

***GLOBAL HEALTH FORUM
FORUM 9 – MUMBAI***

ORAL PRESENTATION # 207

**Does community health insurance increase access to health care
for the poor? Evidence from India**

Dr. N. Devadasan^{1,2}, Dr. Wim van Damme¹, Dr Patrick van der Stuyft¹ and Dr Bart Criel¹

Address for correspondence

Dr. N. Devadasan

C/o The Valley School

Thatguni Post

(Kanakapura Road)

Bangalore – 560062.

deva@devadasan.com

Disclaimer: The research activities have been concluded only in June 2005. So this article is a preliminary report, based on the initial data set. More definite figures will be provided at the presentation on the 15th of September 2005

Acknowledgements

This study would not have been possible, but for the voluntary work of 106 village workers who followed up their designated families on a regular basis. Also many thanks to the research assistants, especially Easwaran who braved rain, flooded rivers and wild animals to interview the patients. A special thanks to Dr Bharat Gadhvi for supervising the study and to Mr S. Manoharan for computerisation of the data. And finally, the authors acknowledge with gratitude the financial support of the Belgian government (Directorate General of Development Cooperation) and the Sir Ratan Tata Trust - Mumbai for funding this research.

¹ Dept. of Public Health, Institute of Tropical Medicine, Antwerp, Belgium.

² AMCHSS, Sree Chitra Tirunal Institute of Medical Sciences, Trivandrum, Kerala, India.

Introduction

Health care in India is supposed to be funded and provided by the government. Unfortunately, decades of under-funding have resulted in poor infrastructure, unmanned health institutions and inadequate supply of medicines. This has naturally resulted in poor quality of health care, resulting in patients shifting to the private sector. Today, studies show that about 80% of all outpatients and about 50% of all inpatients seek health care from the private sector (Raman Kutty 1996). This has obvious repercussions, the main being reduced access to health care and high medical expenditure at the time of illness. Evidence shows that about 19% of the patients do not seek health care because of the high costs. And about 24% of households who do seek health care are impoverished because of this event (Peters 2002).

This problem of access is usually redressed in other countries through an insurance mechanism. People (or their employers) pay an annual premium towards a sickness fund that is used to meet the health care costs of the enrolled. While this is well developed in most OECD countries, health insurance is still at a nascent stage in India. Only about three percent of the population are insured in any form or the other. Most of the insured are people in the formal sector (especially civil servants and industrial workers). To overcome this problem, some non-governmental organisations (NGOs) have instituted community health insurance (CHI) among the poorer sections of society. These are small health insurance schemes managed by the NGO and the local community. The numbers enrolled range from 5,000 to 50,000 and the benefits usually include hospitalisation costs (Devadasan N 2004). The main objective of these CHIs is to enable their members to access health care with minimum costs. While there have been many documents recording the process by which these CHIs function, there are hardly any evidence to show whether they are effective in improving access to health care. The only two Indian studies so far are by Ranson (Ranson MK 2001) and Devadasan (Devadasan 2004). The main limitations of these studies are that they are either based on small samples or institution based. This is echoed by Ekman (Ekman 2004) when he states that the evidence base of the effectiveness of CHIs is very limited. This research is an effort by the authors to develop community-based evidence on whether the CHIs actually improve utilisation of health services for their members. In the next section, we document the context, then describe the research methods used and finally the results of our research. We conclude with a short discussion on our findings and its relevance to the national and international context.

