

## Chronic Diseases: Chronic Diseases and Development 1



### Raising the priority of preventing chronic diseases: a political process

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Chronic diseases, especially cardiovascular diseases, diabetes, cancer, and chronic obstructive respiratory diseases, are neglected globally despite growing awareness of the serious burden that they cause. Global and national policies have failed to stop, and in many cases have contributed to, the chronic disease pandemic. Low-cost and highly effective solutions for the prevention of chronic diseases are readily available; the failure to respond is now a political, rather than a technical issue. We seek to understand this failure and to position chronic disease centrally on the global health and development agendas. To identify strategies for generation of increased political priority for chronic diseases and to further the involvement of development agencies, we use an adapted political process model. This model has previously been used to assess the success and failure of social movements. On the basis of this analysis, we recommend three strategies: reframe the debate to emphasise the societal determinants of disease and the interrelation between chronic disease, poverty, and development; mobilise resources through a cooperative and inclusive approach to development and by equitably distributing resources on the basis of avoidable mortality; and build on emerging strategic and political opportunities, such as the World Health Assembly 2008–13 Action Plan and the high-level meeting of the UN General Assembly in 2011 on chronic disease. Until the full set of threats—which include chronic disease—that trap poor households in cycles of debt and illness are addressed, progress towards equitable human development will remain inadequate.

#### Introduction

There are new opportunities to strengthen the prevention of chronic diseases, especially cardiovascular diseases, diabetes, cancer, and chronic obstructive respiratory diseases (panel 1). The UN General Assembly recognises the importance of chronic diseases as a development issue and will host a high-level meeting on this topic in September, 2011.<sup>11,13</sup> This meeting is a crucial opportunity to engage heads of state and governments in the fight against chronic diseases, and also represents a growing recognition that human development initiatives, such as the Millennium Development Goals, will not fulfil their goals until they include robust and concerted international action against chronic diseases in low-income and middle-income countries.<sup>14–16</sup>

Such opportunities to promote global health and development by means of strengthened actions against chronic diseases are, however, at risk. In the past few years, a series of unexpected setbacks have hampered human development and added to the difficulties facing global health. The financial and food crises of 2008 and 2009 put millions of vulnerable households on the brink of poverty and malnutrition; and the recent decision by the G20 countries to respond with rapid and deep spending cuts to national budgets threatens to reduce development assistance and the viability of essential but underfunded policies and programmes in low-income and middle-income countries.

Chronic diseases are now the leading causes of death and disability worldwide and will cause over three quarters of all deaths in 2030.<sup>17,18</sup> More than 80% of

deaths from chronic disease now occur in low-income and middle-income countries,<sup>18,19</sup> with important consequences for individuals, families, and national economies (figure 1).<sup>21–24</sup>

In the first *Lancet* Series on chronic diseases (2005), published in association with *Preventing chronic diseases: a vital investment*,<sup>25</sup> the authors described the global economic and health burden caused by chronic diseases and redressed pervasive myths about chronic diseases;

#### Key messages

- Chronic diseases substantially contribute to the global burden of disease but they remain neglected globally, especially in low-income and middle-income countries
- Global economic and social policies are driving the chronic disease pandemic
- Human development programmes must include action against chronic diseases to fulfil their potential
- Neglect of chronic disease by international agencies and national governments is a political, not a technical, failure since cost-effective interventions are available
- Political opportunities for progress are building, but coordinated and inclusive actions by all stakeholders are necessary to exploit these opportunities
- Key actions are implementation of available cost-effective interventions, addressing the common causes of the high burden of preventable diseases irrespective of the cause, and distributing resources more equitably on the basis of avoidable mortality

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This is the first in a [Series](#) of five papers about chronic diseases

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### Panel 1: Landmarks in chronic disease prevention

#### 2007

- Grand challenges in chronic non-communicable diseases<sup>1</sup> made the case for concerted action and funding for chronic disease prevention and research, and identified the top 20 policy and research priorities that need to be addressed to reduce the number of premature deaths from chronic diseases worldwide

