



ANALYSIS

SOLUTIONS FOR PREVENTION AND CONTROL OF NON-COMMUNICABLE DISEASES

One size does not fit all: implementation of interventions for non-communicable diseases

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Implementation of evidence based interventions for non-communicable diseases is slow in many countries, and **João Breda and colleagues** call for more support to help them adapt the recommendations to their local context

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Non-communicable diseases (NCDs) are recognised to be a major barrier to human health and development, and there have been global policy commitments to prevent and control them.¹ Most notably, NCDs were included in the United Nation's sustainable development goals (SDGs), with a target of reducing premature mortality by a third by 2030.² However, the current global rate of decline of premature mortality from NCDs is not enough to meet this target.³ This is disappointing as international consensus is that premature mortality from NCDs can largely be avoided if evidence based interventions such as the World Health Organization's best buys are implemented.³⁻⁵

Country responses to NCDs have been uneven. Although in many instances policies are drafted and in place, countries do not have the capacity to implement the interventions at scale. The focus on preventing and combating NCDs globally must therefore move from gaining policy support to the implementation of this evidence informed policy. The UN and WHO have called for countries to be held accountable for the delivery of outputs and outcomes stated in endorsed documents^{1,3} and for ongoing monitoring, surveillance, and reporting.

Contextual factors have hampered implementation in many cases, particularly in low and middle income countries. An

intervention or policy needs to fit the specific social, cultural, economic, political, legal, and physical environments in which it is being implemented, as well as the institutional settings if it is to be effective.⁶ Obtaining context specific technical knowledge for each country, however, is time and resource intensive for both expert bodies and states. Stakeholders from all levels of policy making, prevention, and management must be included from the planning stages onwards to ensure appropriate and effective implementation. This is especially important given the multidimensional determinants of NCDs.

Challenges of implementation

The use of multiple drugs to reduce the risk of cardiovascular diseases provides a good example of these challenges. Robust evidence exists that the intervention works, including a Cochrane review of 65 randomised controlled trials on the effect of early treatment with antihypertensive drugs in 2009.⁷ WHO recommended the use of two or more drugs for people at risk of cardiovascular events as a best buy intervention in its 2010 status report on NCDs,⁸ but inequalities in outcomes persist.⁹ Studies have also found inequalities in the coverage of these recommended interventions,¹⁰ with a higher use of secondary prevention drugs for cardiovascular disease in high income

countries and in urban areas in countries of all economic classifications.¹¹ Inequalities in cardiovascular outcomes are therefore more likely to be the result of lack of implementation than a failure of the intervention.

The drugs were included in WHO's essential medicines list, which guides procurement of medicines on the basis of public health importance, efficacy, safety, and cost,¹² but availability is still suboptimal in low and middle income countries.¹³ A review of access to essential medicines in Kenya found that although it probably had sufficient quantities of the drugs for those who need them, lack of delivery systems affected accessibility.¹⁴ Health facilities ran out of essential drugs, pointing to weaknesses in the distribution systems and supply chains, which may have resulted from a lack of investment in services across the healthcare system.¹⁴ The intervention was not supported by the necessary implementation that would ensure that patients could gain access to the required drugs, with commitment needed from a range of organisations and stakeholders to ensure success.⁶

Adopting WHO recommended interventions and approaches, such as the "best buys," when political, social, economic, and health systems are not strong enough to support them is unlikely to lead to sustained or effective implementation. It is important to identify systemic weaknesses such as those in Kenya and take action to strengthen systems if WHO's recommended approaches are to be successful. This whole system approach requires engagement with all key sectors and stakeholders.

Multisectoral and multistakeholder action

Effective action on the risk factors and determinants of NCDs, including social, economic, and environmental determinants, requires a multistakeholder approach.^{15 16} This is sometimes referred to as "health in all policies," "whole of society," or "cross-sectoral."^{17 18} It applies not only to developing interventions but to implementation if the policies are to have long term effectiveness and sustainability. Barriers to successful development and implementation may come from within the health sector or from outside, in particular non-governmental stakeholders and industries with links to food, tobacco, and alcohol.

In October 2012, the WHO Eastern Mediterranean Region Office (EMRO) developed a regional framework to implement multisectoral action plans for the prevention and control of NCDs. Previously, WHO support for developing and implementing such action plans had been developed conceptually or through expert opinion and did not consider the practical difficulties countries may encounter when attempting to follow the recommended steps. EMRO initiated a process to support four countries to develop multisectoral plans. Working with these countries it identified key barriers and facilitators to the development of NCD plans in the region and developed regular opportunities to share national experiences, with the aim of helping all EMRO countries to have an operational NCD plan by 2030.¹⁹

The barriers it identified included stakeholders outside of health having competing priorities and lacking understanding of their role in the development and implementation of NCD prevention policies. Along with the logistical challenges of multisectoral collaboration, such barriers often resulted in lack of stakeholder engagement, making sustained implementation difficult. This is concerning, as a cornerstone of the NCD best buys is ensuring collaboration between health and other sectors at all levels of government. Although countries sharing practical experiences with one another is likely to facilitate and enable policy

implementation, effective public health approaches need to take account of key stakeholders' views in each country.

