Economic Research in Public Health: The Two-Way Relationship between Economics and Health

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Abstract:
The relationship between health and economics is deep rooted and multidimensional. According the capabilities approach, health is not only a means to achieve the goal of development, but is in fact an end in itself. This realization, fairly recent in the development of the discipline of economics, has pushed many countries to include concerns relating to health as part of their economic policies. The Millennium Development Goals stem from the same idea. The economics of health not only includes availability of health services, cost of provision, user fee or insurance, but also people's knowledge, attitudes, practices, behaviours and perspectives towards healthcare. The current paper brings out how health paves the way and opens up diverse opportunities for research in economics.

Keywords: *Economics, Health, Research*

1. Introduction

People often ask me me why being an economist, I chose to work and conduct research in the health sector. I found in most such queries a tendency to dissociate the health sector from "mainstream" economics. The only association that seems logical to most, is the fact that a healthy population raises productivity and therefore contributes to economic development Having worked in the public health sector for a couple of years now, I have come to realise that there's much more than that to the relationship between health and economics. In the present paper I would not only attempt to bring out how deep-rooted is the relationship between health and economics, but also the multi-dimensionality of this relationship, which has given birth to research in many other fields such as gender, youth, violence, marital behaviours etc., again as part of the discipline of economics.

2. Theoretical underpinnings

Amartya Sen, an ardent critique of the long drawn income approach to development judges' individual advantage in terms of "capabilities" defined as the freedom and potential to actually achieve certain valuable functionings (Sen 1985, 1987, 1999). Under the capability approach, health and education acquire key positions and are expressed as ends in themselves rather than the means to the end of earning income. The capability approach lies at the heart of the human development approach and calculation of the human development index, where, health and education appear as independent development goals. (UNDP 1990).

The Commission on Macroeconomics and Health of the World Health Organization (2001) argues that 'health is a creator and pre-requisite of development'. According to the Commission, extension in the coverage of health services and improved health care lead not only to better health outcomes and reductions in poverty, but also increased productivity, and hence growth in poorer countries. (WHO 2001). The view held by the Commission attaches an instrumental value to health care, not denying the fact that a healthy life is also intrinsically important for all individuals. In 2000, 189

nations made a promise to free people from extreme poverty and multiple deprivations by 2015. This pledge took the form of eight Millennium Development Goals. In September 2010, the world recommitted itself to accelerate progress towards these goals. The importance of the health sector in this endeavour can be adjudged from the fact that three of the eight goals pertain purely to health concerns. These include, reducing child mortality, improving maternal health and combating HIV/AIDS, malaria and other diseases. (UNDP 2011).

3. Primary Health Care

In 1978, an international conference was held at Alma Atta, USSR urging the importance of primary health care. The Conference strongly affirmed that health, which is a state of complete physical, mental and social wellbeing, and not merely the absence of disease or infirmity, is a fundamental human right and that the attainment of the highest possible level of health is a most important world-wide social goal whose realisation requires the action of many other social and economic sectors in addition to the health sector. It contended that the existing gross inequality in the health status of the people particularly between developed and developing countries as well as within countries is politically, socially and economically unacceptable. Under this goal of providing health for all, the conference brought forward, the role of primary health care. Primary health care is the first level of contact of individuals, the family and community with the national health system bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process.(WHO 1978). It addresses the main health problems in the community by providing promotive, preventive, curative and rehabilitative services accordingly.

The report of the conference clearly supports aggressive public investment in the provision of primary health care because of its significant contribution in the process of economic development. The purpose of development is to permit people to lead economically productive and socially satisfying lives. However, only when they have an acceptable level of health can individuals, families and communities enjoy the other benefits of life. Primary health care contributes to development by improving health status. For example, the control of certain communicable diseases by primary health care and other means often helps to promote development in general. Proper nutrition and reduction of sickness increase work productivity. (WHO 1978).

Recognition of the importance of primary health care gave rise to an exploration of the importance of the health sector, for the rural economies.

4. Importance of Health Sector for a Rural Economy

It is increasingly being recognised worldwide, that a viable health sector is imperative for the growth and development of any community. Preventive and protective health services acquire even more importance in communities with a large dependency ratio, created either by a large percentage of the elderly or children. In rural communities, managed healthcare plays a dual role.