#### 2008

- The 2008–13 WHO Action Plan for the Global Strategy for the Prevention and Control of Non-communicable Diseases<sup>2</sup> drew attention to the pressing need to invest in chronic disease prevention as an integral part of socioeconomic development
- The Bloomberg Global Initiative and the Bill & Melinda Gates Foundation<sup>3</sup> announced a combined investment of US\$500 million to help governments in selected countries implement proven policies for tobacco control
- The report of the Commission on Social Determinants of Health<sup>4</sup> presented evidence that linked the circumstances in which people live to their risk of ill health, which dispelled the argument that these disorders are a consequence of individual choices

#### 2009

- The creation of the Global Alliance for Chronic Diseases<sup>5</sup> brought together six of the world's foremost health research agencies, collectively managing an estimated 80% of all public health research funding, to collaborate in the battle against chronic diseases
- The National Heart, Lung, and Blood Institute and the United Health Chronic Disease Initiative initiated a collaboration to establish a network of 11 Collaborating Centres of Excellence in low-income and middle-income countries to build sustainable programmes to combat chronic cardiovascular and lung diseases<sup>6</sup>

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they also proposed a stepwise approach to prevention of such diseases to reduce age-specific death rates by an additional 2% per year.<sup>26</sup> A review of the evidence showed a clear, scientific case for action; within a decade more than 36 million lives could be saved at a cost of less than US\$500 million but producing savings of over \$60 billion. In 2007, the second *Lancet* Series was focused on 23 high-burden low-income and middle-income countries and three cost-effective interventions, which, if widely implemented, would readily achieve the global goal in these countries at a fairly low cost.<sup>27,28</sup> The Series ended with a call to action to encourage all stakeholders to strengthen their responses to chronic disease.<sup>29</sup>

Chronic diseases are still neglected globally, receiving very few financial and human resources, especially from development agencies and governments of low-income and middle-income countries.<sup>30</sup> Scientific

(Continued from previous column)

- The 2009 Global Risk Report of the World Economic Forum<sup>7</sup> rated chronic diseases as a more costly global risk than the global financial crisis, with potential costs estimated between \$250 billion to \$1 trillion dollars
- The Global Non-communicable Disease Network<sup>8</sup>—a voluntary collaborative arrangement of UN agencies, intergovernmental organisations, academia, research centres, non-governmental organisations, and business communities—is launched with the objective of providing support to low-income and middle-income countries to implement the Action plan for the global strategy for the prevention and control of non-communicable diseases (NCD action plan)
- The Aga Khan Development Network<sup>9</sup> hosted a two day, Africa-Asia chronic diseases summit in Kampala (Uganda) that brought together ministers and senior bureaucrats in government from low-income and middle-income countries in Africa and Asia, global chronic-disease experts, leaders from civil society, and UN and international agencies, to establish a common strategic platform to influence policies to combat chronic diseases

#### 2010

- Wellcome Trust announced their 2010–20 strategy,<sup>10</sup> which includes substantial focus on the investigation of development, ageing, and chronic disease, and has initiated a South Asia Network for Chronic Disease through a large strategic award
- UN General Assembly recognises the importance of chronic diseases as a development issue and will host a high level meeting on these diseases in September, 2011<sup>11</sup>
- The Institute of Medicine released a report<sup>12</sup> recommending strong actions to promote cardiovascular health in low-income and middle-income countries

evidence alone will not change people's hearts and minds, nor will a rise in the number of cost-effectiveness studies produce an increased investment. This Series addresses the continued political neglect of chronic diseases, and argues that the way forward is to take concerted and inclusive actions that link closely with the development and global health agendas by addressing the common causes of the high burden of preventable diseases, irrespective of the cause.

We use the political process model as a framework for understanding the inadequate response to the chronic disease pandemic and to centrally reposition chronic disease prevention in the global health and development agenda. By use of this model, we explore what is needed to stimulate the emergence of a global movement for chronic disease prevention, as has happened with other threats to global health (eg, HIV/AIDS), maternal and child health, and the environment.

