

BRIEFING NOTE

Impacts of COVID-19 on people living with NCDs

This briefing note is for policymakers and provides key messages on the impact of COVID-19 on people living with NCDs (PLWNCDs), along with supporting evidence. It is based on recent data as of April 2020, whilst recognising that the evidence base is still rapidly developing. Please see NCD Alliance's [resource page](#) for updates.

The response to the COVID-19 pandemic at the national, regional and global levels must consider the healthcare needs of people living with or affected by noncommunicable diseases (NCDs), in particular hypertension and cardiovascular diseases, cancer, diabetes, respiratory diseases, and mental and neurological health conditions. Emerging evidence from the COVID-19 pandemic suggests that people living with NCDs are at higher risk of becoming severely ill or dying from the virus.¹

The COVID-19 pandemic exposes the existing link between NCDs, communicable diseases and health emergencies, and the need to stop addressing health issues in siloes. Both COVID-19 and NCDs are indiscriminate killers, reinforcing one another and disproportionately impacting the poorest communities around the world and the most vulnerable people in every country.

Considering COVID-19, tackling NCDs must be henceforth understood as fundamental to health security.² As ever during global health crises, the most vulnerable and poorest groups will be hit the hardest and inequalities will be exacerbated by COVID-19. Epidemic preparedness – today and in future – depends on strong health systems, a resilient, qualified, well-resourced health workforce and healthy populations. NCD Alliance calls for leadership, investment, care, community engagement and accountability in national and international responses to the COVID-19 pandemic. In preparing national COVID-19 responses, with support from WHO, governments must recognise the compounding severity of NCDs and act to mitigate the impact on PLWNCDs and health systems.



Claims and counter-claims of whether infectious diseases are the bigger health or economic threat are futile and counterproductive. They reinforce each other. Infections lead to inflammation, which can set off biological processes that result in blood vessel damage, diabetes, cancers and other NCDs. The NCDs, in turn, predispose affected individuals to infections and increase the risk of severe illness and death among the infected. Neither the human body nor human society has the option of choosing one over the other.”

Dr K. Srinath Reddy, April 2020³

Key messages

KEY MESSAGE 1

People living with NCDs are at a higher risk of severe complications and death from COVID-19⁴

- Although all age groups are at risk of contracting COVID-19, older people face significant risk of developing severe illness if they contract the disease due to physiological changes that come with ageing and potential underlying health conditions.
- Studies of critically ill COVID-19 patients have identified high proportions with at least one NCD: 48% of hospitalised patients in Wuhan⁵; 71.9% of hospitalised patients in New York City⁶ and 98.9% of deceased patients in Italy⁷ had at least one NCD.
- Hypertension and cardiovascular disease were found to be the most prevalent pre-existing conditions, followed by diabetes.
- People living with three or more co-morbidities (accounting for 48% of COVID-19 mortality in Italy⁶) appear to be at the highest risk of death from COVID-19.
- Obesity is one of the underlying health conditions that can cause a more severe⁸ reaction to COVID-19 infection and has been shown to be an important risk factor for worse outcomes.⁹
- Smokers appear to fare comparatively poorly among hospitalised COVID-19 patients.¹⁰ One study found that smokers have 14 times greater odds of developing COVID-associated pneumonia than non-smokers.¹¹
- There is evidence from the USA and Europe that illustrates a higher prevalence of severe cases of COVID-19 in areas with high levels of air pollution.^{12,13}

KEY MESSAGE 2

People with compromised immune systems (e.g. due to cancer treatment, diabetes, COPD, steroid treatment) are at high risk of developing complications from COVID-19

- Viral infections can be harder to treat in people with diabetes due to fluctuations in blood glucose levels and, possibly, the presence of diabetes complications. Firstly, the immune system is compromised, making it harder to fight the virus and likely leading to a longer recovery period. Secondly, the virus may thrive in an environment of elevated blood glucose.¹⁴
- People in active chemotherapy or intensive radiotherapy, those undergoing antibody treatments or other targeted treatments, or those who have undergone bone marrow or stem cell transplants in the last six months, are particularly vulnerable as these treatments weaken the immune system.¹⁵

KEY MESSAGE 3

Evidence indicates that COVID-19 and its treatments may also cause life-threatening or long-lasting impacts

As well as respiratory impacts, these complications from COVID-19 include cardiac injury, acute kidney disease, neurological malfunction, blood clots and damage to liver and intestinal function.^{16 17 18 19}

KEY MESSAGE 4

COVID-19 is disrupting the provision of essential public health functions and necessary health services, including for people living with NCDs

- As governments reorient health systems to respond to COVID-19, there are severe disruptions to the delivery of routine chronic care, such as potential blockages in supplies of essential medicines and technologies, screening and diagnosis, and limited access to resources including health workers and support services critical for ongoing management of NCDs.
- Particularly in LMICs, vast numbers of PLWNCDs are undiagnosed or cannot access treatment to control their conditions, even under normal circumstances: Globally, 175 million adults estimated to live with undiagnosed diabetes²⁰ and over 1 billion people with uncontrolled hypertension²¹ may be at particularly high risk from COVID-19.
- Due to postponement of routine procedures, disruptions to care and travel restrictions, there are increased obstacles to individuals self-managing their NCD conditions. Impacts are also being seen in the provision of dementia care and palliative care.²²
- Due to disruption or suspension of routine services such as NCD screening and diagnosis, as well as disruptions in access to treatment and medication, there may be aftershocks to some health systems as people present later with symptoms of more advanced diseases, e.g. later stage cancers, uncontrolled hypertension, chronic kidney disease, etc.
- While the impacts on health systems in high-income countries are unprecedented, the worst impacts are expected to be felt in lower income countries with already severely under-resourced health systems.
- The COVID-19 pandemic and its response pose a challenge to mental and neurological health and social wellbeing. Governments must ensure access to mental health and psychosocial support services, based on respect for human rights, and make them available in the community to protect and promote the mental and neurological health of the population.
- Responses to COVID-19, including physical distancing and self-isolation, may increase exposure to some NCD risk factors, e.g. increased alcohol and tobacco use as coping mechanisms, barriers to physical activity and healthy diet, etc.

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