On the one hand, it becomes the centre for providing primary healthcare. Rural communities, being distant from cities, may not have easy access to well developed hospitals with modern equipment. Yet, this should not interfere with providing first point of contact services to the rural population. Given that provision of primary healthcare does not require a well-developed hospital setting, it can easily be provided at the village level with minimal infrastructure. Today, primary healthcare has become the cornerstone of the rural health strategy of all countries Leaders in rural communities around the world are struggling to provide primary healthcare services. The National Rural Health Mission (NRHM) in India is an effort in the same direction. The NRHM was launched in 2005 as part of the Common Minimum Program of the UPA government (GOI 2010).

On the other hand, the health sector has the potential to create employment and income and also enhance it through a multiplier effect. Doekson and Schott (Doeksen G.A., V.Schott, 2003) conducted a study in Atoka, a rural area located in south-eastern Oklahoma, USA, to evaluate the economic impact that health sector has on a community's economy. In particular, it attempted to quantify its direct and secondary impacts on employment and payroll. The direct effects include those that result within the health sector, while the secondary effects include the additional changes that such activities bring about such as income generation in other business and employee spending. Results revealed that the health sector in Atoka, accounts for 11 percent of the total non-farm employment, with an estimated annual payroll of US $ 10,355,317. The researchers also included a model to calculate the multiplier effect of income generation in the health sector, which revealed that for each dollar created in the health sector, an additional $0.47 is created throughout the area due to business (indirect) and household (induced) spending.

5. Role of State

The health sector is stricken by various market imperfections such as uncertainty, asymmetric information (Blomqvist Ake 1991) and externalities due to which, alongside the private sector, public provision of health services assumes greater significance. Once state provision of health services comes into picture, concerns of health equity and social justice surround the issue. Besides, use of public fund for provision of services is subject to financial scrutiny. Thus economic evaluation of public health programs is paramount in any country.

6. Access and Utilisation of Health Services: Issues of Awareness, Quality and Expenditure

Mere availability of health services is not enough as it does not ensure their utilization and therefore may not translate directly into expected outcomes. Studies (Ashraf and Aeron 2005, Ghosh 2010, NFHS-2, 2000, Varkey et. al 2006) that explored the utilisation of health facilities have shown that the three most significant barriers to utilization of health facilities are:

1. Lack of awareness
2. Poor quality if services
3. Inability or unwillingness to bear the cost of health services

Another barrier that assumes importance in the context of health services for women in a patriarchal society is the low status and lack of decision making power of women in such societies. Each of the above stated problems opens up a new door for research.

6.1 Lack of Awareness

Studies have found that many people, especially in developing countries are unaware about the need to avail medical services for certain conditions. Many are unaware of the fact that certain medical services are available and if they are, they may not know where they are available. Given this significant barrier, it is important to build "Information, Education and Communication (IEC)" material which includes posters, banners, television spots, advertisement on radio etc to inform people about the need for availing medical services such as institutional delivery, vaccination, etc. Recently, it has been recognised that the purpose of such material is not simply to provide information and education but the end aim of such campaigns is to bring about a change in people's behaviour. Therefore, they have been renamed as Behaviour Change Communication (BCC) rather than just IEC. The change of name from IEC to BCC not only brings about a change in the functional importance of communication material but also opens us new research opportunities in the field of communication. For communication to be effective, tools need to be designed carefully so that the target audience can understand and accept them. This requires extensive research regarding the background of the target area, prevailing practices, suitability and feasibility of medium of communication material. Various organisations working in the health sector are now conducting massive landscape projects before constructing any BCC material.

6.2 Poor Quality of Health Services

Several studies (Ashraf and Aerron 2005, Varkey et. Al. 2006) have pointed to the poor quality of services provided, generally through the public sector, which discourages them to access these services. Long queues, lack of cleanliness, lack of privacy unavailability and rude behaviour of medical and support staff are among the major concerns cited by most respondents of such studies.
The desirability of good quality services is undisputed in the political discourse, both nationally as well as internationally. Yet, practically, it still falls far behind in many countries. One reason for this is that the concerned officials are often not from medical or research background and are unable to assure quality of health services in a systematic manner. One approach to systematic evaluation of the quality of health services and ensuring it, is known as "Quality Assurance". It consists of a set of tools designed in a manner that ensure uniformity and can easily be used by any official entrusted with the responsibility of assessing quality of the particular facility. These tools include first of all, a checklist, which quantifies various elements of service provision including availability of staff, equipment, materials and supplies, maintenance of records, and observation of client-provider interaction. The checklist provides a score of quality for each facility. Care is taken to make the checklist as objective as possible so that it could be used uniformly across facilities thereby making comparisons possible. The checklist is accompanied by other tools such as client-exit interviews and possibly some key-informant interviews such as those with ANMs and medical officers of the facility concerned. (Varkey et. Al. 2006)

6.3 Concerns regarding costs

Health services come with both direct costs, such as user fees and payment for medicines as well as indirect costs such as transportation costs, loss of productivity etc. If one focuses solely on the direct costs, then user fees becomes an important concern, especially for availing primary healthcare. The reader may wonder why, after mentioning the importance of public provision of health care, why one should bring up the concern for user –fees as most publicly provided health services come free of cost.

