Chapter III
THE MULTIFACETED VIRTUE OF HUMAN HEALTH

The attainment and sustenance of good health invariably preoccupy the mind of every human being but lack of it is not merely an individual apprehension to be addressed in isolation. Health has evolved over the centuries as a concept from an individual concern to a worldwide social goal and encompasses the whole quality of life. Since ancient times, human beings and societies have tried to formulate rules and protocols that would enhance the chances of sustained good health (Yadavendu, 2003). The survival of any human society is inextricably related with the health of its population. In fact, every society, government, and various international agencies strive hard to accomplish the worthy goal of better health. It is both national and international, since disease and squalor anywhere in the world are a threat to the health of mankind (Shanmugasundaram, 1994). The last 150 years witnessed a global transformation in human health that has led to people living longer, healthier, more productive lives (Bloom et al., 2004).

The spectacular improvement in the health status of many sections of humankind all over the world highlights the advancement of medical science and the immense involvement of agencies responsible for the provision of health care services. Some writers put more stress on factors other than medical involvement in contributing towards the splendid progress in population health. For instance, McKeown (1980) and other writers have drawn attention to the fact that many of the advances in health have been related more to socioeconomic, environmental, and educational changes than to medical intervention.

Mary Jane Schneider (2004) mentions a number of reasons why people’s lives are healthier today than they were a century ago: clean water, air, and food; safe disposal of sewage; better nutrition; education concerning healthy and unhealthy behaviours; and many others.

Notwithstanding the tremendous progress that has been made in the health and life expectancy of billions of people around the globe, an unacceptably huge rise in the number of cases of illness and death from non-infectious diseases as well as new and emerging infectious diseases cause untold worries in the minds of people. This apparent paradox between the dramatic improvement in health status on the one side and the
growing burden of diseases on the other calls forth a meticulous refocus of our attention on the causative factors leading to health problems. As well, there is no agreement, so far, on the meaning, determinants, and the decisive impact of the health status of a population.

The purpose of this chapter is to look into the varied facets of the multidimensional concept of health, from its meaning to the numerous factors influencing it, the linkage between health and economic growth and its various routes, and the direct and indirect cost of illness from micro and macro points of view, so as to make the notion of health less ambiguous and to accentuate the implications of health state of a community for any economy, polity and society.

3. 1. Meaning of Health

Health is not a unitary concept but one that has a number of dimensions and, therefore, has a wide variety of connotations ranging from an ideal state to the absence of a medically defined and certified disease. Health as an ideal state has been encapsulated in the original and inspirational World health Organization definition: ‘health is a state of complete physical, mental and social well-being and not merely absence of disease or infirmity’ (WHO, 1946). Although, this definition is a fine and inspiring concept and its pursuit guarantees health professionals unlimited opportunities for work in the future, but it is not much of practical use (Doll, 1992).

There is obvious difficulty in operationalizing the WHO’s concept and in constructing an index of health that will combine physical, mental, and social well-being in some valid manner. Necessarily, health has to be defined from a practical point of view and, therefore, well established health indicators such as mortality and morbidity should be given more prominence in order to arrive at an operational definition of health.

Some definitions plainly express what the common man thinks about health. Health can be defined negatively as the absence of illness, functionally as the ability to cope with everyday activities, or positively as fitness and well-being (Blaxter, 1990).

3.1.1. Health as a Positive Concept

The positive aspect of health is stressed by the Institute of Medicine (IOM, 1997, P.41) when it defined health as “a state of well-being and the capability to function in the face of changing circumstances. Health is, therefore, a positive concept emphasizing social
and personal resources as well as physical capabilities”. Bowling (1997, p.5) suggests that positive health: implies ‘completeness’ and ‘full functioning’ or ‘efficiency’ of mind and body and social adjustment. Beyond this there is no one accepted definition. Positive health could be described as the ability to cope with stressful situations, maintenance of a strong social support system, integration in the community, high morale and life satisfaction, psychological well-being and even levels of physical fitness as well as physical health.

3.1.2. Health as a State of Equilibrium

Theodore Tulchinsky and Elena Varavikova define health as “a state of equilibrium of the person with the biological, physical and social environment, with the object of maximum functional capability. Health is a state characterized by anatomic, physiological and psychological integrity, an optimal functional capability in the family, work, and societal roles (including coping with associated stresses) a feeling of well-being, and freedom from risk of disease and premature death” (Tulchinsky and Elena, 2000, p.36).

