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Health Care System in India: Towards Measuring Efficiency in Delivery of Services, Brijesh C. Purohit (Gayatri Publications: Delhi), 2010; pp XI+187, Rs. 600.

All over the world, concern is growing about efficiency of the health care system. The concern is severe in case of developing countries with different socio-economic backgrounds wherein citizens face distressingly different prospects of living a healthy life. There is widespread disparity in various measures of health between the privileged and the deprived despite the long-term tendency towards convergence of a healthier society. In industrial countries, there is a shift in the health care system from the principle of universal access to a more market-oriented system that is causing growing disparities. The rise in income inequality is another potential problem creator. Policy makers worldwide talk about efficient delivery of essential health care, but disagree on what counts as essential and on the optimal mix of private and government components of service. In Indian context, the current book has the answer to this short of pertinent questions.

It is properly mentioned in the book that the health care system performance could be monitored with either in terms of efficiency, effectiveness, or economy. Efficiency indicator is rightly defined as "the extent to which a health agency or health system maximizes the output produced from a given set of inputs or minimizes the input cost of producing a given set of outputs". This has been accurately estimated by deploying 'frontier efficiency measurement techniques'. Some of the techniques discussed are capable of making sensible analysis on health care system at national and sub-national level. The secondary sources of statistics provided in the book relating to health care system ranges from the First Plan period to the current decades is amazingly great. The study under the aegis of the National Commission on Macroeconomics and Health of the Government of India compared 14 major states as its focus as well as all-India and a sub-State level analysis of five States (Punjab, Maharashtra, Karnataka, Madhya Pradesh and West Bengal). The whole gamut of questions are addressed with appropriate statistical techniques and having contemporary relevance.

In recent years, with growing public attention to the problem of health inequalities, a huge literature has accumulated regarding the link between socio-economic factors and health. Effectiveness is the extent to which programs and services (outputs) of a system achieve the desired outcomes. "Economy refers to buying appropriate quality resources or inputs in the most economic manner (or at least cost)". Among various lines of recent research, the influence of income inequality on health is perhaps the most popular area. Over the last decade, a series of studies have provided evidence that the extent of income inequality in society is negatively associated with the health status of citizens, based on cross-sectional comparisons between and within countries and at sub-national level.

Statistical Measurements

Three broad approaches to economic performance measurement are generally used. These are (i) index number technique; (ii) statistical programming approach; and (iii) mathematical programming. These empirical testing led to a controversy over the pathway through which income inequality affects individual health status. Some of the researchers have largely focus on the negative effects of psycho-social stress resulting from the perceptions of relative deprivation and the disruption in social cohesion that are more prevalent in unequal societies. This hypothesis is substantiated by the finding that more egalitarian societies exhibit more cohesion, less violence, lower homicide rates, more trust, lower hostility scores, and more involvement in community life.

The 'stochastic frontier analysis' and 'data envelope analysis' hypothesize the fact that: "States differ in their technical efficiency pertaining to health system due to the factors which requires emphasis in health facility planning". It is also hypothesized that these factors differ from State to State according to their level of development. A number of studies have raised concerns about the validity of the empirical relationship between income inequality and health. It is the level of a country's income, rather than the degree of inequality, that is crucial. An interesting exception to these usual patterns of health care disparities is New Zealand, where the poor were found to receive either appropriate or slightly excessive use of services given their estimated health needs.

This may be explained by the effects of a continued restructuring of the New Zealand public health system that focuses on providing decent minimum care.

As the review of the literature on healthcare reveals in this book, economists and epidemiologists are primarily focused on empirical issues: establishing the facts on differences in health care by socio-economic status, and measuring the impact of inequality on health outcomes. Discussions of such normative issues as how much of national resources ought to be devoted to health care or how these resources ought to be distributed within the population are left largely to legislatures and to various socio-economic organizations and think-tanks. International institutions, such as, the World Health Organization (WHO) and International Labour Organization (ILO) have called on all countries to guarantee delivery of "high-quality essential care to all persons, defined mostly by criteria of effectiveness, cost and social acceptability".

