CHAPTER 1

INTRODUCTION
Health is the foundation for all cultural and civilizational developments as the healthy individual is the maker of culture and civilization. Creating healthy individuals needs active planning and hard work as health rarely works through magic bullets. The health professionals need what the poet Adrienne Rich has called “wild patience” combining ingenuity, evidence, common sense, passion, a sense of urgency and above all a sense of justice. The challenges to health today are much larger and even more fundamental. A new conceptual map for health action that incorporates scientific and technological development, political, social and economic action, as well as domestic and global public health responsibilities in new ways needs to be developed.

“The basic objective of development is to create an enabling environment in which people can enjoy long health and creative lives”, wrote Mahbub ul Haq in the first Human Development Report in 1990. That simple truth is sometimes forgotten. Mesmerized by the rise and fall of national incomes (as measured by Gross Domestic Products), we tend to equate human welfare with material wealth. The importance of Gross Domestic Products (GDP) growth and economic stability should not be understated. Both are fundamental to sustained human progress, as is clear in the many countries that suffer from their absence. But the ultimate yardstick for measuring progress is people’s quality of life. As Aristotle argued, “Wealth is evidently not the good we are seeking; for it is merely useful for the sake of something else”. That “something else” is the opportunity of people to realize their potentials as human beings. Real opportunity is about having real choices—the choices that come with a sufficient income, education, and good health and living.

The issues related to health services in developing countries like India are not simply medical problems but also serious inhibiting factors in the pursuit of development because health problems are not only threats to individual lives, human
security, but also have negative socio-economic impacts on societies. For example, people’s health conditions become worse with the problems caused by a fragile health system, such as a lack of access to health services, health education, safe drinking water and adequate sanitary facilities, as well as malnutrition, resulting in, at the national level, the shrinkage of labour force, increase in the cost of medical care, and loss of educational opportunities among those affected by poor health. The number of potential risks to health is almost infinite, and the rapidly changing age structures of many populations will lead to changing risk profiles in the coming decades.

Health and population are intimately linked to each other, as a country will not be able to provide better health unless it simultaneously addresses ‘the population problem’; and vice versa, population growth will not abate unless health is improved dramatically.

Poverty is another underlying determinant of many risks to health and affects disease patterns between and within countries; other aspects of socio-economic development, particularly education for women, also has a key role to play. The chain of causes – from socio-economic factors through environmental and community conditions to individual behaviour – offers many different entry points for prevention. Globalization has been hailed as a strategy to reduce poverty, but the liberalization of trade can lead to both benefits and harms for health. Approaches can be combined so that interventions focus on background environmental (for example, indoor air pollution) and distal (for example, sanitation) risks, as well as more proximal risks such as physical inactivity and alcohol abuse. Tobacco is either an established or a rapidly emerging risk to health in all developing countries. The need for more stringent tobacco control is uniformly recognized, including increased taxation, bans on advertising, and the introduction or expansion of smoke free environments and
cessation programmes. Alcoholism, another commonly cited and increasing risk to health in many countries. Conditions with important dietary components, such as diabetes, obesity and hypertension, are increasingly globalized, even in countries with coexistent under nutrition.

Education is another variable that influences the perception that the person has towards health. Education improves the opportunities for economic empowerment for an individual and is directly linked to better health. Education inculcates attitudes and values and enlarges the psychological dispositions that orient the behaviour towards modernity. It develops scientific and rational thinking about various aspects related to health. It can help a person make correct decisions about the intake of nutritious food, importance of breastfeeding and appropriate practices with regard to child care. It also affects the use of family planning measures. Education helps a person to comprehend the relevant information about the causes of cancer. It develops right attitude and respect towards women in the minds of the people. It also provides necessary and appropriate information about cause, consequences and preventive measures of HIV/AIDS. Thus, education is an important modernizing agent and influences health and promotes right knowledge about health related information.

