REVIEW ARTICLE

Low Mortality and High Morbidity Syndrome - The Health Paradox in Kerala: A Review

Anila Skariah*

Centre for Research in Economics, BK College for Women (Mahatma Gandhi University) Amalagiri, Kerala, India.

*Corresponding Author: Email: aniskariah@gmail.com

Abstract

The development of any nation depends on the health of its people. It is a fundamental factor which affects the quantity and quality of the population and their productivity. Even though Kerala has been acclaimed for the achievements in the human development indicators like health status, sex ratio, life expectancy etc; a close scrutiny to these broad indicators brings up more questions. This paper is to make a review of the emerging health issues in Kerala economy for efficient provisions and management of public health care delivery systems.

Keywords: Health status, Mortality, Morbidity, Chronic diseases.

Introduction

Health is considered as a fundamental human right and a worldwide social goal. It is essential for the satisfaction of basic human needs and to improve the quality of life. The development of any nation depends on the health of its people. Health is a state of complete physical, mental and social well-being, and not merely the absence of disease or infirmity (WHO). Health is not merely consuming goods, but is an investment for economic growth [1].

Even though these definitions are narrow, it provides a broad outlook to behavioral and social determinants of health or health care. Among the several non-economic indicators of human welfare and national development, the health status of a nation's population required prominent position. It is a fundamental factor affecting the quantity and quality of the population and their productivity. The objective of this paper is to make a review of the emerging health issues in Kerala economy.

Global Health Scenario

The human disease trends at the global level reveal the emergence of lifestyle diseases (LSD) otherwise called non-communicable/chronic diseases. They mostly include obesity, diabetes, heart problems, osteoarthritis, cancer, HIV, psychological disorders and pains, violence etc. For a long time, infectious (communicable) diseases were the biggest killer globally. But, now the trend is changing towards increasing prevalence of chronic diseases, and the therapies for cardiovascular diseases and diabetes etc. are expected to have the highest growth rates.

Globally, chronic diseases are now the leading causes of the death pattern that will become even stronger as the population of the developing world gets older, fatter and less physically active. For example, diabetes is expected to rise from 84 million in 1995 to 228 million in 2025 with India, Middle East and South Asia bearing the worst burden. World's largest killer is cardiovascular diseases with 17.5 million annually. Globally, 1.6 billion adults are overweight, and at least 400 million are obese [1]. It is in the growing concern for this trend that WHO has even initiated vision and action strategies to contain them through concerted efforts and included as one of the global targets for prevention and control of Life Style Diseases (LSD) in Health For All in the 21st Century [1].
The Indian Health Scenario

In India the predominant disease were epidemics like cholera, TB, plague, malnutrition etc. Recent studies show that the prevalence of these infectious diseases is at a decline and morbidity and incidence of life style related diseases are in an accelerated phase. India appears to be in the midst of an epidemiological transition in which chronic and degenerative diseases are increasingly displacing the poverty related health problem of infection, malnutrition and reproduction. Cancer, cardiovascular and other health problems often associated with affluence are beginning to resurge as major causes of death.

Concurrently, fresh unanticipated health threats that include the AIDS epidemic, environmental health hazards and an upsurge of behavioral pathologies like violence, substance abuse and accidents, complicate the epidemiological scenario.

Health Status of Kerala

Kerala is well known for its socio-demographic achievements. Many factors like education, level of income, standard of living, housing, sanitation, water supply greatly influences the health scenario of Keralites. Being a state subject, the Government of Kerala is responsible for the maintenance of health systems in the state. By 73 and 74 constitution amendment local self governments are entrusted with the administration and maintenance of the public health centres.

The health status of a state can be expressed in terms of Physical Quality of Life Index (PQLI). It is comprised of various indicators like Infant Mortality Rate (IMR) (current rate-13), Life Expectancy at Birth (current rate- Women- 73.62, Men-68.03) and literacy rate (current rate- 91 %). The health status of Kerala is far better when compared to the other states of the country and in par with the standards of the other developed nations. Kerala has generated tremendous attention worldwide because of its high health indices in spite of its economic backwardness. However, the new challenge faced by the state of Kerala is, to sustain the achievements that they have made, in the current economic climate. Kerala is struggling to pave a new way without resting on the past laurels.