## Politics of global health

To analyse the politics of global health we need a framework to study power: who wins and who loses in global health? What are the dominant forces, and why do their agendas leave little room for incorporating chronic diseases? How can we advance the early signs of momentum and the growing number of calls to action on chronic diseases? Several conceptual frameworks, grounded in political science and sociology,<sup>31,32</sup> have been developed to improve the understanding of the allocation of funding for international development and global health.<sup>33–36</sup> Each framework begins with the recognition that scientific evidence is only one of several determinants of political priorities. The assumption that policy makers will make decisions on the basis only of sound evidence, such as that describing the global burden of avoidable disease and availability of suitable interventions, has long been challenged. Although the availability and credibility of evidence, and whether it has provided a solution to a problem, are important to generate political priority, these new models devote increasing attention to other conditions that determine the policy processes. For example, evidence plays an increased part in policy making when there are strong networks to link researchers with policy makers.<sup>37,38</sup>

The effect of various incentives for change is also important to consider. One incentive is economic. The evidence has to be sold to policy makers, typically in the form of a business case that will convince politicians and tax payers. In the same way that infectious diseases have a substantial economic effect, non-communicable diseases do too—albeit an effect that is even greater because its prevalence is so much higher, and consequent disability so great. Another type of incentive is organisational. Institutions have their own mandates and agendas to pursue, often continuing along the policy path they have followed for decades (institutional inertia), irrespective of changes in the external environment, unless they receive a shock such as the emergence of HIV or pandemic influenza. A third type of incentive is linked to the political nature of decision-making processes in the health sector. Politicians who face frequent re-election often pursue short-term outcomes. They might, for example, find investments in treatment programmes more palatable than investments in population-health strategies to improve long-term-health outcomes.

Which of these incentives prevail depends on the policy context, including the priorities of a particular administration, power relations, and vested interests. For example, whether action against chronic diseases is taken depends on external determinants, such as donor policies, especially for those health systems that rely dominantly on donor finance. So far, these donor agencies have deliberately excluded chronic diseases from their policy agenda. In some cases, decisions are made behind closed doors as occurs with many leading private-philanthropic foundations and many private non-profit organisations.

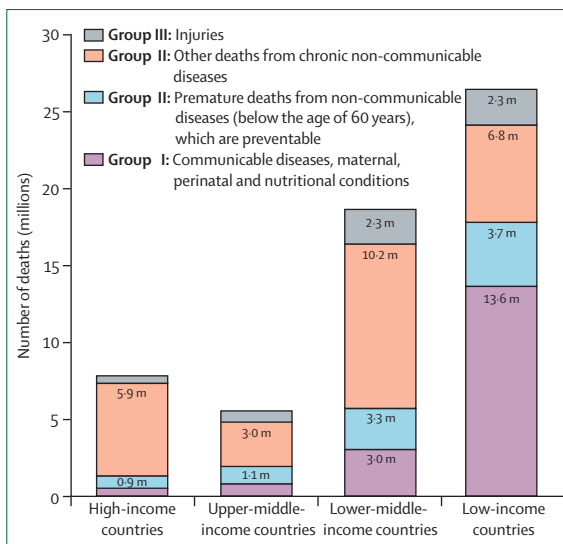


Figure 1: Total number of deaths in the world in 2004<sup>39</sup>

These political forces and incentives are being analysed through different lenses. Some frameworks draw on a tradition known as pluralism, and others on elite models. In a pluralist model of politics, groups compete to achieve political priority. However, increasing evidence about how decisions are made for global health shows that the system resembles the elite model, in which a small group of powerful individuals decide which diseases are relevant and the criteria used to make those decisions.<sup>39,40</sup> Yet, initiatives that successfully raised the priority of HIV through social mobilisation show that civil society can play an important part.

Thus, to integrate pluralist and elite models, and move beyond merely describing politics to identifying strategies for intervention, we draw on a sociological tradition that assesses the success and failure of social movements. Such movements seek to address collective problems through mass mobilisation, protest, and other strategies to generate societal change. Specifically, we use a modified political process model as a framework, and with a dual purpose: to explain the conditions that led to the neglect of chronic diseases by development and donor agencies and governments of low-income and middle-income countries, and to suggest general strategies for change.

