Choice of Curative Healthcare Provider among Urban Households in Tamil Nadu

Dr. M. Raju

Language in India www.languageinindia.com ISSN 1930-2940 Vol. 13:4 April 2013

Abstract

The Indian economy, which has passed through various phases of growth over the last six decades, is now all set to enter an altogether different orbit: one marked by a high rate of expansion, combined with 'inclusive growth'. Access to good quality health services is one of the critical elements of the inclusiveness strategy. Individuals take efforts to improve their health status. Besides the government, NGOs and private sector also play important role in the delivery of health services. Actual consumption of healthcare depends on factors influencing the demand for healthcare such as income, cost of healthcare, education, social norms and traditions. Following a growing literature on healthcare demand, it is necessary to investigate the determinants of access to public and private healthcare provisions and of health seeking behaviour of people broadly. Under this circumstance this paper attempts to estimate the choice model of healthcare demand, where demand is understood as the probability of seeking different types of healthcare providers and systems of medicine for illness, given the relevant characteristics of the individual, the household and the community.

Key Words: Healthcare, Choice of Hospital, Demand for healthcare health seeking behaviour

Introduction

The Indian economy, which has passed through various phases of growth over the last six decades, is now all set to enter an altogether different orbit: one marked by a high rate of expansion, combined with 'inclusive growth'. According to Dr. Manmohan Singh (2009), the key components of the 'inclusive growth' strategy included a sharp increase in investment in rural areas, rural infrastructure and agriculture and a sharp increase in public spending on education and healthcare. India needs to spend more on basic health care and education if economic growth is to benefit all members of society, said Amartya Sen (2011). Access to good quality health services is one of the critical elements of the inclusiveness strategy.

Language in India www.languageinindia.com ISSN 1930-2940 13:4 April 2013

C. Subburaman, Ph.D. (Ed.) Health and Medical Care Services: Claims on National Resources

Dr. M. Raju

Choice of Curative Healthcare Provider among Urban Households in Tamil Nadu

Need for the Study

Individuals take efforts to improve their health status. Governments also, from social sector point of view, take efforts to promote the health services available to the people by focusing on preventive and curative services in both rural and urban areas. Besides the government, NGOs and private sector also play important role in the delivery of health services. Actual consumption of healthcare depends on factors influencing the demand for healthcare such as income, cost of healthcare, education, social norms and traditions. Following a growing literature on healthcare demand, it is necessary to investigate the determinants of access to public and private healthcare provisions and of health seeking behaviour of people broadly. Hence a detailed study is needed to estimate the choice model of healthcare demand, where demand is understood as the probability of seeking different types of healthcare providers and systems of medicine for illness, given the relevant characteristics of the individual, the household and the community.

The selection of service provider depends also on the household healthcare expenditure due to the fact that public healthcare system is provided at subsidised rate when compared to other channels. Both preventive and curative public health services in India have been provided free of cost or at very low price. However, public healthcare is not all that 'free' after all; there are many incidental expenses that consumers have to bear on their own. If all the quality and access differentials between public and private healthcare were to be wiped out, there would still be some financial burden on the consumers. The large volume of private health expenditure in India is probably one of the largest in the world when viewed as a proportion to total health expenditure (Duggal, 1986).

Objectives

The main objective of this paper is to examine the choice of curative healthcare provider by the Urban Households.

Methodology

The study used the data generated by UGC Major Research Project on Health Seeking Behaviour of Urban Household of Tamil Nadu by 600 urban households of Tamil Nadu. The

Language in India www.languageinindia.com ISSN 1930-2940 13:4 April 2013

C. Subburaman, Ph.D. (Ed.) Health and Medical Care Services: Claims on National Resources

sample households were spread in the two municipal corporation areas of Tamil Nadu namely, Coimbatore and Erode. In each municipal corporation, the project covered 24 wards

and in each ward 50 households were randomly selected following NSSO sample selection pattern.