The definition, given by the WHO, underscores the importance of including the functional, societal, cultural, subjective and socio-psychological variables that impact on role performance, independent living and perceived well being in any elaborated conception of health. But, unfortunately, health in this vision is unattainable. While individuals may very occasionally be in this state, population as a whole will never be in complete mental, physical, and social well-being. The foundation of well being can be well understood by looking into its conceptual connection with human health.

3.2. Health and Well-being

Well being is dynamic state of mind characterized by reasonable harmony between a person’s abilities, needs, and expectations, and environmental demands and opportunities (WHO, 1986). The origin of the concept of well being can be traced to Jeremy Bentham’s utilitarianism in which individuals seek to maximize their happiness. For John Stuart Mill, happiness involves more than sensual pleasure. From the Classical Political Economy through the contemporary literature, economists articulate the necessity of efficiency in the allocation of scarce resources. The principal objective of economic efficiency is to obtain the maximum well being for all. “Any combination of resources will be more efficient if the well being obtained by adding up the increases in individual well being is
greater than the adding up of reductions in the well being that may occur in other or in the same individuals” (Giraldes, 2000, p.24). The observation, “well being ought to be the ultimate goal around which economic, health and social policies are built”, underscores the relevance of ‘well being’ in any set of policy framework.

It is true that well being cannot be attained without the basic material needs of people being met and, thus, income is an important attribute of well being when it is the means to purchase basic necessities. Once the basic needs are met, however, increase in income may have very little impact on well being and, in some cases, may even have a detrimental effect. Also, income has proved to be intrinsically unable to capture non economic dimensions of well being. The concept of ‘well-being’ encompasses the social, economic and political opportunities enjoyed by individuals. Good health, social interaction, non-polluted air/water are all aspects of life that can enhance well being. Even though the concept of well being is much broader than the concept of health, any deterioration of health will have a negative impact on it. The description, “health is a condition of well being, free of disease or infirmity, and a basic and universal human right” (Saracci, 1997, p.1409), provides an intermediate concept linking the WHO’s ideal to the real world of health and disease as measurable by means of appropriate indicators of morbidity and quality of life.

3.3. Health and Quality of Life

The World Health Organization defines the quality of life as the individuals’ perceptions of their position in life, in the context of the cultural value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the person’s physical health, psychological state, level of independence, social relationships and their relationships to salient features of their environment (Billington, 1999).

Walker and Rosser (1988) define quality of life as a concept encompassing a broad range of physical and psychological characteristics and limitations which describe an individual’s ability to function and to derive satisfaction from doing so. The broad ranging concept of quality of life has two clear-cut dimensions – an objective dimension and a subjective dimension.
The objective dimension refers to fulfilling the societal and cultural demands for material wealth, social status and physical well-being and can be measured through quantitative indicators such as morbidity, life expectancy, per capita income and human development index. The subjective dimension is about feeling good and being satisfied with things in general and can be measured through individuals’ perception regarding their physical, social, emotional, functional abilities or feelings.

If one measures welfare more broadly than income or consumption, poor health is itself a deprivation that is part of poverty (WHO, 2002). The Human Development Index (HDI), introduced in 1990 reflects achievements in the most basic human capabilities – leading a long life, being knowledgeable, and enjoying a decent standard of living (UNDP, 1990) that can be represented as health, education and income, which are indeed the three pillars of human development. “There is hardly any need to emphasize the fact that health is a major component of human welfare and quality of life” (Shanmugasundaram, 1994, p.17) and, consequently, the factors that influence the health of individuals, unquestionably, have a sway over the determination of social welfare, the ultimate goal of all policy making.

3.4. Determinants of health

“Determinants of health” is the collective label given to the factors and conditions which influence health status of a population. Most theoretical models of the determinants of health distinguish between four main groups of external factors that have an impact on health: health care, health related behaviours and lifestyle, the physical environment and the social environment (Bennett, 2003). The foremost determinants include: income and social status, social support networks, education, employment and working conditions, physical environment, social environment, biology, and genetic environment, personal health practices and coping skills, healthy child development, health services, gender and culture. The determinants of health do not exist in isolation from each other but rather function in an intricate web of cause and effect.

3.4.1. Income and Health

The association between income per capita and health is one of the finest relationships in the sphere of development. The link is generally considered to reflect a causal connection running from income to health, and the reverse connection is also well
articulated by researchers. Higher income gives greater command over many of the goods and services that promote good health, such as better nutrition and access to safe water, sanitation, and good quality health services. In many less developed and low income countries, health status is relatively low in terms of life expectancy and other indicators (WHO, 2008). Such countries also have greater proportions of people living below the poverty line and vulnerable to serious health risks. As the hierarchy of income falls, the rates of poor health increase (see, Berkman and Kawachi, 2000). The income gradient of health exists in every measure of health outcomes, including mortality, life expectancy, morbidity, disability, and perceived health status.