The political process model has been used to assess social movements such as civil rights<sup>41</sup> and women's suffrage.<sup>42</sup> The original model identifies three factors that are crucial to generate social change.<sup>41,43</sup> The first factor is the process of cognitive liberation and transformation of consciousness. The premise is that people must collectively define their situations as unjust and subject to change through group action for social movement activities to gain momentum. The second factor is the structure of political opportunities and how these opportunities can either enable or constrain social

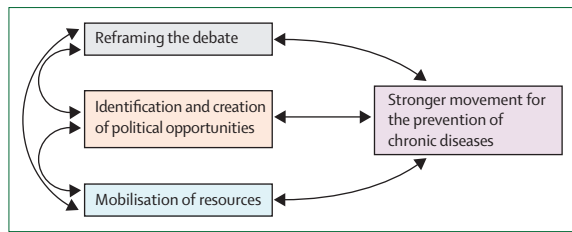


Figure 2: Adapted political process model

movements. A shift in political conditions, triggered by events or social processes that challenge the status quo, might supply a crucial stimulus to the process of cognitive liberation. The third factor relates to resource mobilisation. In the absence of appropriate resources, social-movement organisations might not have the capacity to take action even when given the opportunity. These three factors are clearly presented as being interlinked; each factor is needed but not sufficient to trigger social change.

We refer to the first factor in the section on reframing the debate. The intent is to emphasise that people's beliefs, perceptions, and attitudes about the fairness of the status quo determine the potential for a social movement. The recognition of the unfairness of the existing situation is an important precondition for the initiation of a shift in political opportunities, with our second factor consequently being the identification and creation of political opportunities. As in the original model, we refer to resource mobilisation as a dynamic process that is determined by the first two factors, and is crucial to converting political opportunities into action. Figure 2 shows that the three factors potentially co-influence each other, whereas the creation of a strengthened movement for the prevention of chronic diseases is a process with possible feedback effects on the conditions that gave rise to it. For example, the political opportunities derived from existing policy processes and political structures can be both the conditions and outcomes of social movements. Although we do not use the political process model in its original form, it provides a powerful framework through which the neglect of chronic diseases can be analysed. This Series marks an entry into the political process to begin to encourage urgently needed changes to the system of resource allocation for global health, to raise the priority of chronic disease.

### Reframing the debate Background

How an issue is framed affects the scope of intervention. For chronic diseases, a series of pervasive myths blame the victim or suggest that nothing can be done. These myths negatively frame chronic diseases as: diseases of individual choice, implying that people knowingly accept risks of chronic diseases; diseases of ageing—inevitable consequences of progress in health care, whereby public resources would be wasted on those

who have achieved a normal life-span; and diseases of affluence, with their emergence serving as a marker of social progress.

These myths deny the potential for political action by showing chronic diseases in one of two ways: as an individual problem that needs no collective policy action; or as a problem, so deeply entrenched, that policy cannot make a difference, thus legitimising the status quo of little or no action.

If chronic diseases are judged as an individual problem rather than a societal one, there is no need for social interventions, only the education of individuals. In many societies, social interventions for individual problems are viewed as an impingement on people's freedoms, which makes strong public-health measures, such as taxation or regulation, inappropriate. Taxes on soft drinks, bans on smoking in public places, and other effective public health interventions are regarded as intrusions into personal freedom rather than life-protecting measures, similar to the automobile safety belt. There are two approaches for reframing the debate about chronic diseases: an increased focus on their social causes, and an emphasis on chronic disease prevention as a key strategy for poverty reduction.

### Emphasis on social causes of chronic disease

Discussions in global health are dominated by the idea that people afflicted by communicable diseases are victims, either of the circumstances that made them vulnerable to infection or of the infectious agent itself. By contrast, those afflicted by chronic diseases are generally represented as the agents of their own misfortune, typically because they have freely chosen particular health-damaging behaviours, such as smoking, hazardous drinking, physical inactivity, or overeating.<sup>44</sup> Some of the successes of effective actions against chronic diseases have come when such a view has not prevailed—eg, the creation of smoke-free public places to protect non-smokers from the dangers of second-hand smoke. Similarly, an emphasis on the need to protect the innocent has allowed an increase in government spending on HIV/AIDS.<sup>45</sup>