India's health achievements since 1950 fill half a glass. They include a doubling of life expectancy, a halving of mortality in the population at large as well as among infants, a highly susceptible group, and a reduction by two-fifths of fertility. Two important diseases: smallpox and guinea worm are eliminated and others such as 'kala azar' (leishmaniasis) and leprosy are significantly reduced. Several hundreds of thousands of doctors and paramedics have been trained and a public health system that is spread throughout the country is been built.

Since Independence, the Government has paid particular attention to India's
endemic health problems. Progress has been made in combating malaria and plague and in controlling tuberculosis. Overall life expectancy at birth was about 63.2 years in 2002, compared with 32 years in 1941. The infant mortality rate declined from 151 to 91 per 1,000 live births between 1965 and 1989. In 2002 the infant mortality rate was 61 deaths per 1,000 live births.

Basic health services reach people even at the grass root level through Community Health Centres, Primary Health Centres (PHC), Sub-Centres (SC) and Community Centres (CC) spread throughout the country. In 1998, there were 23179 PHCs, 137006 SCs and 2913 CCs. The population per physician has decreased from 2171 in 1990, to 1916 in 1998. The population per health personnel, such as nurses, midwives and auxiliary nurse midwives has also reduced. The population per nurse, which was 2670 in 1990, decreased to 1598 by 1997. Similarly, the population per midwife and auxiliary nurse midwife together has decreased, from 5525 in 1990, to 3199 in 1997. In 1993 some 410,875 doctors were practicing in government hospitals and private clinics, providing an approximate ratio of one doctor for every 2,459 people. The country was served by over 642,100 hospital beds, in approximately 15,000 hospitals. In 1990, India had 11,600 hospitals, increasing to 15,200 by 1997. The population per patient bed however has not improved over the years. In 1990, the population per patient bed was 1031, which rose to 1376 by 1997. Several private and nongovernmental organisations are involved in providing health services to the people in different parts of the country; many of them specialized in specific health service.

During the last thirty years, mortality levels have decreased. The Infant Mortality Rate (IMR) decreased from 137 per 1000 live births in 1970, to 26 in 1992 and further to 21 in 2000. The Under-Five Mortality Rate (U5MR) has also declined steadily over the years, from 206 per 1000 live births in 1970, to 86 in 2000. After
1997, however, the pace of mortality decline has slowed down. Life expectancy has also improved, from 43.5 years for males and 41.7 years for females in 1955-60, to 61.9 years for males and 62.6 years for females in 2000. The gap between male and female life expectancy has not only narrowed, females now live longer than males.

The overall literacy percentage in India increased from 42 in 1980 to 56.5 in 1999. Over the years, both male and female literacy rates have increased, and the gap between the two genders has slowly narrowed. The male-female literacy gap was 29 percentage points in 1980 and remained the same in 1992. By 1999, it had slightly narrowed to 23.3 percent. India seems to have made considerable development in the fields of health and related fields, but there is half a glass yet to fill, and this is no buttercup, as the country’s health needs remain enormous.

The generation that was born after Midnight in the dawn of the Republic, cut its professional teeth in the late '70s and early '80s to the jingle, 'Health for All by the Year 2000'. Alas, those who are still around will be sporting replacements before India is delivered by this mantra. The Year 2000 is over, but the goal of 'Health for All' remains a distant dream, here as in much of the developing world. For the country’s health, the turn of the century is not a major landmark, nor even an inflexion point of any significance. At a stretch, the year may represent a half way mark between 1950, when India embarked on creating its health future, and 2050, when we can still dream it could achieve a decent standard of health for most of its citizens.

India’s population crossed one billion in 1995 nearly triple of that of 1950. By 2050, it is expected to stabilize around 1.6 billion, a global first, as we will exceed the population of China around 2035. To stabilize largely connotes an equalization of births and deaths, necessarily at a low level since both longevity and birth control are
aspirations of a modernizing society. A rate of about six deaths and six births per 1000 people would be acceptable. This means that the country's current death rate (8.7 per 1000) would have to be cut back by about a third, and the birth rate (27 per 1000) by over three-quarters.