3.4.1.1. Distribution of Income and Health

Higher incomes may be a pre condition for healthier environments and better health services, given competing demands on services – this is self evident at the community or national level but is also likely to hold at the individual level (Rodgers, 1999), but, if the additional income is accrued to a smaller proportion of the population, it will not have any evident health outcomes. Wilkinson (1996) found evidence suggesting that the health of a population depends on equality in income distribution rather than average income; then rising average incomes can be associated with declining health if the resulting wealth is concentrated among a few. Le grand (1987) explored the relationship between average age of death in 17 developed countries and GDP per capita, per capita expenditure on health care and proportion of national income earned by the least well-off twenty per cent of the population. He found age at death to be most closely correlated with income distribution. This draws one’s attention to the necessity of containing any form of inequality in the distribution of income among different members of the society.

The psychosocial hypothesis makes out relative position as a key factor behind income inequality as a population health determinant. The hypothesis avows that rising income inequality “will feed back to the social environment, affecting levels of social prejudice, social distinction, tendencies to exclusion, the exercise of power, and the creation of insecurity and finally to the insidious tendency for some people to be made to appear as inadequate failures in contrast to the successful and wealthy” (Wilkinson, 1999, p.539).
3.4.1.2. Per capita Income and Life Expectancy

Samuel Preston (Preston, 1975) plotted the relationship between per capita GDP and life expectancy in 1990s, 1930s, and 1960s. Preston’s curves reveal two important insights. First, a rise in per capita GDP is associated with greater gains in life expectancy in poor countries than in wealthy ones. Second, the curve shifts up over time. For a given level of income per capita, life expectancy rose substantially over the study period. For example, an individual from a country with a per capita GDP of $500 could expect to live around 59 years in the 1930s and 68 years in the 1960s. Preston calculated that if income was the sole determinant of mortality, then gains in life expectancy would have been small (2.5 years between 1938 and 1963). Yet when accounted for the upward shift of the curve during the same period, significantly larger health gains were predicted (12.2 years). Preston concludes that factors exogenous to country’s level of income accounted for 75 - 90 per cent of the rise in life expectancy worldwide over this period.

Specific inter-country comparisons of health outcomes and GDP levels also weaken the case for a strict wealth to health causal linkage. Despite having an average per capita income that is four times higher than Costa Rica’s, the United States has a lower life expectancy. Similarly, South Africa has double the per capita income of Cuba, but life expectancy, in years, in South Africa is lower (Alsan, 2008).

3.4.1.3. Negative effects of Income on Health

As a general rule, we would expect that, as income increases, consumption of health improving goods also increases. But health improvement is not the only objective of individuals, and consumption of certain health reducing goods and services may also depend on the level of income (Jack, 1999, p.35). Consumption of some goods and services has potentially negative effects on health status. These effects include exposure to pollution, increased likelihood of motor vehicle accidents, overconsumption of alcohol, smoking, indulgence in unsafe sex, and consumption of unhealthy foods (such as those with high fat content). Goods that negatively affect health, such as alcohol, cigarettes, high fat foods, may only become affordable at certain levels of income (ibid). William Jack argued that the direct effect of an increase in measured income would be, to reduce health, if it requires the exertion of greater physical effort leading directly to exhaustion, the operation of more dangerous machinery, or the cultivation of more marginal land causing deterioration of the environment (Jack, 1999, p.34). Accordingly one cannot substantiate
a one sided influence of income on health while paying no attention to the undesirable consequences of higher income. In judging a person’s advantage and deprivation, we have to shift our attention from an exclusive concentration on incomes and commodities to things that people have reason to value intrinsically (Sen, 1999). Income is only one of the factors that influence human health.

3.4.2. Social and other Factors Influencing Health

Social factors are those that arise from the interaction of individuals or groups within the community (McKenzie et al., 2005). Recognition of the importance of social ties for health dates back to Bowlby (1969), who maintained that secure attachments are not only necessary for food, warmth and other material resources, but also because they provide love, security, and other non-material resources necessary for normal human development. Attachment concerns relationships and emotional bonds with people, objects and certain places, such as a house, a neighbourhood, a city or a country. Access to personal relationships is often, but not always, associated with better health and mental health (Kawachi & Berkman, 2001). In thinking about social determinants of health, analysts find it useful to distinguish between proximal and distal social factors (House & Mortimer, 1990). Proximal social factors include the readily identifiable settings and institutions in which we live and participate on a day to day basis such as family, work organization, school, neighbourhood, and community. Distal social factors include the more pervasive forces in society – such as political economy, culture, social stratification, and systems of gender, race, and ethnic relations – which change slowly over time (Amick et al., 1995).

