.

Methods
Empirical data on development partner aid funding were accessed through a review of web sites, annual reports, published data, funding proposals and other publicly available documentation of donor country aid agencies, multilateral agencies and programs and that of recipient governments. The document review was supplemented by 27 key informant interviews to verify and clarify the available data. Interviewees were drawn mainly from bilateral and multilateral agencies active in the Pacific and researchers working in the field. The HIV component was commissioned work for the Commission on AIDS in the Pacific.

Results
Despite much higher mortality rates from NCDs, external funding for HIV is higher than for NCDs. From 2002 to 2009, funding totalled US$68,481,730 for HIV and US$32,910,778 for NCDs. External assistance for HIV activities in the Pacific in 2009 was more than US$18 million, while funding for NCDs in the same year was almost US$12 million.

Conclusions
Despite cooperation from many agencies, the funding data were difficult to gather, highlighting the need for greater transparency of funding information and more thorough record keeping. The external funding does not align with the disease and mortality figures, and further interviews suggested that donor funding decisions in the region are driven not by local priorities but by factors including a strong global HIV community, the commitment to the Millennium Development Goals (MDGs) and the lack of coherence in the way NCDs are presented to policy makers.

Funding the future of global health: A medical student perspective
Roberts S. et al. (2013) Journal of Global Health, 3(2)
http://www.ghjournal.org/wp-content/uploads/2014/02/FALL%202013%2012.10.pdf

Although it is important to increase funding for NCDs, there may be negative implications for other global health ventures. A shift of funding toward NCDs may result in the reallocation of money and interest from low-cost, life-saving interventions for preventable infectious diseases.

We are concerned that shifting funding from neglected tropical diseases (NTDs) towards NCDs may widen the wealth gap and increase the inequity in distribution of healthcare. Eradicating NTDs has an economic benefit. Experts estimate that hundreds of millions of

children would be afforded the opportunity to live longer and healthfully enough to contribute to their country's workforce, thereby stimulating economic and social development if not stricken with NTDs.

The impoverished and unhealthy state of the world's poorest billion would only worsen if the global health community averts its eyes to their plight in favor of the ever-expanding public health problem of NCDs.

Fully acknowledging how important the issue of NCDs has already become, we implore that pure prevalence of these diseases not overshadow the low-hanging fruit to be had in both prevention and treatment of NTDs.

Non-communicable diseases in low and middle-income countries: a priority or a distraction?
Ebrahim S and Smeeth L (2005) Int. J. Epidemiol, 34 (5)
http://ije.oxfordjournals.org/content/34/5/961.full.pdf+html

NCDs account for the majority of the global burden of disease and, in LMICs, are projected to increase markedly. However, global and even region-specific estimates of disease burden may not reflect the health problems faced by the world's poorest people who, of course, face the greatest threats to their health. The world's poor face the highest risk of communicable disease and the highest risk of NCDs. Very little relevant cost-effectiveness data are available to aid decision making in LMICs and virtually nothing is known of the public's views on resource allocation for health.

Improving health care: individual interventions
WHO (2011) Global status report on noncommunicable diseases 2010. Description of the global burden of NCDs, their risk factors and determinants, Chapter 5.
http://www.who.int/nmh/publications/ncd_report_chapter5.pdf

This report suggests notes that vertical national programmes to address HIV/AIDS, tuberculosis and malaria have positive effects and negative effects. Negative effects might include distortion of national priorities, distraction of governments from coordinated efforts to strengthen health systems, and re-verticalisation of planning, management and monitoring and evaluation systems. Within a coordinated process of overall health-system strengthening, national health programmes should be based on sound situation analyses and a clear understanding of national health priorities.

Competing health priorities complicate prioritisation of health service interventions in low- and middle-income country contexts. Given constraints, and the urgent need to contain the rising epidemic of NCDs, low- and middle-income countries need to prioritise investment of available resources in individual health-care interventions that will provide a good return (best buys); very cost-effective individual interventions that are feasible for implementation on a wide scale can also have a high impact.