Evidence informed implementation

Since context is an important determinant of both the effectiveness of the policy and its implementation, partnerships must be created with stakeholders to support all aspects of the process. This should include ensuring that the policies are considered valid by those implementing and those affected by them, without which they are unlikely to gain support.²⁰

To improve the relevance of the research focus for NCDs, along with the adoption and application of evidence informed interventions in policy and practice, Lobb and colleagues propose improved stakeholder involvement and a greater focus on external validity at all steps of the process from investigative studies through to real world implementation. This includes peer review of funding applications, review for publication, research synthesis, and the production of recommendations and guidelines for implementation.²¹ They argue that such external validity may help answer three key questions that policy and practice stakeholders want to know: "for whom does it work? in what settings? and in what dose frequency, intensity, and duration?"²¹

A shift towards greater emphasis on reporting external validity along with stakeholder input would improve the relevance of the evidence produced and allow policy makers to make better informed decisions on selection and implementation of policies and interventions.²¹ This view is supported by increased recognition of the need to consider transferability to support implementation of effective interventions in a new context, both in terms of evaluation and through close collaboration between research, policy, and practice to support and inform the practical means of transfer.²²

Integration of stakeholders at all stages is important in encouraging funders and journals to move away from the established model of relying solely on internal validity to identify the best studies and to consider policy relevant questions. This would improve the relevance of the evidence produced for the population and those working in public health. Despite the growing demand for such evidence from policy makers and organisations, including the WHO and ministries of health, researchers find it hard to get funding for or publish this work. Unless funders and journals shift their priorities, there is little incentive for researchers to work with policy makers to improve implementation.

Context relevant implementation

If NCD policies are to be effective, WHO globally recommended interventions and targets must be adapted to the local context. We have already discussed how health system structure may affect the reach of drug therapy in countries such as Kenya, but many would argue that contextualisation is even more important in the implementation of the recommended public health policies such as media campaigns, marketing restrictions, and taxation policies because of heterogeneity in cultural norms and market factors.²³

Factors such as stakeholder, health system, and political structures, along with the culture, language, age, and socioeconomic status of the target population, can change not only between regions, countries, and locality but also over time. A key aspect in successful implementation is social validity—the support, or acceptance, the policies receive from policy makers, implementers, and other stakeholders. A policy's goals and

procedures need to be both effective and acceptable in the intended context.^{20 24}

The implementation of NCD prevention policies must therefore be viewed as a partnership of relevant stakeholders to enable identification of the many aspects of an implementation strategy that could fail and to find solutions. In addition, other powerful players need to be considered in shaping both policy and implementation, even if they are not included as stakeholders. These include business interests, the media, public and private financing bodies, regulatory agencies, civil society organisations, and religious leaders. Some of these have conflicts of interests and may not be “partners,” but are influential nonetheless and may affect adoption and implementation.

It is not unusual for different sectors of the same government to hold opposing priorities, which may lead to disagreements on acceptable interventions and policies. For example, in 2014, the Portuguese Ministry of Health tried to implement a single front-of-pack traffic light nutrition labelling system.²⁵ However, in Portugal food labelling falls under the control of the Ministry of Agriculture, which viewed such legislation as against agricultural interests and the labelling system was never approved. In response, the Portuguese government brought together all government departments to commit to common health goals in nutrition and produced an integrated strategy for the promotion of healthy eating (Estratégia Integrada para a Promoção da Alimentação Saudável). The strategy was approved in December 2017, after one year of negotiations led by the prime minister with the coordination of the health sector.²⁶ One of the four strands of the strategy was to improve the quality and accessibility of the information available to consumers, and Portugal has already produced proposals for front-of-pack nutritional labelling based on the French Nutri-Score model.^{25 27}

This example shows how engaging with relevant stakeholders can improve implementation so that evidence informed policies and practices can reach those intended. However, dedicated resources and investment are required to support and sustain coordinated implementation. Achieving financial buy-in from all sectors can be difficult, as those outside of health do not commonly receive funding for health issues. Governments may need evidence of the economic and social case for investment to persuade them to increase their budgetary funding for NCD prevention and control in other sectors, and may need to consider innovative financing mechanisms such as higher taxes on unhealthy products.

Failure to implement evidence informed interventions and policies is slowing progress to the agreed targets for NCDs in the sustainable development goals, with enormous health, economic, and societal consequences for countries. The NCD agenda must move from promoting a focus on these diseases, towards strengthening the capacity of countries to implement and evaluate interventions for achieving the targets. Countries must also be supported in systematic efforts to identify barriers and facilitators at each phase of the implementation process. This development needs to be reinforced through advocacy, capacity building, and dissemination and through increasing demand from funders to support implementation of effective NCD interventions and related research into suitable methods and tools.

Key messages

- Evidence based interventions for NCDs have been internationally accepted but implementation is uneven
- Efforts need to move towards supporting countries with implementation
- Global policies need to be adapted to local contexts, which can be time consuming and expensive
- Overcoming contextual barriers requires collaboration of all stakeholders at all stages of the process

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