3.4.2.1. The Health Field Concept

The health field concept divides inputs to health into four categories: genetic predisposition, environmental circumstances, individual behaviour and lifestyle, and health services (Lalonde, 1974). Genetic determinants are important constitutive factors for individual health. However, an assessment of the influence of genetic factors on health outcomes is beyond the scope of any social science research since it involves comprehensive scientific experiments rather than empirical results.

3.4.2.2. Environmental Effects on Health

A wide array of problems, including infectious diseases, injuries, and chronic illnesses, can be partly attributed to poor environmental conditions (Jackson, 1998).
Environment includes matters related to health and external to the individual (including social environment) and over which the individual has no control. The environmental effects on mortality and morbidity may occur only after long time lags because of the latency periods of these exposures. Air pollution containing potentially hazardous chemicals, biologic and chemical contamination of foods, home accidents, and environmental carcinogens are all important to the health of the community (WHO, 1975). New environmental threats have arisen. Atmospheric pollution resulting from combustion of fossil fuels causes respiratory damage and disease and has other serious consequences produced by the “greenhouse effect” (Last, 1987). The WHO has estimated that, globally, over 1,50,000 deaths annually result from recent change in the world’s climate relative to the base line average climate of 1961-1990 (Mc Michael et al., 2004). This alarming issue, if not addressed appropriately, will have far reaching and undesirable consequences of a massive scale. “The major, perhaps irreversible, changes to the biosphere’s life support system, including its climate system, increase the likelihood of adverse intergenerational health impacts”, (Mc Michael & Butler, 2006, p.19). Since nearly all environmental and climatic bad effects are man’s creation, its solution, undoubtedly, is his obligation. A deep-seated transformation in the lifestyle and behavioral pattern is an essential aspect in bringing about a positive change.

3.4.2.3. Negative effects of Life Style on Health

Most health problems arise from a combination of causes associated with structural factors in society and factors related to individual behaviour and lifestyle. Lifestyle may be described as “a complex of related practices and behavioural patterns, in a person or group that are maintained with some consistency over time” (Green and Kreuter, 1991, p.13). Lifestyle may make or mar health status of individuals and community. In the UK, documents such as ‘Prevention and Health: Everybody’s Business’ (DHSS, 1976) has identified lifestyle as a key factor in improving health status.

3.4.2.4. Personal Behaviour and Health

Personal behaviours play critical roles in the development of many serious diseases and injuries (Novick & Mays, 2005). Consumption of alcohol and cigarette smoking have become menace to the healthy survival of humanity. Alcohol consumption is a leading cause of premature death, preventable illness and disability. Mortality, both accidental and intentional, has shown to increase dramatically with increasing alcohol consumption.
“Cigarette smoke does more damage to human health than all air pollutants combined. Smoking is hazardous not only to smokers, about half of whom die prematurely from tobacco-related diseases including cancer, heart disease, and respiratory conditions but also to passive smokers” (Soubbotina, 2004, p.61).

Behavioural determinants of health include a range of inherent and acquired behaviours. An important class of behavioural determinants of health is a set of characteristics we describe as human values. Health related human values evolve and change under the influence of expanding knowledge and awareness (Last, 1987).

3.4.2.5. Socioeconomic Factors and Health

Social aspects, very often, are combined with economic forces to discuss the health outcomes of socioeconomic factors. In this view, the socioeconomic status of individuals has to play an essential role in determining their health status. “Socioeconomic status refers to the position of the individual in a system of ranked statuses based on criteria that include occupation, income, and education” (Dressler, 2000, p.245).

Thomas Mc Keown (Mc Keown, 1976) has identified improvements in social and economic conditions as the most important factor behind the marked improvements in life expectancy in the developed world in the last two centuries. But, solution of one predicament results in the emergence of other tight spots. “A long shift occurs in mortality and disease patterns whereby pandemics of infection are gradually displaced by degenerative and man-made diseases as the chief form of morbidity and primary cause of death” (Omran, 1971, p.516).