Table No. 1

Demographic Characteristics of India

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
<th>2030</th>
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<tbody>
<tr>
<td>Total population (thousands)</td>
<td>108937</td>
<td>116402</td>
<td>129129</td>
<td>140892</td>
</tr>
<tr>
<td>Adults 15 years and above (percentage)</td>
<td>66.5</td>
<td>70.8</td>
<td>75.3</td>
<td>77.6</td>
</tr>
<tr>
<td>Percentage of urban population</td>
<td>28.4</td>
<td>33.4</td>
<td>39.2</td>
<td>45.8</td>
</tr>
</tbody>
</table>


In 2000, about 66.5% of the population was 15 years and older. This will increase to 77.6% by 2030. India’s urban population was estimated at 28.4% in 2000. Every ten years the proportion of urban population will increase by about 5.5%, reaching 45.8% by 2030. India’s mass of humanity – one-sixth of the world’s total continues to struggle against decimation and multiplication through the next several decades. Where India must focus to bring about stabilization is obvious from a few simple statistics.

The dead today still include a significant proportion of the very young. Of around 8.7 million deaths that occur annually, over two-thirds are of children under
five years of age, and almost one in four, about 1.5 million, are of infants (under one year old). Reducing these deaths by half would achieve the necessary reduction in the mortality rate and, would also accelerate the decline in the birth rate. A major cause of poor child survival is the pitiful state of health of Indian women. One-third of infants are born ‘low birth weight’ and hence at higher risk of death or physical underdevelopment because their mothers suffer from anemia, chronic malnourishment and/or infection.

During their reproductive span (15-45 years), Indian women still die from pregnancy related causes at alarming rates, accounting for more than a quarter of the world’s maternal deaths. Underlying both child and maternal deaths are malnutrition and rampant infectious diseases. About 53% of Indian children under five are malnourished and over 60% of Indian women are anemic.

Diseases such as malaria, tuberculosis, diarrhea, respiratory illnesses, and other childhood infections are still widespread and affect the poor disproportionately. One person dies of tuberculosis and there are five new cases of malaria every minute in India (Chatterjee, Meera, 2001). Problems of infectious disease, malnutrition, and high death rates among children and mother constitute major public health problems in India (Katti, SM, 1997).

While communicable diseases still continue to be the major cause of morbidity and mortality in the Country, urbanization, industrialization and associated changes in life style pattern towards a more sedentary life have led to the growing rise in the incidences of non-communicable diseases like cardiovascular diseases, hypertension, diabetes, degenerative diseases and cancer. The situation has been further complicated by the shift in the demographic transition of the country due to increase in life expectancy as more and more people are added to the aging population. A new
challenge has emerged due to ever-growing spread of HIV and AIDS in the country. Estimates of HIV infection at national level are about 3.5 million cases. As on April 30, 2000, a cumulative total of 96,694 persons have been reported to be HIV positive and at the same time 11,566 full blown cases of AIDS have been reported in the country. A new dimension has also been added to the prevailing problem of tuberculosis by the emergence of Multi Drug Resistant form of tuberculosis and increased association of tuberculosis with HIV and AIDS. Malaria continues to be a major health problem throughout the country. Occurrence of dengue is seen every year in several cities and towns. Tobacco related diseases are on increase despite banning the tobacco products in some states.

The Gross Domestic Product (GDP) per capita annual growth has barely improved in the last 20 years. It was 5.8% during 1980-91, and by 1999-2000 had increased to 6%. Table 2 shows the per capita Gross National Income (GNI- formerly Gross National Product or GNP) increasing slowly, from US$ 360/- in 1990, to US$ 460/- in 2000. The per capita Purchasing Power Parity (PPP) has also increased, from US$ 1072 to US$ 2432 for the same period. Despite demographic forces negatively influencing the economy, the proportion of population under the national poverty line has declined from 49% in the late 1970s to 35% in 1997.