Context

This research was conducted at three sites where CHIs have been operational for more than five years. In the current document we describe the findings at one of the sites – Gudalur. Gudalur is a remote taluk in the Nilgiris District of Tamil Nadu. ACCORD – ASHWINI, an NGO has been working among the aboriginal population (adivasis) in this area since 1986. Primarily involved in empowering the adivasis, ACCORD – ASHWINI also provides development services like health care, housing, agricultural support, education etc. The health programme is a comprehensive three tier system, consisting of village level health workers, area level nurses and a small referral unit with all the basic specialities. This programme provides primary and secondary care. In 1992, a community health insurance programme was started, mainly to improve the access to health care for the members of the Adivasi Munnetra Sangam (AMS), the organisation of adivasis in Gudalur. The AMS members pay an annual premium of Rs 22 (US\$0.50) per person

per year to ASHWINI. In return, they are covered for any hospital expenses at the Adivasi hospital (managed by ASHWINI) upto a maximum limit of Rs 1500 (US\$34) per patient per year. ASHWINI reinsures with a formal Insurance company to protect its risk. ASHWINI also provides primary care through other resources, and this complements the health insurance programme (Devadasan N 2005).

Material and Methods

To assess the effect of CHI on access to health care, we conducted a panel survey among the AMS members. The 13,070 AMS members were stratified into insured and non-insured households based on the June 2004 data. Using Epicalc sample size calculator, the sample size was estimated to be 250. A systematic sample of 324 insured households was selected using the AMS member's list. Each of the selected households were then visited at home and invited to join the survey. 18 households were not available and had to be excluded from the survey. Each of the selected insured household was then matched for a similar non-insured household. The matching criteria were same village (a proxy indicator for distance from the hospital), socio-economic status, size of household and age of the head of the household (a proxy indicator for the age of the family). A total of 261 households were thus identified and invited to join the survey. 45 non-insured families could not be matched, given the specific criteria that we had used.

Once the families were identified, a baseline survey was conducted to measure the socio-economic and demographic profile of the household members Proxy indicators like assets were also measured. Social capital in terms of trust and confidence of ACCORD – ASHWINI was also gauged.

Then village level investigators followed up these families by visiting them every fortnight and enquiring about any episodes of illness in the past two weeks. Minor illnesses were recorded, while major illnesses³ were investigated in detail, using a researcher-administered structured questionnaire. The main focus was on the health seeking behaviour and the costs of treatment (direct and indirect). All 567 families were followed up for a year (July 2004 to June 2005).

Results

A total of 299 insured and 247 non-insured households (representing 2537 individuals) were followed up over 365 days. There was no significant difference between the men and women who were studied. Similarly the age groups were also well matched and there were equal percentage of children and elders in both the groups. The lower social strata of adivasi society were slightly better represented in the study population as compared to the higher social strata. Education levels and literacy levels were also similar in both the groups (though this was not matched). There was no significant difference in the occupations among insured or non-insured. Economic status was also similar, with similar representation of absolute poverty (< US\$1 income per capita per day). Proxy indicators like landholdings and type of house also showed a markedly similar distribution in both the groups. The incidence of pre-existing illnesses was

³ Defined as “any illness lasting for more than 3 days and preventing the patient from conducting his/her normal activities or any illness leading to hospitalisation (irrespective of duration of illness) or any illness leading to death.”

similar among the two groups. However, there was a significant difference in the trust placed on AMS – ACCORD – ASHWINI between the insured and non-insured (Table 1).

Table 1 Characteristics of the insured and non-insured samples at Gudalur

Indicator	Insured	Non-insured
Individuals	1414	1123
Males	684 (48%)	532 (47%)
Children (0-5 years)	195 (14%)	184 (16%)
Lower social status*	797 (56%)	683 (61%)
Illiterate	541 (44%)	447 (48%)
Manual Labourers	485 (51%)	402 (56%)
Landed	204 (68%)	144 (58%)
Median annual expenditure	US\$634	US\$616
Families who benefited from the AMS	255 (85%)	149 (60%)
Families who will approach the AMS for their problems	283 (95%)	200 (81%)
Families who trust ASHWINI	297 (99%)	201 (81%)

* Statistically significant

During the 365 days of follow up, 835 insured (59%) and 639 non insured (57%) had an episode of illness. The median number of episodes of illness was 2 in both the groups. Of these illness episodes, 198 and 105 were serious episodes (as per our definition). 96% of insured patients with serious episodes of illness chose to get admitted in the hospital, while only 64% of the non-insured patients did likewise. The first choice of treatment for 63% of the insured patients was the ASHWINI health system, while only 28% of the non-insured chose this. The non-insured preferred to use the government or the ‘free’ NGO services (23%) or the private sector (26%).