In analysing the data our study made tabular analysis by using simple statistical tools. For finding factors which determine the households' choice of healthcare provider and choice of system of medicine Multi-Nominal Logit (MNL) model was used.

Results and Discussion

In the event of illness, majority of individuals seek some kind of treatment. It is revealed that in the event of health problem, very small per cent (2.5 to 5.4 per cent) of the people were not opting for any kind of care. When an attempt was made to know the reasons for avoiding healthcare, it came to light that want of money and treating the

complaint not seriously emerged equally responsible.

It is common knowledge that government hospitals provide service free of cost and private hospitals charge fees. In some cases private hospitals charge exorbitant fees. Inspite of the above facts, data revealed that two third of the sample households took treatment from the private service provider and only three out of every ten of the population have sought Government sources for treatment. It sends a message worth pursuing and validates the

reason for such preference.

It was found that there was no difference in seeking either government or private hospital services. However, there was a small difference between age groups in their choice. As age increases there is a gradual increase in the proportion of people (27 to 38 per cent) seeking

government hospital services.

Studies often found that poorer patients depend heavily on public health services on account of higher charges levied by private healthcare providers. Also the patients with higher levels of income use more of private care, which is believed to be superior when compared to government-managed hospitals in terms of quality (Selvaraj, 2001). The result of this paper also corroborates the existing studies that as the level of income rises, the dependency on public facilities declines and there is a shift towards private facilities.

Language in India www.languageinindia.com ISSN 1930-2940 13:4 April 2013

C. Subburaman, Ph.D. (Ed.) Health and Medical Care Services: Claims on National Resources

Estimation of Household Choice of Curative Healthcare

In the course of analysing the factors determining the choice of healthcare provider

one comes across a situation where persons affected by illness/complaints can be categorised

into two, viz., persons who do not prefer any treatment and others who take treatment. The

group, which prefers treatment, faces a choice to be made between public and private

sources of treatment. In this context factors influencing their preference can be estimated.

This kind of categorical multiple choice dependent variable estimation can be made by using

Multi-Nominal Logit (MNL) method.

The reduced form of health demand function can be specified as:

 $H_i^* = \alpha_1 + \alpha_2 P_i + \alpha_3 V_i + \alpha_4 E_i + u_i$, i = 1, 2, ..., N individuals

where H* is the health status of an individual which is unobservable. When the health status

of individual falls below a threshold level (Z), the person is reported to be ill. What we can

observe is a health indicator, which takes the value of 1 if the person is reported to be ill

during the reference period and 0 otherwise. That is

H = 1 if $H^* < Z$ and

H = 0 otherwise

Seeking healthcare depends upon the sickness tolerance level, which varies from

person to person. Similarly, the type of care demanded also depends upon the severity of the

illness. The conditional demand for curative care can be specified as

 $[Mi/Hi = 1] = \beta 1 + \beta_2 P_i + \beta_3 V_i + \beta_4 B_i + e_i$, i. = 1,2 ...m sick persons.

Where M = 0 if no treatment

= 1 if self treatment and other care (other than public and private)

= 2 if private health facilities are used for treatment

= 3 if public health facilities are used for treatment

Language in India www.languageinindia.com ISSN 1930-2940 13:4 April 2013

C. Subburaman, Ph.D. (Ed.) Health and Medical Care Services: Claims on National

Resources

The untreated cases are treated as normalised or reference category. We have used the multi-nomial Logit estimation of choice of curative healthcare and presented it in Table 2 and Table-1, presents summary statistics relating to the variables that were used for estimating the model. The socio-economic variables used were district, gender, age, educational level, occupation, religion, and the social group. The income variable gives the annual household income associated with a particular individual in the data. The district variable is used as a dummy variable. The variable on gender is a categorical variable, which takes a value of 1 if individual is a male and 0 in the case of female. Similarly, the variable educational attainments are divided into levels and valued 1 for each level and otherwise 0. Age is continuous variable.