The victim-blaming approach does not account for the context in which people make choices about their behaviours (eg, tobacco).<sup>46</sup> The tobacco industry has, over several decades, worked hard to enhance the ability of cigarettes and other tobacco products to deliver nicotine in ways that enhance its addictive nature.<sup>47</sup> The tobacco industry also uses advanced approaches for marketing its products, often directing their efforts to the most vulnerable members of society, especially children.<sup>48</sup> Equally advanced techniques are widely used by the alcohol industry,<sup>49,50</sup> and questions about the food industry's approach to marketing have been raised.<sup>51</sup>

A second aspect associated with discussions about global health is uncertainty. For chronic diseases, the situation is complex and involves the interpretation of

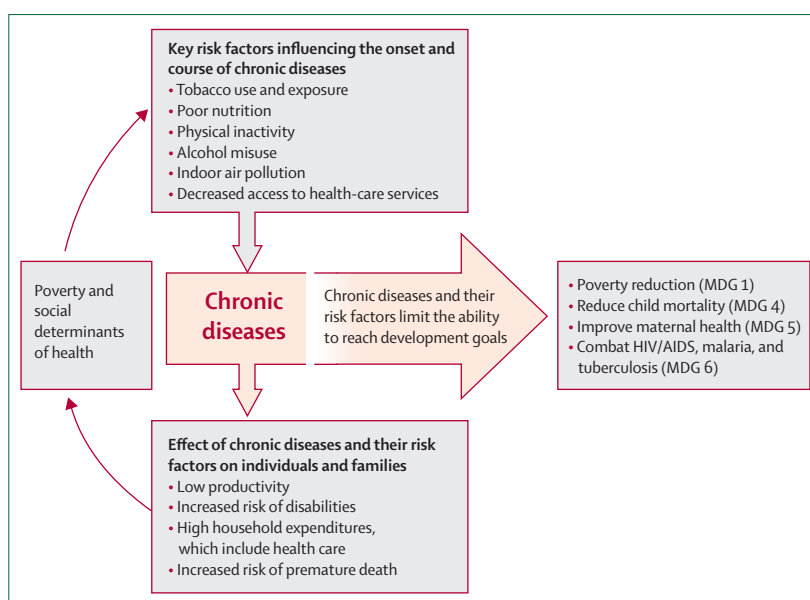
relative risks derived from observational epidemiology. These risks are almost inevitably subject to caveats such as measurement of exposure, bias, and confounding. Here too, powerful vested interest has played a part—for example, studies undertaken at the behest of the tobacco industry to create scepticism about the effects of second-hand smoke,<sup>52</sup> or in efforts to redefine good epidemiological practice so as to exclude important risk factors.<sup>53</sup>

In addition to overcoming these myths through rebuttal, the generation of a new narrative that evokes compelling, symbolic, and emotive images of the victims and causes of chronic diseases is needed. Evidence about the addictiveness of many products that cause chronic diseases, especially in children, will need to be acquired and disseminated through scientific research and discovery of corporate strategy documents that refer to evidence for addictiveness, to dispel dominant myths.

### Poverty reduction and development goals

The position of chronic disease in the development agenda is an essential step in reframing the debate, to mobilise resources to scale up available cost-effective interventions for the prevention of chronic diseases. Development efforts, if they are to be successful, should assess all the diseases that can trap households in vicious cycles of illness and poverty.<sup>2</sup> The notion of human development has quality of life, not only the extension of life, as a central value. The development of metrics that assess wellbeing and quality of life are needed, as part of a sustainable human development agenda.<sup>54</sup>

The chronic disease pandemic originates from poverty and disproportionately affects the poor. Poverty is also associated with other social determinants of chronic diseases, such as inadequate education, weak social networks, social exclusion, and longlasting psychological stress.<sup>55</sup> There are two reasons why the poorest people are the most likely to develop and die prematurely from chronic diseases. First, they have decreased access to comprehensive services for chronic disease prevention and treatment because of weak health systems.<sup>56</sup> Second, they live in environments where policies to tackle chronic diseases are either non-existent or inadequate, which increase their probability of exposure to risks such as tobacco use,<sup>57</sup> poor nutritional status throughout life,<sup>58</sup> alcohol misuse,<sup>59</sup> indoor air pollution,<sup>60</sup> and physical inactivity.<sup>61</sup> Several factors determine the relation between poverty and chronic diseases and their risks; rapid urbanisation in low-income and middle-income countries, through expansion of cities and in-migration, is a prime example. Foreign direct investment and export-oriented growth models are associated with many chronic diseases and their causes, including obesity, diabetes, hypertension, and other risk factors.<sup>62</sup> These forces show globalisation of the behavioural risk factors of chronic disease,<sup>63</sup> and how they lie outside of the



**Figure 3: Inter-relation between poverty, chronic disease, and development**  
MDG=Millennium Development Goal.

control of individuals and are guided, to a large extent, by global policies.