Discussion

Access to health care has many determinants (Igun 1979) – distance, financial barriers, acceptability of the provider, social and economic class of the patients and effectiveness of the care provided. By matching for most of these determinants, we tried to isolate the effect of health insurance on access to care. Does health insurance remove (or reduce) the financial barriers to health care? In our study we find that it does and that the insured do access health care more than the non-insured. One of the reasons for this effect is of course the fact that the patient does not have to pay out of pocket at the time of illness. This is not just a financial barrier, but also a psychological barrier as patients state that they are afraid of the unknown (bill) when they go to a hospital. This is especially true in the Indian context, where fee for service is the normal payment

mode. In our study the difference was not very marked, probably because there were other low cost providers in the region. These included the government 'free' hospital, and two other NGO hospitals that also provided free services for adivasis. But in places where these are not available, the difference may be marked.

This study also demonstrated the role of trust in health insurance. As we matched for most of the variables, one of the important differences between the insured and the non-insured is the trust that they have in the organising institutions. It was very clear that those who trusted ACCORD – ASHWINI – AMS tended to enrol for the health insurance, compared to those who did not trust. This is an important, but unrecognised determinant in health insurance and needs to be explored further. This is relevant in the context where governments (with little credibility) may want to promote CHIs. Health insurance could be an excellent platform for initiating a 'public-private' partnership where the government provides the stability and its administrative backup while the NGO (or any other local organisation) contributes its integrity and capability in managing the funds.

We conclude by stating that community health insurance can increase access to health care for the poor if certain conditions (like trustworthy organisers and a credible and effective health care provider) are met. These findings are similar to findings in Africa (Jutting J 2003) and the Phillipines (Dror 2005), indicating that a well managed CHI has the potential to improve access to health care for the poorer sections of society. This has policy implications for governments that are trying to improve access to health care for their poorer sections of society. CHIs could be an effective strategy, especially if they link up with local NGOs who provide the 'dependable' face.

References

Devadasan N. *Community health insurance in India: a compilation of case studies*. Ahmedabad: FWWB.2005:Pp 62.

Devadasan N, Ranson MK, Van Damme, W., & Criel B. 2004. Community health insurance in India: an overview. *Economic and Political Weekly*. **39**, pp. 3179-3183.

Devadasan, N., Manoharan, S., Menon, N., Menon, S., Thekaekara, M., Thekaekara, S., & AMS team. 2004. Accord community health insurance - Increasing access to hospital care. *Economic and Political Weekly*. **39**, pp. 3189-3194.

Dror, D., Soriano, E., Lorenzo, M., Sarol Jr, J., Azcuna, R., & Koren, R. 2005. Field based evidence of enhanced healthcare utilization among persons insured by micro health insurance units in Philippines. *Health Policy*. **73**, pp. 263-271.

Ekman, B. 2004. Community-based health insurance in low-income countries: a systematic review of the evidence 127. *Health Policy and Planning*. **19**, pp. 249-270.

Igun, U. A. 1979. Stages in Health Seeking: a descriptive Model. *Soc Sci Med*. **13A**, pp. 445-456.

Jutting J. 2003. Do Community-based Health Insurance Schemes Improve Poor People's Access to Health Care? Evidence From Rural Senegal. *World Development*. **32**, pp. 273-288.

Peters, D., Yazbeck, A., Sharma, R., Ramana, G., Pritchett, L., & Wagstaff, A. *Better Health Systems for India's poor*. Washington: World Bank.2002:Pp 347.

Raman Kutty, V. 1996. Health Care Utilisation Surveys: What Do They Tell Us? *National Medical Journal of India*. **9**, pp. 255-256.

Ranson MK 2001, *The Impact of SEWA's Medical Insurance on Hospital Utilization and Expenditure: A Household Survey*. Washington: World Bank. 16 .