Title:Diseases Burden and Continuing Epidemiological Transition in South Asia

Abstract

The rapidly changing socioeconomic scenario, fast-increasing urbanization, longevity, changes, and decrease in mortality leading to the demographic and epidemiologic transitions in South Asia is resulting in an increasing share of the disease burden particularly related to non communicable diseases (NCDs). Three of the world's top 10 most populous countries are located in South Asia. Thus the healthcare scenario and its burdens portrays an important role in the socio-economic change of the region. Therefore it is important to understand the continuing epidemiological shift and its burden on national economies in the region. This study aims to understand the burden of epidemiological transition since post 1990's so as to study the impact of disease pattern and role of Non communicable diseases on the economic growth in the region. This paper studies the impact of diseases burden through different perspectives in socio economic context and SDG's

Introduction

The rapidly changing socioeconomic scenario, fast-increasing urbanization, longevity, changes, and decrease in mortality leading to the demographic and epidemiologic transitions in South Asia are resulting in an increasing share of the disease burden particularly related to non-communicable

diseases (NCDs). Three of the world's top 10 most populous countries are located in South Asia. Thus the healthcare scenario and its burdens portrays an important role in the socio-economic change of the region. With differing nature of health-care problem and socio-economic conditions in south Asia as compared to the developed world, It is important to understand the continuing epidemiological shift and it's burden on national economies in the region. While defining Epidemiological Transition which is generally reflects the changing Morbidity Patterns with variations in time and space. The continuous epidemiological transition is the transition of declining mortality increasing life expectancy and shift of diseases pattern from Infectious and parasitic diseases to non communicable and chronic diseases. It has been in contemporary era of heading into a shift towards life style diseases.

While the transition theory provides an understanding of changing diseases pattern and their impact on the burden in the long run continuing is termed to be the trend that result through the morbidity patterns in both short run and long run of varying communicable and non-communicable diseases. The present study thus focuses on eight countries of the south Asian region and tries to understand the pattern of diseases shift in the region based on the data provided by WHO and other sources .This study aims to understand the burden of epidemiological transition since post 1990's so as to study the impact of disease pattern and role of Non communicable diseases on the economic growth in the region. The study will also attempt to explore the connection between migration and epidemiological transitions as well which is of vital concern in the region particularly in countries like India, Bangladesh, Nepal and Sri Lanka. The economic strain due to poor health is not rejected thus reinforcing the importance of achieving SDG'S in the region is pivotal.. NCDs currently cause more deaths than all other causes combined and are projected to increase from 38 million in 2012 to 52′ million by 2030 . They have now reached epidemic proportions in many countries and now affecting hardest at the world's low- and middle-income groups hence leading to the increase in resource allocation towards health system. NCD's are also shaping the epidemiological transition in south Asian region Thus it is necessary to understand their trend emergence and severity in the region to avoid the consequences of long run growth. Therefore the present study will analyze the impact of diseases burden through various perspectives in socio economic context and SDG's as the health conditions and disease environments are important for economic outcomes and long run development. Therefore the present study will try to understand the dynamics of epidemiological transition in south Asia while mainly focussing on the burden of diseases through different various perspectives in the in the region.

Data Source

The study is using the data from Global WHO Estimates as well as other sources to study the outcome of the given objectives. Various statistical measures has been used to study the outcome of the objectives and the results has been finally shown in figures to provide the results A time series analysis may also be carried out to study the casual impact of diseases burden on economic growth and vice versa in the region

Results and Discussion

The changing morbidity pattern has resulted in the transformation of economies into higher levels of economic growth and well being leading to the increase in the pattern of life style diseases thus continuing the epidemiological transition on the basis of non communicable diseases due to their severity and increasing fatal outcomes. Life expectancy at birth has witnessed a 10 point increase in the south Asian region since 2000 as can be shown in the results at the end. We found that Afghanistan has witnessed small change in NCD's as compared to the other countries whereas silanka is having the lowest number of deaths in both the periods. Though the trend of NCD's is changing but it is varying across the countries in the region. The DALY's computed in the figure at the end shows are highest for cardiovascular diseases in case of age and sex when looking at the results from the causes of the diseases in 2015. We also found that the CVD is highest in the Afghanistan followed by India in both the years. Whereas in Respiratory diseases Nepal tops the list followed by India while adjusting to the Age standardised death rates. It has also been found that Silanka is having the Highest rate of ASDR due to diabetes where as lowest was witnessed in the India

Discussion

The Change in Life style has lead to the increase in non communicable diseases mostly in the countries in south Asia due to the economic growth in the region. There is a continuing transition of diseases shift towards non communicable diseases resulting through the changes in demographic behavior because of the increasing life expectancy and economic transformation as well as the increasing level of income and urban growth. The increasing pace of urban growth as positively contributed the income ***levels***. But it is also affecting the growth of economy by increasing Disability and loss of healthy Years. Hence this study is ***a*** thorough attempt of studying the ***dynamics*** of continuing transition that affect the growth of economic outcome's resulting through increasing burden of disease's in long run.