Chronic diseases also cause poverty. High household expenditures, including for health care, and household productivity losses reduce households' long-term economic prospects.<sup>64,65</sup> Expenditure by Indian households in which someone has a chronic disease increases the risk of falling into poverty by 40%.<sup>66</sup> Countries also suffer huge economic losses as a result of high health-care costs, and lost productivity because of illnesses and premature deaths from chronic diseases, which displace resources that could have been used for investment.<sup>20,21</sup> Figure 3 shows the main inter-relations between chronic diseases, related risk factors, and poverty and development. One example is tobacco use, which substantially increases tuberculosis mortality rates<sup>67,68</sup> and is a common cause of low birth-weight in wealthy countries.<sup>69</sup> Diabetes increases the risk of tuberculosis by about three-fold and is estimated to be responsible for 10% of tuberculosis cases in India, and 15% globally.<sup>70</sup> Reduced burdens of HIV/AIDS and other chronic diseases have been associated with much faster progress towards attainment of child-mortality and tuberculosis Millennium Development Goals than were gains in GDP. An estimated reduction of 1% in HIV prevalence or 10% in mortality rate from chronic diseases would have a similar effect on progress towards the tuberculosis Millennium Development Goal, as would a rise of 80% or greater in GDP, corresponding to at least a decade of economic growth in low-income countries.<sup>14</sup> A focus on chronic disease prevention and control makes both health and development sense for low-income countries where the means of rapid achievement of economic growth are elusive.



**Panel 2: Five reasons for development agencies to take action against chronic diseases**

- 1 Chronic diseases are a major cause of poverty and poor health in low-income and middle-income countries
- 2 Technological interventions will not overcome poverty and health inequalities; addressing the determinants that underlie health will be more effective at improving the health of the poor
- 3 Straightforward interventions are feasible, as shown by progress on tobacco control, and other cost-effective interventions are available
- 4 Through collaboration against infectious, chronic, and neglected diseases health systems will be prepared to meet all main challenges
- 5 Without prevention, the burden of chronic diseases will rise in low-income and middle-income countries, and they will continue to be a substantial barrier to development

**Identification and creation of political opportunities**

Although progress in chronic disease prevention has been slow, with mounting casualties, there is now strengthened global support for action. Events such as the UN resolution on chronic diseases are contributing to a shift in political conditions that might help raise priority for the prevention of chronic diseases globally and nationally. But an examination of the political opportunities for chronic disease prevention is needed to outline how new opportunities could arise.

Funds for Development Assistance for Health are provided by a few institutions that still exclude chronic diseases from their agendas. Despite a continuous increase in funds for development assistance for health, from \$5.6 billion in 1990 to \$21.8 billion in 2007,<sup>71</sup> donors still commit few resources to chronic diseases. Less than 3% of Development Assistance for Health, less than 15% of WHO's budget, and less than 2% of the total health budget of the World Bank and Gates Foundation are directed to chronic disease prevention and control.<sup>16,72</sup> Governments of low-income and middle-income countries are now increasing domestic expenditure for health—although in several sub-Saharan countries Development Assistance for Health is replacing some of this spending<sup>73</sup>—but there is little evidence of sustained investment for chronic disease prevention.