Free provision of public health services may seem like a rather necessary policy in developing countries, but the practical realities of such a policy point to the negative. With rising pressures on the government budget and a shrinking donor pool, it is becoming increasingly difficult for governments as well as non-government organisations that run on donor fund. Overtime therefore concerns for cost recovery and calculation of marginal contributions have assumed importance. The pressure to changing user fees has been rising and the governments of various countries (Egypt, India, Vietnam, and Bangladesh) have been attempting to follow strategies to recover costs.

However, this policy comes in conflict when one weighs it against the concerns of health equity and social justice. Clearly, introduction or enhancement of user fees will bring about some reduction in the volume of health services that are demanded. This makes it difficult for any policy maker to decide on a reasonable value or increment of user fees. This difficulty in recent years has given rise to another type of research in health economics know as the "willingness to pay" surveys. These surveys rely on a tool designed to systematically explore the willingness of clients to pay for health services. For each respondent, the tool identifies the maximum price that the user would be willing to pay for the service. Once this information is available for all respondents, once can derive, a market demand curve for the health services and also work out a rough estimate of the elasticity of this demand. Once these indicators are revealed, the decision of the policy maker can then be informed. It must be noted that these surveys do not end at deciding on a price hike based on the WTP survey. Once the price is charged or changed, utilisation of health services is monitored over a long period of time to evaluate how closely practice is associated with theory. Various studies (Ghosh 2010, Garg 2009) have shown that one of the major heads of expenditure in health care is that of medicines, which leads to half hearted utilization of the services in the sense

that people may consult the doctor but not continue treatment due to the barring prices of medicines. Concerns regarding user fees and other direct costs of health services has led to another area of research which has become particularly important in recent years, that is analysis of catastrophe in paying for healthcare and calculation of medical povety. These are discussed later in the article.

7. Catastrophe in healthcare and Medical Poverty

Illness represents a loss of well-being and medical care, does not come free of cost. Healthcare may be financed through coverage of insurance schemes or by the public sector or otherwise, by paying for it directly. The latter are called **out-of–pocket** (OOP) payments for healthcare. In India, almost 70 percent of the total expenditure on healthcare is done by household, mostly through their pockets. (NSSO 2006).

Studies around the world have shown that healthcare payments, especially when made out-of –pocket can have dire consequences on a household's economic well being (Gertler 2002). Some refer to health expenditures as being catastrophic when households may have to cut current consumption in order to finance healthcare while others talk about "medical poverty" wherein, a household is pushed below the poverty line due to large heath expenditures (Wagstaff and Doorslaer 2003, Xu et al. 2003). Besides, many households may not even be able to afford treatment due to prohibitive costs (NSSO 2006).

8. Concluding Remarks

One can bring out a two way relationship between health and economics. On the one hand, there is no denying the fact that health is important for economic development, both indirectly, in terms of raising productivity and incomes and directly, by enhancing capabilities and freedoms. This creates a private as well as social demand for health services and makes imperative, the provision and utilization of these services. Given the scarcity of resources, this brings us full circle to the central problems of the economy – which services to provide, how to provide them in the most cost effective manner and how to distribute them or say, make them available for the target population. Thus, not only is health research important for economics but the knowledge and application of economics are also central to health. Recognition of this fact has led to tremendous strides in the health economics literature and an increased reliance of public policy on health systems research. They have opened up a whole new world of research in the field of health economics.

If the concepts and principles of economics are to be used in the provision of health services, it means that the health professionals, and planners as well as the various agencies involved in the delivery of these services need to be educated and oriented towards such research. This opens up the doors for two other correlates of research that is, **technical assistance** and **capacity building** which at present, most research organisations are engaged in. Bilateral and Multilateral donor agencies are also stressing on these two practices so that the governments of developing countries become more capable of solving the three central problems of the economy associated with the health sector.

What I have provided in this paper is only the tip of the iceberg. Economic research in the field of health is vast, multidimensional and multidirectional and touches upon various aspects of personal and social life. Health economics has gained immense theoretical importance over the last decade. As part of taught courses in economics, it is still a sapling but is growing rapidly in height and coverage. Health and economics are not only related, but reinforce each other both as a goal in development and as a means to the goal.

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