CHAPTER – 7

CONCLUSION

Most of the analysis of health inequities in India till date is focused on disparities between population health as measured by mortality indicators. But India has made significant gains in health in terms of improvement in life expectancy at birth and declines in death rate. So analysis of morbidity is important. It is also meaningful to analyse inequality within populations and not just between populations. So a study of inequalities in health measured in terms of morbidity of individuals fills a lacuna in the analyses of health inequalities.

Major Empirical Findings

There are wide inequalities in the incidence of ailment across states. While the average rate of incidence of ailment for the country as a whole is about 5.5 %, there are wide variations in this figure across states. States like Assam, Himachal Pradesh, Kerala, & Punjab have more than 7% incidence of ailment. While states like Bihar, Gujarat, Karnataka, & Madhya Pradesh have a rate of 4% or less in the incidence of ailment.

Place of residence of an individual in terms of rural urban location does not reflect any disparities in health for most states except Himachal Pradesh & Kerala. But this result does not seem very surprising because not only the rural areas but even the urban centres are plagued by an abysmally poor provision of public health facilities. In the rural areas, people have to travel at least 1 km to fetch water. In the urban areas, though 89% of the urban population is covered by treated water supply, water is supplied only for few hours a day. About 54% of urban households do not have access to water, toilets and 64% are not connected to the public sewerage system. Almost 50% of solid waste remains uncollected. In rural areas, sanitary services are almost non existent and for most of the population, defecation takes place in open fields.

Contrary to the accepted notion of health inequalities in India, there is no gender based inequality in the distribution of morbidity as per the NSS data.
The NSS data shows that the inequalities in health are greater than the inequalities in living standards as measured by per capita final consumption expenditure. The Gini coefficient of per capita final consumption expenditure for all the major states in the country is about 0.2, while the Gini coefficient for morbidity is about 0.5 for all major states.

It is almost customary to expect inequalities in health to be associated with socio economic inequalities in the society. But surprisingly, morbidity distribution is skewed in favour of the poorer segments of the society, and against the richer sections. In the literature, this has been attributed to a suspected reporting bias in the measurement of health. We are not in a position to test conclusively for reporting bias on account of data limitations, but we do get some pointers to reporting bias through the HOPIT model for the sample of the aged people in the data.

Although, income related inequalities in health outcome are not observed in the NSS data but other socio economic inequalities in health are observed. There are inequalities in morbidity across education levels of the people. The more educated people have a lower incidence of morbidity compared to the less educated people.

In the rural areas, health disparities are also observed by occupation categories. The self employed people in non agricultural activities and non agricultural labor are characterized by greater morbidity compared to other occupational classes.

The NSS data shows that greatest morbidity burden is coming from diseases like short duration fever, diarrhoea, gastroenteritis, cholera, gastritis, cough, bronchitis, whooping cough, and acute respiratory infection.

**DETERMINANTS OF HEALTH INEQUALITY**

*Regression Analysis*

It is widely recognized that health outcomes are more responsive to preventive health interventions (Deolaliker 2004). But no comprehensive studies on equity issues relating to water supply, sanitation, and health have been undertaken have been conducted (Planning
Commission, GOI, 2002). It is in this backdrop that the decomposition results of health outcome inequalities provide useful insights into the determinants of inequality. This is more so because this decomposition analysis is not the traditional decomposition of inequality within and between groups. It is a regression based decomposition analysis that has been carried out. Such a decomposition analysis allows (i) the identification of those variables that influence inequality, (ii) permits functional flexibility in the determination of inequalities, (iii) allocates a non trivial share of overall inequality to the constant and the residual terms in the regression model.

The results show that about 50% to 60% of the inequalities are due to age related factors. This age related factor is made up of greater incidence of morbidity among the children and the aged people. In the NSS data, there is a greater preponderance of the children aged between 0 to 14 years, in this group of people. The contribution of age to inequality, while on the one hand reflects the quantum of inequality due to unavoidable factors; on the other hand it also brings out the need for a more proactive population policy and greater attention towards family and child health care.

The rest of the inequalities that is about 40% to 50% of the total inequalities represent inequality due to avoidable factors. This is a large proportion of inequality that can be and should be ameliorated.

Of the major factors that contribute to this avoidable inequality, is the availability of drains. Availability of toilets and access to safe drinking water also make a large contribution to inequality. Provision of health care facilities is contributing much lesser proportion. This is an important finding. It suggests that the major thrust of health care should be on preventive and public health care. This will not only help to reduce the disease burden but will also help to reduce the inequalities in morbidity.

