Prevention and control of non-communicable diseases in the COVID-19 response

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Moving towards universal health coverage, promoting health and wellbeing, and protecting against health emergencies are the WHO global priorities[1] that are shared by the proposed WHO European Programme of Work 2020–25.[2] The coronavirus disease 2019 (COVID-19) pandemic has underlined the importance of interconnecting these strategic priorities. Of the six WHO regions, the European region is the most affected by non-communicable disease (NCD)-related morbidity and mortality[3] and the growth of the NCDs is concerning. Cardiovascular diseases, cancers, chronic respiratory diseases, and diabetes are among the leading causes of death and disability in the region,[3] and an increasing proportion of children and adults are living with overweight or obesity,[4] one of the major risk factors for NCDs. Prevention and control of NCDs are important during this pandemic because NCDs are major risk factors for patients with COVID-19.[5] Additionally, some of the restrictive measures such as lockdowns, social distancing, and travel restrictions to reduce the spread of infection in many countries impact specifically on people living with NCDs by limiting their activity, ability to secure healthy foods, and access to preventive or health promotion services.[6]

The COVID-19 pandemic has had widespread health impacts, revealing the particular vulnerability of those with underlying conditions. In Italy, a recent report revealed that the majority (96·2%) of patients who have died in-hospital from COVID-19 had comorbidities, primarily NCDs; the most prevalent NCDs among these patients were hypertension (69·2%), type 2 diabetes (31·8%), ischaemic heart disease (28·2%), chronic obstructive pulmonary disease (16·9%), and cancer (16·3%).[7] An association between COVID-19 severity and NCDs has also been reported in Spain,[8] China,[9] and the USA.[10] However, many COVID-19 deaths also occur in older people who often have existing comorbidities.[11] Body-mass index (BMI) might also be associated with the severity of COVID-19; in China, patients with severe COVID-19 and non-survivors typically had a high BMI (>25 kg/m^2).[12]

The impact of COVID-19 response measures on NCDs is multifaceted. Physical distancing or quarantine can lead

	NCD-specific responses	Associated risks
Community transmission with containment measures such as physical distancing and public service and institution closures or restrictions		
Lengthened time spent indoors	Use technology to provide knowledge and support for management of NCDs, online information on exercise and mental health self-management classes, healthy recipes for home preparation, and online delivery of healthy foods, among other responses	Reduced physical activity and increased strain on mental health might result in greater consumption of unhealthy foods and harmful use of tobacco and alcohol
Family members at home	Provide special arrangements for families with NCD patients to self-isolate	Risk of increased contact with younger family members at home
Inadequate access to medicines	Use telemedicine more, allow local or community doctors and pharmacists to renew or extend drug prescriptions, deliver essential NCD drugs to home	Shortage of essential medicines such as insulin and other NCD-specific medications
Transport and other services restricted	Prioritise and ensure continued community level services in a safe way to cater for NCD patients' needs	Restricted transport facilities and family support for continued NCD care
Infection control		
Early detection and laboratory testing	Prioritise NCD patients for COVID-19 testing; triaging should take account of whether patients have NCDs and are immunocompromised	Those NCD patients for whom visits to health facilities are essential could be at greater risk of getting exposed to COVID-19
Contact tracing	Focus especially on those with increased risk factors for NCDs and NCD patients (ie, patients living with obesity) and alert and follow up closely any possible contacts for NCD patients	NCD patients might be unaware of the additional risks posed on them
Extensive testing	Prioritise NCD patients for testing when possible and promote the need for testing	NCD patients might be less motivated or able to actively seek testing (in a safe, physically distanced manner)
Health-care settings (infection control)	Provide NCD patients and health-care staff working in NCD services with special training and personal protective equipment, as well as health-care professionals at increased risk of NCDs	NCD patients with comorbidities are at increased risk of infection; health-care staff working in NCD clinics are therefore also at increased risk of infection

NCD=non-communicable disease. COVID-19=coronavirus disease 2019.

Table: **Responses and risks related to NCD prevention and control during the COVID-19 pandemic**

to poor management of NCD behavioural risk factors, including unhealthy diet, physical inactivity, tobacco use, and harmful use of alcohol.[13] Evidence from this and previous pandemics suggests that without proper management, chronic conditions can worsen due to stressful situations resulting from restrictions, insecure economic situations, and changes in normal health behaviours. As with other health service and preventive programmes, the postponement of routine medical appointments and tests can delay NCD management, while physical distancing, restricted access to primary health care units, pharmacies, and community services, alongside a reduction of transport links, all disrupt continuity of care for NCD patients. This disruption of routine health services and medical supplies risks increasing morbidity, disability, and avoidable mortality over time in NCD patients. Additionally, patients with severe obesity who require intensive care have increased patient management needs.[6]

The prevention and control of NCDs have a crucial role in the COVID-19 response and an adaptive response is required to account for the needs of people with NCDs. Prevention of NCDs is important since the true scale of at-risk groups is probably underestimated, given that many cases of hypertension and diabetes are undiagnosed.[14,15] Communities and health systems need to be adaptive to both support and manage the increased risks of people with known NCDs and exercise sensitivity about the vulnerability of the large population with undiagnosed NCDs and those at increased risk of NCDs.

The COVID-19 response and continued and strengthened focus on NCD prevention and management are key and interlinked aspects of public health at the present time. If the COVID-19 response is not adapted to encompass prevention and management of NCD risks, we will fail many people at a time when their vulnerability is heightened. What steps should be taken to adapt the COVID-19 response? The WHO Regional Office for Europe has started to develop a list of actions that could be adapted by countries to address the needs of those at risk of NCDs or who are already living with NCDs, together with practical considerations for teams developing COVID-19 response plans at local or national levels (table).

Patients living with obesity and NCDs are at increased risk of the health impacts of emergencies such as COVID-19.[16] NCD health-care staff and associated workers and volunteers should be centrally involved in the planning of COVID-19 response strategies to ensure that the needs of patients and caregivers are addressed. Specific advice should be made available nationally and locally for patients living with NCDs, their families, and their caregivers. Prevention and control of obesity and NCDs are crucial in preparedness for this and future public health threats. A streamlined response to COVID-19 in the context of NCDs is important to optimise public health outcomes and reduce the impacts of this pandemic on individuals, vulnerable groups, key workers, and society.

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