There are three theories postulated to explain the health improvement of the state in spite of its economic backwardness. The first hypothesis suggested that the improvement and extension of public health facilities and public health measures led to decline in infant and child mortality rates in 1950's and subsequent decline in fertility rates in 1960's. The difference is the result of broader socio economic and political developments like land reforms which paved the way for more equitable distribution of available resources in spite of economic backwardness, along with availability of wage employment and relatively high wage rate. High education rate also helped for the high health rate. Panickar [3] attributed to the health achievements to the rulers of Travancore and Cochin States of 19th and 20th century who took serious steps for public sanitation and public health improvement.

More improvements are required in the key health indicators of the state in par with changing scenario. Environment we live is so polluted such that it lead to ill health, hike in chronic morbidity in urban and rural areas, shattered health status in urban slums, new contagious diseases like AIDS, fatal diseases like cancer and diseases of poverty and prosperity like anaemia, diabetics, hypertension etc. Health of vulnerable population like women and children need to constantly monitored and improved; especially among scheduled castes / tribes, moving population, immigrant workers etc. A study indicates that children belonging to the above categories suffer greatly from nutritional anaemia. Rapid urbanisation resulted in a new series of health troubles which are directly related to the environmental factors.

Table 1: Comparative health status of Kerala and India

<table>
<thead>
<tr>
<th>Health Status Indicator</th>
<th>Kerala</th>
<th>India</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude birth rate per 1000 population 2007 (CBR)</td>
<td>15.00</td>
<td>23.80</td>
</tr>
<tr>
<td>Crude death rate per 1000 population 2007 (CDR)</td>
<td>6.40</td>
<td>7.60</td>
</tr>
<tr>
<td>Infant mortality rate per 1000</td>
<td>14</td>
<td>58.00</td>
</tr>
<tr>
<td>population (IMR)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal mortality rate per lakh live birth 2007 (MMR)</td>
<td>110.0</td>
<td>300</td>
</tr>
<tr>
<td>Life Expectancy at birth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>73.45</td>
<td>63.50</td>
</tr>
<tr>
<td>Female</td>
<td>70.90</td>
<td>39.00</td>
</tr>
<tr>
<td>NNM rate</td>
<td>76.90</td>
<td>45.00</td>
</tr>
<tr>
<td>Perinatal mortality rate 2006 (PNMR)</td>
<td>11.5</td>
<td>18.00</td>
</tr>
<tr>
<td>Post neonatal mortality rate 2006 (NNMR)</td>
<td>10.8</td>
<td>18.4</td>
</tr>
<tr>
<td>Child mortality rate 2006 (CMR)</td>
<td>3.8</td>
<td>2.90</td>
</tr>
</tbody>
</table>

Low Mortality High Morbidity Syndrome

Morbidity is a departure from a state of physical or mental well-being, resulting from disease or injury, of which the individual is aware (US Public Health Service, 1975, Peterson). In morbidity, a person is alive, but unable and unfit to perform mental and physical activities due to illness. Mortality rate is a measure of number of death due to all reasons or a specific reason per thousand populations per year.

Kerala Human Development Report 2005 disclose that high morbidity is an emerging health issue that matters for human development since it raises issues regarding "quality and affordability of Health care" (CDS, 2006). The National Council of Applied Economic Research (1992) considers health sector as an important indicator of level of economic development and it includes mainly morbidity and mortality.

While Kerala has made remarkable achievements with respect to mortality and fertility, the levels of morbidity is reported to be high. This peculiar situation in Kerala is referred to as Low Mortality - High Morbidity Syndrome [4]. Kerala has shown best with regard to most of the health status indicators, but the biggest paradox is that Kerala has been identified as the state with highest morbidity prevalence in India. It has been estimated that 181 out of every 1000 people in Kerala are morbid due to any of the illness and urban Kerala records the India's highest male morbidity prevalence rate of 185 per 1000 population. Kerala has also been identified as the state with highest percentage of non-infectious illness reported both from rural and urban India. The major reason for this hike in non-infectious or chronic illness in Kerala is the hike in aged population which has been estimated as 13.42 per cent of the total population of Kerala.

Kerala has been passing through a phase of health transition similar to that experienced by developed countries. In spite of all the favourable health indicators used to illustrate Kerala's achievements, a substantial part of population still suffers from morbidity related to air and water born diseases. All studies say that higher morbidity in Kerala is real and is not due to perception factors. Kerala seems to have entered into the fourth stage of epidemiological transition and studies points out that life style related diseases are on rise in Kerala. Further the pattern of age sex morbidity for a given disease also seems to have undergone changes in Kerala.

The risk of morbidity is determined by individual and household characteristics like age, education, caste, religion and socio-economic status as well as environmental and community level aspects. The effect of these characteristics on morbidity may vary according to the level of access to and availability of health care services.