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Preliminary Result's

Figure 1.1 Life expectancy at birth and age 60 for South Asian Region

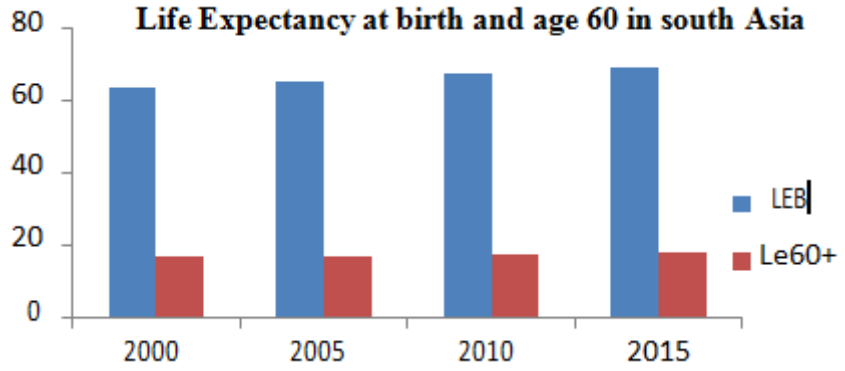

Figure.1.2:Percentage increase in NCD Deaths in 2012

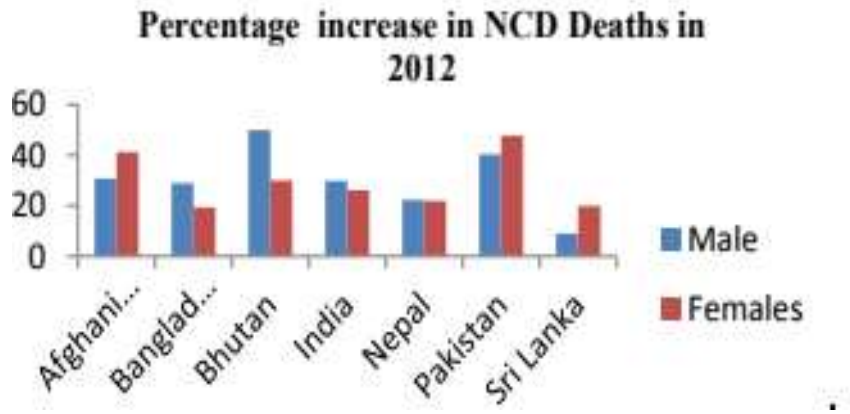

Figure.1.3Percentage of DALY's for Top 8 NCD's in South Asia

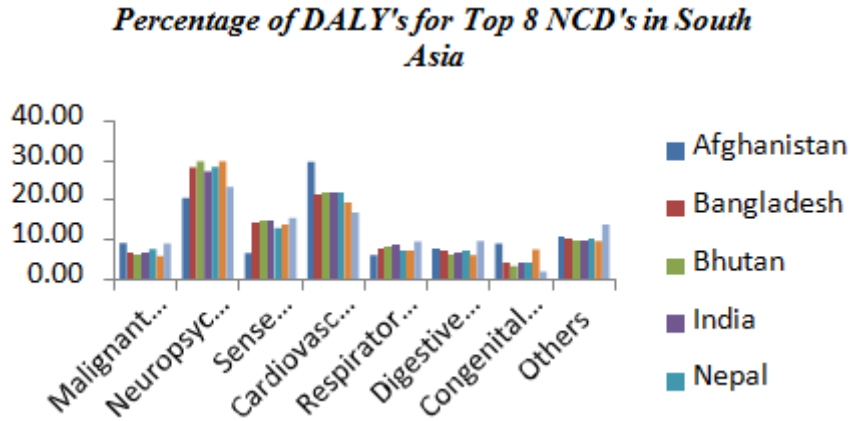

Figure.1.4: Percentage of DALY's for Top 8 NCD'S in south Asian Region

Figure.1.5: DALY by Age Sex and Cause in 2015