

Q: Why is it important to focus on primary health care as an avenue for the management of noncommunicable diseases

People with noncommunicable diseases, or at risk of developing one, require long-term care that is proactive, patient-centred, community-based and sustainable. Such care can be delivered equitably only through health systems based on primary health care (1,2).

People with a noncommunicable disease may show no symptoms until the disease has progressed substantially – the first manifestation may be a heart attack or stroke. Screening of asymptomatic individuals for key risk factors can identify people at high risk and offer the possibility to prevent progression of the disease. Primary health care is the most frequent entry point for people to the health system and therefore offers the greatest potential to detect high-risk individuals who may be visiting health services for other health reasons.

Furthermore, the scale of the noncommunicable diseases burden means that it is no longer feasible to manage these diseases mainly through specialists or in hospitals. The volume of patients has the potential to overwhelm such referral levels services and result in high costs to both the health system and to individuals. The total risk approach is suitable for implementation by non-specialist health workers at primary health care level. Primary health care therefore represents a feasible, affordable and equitable option for reaching people in need of health care for noncommunicable diseases.

Health governance

Most countries do not have adequate capacity in ministries of health to formulate evidence-informed policies and strategic plans, and have limited access to, and use of, quality data for informing policy and strategy development. There is also a lack of recognition that noncommunicable diseases are part of the essential primary health care package.

Health workforce

There is a shortage in the health care workforce. In 2012, the rate of physicians per 10 000 population was very low ranging from 0.3 to 7.7 physicians per 10 000. In addition to numerical shortages there is an inequitable distribution, retention and performance (3). This is coupled with lack of sufficient training for the health work force.

Essential medicine and technologies availability and affordability

Challenges relating to regulatory authorities for medicines include: weak organizational structure and technical capacity; lack of national medicines policies; transparency and accountability in regulation and supply of medical products; weak promotion/advertising of medical products; and unregulated access to controlled medicines.

Health financing

There is limited national expertise in health financing in general, and specifically health financing arrangements, such as social health insurance (4).

These challenges are compounded further when a country is experiencing a humanitarian crisis.

Q: What are the WHO-recommended approaches and tools to managing noncommunicable diseases in primary health care?

WHO provides countries with a number of tools and recommended approaches to manage noncommunicable diseases and prevent complications. Heart attacks and strokes can be prevented if people at high risk can be detected early and treated effectively.

The WHO Package of Essential Noncommunicable (PEN) disease interventions (1) and the recommended total-risk approach (4,5) offer individual health care interventions that complement population-based interventions, such as reduction of tobacco use and salt consumption.

WHO PEN is designed to integrate the management of diabetes, cardiovascular diseases and chronic respiratory disease into primary health care. These tools enable early detection and management of the four common noncommunicable diseases to prevent life-threatening complications (e.g. heart attacks, stroke, kidney failure, amputations, and blindness). The package includes a list of medicines that should be available in all health care facilities and a set of necessary interventions for countries to draw on and utilize.

The WHO-recommended total risk approach enables integrated management of hypertension, diabetes and other cardiovascular risk factors in primary care, and targets available resources at persons most likely to develop heart attacks, stroke and diabetes complications.

Q: What is the total cardiovascular risk approach?

The total risk approach to prevention and management of cardiovascular disease is a cost-effective intervention available for prevention of heart attacks and stroke.

The total risk approach uses a simple score chart to calculate an individual's risk for a heart attack or stroke within the next 10 years. The person's risk score is determined by the combined effect of a number of risk factors (age, gender, tobacco use, blood pressure, blood cholesterol and presence of diabetes). The clinical management of the individual is then tailored according to their risk score, using standardized protocols. The person will receive lifestyle counselling and follow-up, with or without medications, according to their level of total risk, rather than according to thresholds of individual risk factors, such as hypertension. The total risk approach therefore enables integration of the management of hypertension, diabetes and other risk factors.

Q: Why should countries implement a total cardiovascular risk approach rather than focusing on single risk factors like high blood pressure and diabetes?

The total risk approach is one of the cost-effective interventions (best buys) for addressing noncommunicable diseases – “Drug therapy and counselling, including glycaemic control for diabetes and control of hypertension, using a total risk approach to individuals who have had a heart attack or stroke and to persons with high risk ($\geq 30\%$) of a fatal or nonfatal cardiovascular event in the next 10 years”.

Voluntary global noncommunicable disease target number 8 is specifically related to this best buy, with treatment eligibility determined through use of a risk score – “At least 50% of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and stroke”.

Substantial evidence supports the total risk approach as both more effective and more cost-effective than the single risk factor approach. The total risk approach recognizes the high prevalence of multiple co-existent noncommunicable disease risk factors, particularly as people age. An integrated approach to addressing risk factors minimizes the risk of fragmented care or failure to diagnose co-morbidity, as well as offering a comprehensive approach that is key to addressing diseases of lifestyle. Furthermore, management decisions based on traditional single risk factor thresholds may result in large numbers of people being started on medications

despite a low overall cardiovascular risk. In addition to the risk of side-effects, this has financial implications for individuals and health systems. Conversely, a single risk factor approach may fail to provide the medications needed to effectively reduce the risk of heart attack and stroke.

Provision of treatment based on a total risk threshold also allows targeting of scarce resources toward people who have the greatest potential to benefit. In low-resource settings, patients with a previous heart attack or stroke and those at >30% total risk, can be prioritized to receive drug treatment. If resources permit, the threshold for treatment can be decreased to 20% or lower.

Q: What are the minimum requirements for implementing the WHO-recommended total risk approach?

Implementation of the total risk approach requires inclusion of total risk protocols in national guidelines, training of primary health care staff on the approach, and availability of a minimum set of essential medicines, technologies and health information tools at primary health care level. These minimum requirements can be considered a starting point for integration of noncommunicable disease services in primary health care and form part of a basic services package that aims to achieve universal health coverage. □

References

[1. Package of essential noncommunicable \(PEN\) disease interventions for primary health care in low-resource setting. Geneva: World Health Organization; 2015](#)

[2. WHO Global action plan on the prevention and control of noncommunicable diseases 2013–2020. Geneva: World Health Organization; 2013](#)

[3. Demographic, social and health indicators of the WHO Eastern Mediterranean, 2013. Cairo: WHO Regional Office for Eastern Mediterranean; 2013](#)

[4. Global status report on noncommunicable diseases 2014. Geneva: World Health Organization; 2014](#)

[5. WHO prevention of cardiovascular disease: guidelines for assessment and management of cardiovascular risk. Geneva: World Health Organization; 2007](#)

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