

Critical nexus of Non-communicable diseases and covid-19: Pandemic lessons.

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Abstract

The current era of the COVID-19 pandemic has focused on many problems that have been less discussed for a nexus, like the control of Non-Communicable Diseases (NCD). In the 21st century, the NCDs became the subject of debate and a major challenge to public health as it extended its impact internationally from developed countries to the world's low and middle-income nations. Individuals with NCDs such as Diabetes, Hypertension, Coronary, Nephritic, Cerebrovascular disorders, and others are more susceptible to acquiring communicable diseases such as COVID-19, as their health and immunity are impaired by chronic diseases. Their co-occurrence normally leads to greater severity and even early patient mortality. The COVID-19 era challenged the departments of government and public health to consider and manage the crucial intersection of infectious diseases and chronic non-communicable diseases. This nexus is important to consider, as evidence from different countries with the increased COVID-19 burden has shown that patients with underlying chronic diseases have suffered, received critical care, and died when impacted with COVID-19.

Keywords: Non-communicable diseases, COVID-19, Critical nexus, Pandemic, Healthcare.

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Introduction

Burden of non-communicable Diseases

Non-communicable diseases are latent non-transmissible pandemics that have spread worldwide over recent years, yet lack the same urgency as communicable diseases for management. Over the past two decades, this invisible state has contributed to an increased global burden of NCDs, leading to 41 million (71 %) deaths worldwide [1].

Cardiovascular diseases are reported to be highest among NCDs affecting 17.9 million people annually, followed by cancer at 9 million, respiratory diseases at 3.9 million, and diabetes mellitus at 1.6 million (2016). Among the mortality due to NCD, more than three quarters, around 32 million global deaths, are recorded from Low and Middle-Income countries [2].

In India, NCDs are reported to contribute to 55% of the total disease burden [3] from 30% in 1990 and the proportion of deaths have also increased from 37% in 1990 to 61% in 2016. Among the NCDs, Cardiovascular diseases are the highest, followed by Diabetes and Cancer.

According to World Health Organization (WHO) projections, the total annual number of deaths from NCDs will increase to 55 million by 2030, if timely interventions are not done for their prevention and control. This, in addition, may increase under the influence of Communicable diseases, increasing the disability and mortality rates [3].

Critical nexus—A syndemic perspective

The prevention and control interventions for the COVID-19 pandemic have severely disrupted the basic routine health care services, such as screening and diagnosis, the availability of essential drugs in general, and access to health service providers in particular. This has highlighted the disparities that impact the treatment of other underlying chronic conditions in the health care delivery system [4]. The existence of underlying chronic conditions, on the other hand, has made patients vulnerable to exposure to COVID-19 and increased their risk of being infected.

According to the Sustainable Development Goals (SDG) 2015, it is important to reduce premature mortality due to NCD by one-third by 2030 [1]. The occurrence of the COVID-19 pandemic has slowed down the implementation of NCD policies resulting in a quarter of countries with a heavy burden, unable to achieve the stipulated goals [5]. This crucial condition will inevitably lead to poor management of NCD patients affected by COVID-19, increasing mortality, and other NCD patients suffering from serious complications due to insufficient timely health care.

In addition to the increasing health burden and incompetence of the health care system in terms of staff capacity during COVID-19, public health expenditures allocated have also met a radical shift in an attempt to fulfil the need of the hour. The public health allocation of

total health expenditures increased from 1.36% to 3.18% between 1960 and 2003. These however seemed to have declined to 2.65% in 2014 and have been projected to decrease to 2.4% in 2040. This decrease in public health expenditure has highly impacted its ratio for NCD control and management thus affecting preparedness for existing as well as novel health threats over the years [6].

Proposed solutions

The convergence between the underlying pandemic of non-communicable disease and communicable disease has shed light on the issues faced by the health authorities, government, and NCD communities. Thus, to reduce the risk, patients should be recommended to self-manage their conditions and have remote virtual access to healthcare service providers for timely management. It will help to speed up the implementation of NCD preventive and control measures especially in high burden developing countries and in addition, prioritizing planning for interventions such as diet, exercise, physical activity, and healthy lifestyle will be cost-effective [1,7].

It was recorded that the Low-Middle Countries showed a higher burden of NCDs with insufficient management, especially during the COVID-19 pandemic due to limited funds. This can be managed with "Best Buys" from the World Health Organization, where they have developed a menu of cost-effective and realistic policy options with steps to achieve SDG.

It is also critical for government, public health authorities, and other multi-lateral agencies to seek collaborative ways to reduce and manage NCD in order to ensure global health security. They are in need to re-double their efforts to enact evidence-based policy programs and system developments that will reduce the NCD prevalence. Plans to ensure untethered support to people with NCD, especially during a pandemic, through maintaining continuity of care,

enabling self-management, and controlling overwhelming health system capacity is highly essential to address the global emergency.

Conclusion

In summary, the prevalence of NCDs has been slow yet steady worldwide and the COVID-19 pandemic have highlighted the need for implementing global public health initiatives to prevent and mitigate its impact on the healthcare burden. The policies aimed at addressing premature mortality especially during global viral outbreaks need to be strengthened and disparities in managing infectious disease outbreaks and NCD need to be addressed for better health outcomes.

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