The neglect of financial donors to allocate funds for the prevention of chronic disease cannot be excused on the basis of poor awareness about the burden of disease. Many will argue on distributional grounds: that we can save more lives by focusing on infectious diseases, or that infectious diseases affect more poor people than wealthy. These arguments can be rebutted on the basis of evidence that shows that in very poor countries (GDP <\$1000 per head), communicable diseases cause the

greatest burden of disease; in all other countries chronic diseases predominate.<sup>20</sup>

Representatives of development agencies might say that they fund diseases that are perceived to pose domestic threats, which raise concerns about security, and so can be justifiable to taxpayers. Vested corporate interests that direct the agenda might also exist. Some development agencies argue, for example, that action against chronic diseases could hurt export sectors or businesses. Others will aim to be probusiness to encourage foreign investment, and be concerned that a tough health stance could convey the wrong market signal to investors. Scepticism about policy measures might also arise—for example, the introduction of sumptuary taxes that seek to discourage the purchase of unhealthy products (eg, tobacco, alcohol, soft drinks) could result in a rise in smuggling, which could decrease revenues as people stop purchasing them from legal outlets. Therefore, in the context of a financial crisis, the stimulation of demand for some of these products might be seen as desirable in some policy circles as a short-term response to economic problems. Such short-term reaction, however, would worsen the chronic disease epidemic and only aggravate the economic problems facing countries in the long-term.

A study, which included documentary analysis and semistructured interviews with representatives from development agencies (Mwatsama M, unpublished), identified several reasons for raising the priority given to chronic diseases that resonated with these agencies (panel 2).

**Mobilisation of resources**

**Background**

To create new political opportunities, the process of positioning chronic disease in the development agenda must now be embedded into a large movement to promote global health. An acceleration in the momentum and mobilisation of resources—financial, human, and technical—for chronic disease prevention and control needs the commitment of stakeholders operating in different public sectors, as defined by the WHO action plan for the global strategy for the prevention and control of non-communicable diseases.<sup>2</sup> The focus of this section is on development aid and the reinforcement of resource allocation for use by low-income and middle-income countries to improve population health. With the WHO action plan firmly entrenched as a guide for the prevention and control of non-communicable disease, development agencies can further contribute to the improvement of global health by embracing and implementing the available cost-effective interventions described in the second *Lancet* Series.<sup>27,28</sup>

**Pursuit of co-benefits and common causes**

Change will need agreement on shared interests by all those concerned with global health and development. Too often advocacy for health is seen as a zero-sum

game, in which an advantage gained by one disease group equates to a loss by others. Several common causes of chronic disease are entry points for the mobilisation of resources. One example is climate change; *The Lancet* Series about climate change and health has shown the complex inter-relations between greenhouse-gas emissions, agriculture production and land use, nutrition, and health—for example Friel and colleagues<sup>74</sup> showed that a 30% reduction of livestock production would help to substantially cut greenhouse-gas emission, simultaneously reducing the burden of heart disease by 15%. Health co-benefits of strategies that mitigate climate change bring new potential for research and advocacy collaboration in the fight against chronic diseases.<sup>75,76</sup>

A second entry point is to link up with the alternative globalisation movement. Making trade fairer—eg, through the removal of unfair subsidies on cheap, unhealthy foods by high-income countries—would help domestic businesses in Brazil, India, and China, and reduce the risks associated with chronic disease. A strong case exists for the incorporation of health protection explicitly into trade agreements.

A third entry point is to show how chronic diseases are connected to efforts to improve maternal and child health. The WHO Commission on Social Determinants of Health identifies investments in early-childhood development as one of the most effective that countries can make to reduce the escalating burden of chronic diseases in adults;<sup>77</sup> although effects of investments will not be felt for a generation. Interventions that start at the time of conception, if not before, and continue through the early years of a child's life<sup>78</sup> will produce the greatest benefits for their future health; evidence suggests that early childhood poverty can cause chronic diseases later in life.<sup>79</sup> Well designed, comprehensive early childhood development programmes, embracing cross-sectoral inputs into health, education, and the environment, can be comparatively cheap and have huge immediate and long-term returns on investment, and can effectively reach many underprivileged people.<sup>80</sup>

Finally, the reorientation and strengthening of health systems to deal effectively with the double burden of disease should build on systems and structures that already exist;<sup>81</sup> health systems should not be built vertically—disease by disease.<sup>82</sup> Furthermore, the importance of integrating existing and well-funded vertical infectious disease programmes (HIV, malaria, measles, tuberculosis, and polio) into a revitalised primary-health-care system that is able to offer more comprehensive care is increasingly recognised as a means to make progress on the Millennium Development Goal to reduce child mortality. Such integration could be achieved at marginal cost and without the added overhead of a new structure by taking advantage of common management systems.<sup>83,84</sup> Delivery of chronic disease prevention and care early in the lifecycle would magnify

the benefits throughout the life course. In this Series, Samb and colleagues<sup>85</sup> explore the options for improving the response to chronic diseases by health systems in low-income and middle-income countries.

