Leapfrogging health system interventions to accelerate the achievement of non-communicable disease targets in Sri Lanka

Nalika S Gunawardena
National Professional Officer (Health Systems Analysis & Evidence), World Health Organization Country Office for Sri Lanka, Sri Lanka
Correspondence: gunawardenan@who.int
DOI: https://doi.org/10.4038/jccpsl.v24i4.8189
Received on: 1 December 2018
Accepted on: 12 December 2018

The National Multisectoral Action Plan for the Prevention and Control of Non-Communicable Diseases Sri Lanka 2016-2025 targets a 25% relative reduction in premature mortality from cardiovascular disease, cancer, diabetes or chronic respiratory diseases by 2025 (1). It has also adopted a set of voluntary targets to be achieved by 2025 in relation to the control of major non-communicable disease (NCD) risk factors. Sri Lanka adopted Sustainable Development Goals (SDGs), committing action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. The third SDG (SDG 3) pledges to ensure healthy lives and to promote well-being of all at all ages and a relative reduction of 25% of premature mortality from cardiovascular disease, cancer, diabetes or chronic respiratory diseases.

The latest evidence on monitoring the progress of NCD actions in countries has estimated the risk of premature death from NCD among those aged 30-70 years to be 17% (22% for males and 13% for females) in Sri Lanka in 2018. It projects a linear trend and predicts that the country will not be able to achieve the voluntarily set target of 25% relative reduction in premature mortality NCDs by 2025 (2) (Figure 1).

![Figure 1. Risk of premature deaths for NCDs in Sri Lanka (2000-2025).](source: NCD Country Profiles 2018, World Health Organization)
Furthermore, the report clearly demonstrates that none of the main risk factors of NCDs in Sri Lanka is on the path to reach the voluntarily set targets by 2025 (Figure 2). Thus, Sri Lanka needs to urgently accelerate its efforts to intervene the NCD risk factors to move towards paths to reach the targets.

The World Health Organization (WHO) has identified a package of 16 ‘Best Buy’ interventions that are cost-effective, affordable, feasible and scalable in all settings to address the growing burden of NCDs (3). The ‘Best Buys’ were first designated in 2011 and were updated in 2017 based on the latest evidence of intervention impact and cost. They are all forms of health system interventions of core population interventions (tobacco, alcohol, nutrition and physical activity) and individual services (early detection and management of cardiovascular disease, diabetes, lung diseases and cancer). From financing perspective, these interventions cost as little as one dollar per person per year. Other than the ‘Best Buys’, the WHO advocates a set of ‘Good Buys’ which are also evidence-based effective health system interventions though the cost is higher than one dollar per person per year (3). The latest assessment of the status of implementation of the ‘Best Buy’ NCD interventions in Sri Lanka shows that only five of the 16 ‘Best Buys’ are fully implemented while another five have been partially implemented (4). An estimate of the number of lives that can be saved in Sri Lanka by 2015 by implementing all of the WHO ‘Best Buys’ has been estimated as 17,500 (2), reflecting the potential to move the country appreciatively towards the NCD mortality reduction targets. Thus, it seems rational that Sri Lanka explore options to be more assertive and innovative in the implementation of NCD interventions.

This editorial aims to introduce the concept of ‘leapfrogging’, an approach to accelerate gains in health system through interventions implemented at the primary health care level. The idea of leapfrogging is not new. It is drawn from successes of other sectors applied to economic growth, sustainable and green development, even to military strategy. Application of the concept of leapfrogging in NCD interventions in primary health care draws experience from the European Region of WHO. Countries in Eastern Europe and Central Asia adopted the concept during the last decade to be successful in achieving the 25% relative reduction of premature mortality target for NCDs, ahead of its stipulated timing of 2025 (5). Furthermore, the World Economic Forum also has identified leapfrogging as a solution to sustain the health system interventions in emerging economies as they try to catch up with more advanced health systems to reach NCD targets (6).

‘Leapfrogging’ is the utilization of innovative disruptive technology, operational model or pattern of
behaviour to accelerate the development of a health system. In simple terms, it means skipping inefficient, more expensive and even dead-end intermediary steps in the interventional processes and moving directly to more advanced approaches representing today’s good practices in delivering NCD interventions to make progress more quickly.

While the application of ‘leapfrogging’ solutions needs a careful analysis of the health system of a country to identify the opportunities, two key common strategies have been documented (5).

One key strategy to ‘leapfrog’ is to adopt the so-called frugal and disruptive technological innovations and apply them in health system interventions to NCDs. The learning comes from other sectors (e.g. telecommunications, energy) where results have been achieved much faster through rapid adoption of technological innovation at scale. For example, in many low-income countries, mobile telephone has gained widespread adoption even in areas with no access to landlines. Emanating from this learning, it is advocated that health system interventions adopt emerging technological breakthroughs such as artificial intelligence, telemedicine and other fifth generation wireless technologies to leapfrog in the field of health for rapid implementation of interventions and effective NCD outcomes.

Adopting new operating models at the primary health care level is the other key strategy to leapfrog in NCD interventions. There is plenty of evidence-based good practices on innovative changes to the operating models which have led to the achievement of effective NCD outcomes (7). Adopting innovative ways to deliver NCD interventions in a more people-centred manner by engaging the public, working more closely with the private sector, moving towards multi-profile primary care teams with redistribution of tasks of health workers to deliver NCD interventions, using financial incentives to encourage health workers are some of the common examples.

It must be emphasized that the key to success of any large-scale transformation and adopting the leapfrogging concept is a comprehensive well-aligned health system, which adopts and integrates large-scale technological and organizational innovations that are proven to be effective.

The aim of this Editorial is to inspire the ‘champions’ among the public health practitioners who can take bold decisions and think out of box thinking to ‘leapfrog’ for better health system interventions to accelerate achievement of NCD targets.

References

1. Ministry of Health. The National Multisectoral Action Plan on the Prevention and Control of Non-communicable Diseases (2016-2025). Colombo: Ministry of Health, 2015.
2. WHO. Non-communicable Diseases Country Profiles 2018. Geneva: World Health Organization, 2018. Available from: http://www.who.int/nmh/publications/ncd-profiles-2018/en/.
3. WHO. ‘Best Buys’ and other recommended interventions for the prevention and control of non-communicable diseases. Geneva: World Health Organization, 2017. Available from: http://apps.who.int/iris/bitstream/handle/10665/259232/WHO-NMH-NVI-17.9-eng.pdf;sequence=1.
4. WHO. Non-communicable Diseases Progress Monitor. Geneva: World Health Organization, 2017. Available from: http://www.who.int/nmh/publications/ncd-progress-monitor-2017/en/.
5. Borgermans L, De Maeseneer J, Beran D, Tello J. How leapfrogging in primary care can contribute to upscaling NCD core services. Eurohealth 2018; 24(1): 20-23.
6. Industry Agenda Health Systems. Leapfrogging in emerging economies. Ecosystem of partnerships for leapfrogging. Available from: http://www3.weforum.org/docs/WEF_HealthSystem_LeapfroggingEmergingEconomies_ProjectPaper_2014.pdf
7. WHO. Health systems response to noncommunicable diseases: compendium of good practices. Geneva: World Health Organization, 2018. Available from: http://www.euro.who.int/__data/assets/pdf_file/0007/381319/hss-ncd-policy-brief-eng.pdf