A variety of terms have been used in the epidemiological literature exploring the socioeconomic influences on health, including social class, social stratification, and social and income inequality. The term “socioeconomic position” is used to address the social and economic factors that influence the position(s) individuals and groups hold within the structure of society, i.e. which social and economic factors serve as the best indicators of the location in social structure that may influence health (Berkman & Kawachi, 2000). The study of social, economic, and political determinants of public health has been termed as social epidemiology. Traditional epidemiology has not always accepted the radical ideas in social epidemiology.
Several profiles in social epidemiology have defended the subject and argued that it is indispensable because “ignoring social determinants of social disparities in health precludes adequate explanations for actual and changing population burdens of disease and death, thereby hampering efforts for prevention” (Krieger, 2001, p.45).

3.4.2.6. Social Support and Health

There is a substantial body of epidemiological evidence linking social networks and social support to positive physical and mental health outcomes throughout the life course (Stansfeld, 1999). Persons with extensive networks generally have longer life expectancies (Last, 1987). Lack of social support has been shown to be a predictor of cardiovascular disease and mortality on the same magnitude as hypertension and high blood lipid levels (Cassel, 1976; Kaplan et al., 1977; Rehm, 1993).

Social exclusion results in not only social, but also economic and psychological isolation. People who are already disenfranchised are further disadvantaged with respect to their health – having the freedom to participate in economic, social, political and cultural relationships has intrinsic value (Sen, 1999). Being included in the society in which one lives is vital to the material, psychosocial, and political empowerment that underpins social well being and equitable health. Conversely, any form of alienation, especially in the place of work, definitely, leads to debilitating effects on the health of individuals.

3.4.2.7. Alienation and Health

When something is taken away, it is separated from us, and that is the core of the contemporary meaning of alienation. To be alienated from someone or something is to experience estrangement from or loss of something that had been of great value. Robert Blaumer (Blaumer, 1964) has identified the four basic components of alienation: powerlessness, meaninglessness, isolation and self estrangement. Powerlessness can be defined as the inability to control the conditions under which the work is done, and meaninglessness is a situation where workers perceive nothing of value inerhes in the work they do. Isolation occurs when workers feel a sense of separation from their co workers, society as a whole or both. Self estrangement is the sense that work is done only to earn money and that nothing of one’s self is invested in the work that he or she is doing.
3.4.2.8. Working Conditions and Health

Differences in working conditions have been proposed as one plausible pathway by which the larger systems of social stratification influence health (Marmot & Theorell, 1988). Certain ways in which work is organized have been found to be detrimental to mental and physical health and overall well being, causing depression and burnout (Rugulies et al., 2006), as well as contributing to a range of serious and chronic physical health conditions, such as musculoskeletal disorders, hypertension, chronic back pain, heart disease, stroke, type II diabetes, and even death (Belkie et al., 2004; Krause et al., 1997). In addition to causing physical injuries and even death, a job that poses physical hazards can also induce the psychological condition known as stress.

3.4.2.9. Job Stress and Health

Some degree of job related stress is not necessarily a bad thing. A challenging set of tasks may be stressful, but the stress they induce may also promote a high level of performance. But, beyond a certain point, stress becomes an overwhelmingly negative aspect of working life. High stress jobs have been found in epidemiological studies to be a significant contributory factor to high blood pressure, cardiovascular diseases, mental illness, and long onset disability, but the link from stressful work conditions to health is all but unrecognized by workers’ compensation boards (Sullivan, 2000). Stressful work situations are not always offset by higher wages or salaries even though low class workers are more susceptible to strenuous work environment.

Lower class workers tend to occupy jobs where they confront more physically hazardous working conditions, and more boredom and overall stress; they also have leeway in managing demands or hazards on the job (Amick et al., 1995). Stress at work is associated with a fifty per cent excess risk of coronary heart disease (Marmot, 2004; Kivimaki et al., 2006), and there is a consistent evidence that high job demand, low control, and effort reward imbalance are risk factors for mental and physical health problems (Stansfeld & Candy, 2006).

Job control refers to employees’ ability to make decisions about how and when they perform their work as well as the extent to which their job entails using and developing their skills. Job demands encompass the amount and pace of work (Theorell, 2000). Men who experienced having little control over meeting the high demands of their jobs – what
is called job strain – were three times more likely to have high blood pressure than those who experienced more control, even when all other risk factors were taken into account (Schnall et al., 1990). Lower job satisfaction, exhaustion and depression are the ramifications of job strain.

Employees who felt that their boss was not fair minded had almost a third more incidents of cardiovascular disease compared to employees who felt that their boss was fair minded (Kivimaki et al., 2003). Also, many employees, especially in the informal sector, regardless of the nature of work, feel some sort of job insecurity.