The proportion of the population under the international poverty line of US$ 1 a day is very high (44.2%). India has allocated meager resources to health and education in the last decade. Public expenditure on education has remained the same (3.2% of GNP in 1988-1990 and 1995-1997). The Human Development Index improved by nearly 12 percentage points in the 1990s, from 0.510 in 1990 to 0.571 by 1999.
Table No. 2


<table>
<thead>
<tr>
<th>Socio-economic indicator</th>
<th>1990</th>
<th>2000</th>
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<tbody>
<tr>
<td>GNI per capita (US$)</td>
<td>360</td>
<td>460</td>
</tr>
<tr>
<td>PPP GNI per capita ($)</td>
<td>1,072</td>
<td>2,432</td>
</tr>
<tr>
<td>GDP average annual % growth</td>
<td>5.8 (80-90)</td>
<td>6.0 (1990-1999)</td>
</tr>
<tr>
<td>International poverty line: Population below US$1 a day</td>
<td>Not available</td>
<td>44.2 (1998)</td>
</tr>
<tr>
<td>Population below the national poverty line (%)</td>
<td>49</td>
<td>35 (1997)</td>
</tr>
<tr>
<td>Human Development Index</td>
<td>0.510</td>
<td>0.517 (1999)</td>
</tr>
<tr>
<td>Public expenditure on health as (%) of GDP</td>
<td>0.9</td>
<td>0.6 (1990-1998)</td>
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At the PPP rate, one International dollar has the same purchasing power parity over domestic GNI that the U.S. dollar has over U.S. CNI. PPP rates allow a standard comparison of real price levels between countries, just as conventional price indexes allow comparison of real values over time.

India is lagging behind in all aspects of health, the main reason being superstitious belief, ignorance, illiteracy, overpopulation growth and poverty. Further health policy in India has been tragically inconsistent in acknowledging these fundamental understandings and underpinnings, and dealing with them. Policy makers thus need to take a new, long and hard look at where we are, and whither we are heading on the health front. While the Government spends its limited resources infructuously, the poor are consigned to repeated cycles of illness, exploitation and
dwindling physical, financial and psychological strength. Most of the knowledge that
is needed to address the major diseases that affect them and prevent this vicious
downward spiral, and the technology, exist. What is still missing in the health services
is the managerial competence to deliver services of effective quality in the appropriate
balance, and the political-bureaucratic will to allocate the resources that are required
to do so.

The health facilities that India has built with great fervour, and greater expenditure, over the past fifty years remain beyond the reach of the poor – indeed, beyond a sizeable proportion of rural residents, rich and poor. They have little access to health care beyond the occasional ‘check up’ or advice of the government ANM (Auxiliary Nurse Midwife) and the handful of ‘carcin’ found in a jar at the village petty-shop. Despite a large public and even larger private health sector, appropriate and affordable health care remains inaccessible to several hundreds of millions, particularly women and children. Large numbers of villages are unconnected by road or public transport within a reasonable time-distance norm of a health facility or modern doctor, public or private. Curative care without follow up instructions or health education is about as good as sowing seeds and neglecting to water them.