#### Surveillance as a means of advocacy

Although development agencies claim to respond to the priorities of low-income and middle-income countries and make equity a central goal of their health programmes,<sup>86</sup> the current resource allocation processes are flawed because of weak health-information systems in such countries. Surveillance of chronic diseases and their risk factors is often inadequate in such countries, and when it exists it is not frequently integrated into national health information systems or the policy-making process. Improved surveillance of chronic diseases is essential for evidence-based advocacy and for raising political awareness and commitment; if the scale of the problem is invisible, as with the chronic disease burden, to argue in support for prioritisation of chronic disease surveillance is difficult.

Improvement of chronic disease surveillance, with special focus on monitoring the shared risk factors and cause-specific mortality, should be a priority for all countries, as should its integration into national-health-information systems.<sup>87</sup> Chronic disease interventions should focus on what is already known to be effective—eg, tobacco control strategies in line with the Framework Convention on Tobacco Control guidelines and recommendations, reduction of salt intake in the population, and support for the high-risk approach to the management of people at risk of cardiovascular diseases. The increase in epidemiological data about the rapid rise of chronic diseases and risk factors over the past decade, through initiatives such as the WHO STEPwise approach to surveillance,<sup>88</sup> offer promising opportunities for informing national decision making. Although essential, the process of strengthening health-information systems in low-income and middle-income countries does not guarantee resource mobilisation for chronic disease prevention and control nationally.

#### Support local coalitions

The decision-making processes, including those for resource allocation, are largely political. Active leadership of civil society in support of the partnership of chronic disease interventions is vital. Strong civil-society actions such as lobbying, mobilisation of resources, promotion of policies, and building capacity for evidence-based advocacy are some of the essential supportive roles that provide the much needed buffer and continuity for action against chronic disease, especially in times of political turnover that is characteristic of governments in low-income and middle-income countries. Four international non-governmental organisations—International Diabetes Federation, International Union Against Cancer, International Union against Tuberculosis and Lung Disease, and World Heart Federation—have

allied to generate momentum and advocacy for raising global awareness of non-communicable diseases, and still maintain their respective identities.<sup>89</sup> But what is missing in the policy arena in too many of these countries is the presence of local groups and coalitions to urge prompt action by national authorities against chronic diseases. Inclusive alliances between local and international civil-society organisations need to be strengthened to increase the attention given to chronic disease prevention and control as part of the development agenda. The participation and support of development agencies for these international, national, and local efforts to prevent chronic diseases in low-income and middle-income countries is crucial.

### Conclusion

This report draws attention to the close and neglected link between chronic disease and development. The high cost of ignoring this link is undermining development efforts nationally and globally. The growth of the chronic disease pandemic is a failure of the development response, since cost-effective interventions exist but are not widely implemented. Balanced global health investments from development and donor agencies that are proportional to the burden of disease in low-income and middle-income countries are urgently needed. Governments of these countries and development and donor agencies should also embrace a proactive approach to address the causes of chronic diseases. Such an approach needs complex, multifaceted, and intersectoral interventions based on long-time periods to tackle the wide range of social determinants of health; a decisive move in this direction is a prerequisite for the reduction of poverty and health inequities.

Concerted efforts to fight chronic diseases can advance the interlinked health equity and development agendas, both nationally and globally. An opportunity for development that must be seized by both the global health and international development communities is the reinforcement of the global movement for the prevention of chronic diseases. The third *Lancet* Series about chronic diseases supports a development agenda that tackles the key determinants of global health to strengthen chronic disease prevention and promote improved health for all.

#### Contributors

All authors contributed to the conception and critical review of all versions of the report. RG and SS produced the first draft and RG coordinated the production of subsequent versions. DS provided guidance about the use of the political process model. RG, DS, and RB co-wrote several sections of the report. All authors approved the final version of the report.

#### Conflicts of interest

We declare that we have no conflicts of interest.

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