3.4.2.10. Job Insecurity and Health

Studies indicate that job insecurity could also affect health (Kuhntert, 1989; Roskies et al., 1993; Mc Donough, 2000), and everyone, regardless gender, is susceptible to this very miserable state. Job insecurity involves both the threat of job loss, and uncertainty regarding future employment. Threat of job loss has been associated with increases in self reported morbidity, serum cholesterol, depression and anxiety (Ferrie et al., 1998).

A flexible workforce is seen as good for economic competitiveness but brings with it effects on health (Benach & Muntaner, 2007). Evidence indicates that mortality is significantly higher among temporary workers compared to permanent workers (Kivimaki et al., 2003).

3.4.2.11. Social Stratification and Health

A person’s location in a social hierarchy is a critical factor in health: those with greater socioeconomic resources have wider social, psychological and economic means to cope with less advantageous events. In a developing country context, studies have shown that individuals with lower socioeconomic status often have higher mortality rates. For example, a World Bank (1989) study found that individuals with lower incomes and education levels in Brazil face higher risks of certain non communicable diseases, and they also engage in higher levels of risky behaviour.

The process of social stratification takes place along many dimensions. People further down the social ladder usually run at least twice the risk of serious illness and premature death than those near the top. Nor the effects confined to the poor: the social gradient in health runs right across society, so that even among middle class office workers, lower
ranking staff suffer much more disease and earlier death than higher ranking staff (Wilkinson & Marmot, 2003). These are all, indeed, the upshot of complete deficiency, among other things, of well organized social support systems such as adequate health care.

3.4.2.12. Provision of Medical Care and Health

In many developing countries, even with inadequate growth performance, deliberate policy interventions aimed at provision of adequate health care resulted in noticeable improvements in the health status of population. For instance, the World Development Report 2003 characterized Cuba as a ‘puzzle’ of ‘good health without growth’. Cuba’s impressive health outcomes are thought to be attributable to the priority assigned by the government to health care, as evidenced by the establishment of well-staffed community clinics, immunization campaigns, vector control, and a commitment to minimizing inequality in access to health care (Alsan et al., 2008, p.25).

In most societies, health care benefits are distributed inequitably. Those who are better placed because of their possessions, entitlements, inheritance or skills, enjoy an unduly larger share of the benefits of health programmes. Barrier to health service access is a factor in differentiated health outcomes among different population groups within a society. There are several practical reasons for this, including location and cost. Communities that lack access to good quality health services may have higher burden of disease because sick individuals will delay seeking care or will turn to alternative options, such as traditional healers or self treatment (Chen et al., 2004).

Communities with local access to health care, emergency and security services, good educational opportunities and social support systems such as welfare and social security are more likely to have good health (Cheadle et al., 1991). Health for all by the year 2000 was launched as a global movement at the International Conference on Primary Health Care Alma-Ata 1978. It was based on the shared understanding of the World Health Assembly that hundreds of millions of people in the world had an unacceptable health status and that strategies were needed to tackle this problem. The conference established that “attainment of health required the action of social and economic sectors as well as the health sector” (Irvine et al., 2006, p.75). There are also misgivings regarding the relative contribution of medical expenditure and care in improving the health status of a community.
3.4.2.13. Medical Expenditure and Health

International comparisons suggest that higher medical expenditure do not necessarily result in better community measures of health, such as life expectancy. This research suggests that broader social and economic conditions that lead to poor health are more important for the health of the population as a whole than medical care once person has become sick (Wilkinson & Marmot, 2003). Support for this comes from the 2006 World Health Report, which shows that the United States ranks first among all 192 member nations of the UN in per capita health care expenditures ($5,711 per person per year in 2003) but ranks 24th in life expectancy (WHO, 2006). Notwithstanding the debates over contribution of health care to life expectancy, it is estimated that up to fifty per cent of premature mortality from ischemic heart disease may be amenable to health care (Tobias & Jackson, 2001; Capewell et al., 1999). The impact of medical care, especially in individual cases, depends very much on the doctor-patient rapport rather than any other amenities made available by the system. The doctor and patients should have good natured personal relationship and the strength of this relationship rests profoundly on the patients’ perception about their doctor.

3.4.2.14. Patients’ Perceptions of their Physicians

Patients’ perceptions of their physicians can influence health outcomes by increasing patients’ willingness to disclose information or to follow advice and return for care (Altice et al., 2001). Trust is a fundamentally important aspect of medical treatment relationships. Patient trust is related to, but conceptually distinct from, the more familiar concept of satisfaction with the physician. Satisfaction looks backward, based past experience, while trust looks forward, an expectation of future behaviour.