Resource Needs for Addressing Noncommunicable Disease in Low- and Middle-Income Countries Current and Future Developments
Stenberg K, Chisholm D. (2012) WHO Global Heart, 7 (1).
http://www.who.int/choice/publications/karindan.pdf

Low and middle income countries are faced with a range of challenges related to providing efficient and affordable health care. With non-communicable diseases (NCD) on the rise, there is a growing need to be able to estimate resource requirements, costs and expected impact associated with various investment strategies related to prevention and control of

NCD. In this article, recently developed costing and health impact models for NCDs are reviewed, with a view to drawing out their main findings as well as methodological limitations. A key shortcoming is that earlier modelling efforts have taken a vertical approach to costing, when in reality a more integrated, horizontal approach is needed in order to effectively plan for scaled-up investment and system development. The authors subsequently describe how the integration of an NCD module into the joint United Nations OneHealth tool will enable low- and middle-income countries to bring NCD into an integrated process for national strategic health planning.

5. Service integration

Non-communicable diseases in low- and middle-income countries: context, determinants and health policy
Miranda et al. (2008) Tropical Medicine & International Health 13(10)
http://onlinelibrary.wiley.com/doi/10.1111/j.1365-3156.2008.02116.x/full

The organised efforts of societies have resulted in the most remarkable improvements in child and maternal survival, control and eradication of major infectious diseases and fertility control that have resulted in population ageing – an underlying cause of the increase in non-communicable diseases – over the last 50 years. We now need to seek ways of building on these successes by strengthening existing health-care systems in their ability to provide comprehensive, accessible, community-based, family health care – preventive, curative and rehabilitative – for both communicable and non-communicable diseases. This will involve re-integration of current vertical programmes (e.g. for malaria, polio, tuberculosis, HIV) into novel forms of family-orientated primary care. Setting up new vertical chronic disease programmes for non-communicable diseases would simply perpetuate an approach that has undermined the ability of the health system to operate effectively in many countries. The primary care agenda embodied in Alma Ata in 1978 and now revitalised by World Health Organization's new framework for strengthening of health systems is the main priority for making a start in tackling non-communicable diseases in low- and middle-income countries.

The burden is great and the money little: Changing chronic disease management in low– and middle–income countries
Reidpath DD, Allotey P. (2012) Journal of Global Health, Viewpoints, 2 (2).
http://www.jogh.org/documents/issue201202/5-Viewpoint%20Reidpath.pdf

This article aims to focus on the practicalities of the management of chronic diseases. The authors note the shift from the NCDs vocabulary back to chronic diseases. This is intentional and pointed. If one is interested in understanding causes and prevention strategies it is important to separate the NCDs from other chronic diseases; however, if one is interested in the effects of the diseases, particularly on the health systems, then it is equally important to join the NCDs with other chronic diseases.

The two main issues that arise when contemplating health systems' management of chronic diseases are structure and financing. Our interest is in the observation that the management of any chronic condition entails a commitment to recurrent costs, which reduces the flexibility of health systems to respond to new demands. It also requires that a health system that traditionally has a poor relationship with the population beyond acute management becomes more responsive to changes in the population health profiles. Such a system will be harder for poorer countries to manage than richer ones.

Consultation of HIV Advocates about Post-2015 Global Development Goals
ICSS post-2015 consultation (2013)
http://www.worldwewant2015.org/file/311569/download/338668

Points related to NCDS:

Health issues are interlinked and health advocates should remain unified.
HIV advocates reject attempts to create divisions and competition between health agendas. To achieve strong global commitment for health, unified advocacy is needed across all health sectors, including those working on communicable diseases, sexual and reproductive health, maternal and child health, harm reduction, mental health, environmental health, and noncommunicable diseases (NCDs).

Global goals should focus on the leading causes of premature death and disability
These should include specific time-bound targets against HIV, tuberculosis and malaria and also targets against other diseases (including NCDs and vaccine-preventable infections) and for indicators of sexual and reproductive health, maternal and child health, mental health, harm reduction and prevention of deaths and disability due to substance use.

One of the statement developed in meeting discussions:

"The global health priority should be to defeat the leading preventable and treatable diseases, including HIV, tuberculosis, and malaria, maternal mortality, and major NCD's, with sufficient and sustainable domestic and global financing, equitable access to quality health services, and a focus on country ownership and commitment."

One of the key suggested actions:
Communicate and reinforce coalitions with allied agendas, including coalitions focused on other diseases (including NCDs and vaccine-preventable infections), sexual and reproductive health, maternal and child health, mental health, harm reduction, and the rights and health of women, youth, gay men and other men who have sex with men, sex workers, people who use drugs, and transgender people. Networks that were specifically named included the Global Vaccine Alliance (GAVI) and the Partnership for Maternal Newborn and Child Health (MNCH).

6. Additional information

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