**Simulation Analysis**

The results of the simulation analysis also show that the largest gains in the inequality in morbidity are obtained by improving the drainage facilities. The gains that result in inequality reduction by improving provision of health care facilities and providing
greater access to safe drinking water and flush toilets are lesser than those that are achieved by provision of better drainage in the form of covered pucca drains.

Some Inferences

Equity in health care is desirable to prevent impoverishment of individuals and to separate utilization of health care from the ability to pay for it. But equity in health care is also desirable to promote the equity of health. Our analysis tells us that the components of health care defined narrowly in terms of medical expenditure and medical care centres whether government or private have played a secondary role in promoting equity in health outcome, as measured by incidence and severity of ailment. A more decisive role is played by public health variables defined in a broader sense. Chief among them is the availability of drainage facilities, toilet facilities and safe drinking water.

India’s health care system is based on a model of sufficient public financing and universal access to publicly provided services at little or no cost to the user and covers most of the user’s health needs. The fulfillment of the goal is remains distant and what has emerged is an overwhelmingly private system of ambulatory care which is a major source of treatment for lower income groups and which provides bulk of interventions for many disease of public health significance such as diarrhoea, childhood respiratory infections, malaria, TB etc. Berman (1998).

This makes a strong case for public action on the basis of externalities associated with secondary prevention (primary cure prevents further transmission or more severe sequelae of untreated diseases) of morbidity.

Given the dominance of private expenditure on health care and the nature of that expenditure, the important contribution of public health variables in the total inequality and the large reductions attained in inequality by providing more drains etc., the kind of thrust that needs to be imparted to the health care policy is obvious. A better provision of public health facilities is also expected to bring a reduction in out of pocket health care expenditure by controlling many diseases that have public health significance such as malaria etc.
Rafei (2000) is also of the view that there should be a convergence of the dichotomies that exist between medicine and public health to overcome the double disease burden of infectious and non-infectious diseases. Curative care, which is the main domain of medicine, will be overburdened if public health does not do its job well in disease prevention and health promotion.

While increasing the public spending on health is a frequently affirmed objective of health policy, it is also important to consider the functional composition of health spending. It has been found in this study that health outcomes are more responsive to public health interventions. Unfortunately, the lion's share of government health expenditure in most Indian states goes towards the provision of curative services. Relatively little is spent on preventive and public health activities. In 1999, Maharashtra was the only state where 37% of the total state government expenditure was spent on public health activities. In Bihar, Kerala, Karnataka, & Punjab less than 10% of the total state government expenditure was spent on public health activities. While for the states of Andhra Pradesh, Gujarat, Haryana, Madhya Pradesh, Orissa, Rajasthan, Tamil Nadu, Uttar Pradesh, & West Bengal the figure lay between 10% and 20%.

A major bottleneck in an effective policy formulation is the institutional set up in the country, where different government agencies are responsible for fund allocation, policy formulation and implementation of different activities like water supply, civic sanitation, health promotion etc. Though all these activities are covered under the state subject and states are empowered to enact laws or frame policies related to these issues, but even then at times, the states are constrained by the availability of resources, at other times they lack the necessary vision to frame the right policies and at some other instances the necessary political will power to execute policies in an effective manner may be missing.

Health authorities capacity as advocates of improved water supply and sanitation services also needs to be strengthened by linking disease surveillance with environmental surveillance program.

But while improving access to water supply, sanitation etc. is necessary; it is not sufficient to reduce disease prevalence without also improving practices and behaviour.
To do this, health promotion and education programs will need to be strengthened to achieve behavior changes needed to improve health practices.

Health authorities must take action to ensure inter program collaboration, where water supply and sanitation concerns intersect with program for disease prevention & control, primary health care & healthy settings, and health equity.

**Limitations of the Study**

Nutrition is an important determinant of health and illness. Unfortunately the NSS data that we are using does not collect data on the nutrition intake of the individuals. Information on the nutrition intake would have been useful in revealing its importance in determining the average levels of morbidity and the distribution of morbidity among individuals.

Another caveat in the study is that data on health behaviors of the people in respect of washing hands, water storage & water handling practices is not there. This may have helped to establish more illuminating pathways that determine the relationship between access to safe drinking water, sanitation and health.

Another limitation of the study is that in the absence of information on the unit cost of provision of public health facilities and health care facilities it is not possible to get an idea about the monetary cost of obtaining a given reduction in the health inequality. Incorporation of the cost of providing different types of health services would have made the results of the simulation study more informative.