For trust any sort of personal relationship, especially when people are at a different location, a common lingua franca or mutually comprehensible language turns out to be an indispensable prerequisite. Greater proficiency in destination language would facilitate communication with health care providers, both in and out of hospitals, as well as facilitate understanding written instructions, including information regarding medication (Julian & Easthope, 1996).

The above exposition clearly underscores the fact that health is a highly valued asset and everyone rates good health as their most desired state. Health, indeed, is the end result
of a synchronized interaction of multitude of factors that can be attributed to the polity, economy and society. The fundamental factors required to achieve better health are common to all but have relative differences in their universal applicability. All these factors, via health, contribute immensely to the overall well being of society – the ultimate goal of human activity. But, the advantage of better health can also be gauged from its role in the overall growth and development of an economy since economic growth is a prerequisite for progress and social well being.

3.5. The Link between Health and Economic Performance

While there has been a reciprocal association, a strong causal connection from adult health to economic growth and development has been observed. Good health is especially relevant for sustained economic development and social cohesion. Health acts as a strong engine for economic growth and poverty reduction (Shanmugam & Venkataramani, 2006). A substantial body of evidence demonstrates that health, as measured by life expectancy or adult survival rates, has a significant effect on the pace of subsequent economic growth (Barro and Sala-i-Martin, 1995; Barro, 1996; Hamoudi & Sachs, 1999; Bhargava et al., 2001).

The World Development Report (World Bank, 1993) explicitly highlighted the ever increasing role for health in the pursuit of economic development. The cross country empirical study of Barro (1996) suggests that health status, as measured by life expectancy or analogous aggregate indicators, is an important contributor to subsequent growth.

In December 2001, the World Health Organization (WHO, 2001) Commission on Macroeconomics and Health (CMH), chaired by Jeffrey Sachs, presented its report assembling evidence of the economic benefits attributable to improving health in developing countries and putting forward recommendations for action on this evidence. It is reported that a ten per cent increase in life expectancy at birth increases economic growth by at least 0.3 – 0.4 per cent of GDP annually. The degree and extent of the close linkage between health and development depends very much on the techniques applied in the production process. Production techniques in poor countries more heavily depend on hard manual labour of which physical health is a more important determinant. Poor health of the population stands out as a significant factor among many causal factors that economists have proposed to explain the disappointing growth performance of the poor
countries. This suggests that health may play more critical role for the economies of developing countries than developed countries.

The contribution of good health to economic performance works through a number of major constituents, such as human capital cum productivity, labour force participation, lengthening of service, and elevated levels of savings.

3.5.1. Health as Human Capital

The role of human capital is almost universally regarded as being statistically significant in explaining economic growth and overall development of an economy. The concept of human capital and its crucial role in the economy was well examined, as early as in the 1960s and 1970s, in a number of theoretical and development models (Mincer, 1958; Schultz, 1961; Becker, 1964, 1975; Denison, 1979). In a paper, Lucas (1988) showed that the growth rate of per capita income depends on the growth rate of human capital. Mankiw, Romer and Weil (Mankiw et al., 1992) estimated that the Solow growth model augmented to include human capital can explain seventy eight per cent of the cross country variance of output per capita in 1985.

3.5.1.1. The Narrow and Broad Concepts of Human Capital

The main shortcoming of the above models seems to be that most of them have tended to rely on education as their variable for human capital, and this has usually been proxied by the average number of years of schooling or the percentage of population completing secondary or tertiary studies (Ramos et al., 2009). Enrolment and expenditure on education were also used by as proxy for human capital (Ljungberg, 2002). This narrow view of human capital was questioned fervently by many economists and this, naturally, led to the emergence of new theorizing, which considered human capital, in a broad sense, to encompass education and health. In this sense the broader definition of human capital as “labour skills, managerial skills, and entrepreneurial and innovative abilities – plus such physical attributes as health and strength” (Nakamura, 1981, p.265) reflects fully the spirit of the concept and its significance. Human capital acts as an intangible capability that increasingly contributes the ongoing process of economic transformation and the resultant growth over time and the health of workforce is an increasingly important element of human capability. The capabilities approach (Sen, 1993) suggests that the capabilities most essential for a good life are: adequate nourishment,
leading a long and healthy life, literacy and shelter. Sen (1997) argues that capability expansion not only has a direct impact on well being, but may also raise productivity (by expanding human capital), and encourage social development.

