



NON-COMMUNICABLE DISEASES AND IMPACT OF GLOBALIZATION

Home Science

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ABSTRACT

Global burden of chronic non-communicable diseases has been increasing tremendously as a matter of great concern in this era of modernization. Preventability of its causes and the threat it poses to the population needs an urgent national and global actions to be taken which seems to be inadequate. Public health care system, policy makers, academicians, government and non-government organizations needs to response in an appropriate direction to have an optimum change in the outcome of non-communicable diseases. The objective of the paper is to assess the impact of globalization on health with respect to non-communicable diseases such as obesity, diabetes, cardiovascular disease and also to highlight the need for a switch from treatment to prevention approach.

KEYWORDS

Non-communicable diseases (NCDs), Globalization, Health

INTRODUCTION

Globalisation is an important determinant of non-communicable diseases because of its direct effects on risks to the population and indirect effects on national economic condition and health care systems. Changes in human behaviour, lifestyle and dietary changes with globalization have resulted in a dramatic increase in the incidence of Non-communicable diseases over worldwide. In recent years, Non-communicable diseases (NCDs) such as cardiovascular diseases (CVD), diabetes, chronic obstructive pulmonary diseases (COPD) and cancers have become an emerging pandemic globally with disproportionately higher rates in developing countries (Terzic and Waldman, 2011). As per World Health Organization report, Preventing Chronic Diseases: A Vital Investment shows that non-communicable diseases (NCDs) dominated by diabetes are causing double the deaths that are caused by infectious diseases, maternal/perinatal conditions, and malnutrition combined (WHO, 2005).

There is no doubt that we are facing a global threat from tremendous rise in the prevalence of Type-2 diabetes and obesity and their related consequences. The linkage between obesity and Type-2 diabetes is very strong; in fact the term diabetes is being used frequently to better describe the current twin epidemic (Zimmet et al., 2001). Another important fact is the further complications of cardiovascular (CVD) which is increasing with a rapid pace. Failure to act now on the direct costs of healthcare and the indirect costs from loss of productivity and from premature morbidity and mortality is very likely to cripple the health budgets of many nations, both developing and developed (Alberti and Zimmet, 2012). Chronic non-communicable diseases such as diabetes, cardiovascular disease, chronic obstructive pulmonary diseases (COPD) and cancers has emerged and even exceeds the emergence of devastating communicable diseases including severe acute respiratory syndrome (SARS), acquired immune deficiency syndrome (AIDS) and tuberculosis across the world. This indicates that in future our nation would face double burden of communicable as well as non-communicable diseases. The Present paper attempts (i) to understand the health aspect of globalization with non-communicable diseases (ii) to visualize the effect of globalization in dietary and lifestyle changes (iii) to assess the role of modernization in health and occurrence of non-communicable diseases and its impact on development of nation.

Effects Of Globalisation On Health

Globalization not only related to the economic change but also to the human diet and lifestyle (Zimmet, 2000). So, tragically, the diabetes epidemic is linked to the socioeconomic revolution and its impact on the traditional way of life, including nutritional and physical activity patterns. This means that the solution, that is, the prevention and control of these NCDs is not entirely in the hands of individuals and the medical community. It is, as stated by the 1999 WHO report, a major responsibility of public and social planners, private enterprise, economists, and politicians (WHO, 1999).

Industrialization and progressive modernization of many communities have resulted in major improvements in housing, sanitation, water

supply, and nutrition. Improvements in the health sector with the discovery and development of antibiotics, vaccines and various medicines which has positively changed the profile of various infectious diseases. Consequently, these improvements have led to the reduction in the mortality related to infectious diseases. But simultaneously there has been a tremendous increase in the prevalence of risk factors associated with NCDs such as Type-2 diabetes, CVD, hypertension, and strokes. These diseases further contributed to morbidity and mortality.

Type-1 or insulin-dependent diabetes is although relatively uncommon, but the prevalence of Type-2 diabetes is increasing. Not only the prevalence of Type-2 diabetes is increasing, but also the age of onset is becoming younger since an increased number of children and adolescents are being diagnosed. Thus it needs multidisciplinary approach by government that involves multiple departments such as health, finance, education, sports, and agriculture can all together contribute to a reversal of the underlying socioeconomic causes of the problem.

Globalisation And Non-communicable Diseases

The World Health Organization (WHO) estimates that by 2020, NCDs will account for 80 per cent of the global burden of disease, causing seven out of every 10 deaths in developing countries, about half of them premature deaths under the age of 70 (Mathers and Loncar, 2006) (WHO, 2013). It is estimated that the global NCD burden will increase by 17% in the next ten years and in the African region by 27 per cent and almost half of all deaths in Asia are now attributable to NCDs, accounting for 47 per cent of global burden of disease (WHO, 2013).

Globalisation is a significant determinant of non-communicable diseases because of its direct influence on risks pertaining to the population and an indirect consequence on national economic condition and health care systems. Changes in human behaviour, lifestyle and dietary changes linked with globalization have resulted in a dramatic increase in the incidence of non-communicable diseases over worldwide.

The transition from infectious diseases to NCDs in low-and-middle-income countries have been driven by a number of factors, often indicative of economic development: a move from traditional foods to processed foods high in fat, salt and sugar, a decrease in physical activity with sedentary lifestyles, and changed cultural norms such as increasing numbers of women using tobacco (Hancock et al., 2011). The impact of globalization and urbanization in low-and-middle-income countries (LMICs) has accelerated the growing burden of NCDs. However, governments in low-and-middle-income countries (LMICs) are not keeping pace with ever expanding needs for policies, legislation, services and infrastructure to prevent NCDs and poor people are the worst sufferers (Alwan, 2011).

CONCLUSION

The socioeconomic impacts of NCDs are also affecting the Millennium Development Goals (MDGs) of poverty reduction and

economic development. This calls for the importance and urgency of prevention and control of emerging global epidemic of various Non-communicable diseases viz, obesity, diabetes and its associated cardiovascular consequences and to develop strategies to cease it from becoming pandemic chronic Non-communicable diseases. This necessitates the interventions to be included such as lifestyle and behavioural change and tobacco and alcohol abuse control. The prevention and control of type 2 diabetes and the other major NCDs can be effective through integrated change in lifestyle, eating habits and dietary approach. Health risks of overweight, obesity and diabetes and cardiovascular diseases can be avoided through the use of adequate diet and exercise as a component of an effective solution which would act as a halt for the progress of NCDs. This demand for more active attention of government and non-government levels for economic analysis of the full health consequences of overweight, obesity and the cardiovascular diseases and to decide whether to invest instead on the prevention of these, which would lead to long-term investment.

Declarations

Ethics Approval And Consent To Participate

“Not applicable”

Consent For Publication

“Not applicable”

Availability of data and materials

“Not applicable”

Competing Interests

“The authors declare that they have no competing interests”

Authors' Contributions

“RN performed the proof reading and approved the paper submission. PP was a major contributor in writing the manuscript regarding the non-communicable disease and the impact of globalization. Both authors read and approved the final manuscript.”

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Footnote

Abbreviations: WHO: World Health Organization; NCDs: Non-communicable diseases; CVD: Cardiovascular disease.

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