Major Findings

As incomes rose, the public demand for health services increased much more rapidly than income (because of the high income elasticity of the demand for health care), making the cost of operating such systems unsustainable. In Indian case, as the book reveals, there is widespread disparity prevalent across rural and urban areas, poor and rich states and a notable neglect of some of the emerging needs of the society. Public sector investment has rather come up as a less efficient system thus providing a major impetus to the private sector for an investment which is more inequitable and less regulated. It has been rightly pointed out that inefficiency in public sector health care services has been a propelling factor for the private sector services (NRIs, Industrialists and Pharmaceutical companies played pivotal role) to expand more to compensate for inadequacy in care.

There is no clear agreement currently on the optimal mix of private and government components of health care services. There is not much of a literature on this question, nor is there a consensus on the criteria that should be invoked to resolve the issue. Moreover, conditions vary so much from country to country that the optimal mix cannot be the same for all countries.

Since deaths due to infectious diseases are now a small proportion of total deaths, it might seem that environmental improvements that were so important in reducing health risks have been exhausted. Such a conclusion is premature. A series of recent studies has reported a connection between exposure to stress (biological and social) in early life, with the onset of chronic diseases at middle and late ages, and more so with reduced life expectancy. The strongest evidence for such links that has emerged thus far is with respect to hypertension, coronary heart disease, and type II diabetes.

The urgent needs include the distribution of drugs to combat tuberculosis, malaria, and acute gastrointestinal and respiratory infections; vaccines to prevent measles, tetanus and diphtheria; and improved nutrition in order to revitalize immune systems, reduce pre-natal and neo-natal deaths, lower death rates from a wide range of infectious diseases, and improve the functioning of the central nervous system.

It is likely that past public health reforms, improvements in nutrition and other living standards, and the democratization of education have done much more to increase longevity than has clinical medicine. The main thing that physicians do is to make life more bearable: to relieve pain, to reduce the severity of chronic conditions, to postpone disabilities or even overcome some of them, to mend broken limbs, to prescribe drugs, and to reduce anxiety, overcome depression, and instruct individuals on how to take care of themselves.

Missing Priorities

Although the access to health care matters, insurance does not guarantee adequate access. An important but poorly addressed issue in this book is how different attitudes toward risk influence the insured and the uninsured in deciding when and where to seek health care. This issue is important when considering solutions to those who are under-served in health care, since under-service of the poor also exists in countries with universal health insurance. If the poor and the young are willing to accept higher health risks than are the rich and the elderly, merely extending entitlements may not be adequate. An aggressive outreach

program, targeted at those who fail to take advantage of entitlements, may be required.

The most effective way to improve the health system for the poor is by identifying their most urgent needs and designing an effective way of administering to those specific needs. This goal will not be met merely by equalizing the annual number of visits to doctors (since the rich often waste medical services) or the annual expenditures on drugs (since the rich often overmedicate). Focusing on the specific needs of the poor may not save money but it will insure that whatever is spent is properly targeted.

A second priority that is missing is improved health education and mentoring to enable poorly educated people, both young and old, to identify their health problems: (i) to be able to follow instructions for health care, (ii) to properly use medication, and (iii) to involve them in social networks conducive to good health. It is not enough to wait for such individuals to seek out available services. Outreach programs can be developed to identify the needy individuals and this can be done in the most cost-effective way by organizations already experienced in outreach, so that they can include health screening and counseling among their services. Systems for monitoring the effectiveness of such community organizations also need to be established.

Another point that needs prioritized attention in the study is the reintroduction of health care education into public schools, particularly those in poor neighbourhoods, from nursery school through the twelfth standard of periodic health screening programs using physicians and nurses on a contract basis. Personnel could be employed to ensure that parents understand the nature of their children's problems and who can direct the parents to public health facilities that can provide appropriate health care services.

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