While health services alone will not solve all the extant problems, a system seriously committed to improving health would work with the food distribution efforts, notably the public distribution system and the Integrated Child Development Services (ICDS) to enhance nutrition, and with public health engineering departments to increase the health impacts of water and sanitation schemes. India cannot lay legitimate moral claim to being a modern society unless it squarely addresses the primordial health problems it harbours and the underlying disadvantages that afflict ‘the other half’.
Inkeles, A. and Smith, D.H. (1974) rightly remark that ‘Nation building and institution building are only empty exercises unless the attitudes and capacities of the people keep pace with other forms of development’. The process of modernization involves not only enormous institution building in the social, economic, political and other spheres of the life of people but also a basic change in the knowledge, attitudes and health practices of the individual. To bring about this change, an educational intervention needs to be designed. Health Modernity Education (HME) is one such relatively inexpensive intervention, which is widely acceptable to the communities in which it takes place and has greater potentialities to reach and influence those at risk (Singh, 1983; Singh, 1984; Singh, 1988; Halyal, 1995; Halyal, 1996; Jayashree, 1992, Suraj, 1992; Kenchappanavar, R. N, 1997, Halya, 2000). This Health Modernity Education should be designed taking into consideration the demographic characteristics and present knowledge, attitude and health practices of the target population in order to make a strong impact on that population. Besides, it is also important to identify the misconceptions and areas of ignorance prevalent amongst the target population.

A suitable health educational intervention will not make illnesses disappear or make everyone healthy forever. But it will help people cultivate scientific knowledge with regard to various health related issues, differentiate between healthy and unhealthy practices, and develop right attitude. This in turn will ensure and enhance the overall development of their own self and that of their family members.

The desire for a healthier and better world in which we live our lives and raise our children is common to all people and all generations. Life in 21st century could and should be better for all. There can be no greater gift to the next generation than a healthier future.
FOCUS OF THE STUDY

Health assumes a key status in the process of development, since the individual must be alive and cognitively competent to be economically productive, socially liberal and politically democratic. Being healthy, meaning a complete state of physical, mental and social well-being including the absence of illnesses, is one of the goals most valued by human beings. Thus, the most common analysis related to health is an understanding of factors that determine good health for its intrinsic value. It is unquestionable that avoiding or alleviating illnesses, and developing and maintaining our physical and mental abilities are something that at an individual and social level are considered an essential part of human welfare.

Goa from a backward state in 1961 has emerged as one of the most developed state with a high per capita income, high literacy rate, better health standards, better quality of life and better standard of living. The economy has advanced from agriculture and mining to that of industries and poised to the next stage of evolution viz. high technology industries, information and service era. Goa has witnessed an era of transition and metamorphosis in the twentieth century. It has one of the most extensive health systems in India. The public health system includes higher training institutions for doctors, dentists, pharmacists and nurses, two major district hospitals at Mapusa in the north and Margao in south and a network of smaller hospitals and private nursing homes. There are nearly 4 hospital beds for every 1000 people in the state (as compared to 4 beds for 600C people in India). Health care is available near people’s home as a result of Primary Health Centres, Community and Urban Health Centres and Rural Medical Dispensaries. In addition, there are private medical practitioners in nearly every corner of the State. Special hospitals are available for the care of the severely mentally ill and tuberculosis and chest diseases. Indeed,
there is more than one doctor for every 1000 persons living in Goa, as compared to less than one for every 2000 persons in the rest of the Country (Patel, V, 2001).

Despite this impressive range of health services, the State appears to be losing the ground on health front. Malnutrition, communicable diseases and non-communicable diseases are still present. Non-infectious and infectious diseases are becoming more common. Tackling the woes in the State’s health care system is not an easy task. Social and economic changes are rapidly bringing in a new set of problems. Addressing these health problems requires far more than mere infrastructure and rudimentary support (Patel, V, 2001).

The situation demands suitable intervention strategy in order to create scientific knowledge and positive attitude towards various health related issues amongst the general public that will help them to understand and tackle their health related problems in a better way. But in order to do so, adequate tools are required to measure the actual knowledge and attitude of the people. Health Modernity Scale is one such tool that can be used to identify the areas of misconceptions and ignorance. Once the areas of misconception and ignorance are identified, suitable Health Modernity Education can be developed.

The present study is an attempt to examine the health modernity of two sample sub groups, other Goans and fisher folks sub groups and to investigate the influence of gender, education, SES, religion, domicile, marital status and age groups on health modernity. The researcher also intends to design an educational intervention based on the areas of ignorance and misconceptions present in the sample sub group.