Important findings emerging from the analysis of choice of curative care over and above the reference category at 5 per cent level are that the household income negatively influences the choice of Government hospital, the salaried category does not prefer government hospital for treatment. So the result shows that income is the main criteria to choose the hospital. As compare to government hospital, the private hospital are providing quality treatment the people want to take treatment in the private hospital and only poor are seeking treatment in the government hospital.

Policy Recommendations

In India, government hospitals provide service free of cost without discriminating between the poor and the rich. Even with sophisticated technologies, instruments and highly qualified super speciality medical and para-medical staff, the quality of treatment and efficiency of the government hospitals is not satisfactory. Private partnership in the government hospitals have strong potential for improving the efficiency of healthcare systems in India. It is better to introduce user charges with differential fees to protect the poor. The high-income group can also use government hospital facilities with nominal cost.

Conclusion

Despite investing billions on social sector schemes, there is still a whopping gap in income growth and health delivering in many states of India. The government is unable to

Language in India www.languageinindia.com ISSN 1930-2940 13:4 April 2013

C. Subburaman, Ph.D. (Ed.) Health and Medical Care Services: Claims on National Resources

Dr. M. Raju

Choice of Curative Healthcare Provider among Urban Households in Tamil Nadu

provide high quality and efficient public services to the people both in the rural and urban areas. While private healthcare providers rendered quality services but it is inaccessible to poor people. Therefore there is a need for public-private partnerships in the health sector. The private sector should take more social responsibility and contribute towards making growth more inclusive.

References

- 1. Amartya Sen (2011), Press meet 19, July, 2011
- 2. Duraisamy (2001)," Health Statistics And Health Care In Rural India, NCAER
- 3. Duggal R, (1986), "Health Expenditure in India", FRCH News letter Vol. 1, Foundation for research in community Health.
- 4. Manmohan Singh (2007), Inaugurating address at the National Conference and Annual Session 2007 of the Confederation of Indian Industry (CII), 27 May, 2007.
- 5. Selvaraj.V. (2001), "Healthcare Expenditure in Rural India: A micro perspective", National Institute of Public Finance and Policy, New Delhi.
- 6. Sundar, R (1992), Household Survey on Medical Care", Margin, Jan-March, Vol.24, No.2.
- 7. Sundar, R (1992), "Household Survey on Health Care Utilisation and Expenditure," Margin, July-Sep., Vol.26, No.4.
- 8. Sanyal.S.K. (1996), "Household financing of healthcare", Economic and Political Weekly, Vol.31 (20), May 18.
- 9. UGC Major Research Project (2012), "Health Seeking Behaviour of Urban Household of Tamil Nadu" unpublished report submitted to UGC on March 2012.
- 10. WHO / UNICEF (1980), "Report on Inter-regional Workshop on Cost and Financing Patterns of Primary Health Care," World Health Organisation, Geneva.
- 11. World Bank (1993), "World Development Report- 1993 Investing in Health", Oxford University Press, New York.

ANNEXURE

Table 1 Variable Definition and their Summary Statistics

| Variable | Mean | Std. Deviation | |
|-----------------------------|--------|----------------|--|
| Coimbatore (District dummy) | 0.3956 | 0.4893 | |
| Erode (District dummy) | 0.2551 | 0.4362 | |
| Thanjavur (District dummy) | 0.3492 | 0.4771 | |