3.5.2. Health and Labour Productivity

Economists argue that there are only two paths by which an economy may increase its level of economic growth: either through more labour effort applied in the production process (specifically more jobs) or through an increase in the productivity of the workforce (Mahmud & Rashid, 2006). In reality, the productive capacity of the labor force together with capital formation, given the labour supply and technology, determines the actual development potential of an economy. The share of labour in national income is about two thirds in most countries. Labour thus constitutes the most important factor of production, and changes in productivity can significantly affect total income. In turn, the productivity of labour is a function of two types of factors: the skills of individuals derived from their innate physical and mental capacities, and education, training, and other investment in their human capital; and the efficiency of labour organization and management. Improvements in health can affect labour productivity through both of these channels (Jack, 1999).

3.5.2.1. Poor Health and Economic Performance

Poor health of the individuals, constituting the workforce, is the prime causative factor leading to differences in productivity growth and this, in turn, results in a less than optimum performance. In the short run, poor health, without access to medical care, compels a worker to abstain from work and there is decline in productivity. In some cases, ill health may leave persons able to work, but reduce their productivity (World Bank, 1993). In the long run, in addition to the decline in productivity, illness and disease shorten the working lives of people, thereby reducing their lifetime earnings. The adult health status plays an important role in determining whether or not they participate in the workforce and also will have a bearing on the determination of optimal retirement age. If the debilitating health causes experienced workers in the workforce to die prematurely, there is that much erosion in the human capital stock of the nation. These situations unquestionably warrant greater expenditure on medical care even though the current opportunity cost of such expenditure may be much higher.
3.5.3. Implications of Health Care Expenditure

Spending money on improving the health status is expenditure towards the improvement of human capital, or quality of the population, which will pay dividends in the future. Expenditure on health consists of two aspects: what the government spends on health and what is spent by citizens on looking after their health. In countries where social services are absent or income dependent, health status is likely to reflect lack of access to health care by lower socioeconomic groups and/or lack of ability to pay.

3.5.3.1. Direct and Indirect Costs of Illness

In the absence public funding and support, the individuals confront a situation of bearing all the costs associated with illness. The money spent on medical care and the earnings from employment that are foregone as a result of illness constitute the overall cost of illness. The expenditures for medical goods and services such as medications, doctor visits and hospitalization come under medical expenses, whereas, the present value of the labour earnings that are foregone as a result of illness constitutes the human capital cost. Any expenditure associated with illness entails welfare loss on the part of individuals but it is quite apparent in the case of direct medical expenses. To pay for the medical expenses from illness, the individuals must take money out of savings or reduce other consumption activities. If the entire medical expenditure is met by reducing current consumption, then, it leaves the savings unaffected. But in most cases there is negative saving effect as the money from curtailed consumption becomes insufficient to meet the ever increasing health expenditure. The problem gets aggravated as the affected individuals reach the age of retirement from employment.

The medical treatment costs, very often impoverish the family. Assets are sold and debts taken on. Thus begins a downward spiral from which the family may never recover. Problem worsens when an active adult becomes permanently disabled: the person can no longer work but must still be fed (Peters, 2003). This, indeed, sets in motion the never ending problems for the family that ultimately lead to loss of individuals’ welfare.

The losses in the individuals’ welfare, as a result of direct medical expenses, cannot be summed up in order to arrive at the impact on societal welfare, as there is the existence of a microeconomic paradox. Direct medical expenditures by individuals do not correspond to a fall in aggregate income or consumption; they simply constitute a
redirection of economic activity, with some sectors of the economy actually benefitting from increased economic activity.

3.6. Conclusion

In this section, I have looked into the multidimensional concept of health. The multidimensional character of health precludes the possibility of evolving a universally acceptable definition of health and, therefore, there are numerous definitions of health. Of the countless definitions, the one given by the World Health Organization seems ideal but unattainable at the societal level and not discernible from a practical point of view. Moreover, the apparent paradox between the dramatic improvements in health status based on certain globally acknowledged indicators, on the one side and the growing burden of disease on the other calls forth a meticulous refocus of our attention. A comprehensive investigation into the health status of any community, therefore, must take into account the rate and prevalence of morbidity as well as functional capability and the well being of individuals constituting the community. As these fundamentals have much to do with the quality of life a group enjoys, improvement in the quality of life sans improvement in health status seems an absolute impossibility.

The exposition in this section brings into spotlight the numerous aspects to be taken care of while investigating the socioeconomic impact of the health status of any population. Against the backdrop of this understanding the next section will attempt to put forward an appropriate norm for measuring health status in the present-day Kerala setting, by evaluating the relative implications of the various, conventional, standardized and non-standardized measures of health status.
References


