Noncommunicable and Communicable Diseases: Finding Common Ground

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ABSTRACT

As the world grapples with unprecedented health challenges, such as coronavirus disease 2019 (COVID-19) and now monkeypox, the focus on traditional concerns, like maternal and child health, and relatively newer pandemics, e.g., diabetes and obesity tend to get diluted. This is especially concerning in countries which face a dual challenge of both communicable and noncommunicable diseases (NCDs). In this article, we list the factors that are common to both communicable disease and NCDs, and suggest measures to integrate procedures for their screening, management and prevention.

Keywords: COPD, cancer, diabetes, hypertension, CAD, infections

CONNECTIONS: CAUSATION, CLINICAL PRESENTATION, CARE

The term communicable diseases and noncommunicable diseases (NCDs) are based on a binary classification, which may not always be accurate. Some NCDs can be triggered by infectious agents.¹ Examples include diabetes and obesity secondary to viral infections,² Burkitt's lymphoma due to Epstein-Barr virus, cervical cancer because of human papillomavirus (HPV) and repeated viral and bacterial lower respiratory infections leading to chronic obstructive pulmonary disease (COPD). The long-term effects of coronavirus disease 2019 (COVID-19) on cardiovascular and metabolic health are being unraveled as well.³ Tuberculosis (TB) and human immunodeficiency virus (HIV) are two "chronic" communicable diseases, which are associated with a relatively high NCD burden as well.^{4,5}

Quite often, people living with NCDs present to the health care system with a communicable disease. People living with diabetes, COPD and cancer are more prone to infections, due to their immunocompromised state.¹ At other times, management of acute disease may lead to iatrogenic metabolic derangements, e.g., dysglycemia and fluctuations in blood pressure. The situation in African region is that most of the patients with NCDs come to the health system with complications due to poor control/management or lack of diagnosis.⁶

At times environmental factors facilitate the spread of both communicable disease and NCDs.⁷ Air pollution, smoking and urbanization play a role in the pathogenesis of not only upper and lower respiratory infections, but COPD, hypertension, coronary artery disease (CAD) and cancer as well.

SIMULTANEOUS, NOT SEQUENTIAL

Prevention of both communicable disease and NCD is equally important to ensuring optimal health.¹ People with NCDs; however, utilize a disproportionately higher share of health care facilities than their peers without NCDs.⁸ Because of their immunocompromised status they fall prey more often to acute infections. In turn these precipitate inflammatory and metabolic complication, which may require hospitalization for management. Various drugs used to treat communicable diseases such as corticosteroids in COVID-19, may lead to iatrogenic NCD complications such as diabetes.⁹ Hence, prevention and control of NCDs contribute to communicable disease prevention as well.

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LIMITED RESOURCES, UNLIMITED RESILIENCE

Resources for health care are always finite, and need to be utilized parsimoniously. NCD prevention and care can be integrated in existing health care programs to improve the quality of care, while minimizing extra cost. Examples include screening for diabetes in people with TB and HIV, for hypertension and CAD in people presenting at menopause and for COPD in adults with repeated visits for respiratory tract infection.

Personnel involved in NCD management can contribute to comprehensive health care coverage, too. Blood glucose measurement can be clubbed with hemoglobin estimation, and public health awareness messages against smoking may be linked to those focused on dengue and malaria prevention. An umbrella campaign on environmental stewardship can incorporate preventive measures for both communicable disease and NCDs. Due to lower rates, some efforts against HIV have moved from mass/ universal to targeted screening meanwhile for NCDs, mass screening is still preferred. HIV screening can be made optional (offered) in NCD screening campaigns while highlighting target groups for screening at same campaigns.¹⁰ This will facilitate timely diagnosis for HIV. Such linkages make the health care system more resilient and prepare it to handle future challenges effectively.

ADVOCACY: THE NEED TO BE HEARD, THE NEED TO HEAR

NCD care still does not receive the attention it deserves in many countries. Advocacy for NCDs is important, so as to draw the required resources to prevent and manage NCDs.¹¹ The public's need to be heard has to be fulfilled, by those who need to hear-the policymakers and planners. This conversation should be bidirectional: NCD management should take place within available resources, should not disregard acute health care needs and should promote resource-building and resilience in the community.

The Africa NCDs Network (ANN) is an example of an organization, which seeks to hear and be heard, to encourage simultaneous (not sequential) NCD care, and promote resilient resourcefulness in communities across the continent. The ANN was conceived in 2015 and it took off in 2020 with a 4-person secretariat spread across the east, west, center and southern African subregions. In coordination among its members, the ANN has researched on the needs, challenges and concerns of African people living with NCDs and collaborated with the Global NCD Alliance to develop the global charter on meaningful involvement of people living with NCDs, currently working on the Advocacy Agenda of African People living with NCDs¹² to further build a continent that is responsive to NCDs as it has been to infectious diseases over the years.

FROM ADVOCACY TO ACTION

Advocacy for NCDs is meaningful only if it is accompanied by action. Kickstarting programs on NCD care, and integrating screening/diagnostic/management activities with existing health care services should be done in a cautious and sustainable manner. The opportunity provided by COVID-19 and long COVID-19,¹³ in terms of attention to public health, should be utilized to enhance NCD prevention and management. Our focus should be on prevention, advocacy and action, and our target should be the control of NCDs, so that we can achieve our goal of health for all.

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