Language in India www.languageinindia.com ISSN 1930-2940 13:4 April 2013

C. Subburaman, Ph.D. (Ed.) Health and Medical Care Services: Claims on National Resources

| Male (= 1 else 0) | 0.4434 | 0.4971 | | |
|-------------------------------------|---------------|----------|--|--|
| Age | 32.23 | 20.92 | | |
| Illiterate (Education dummy) | 0.3738 | 0.4841 | | |
| Primary (Education dummy) | 0.1801 | 0.3845 | | |
| Secondary (Education dummy) | 0.1733 | 0.3787 | | |
| Degree (Education dummy) | 0.0218 | 0.1462 | | |
| Labour (Occupation dummy) | 0.0777 | 0.2680 | | |
| Self-employed (Occupation dummy) | 0.1337 | 0.3406 | | |
| Salaried (Occupation dummy) | 0.1132 | 0.3171 | | |
| Household size | 4.14 | 1.51 | | |
| Household annual income | 31253.94 | 22672.75 | | |
| Hindu (Religion dummy) | 0.7954 | 0.4037 | | |
| Muslim (Religion dummy) | 0.1542 | 0.3613 | | |
| Christian (Religion dummy) | 0.0504 | 0.2191 | | |
| SC/ST (Social group dummy) | 0.2567 | 0.4371 | | |
| BC (Social group dummy) | 0.7277 0.4455 | | | |
| Others (Social group dummy) | 0.0156 | 0.1240 | | |
| Type of family (Nuclear = 1 else 0) | 1.21 0.41 | | | |
| Sample Size | 705 | | | |

Table- 2

Multinomial Logit Model Maximum Likelihood Estimate for

Choice of Curative healthcare

Dependent variable Choice of Treatment

Number of observations 733

Iterations completed 15

Log likelihood function -557.7019

Language in India www.languageinindia.com ISSN 1930-2940 13:4 April 2013 C. Subburaman, Ph.D. (Ed.) Health and Medical Care Services: Claims on National Resources

Dr. M. Raju

Choice of Curative Healthcare Provider among Urban Households in Tamil Nadu

| Variable | Self-Treatment | | Private hospital | | Government hospital | |
|----------------|----------------|-------|------------------|-------|---------------------|-------|
| | Coefficient | t | Coefficient | t | Coefficient | t |
| Constant | 2.6214 | 1.742 | 2.480321 | 1.678 | -3.4591 | 1.477 |
| Coimbatore | 0.2212 | 0.469 | 0.2606421 | 0.563 | -1.8325 | 2.221 |
| Erode | 0.5040 | 0.699 | 1.619635 | 2.316 | 0.44654 | 0.493 |
| Male | -0.1469 | 0.346 | -0.0380 | 0.092 | 0.30394 | 0.481 |
| Age | 0.00199 | 0.204 | -0.0126 | 1.314 | 0.0196 | 1.310 |
| Primary | -0.0820 | 0.148 | -0.0207 | 0.038 | -0.2059 | 0.238 |
| Secondary | -0.0986 | 0.171 | -0.1088 | 0.194 | 1.4561 | 0.001 |
| Degree | -1.9239 | 1.257 | -0.2206 | 0.185 | 0.9263 | 0.570 |
| Labour | 0.5869 | 0.678 | 0.4447 | 0.520 | 1.8555 | 1.642 |
| Salaried | -0.6074 | 0.894 | 0.6808 | 0.109 | -12.9851 | 1.964 |
| HH size | 13.2558 | 0.017 | 12.8612 | 0.017 | 0.1491 | 0.170 |
| HH income | 0.00011 | 0.96 | 0.0001 | 1.249 | -0.00009 | 0.046 |
| Hindu | -1.2306 | 1.113 | -0.9334 | 0.855 | 0.7567 | 0.485 |
| Christian | -1.4324 | 0.924 | -0.6749 | 0.442 | -11.8501 | 0.026 |
| BC | -0.2912 | 0.586 | -0.4067 | 0.325 | 2.4212 | 2.087 |
| Others | -0.4455 | 0.341 | 0.4789 | 0.976 | -10.5769 | 0.015 |
| Type of family | -0.0135 | 0.021 | -0.4181 | 0.684 | -0.7618 | 0.909 |

Dr. M. Raju
Associate Professor
PG & Research Department of Economics
Gobi Arts & Science College
Gobichettipalayam – 638 453
Tamil Nadu
India
raju_gobiarts@yahoo.com

Language in India www.languageinindia.com ISSN 1930-2940 13:4 April 2013 C. Subburaman, Ph.D. (Ed.) Health and Medical Care Services: Claims on National Resources