The first available data about the morbidity in Kerala is the Annual Administration Report of Travancore (1990-1991). It says that the mortality of the state is predominantly because of plague, small pox and cholera towards the end of 19th century. Due to drastic immunization measures taken by the Maharajah of Travancore, the incidence of cholera and small pox declined. But this is not the case of Malabar region, which was under Madras Presidency. In the latter half of the 20th century, no small pox cases were reported from Kerala in the years 1968-1970.

Another great achievement is the control of malarial fever and decrease in the death associated to fever related illnesses in the 1940’ s as a result of the Malaria Eradication Programme initiated by the then kings of Travancore and Cochin. Panickar and Soman initiated the study of trends of morbidity patterns in Kerala. They found that respiratory related diseases constituted the largest category of illness, which was followed by diarrhoea.

Child deaths from enteric fever and diphtheria decreased by about 80 per cent. Credit goes to the extensive immunizations programmes in the state. Tuberculosis and enteric fever also showed a sharp decline of incidence.

<table>
<thead>
<tr>
<th>Disease</th>
<th>1940-47</th>
<th>57-60</th>
<th>61-67</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholera</td>
<td>100.7</td>
<td>4.78</td>
<td>0.3</td>
</tr>
<tr>
<td>Small Pox</td>
<td>51.7</td>
<td>75</td>
<td>28</td>
</tr>
<tr>
<td>Plague</td>
<td>13.2</td>
<td>NIL</td>
<td>NIL</td>
</tr>
<tr>
<td>Bowel Disease</td>
<td>1008</td>
<td>597</td>
<td>423</td>
</tr>
<tr>
<td>Respiratory Diseases</td>
<td>743</td>
<td>1031</td>
<td>1074</td>
</tr>
<tr>
<td>All other diseases</td>
<td>5243</td>
<td>7045</td>
<td>6817</td>
</tr>
</tbody>
</table>

Source: Panickar and Soman [4]

But, in the recent days, monsoon related fevers like leptospirosis, Japanese encephalitis, dengue fever, chicken guinea etc brought havoc in the state, leaving thousands of people dead. Also life style disorders like arteriosclerosis, cardio vascular ailments, various cancers, hyper tension,
diabetes mellitus, cirrhosis, kidney disorders etc are very common among the urban and rural population of the state.

What Need Attention?
Irrespective of the socio economic status, the Kerala society has been increasingly vulnerable to the burden of acute morbidity. The socioeconomic implications of high morbidity have far reaching consequences at the household, community and economy levels. Though, we have retained better health care indicators, massive efforts are still needed to attain health for all. It is argued that with an increase in the level of development, the prevalence of communicable diseases comes down where as that of chronic illness goes up. This seems to be true about the morbidity profiles in Kerala.

The morbidity analysis of Kerala reveals that the attacks of pneumonia, pulmonary tuberculosis, dengue fever, leptospirosis etc are the major diseases dominating the health profile of Kerala. Increase in pollution, increase in the use of fossil fuels, tobacco usage, vehicle transport, increasing sedentary habits and aging are the basic reasons for increase in respiratory infectious diseases.

As high morbidity is the key point to be addressed while analyzing the health profile of the state, drastic steps are needed to reduce the intensity of communicable and non communicable morbidity prevalence. Efficient provisions for safe drinking water and sanitation are to be provided to the rural and urban population and importance should be given for better drainage and urban facilities in urban areas. Money spent for the treatment of morbidity causing diseases could be saved by providing clean air, water and living circumstances. For example, the money spent for the treatment of cancer, diabetes mellitus, obesity and related diseases could be saved by initiating steps to provide clean environment, which is free of pollution. Also there should be proper rehabilitation packages for old and ill citizens of the state. It calls for efficient provisions and management of public health care delivery systems [5-13].

Conclusion
In the healthcare sector, the government should fix targets and must take keen interest in achieving them. Also cost-benefit study and cost effectiveness programming should be done seriously at the state level, or at the national level. As improving the health of a nation is a long term investment, it requires participation from all sectors including citizens, states, communities, leaders, professional organizations and non-profit, voluntary groups.

The triadic system of decentralised model healthcare governance in the state- viz, panchayat, block and district levels are not at their best performance. A full-scale public participation is very vital for the successful fulfilment of health programmes. In order to have a healthy community with low morbidity, local self governments should take keen interest in health promotion programmes. The health promotion programme of our state must focus to help our people to change our lifestyle and to move towards a state of optimal health i.e. a balance of physical, emotional, social, spiritual and intellectual health.

References