EFFECTIVENESS OF SERVICE DELIVERY IN HEALTH FACILITY WITH AND WITHOUT COMMUNITY HEALTH INSURANCE SCHEME IN NEPAL

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ABSTRACT

In Nepal, though the health service started early, majority of the people are still beyond the access of minimum basic health service. Approaches such as Community Health Insurance (CHI) can in principle, help households to avoid being pushed into poverty by unanticipated health costs, but schemes exist in only a handful of districts, and have low coverage in Nepal. This study on Effectiveness of Service Delivery in Health Facility (HF) with and without Community Health Insurance Scheme (CHIS) conducted in Lalitpur Nepal was conducted in two similar type of health facility in which one is implementing CHIS scheme. Data suggested that the knowledge about the CHIS programme was more in the community people where CHIS was implemented. Similarly, the types of services available were more in HF with CHIS in Nepal. No significant difference was observed in behaviour of Health Service Providers (HSP) between two HFs. The flow of clients was more in HF with CHIS. However, the trend of number of household insured in CHIS programme was in decreasing order after the implementation of free health service policy by GoN.

Key words: Community Health Insurance, health facility, health service, Nepal

INTRODUCTION

Nepal is a highly heterogeneous country in terms of geography, ethnicity, language and culture. It is land-locked, sharing borders with India and China. It has wide range of distribution of region i.e. Terai (low and plan land), Hilly and Himalayan region. Due to its geography, facilities regarding basic needs along with health services have also got variation. Though the health service in Nepal was started in 1947 on the establishment of Bir Hospital in Kathmandu, up to this 21st century, majority of people of Nepal are still beyond the access of minimum basic health service (Panthi, 2007).

Approaches such as community health insurance can in principle help households to avoid being pushed into poverty by unanticipated health costs, but schemes exist in only a handful of districts, and have low coverage in Nepal (NHSP-IP II 2010-2015).

Health insurance is relatively new area of economic activity to improve the quality of human life (Tabor, 2005). The concept of health insurance (HI) is not new in Nepal. Health insurance schemes (HIS) are implemented in various models by government and non government organizations. These schemes are confined to a certain pocket of the country. The major health insurances implemented in Nepal are: Community Health Post Based Health Insurance model initiated by united Mission to Nepal (UMN) in 1976 in Lalitpur, Hospital based Micro Social Health Insurance Scheme, initiated by B.P. Koirala Institute of Health Sciences (BPKIHS) in 2000 in Dharan, Health Co-operative model initiated by Public Health Concern Trust (PHECT) in Kathmandu Model Hospital. Recognizing the potential of the programme, the government promulgated the Community Health Insurance Scheme (CHIS) in 2003 (Baral, 2007).

CHI is a Pilot Interventions in few Districts of Nepal with different model. Districts PHCC implementing CHI are Mangalabare PHCC in Morang District, Dumkauli PHCC Nawalparasi, Katari PHCC Udayapur, Chandranigahapur PHCC Rautahat, Lamahi PHCC Dang, and Tikapur PHCC Kailali (DOHS, 2067/68).

The relationship between health insurance and use of health services persists, even when controlling for other factors, such as age and poverty status. Those with insurance for only part of the previous year and those with no insurance in the preceding year were significantly less likely than those with insurance for the full year to

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obtain dental care and routine check-ups (Wisconsin Family Health Survey, 1999).

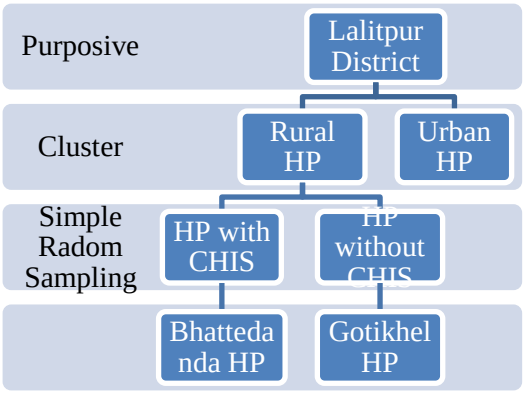

Figure 1: Sampling Flow Chart

A number of social, economic and political elements may inhibit their straightforward adoption, however. Thus, provided no immediate nation-wide health financing alternatives are feasible, one could further scrutinize which beneficial role Community Health Insurance can eventually play. A key question thereby is how CHIs can perform better and what the conditions would be for their replication (WHO, 2003).

The study was conducted with the main objective to identify the effectiveness in service delivery and utilization between HF with and without CHIS.

Table 1: Socio-demographic characteristics (n=112)

	Frequency	Percent
Clients in HF		
Bhattedanda HP (with CHIS)	51	45.5
Gotikhel HP (Without CHIS)	61	54.5
Sex		
Female	66	58.9
Male	46	41.1
Cast/Ethinicity		
Lower caste	24	21.4
Disadvantaged ethnicity	42	36.5
Upper caste	46	41.1
Religion		
Hindu	72	64.3
Buddha	38	33.9
Other	2	1.8
Educational status		
Illiterate	17	15.2
Literate only	27	24.1
Primary	37	33.0
Secondary	19	17.0
Above Secondary	12	10.7
Occupation		
Agriculture	77	68.8
Student	26	23.2
Service	9	8.0

METHODS

This is a descriptive cross-section study carried out in 2013. There were 3 Primary Health Care Centers (PHC), 9 Health Posts (HP) and 29 Sub Health Posts (SHP) in Lalitpur District. Though Lalitpur district is in Kathmandu Valley where the

Table 2: Accessibility of Services (n=112)

Variables	Number	Percent	Mean	Standard Deviation	Chi-square test
Time taken to reach HF			57.99	46.37	
Bhattedada HP			41.57	30.62	P=>0.05
Gotikhel HP			71.22	52.68	
≤30 min	54	48.2			
30-60 min.	24	21.4			
≥60	34	30.4			
Time taken to get services in HF			22.14	16.92	
Bhattedanda HP			11.08	6.95	P=<0.05
Gotikhel HP			31.39	17.27	
Less than 15 min.	60	53.6			
15min. to 1 hour	52	46.4			

capital of Nepal also exists, most of the VDCs of Lailitpur are in remote and hilly area. Among 9 Health posts, 4 of them (Bhattedanda, Ashrag, Gotikhel and Chaughare) are situated in rural, where as remaining five are in urban (Kath) area. Among them the only institution which has implemented CHIS is Bhattedanda and it has started this service since 1995 (2042 BS) through UMN and is now running under the management of Health Facility Organization and Management Committee (HFOMC) of Bhattedanda HP. (DPHO Lalitpur, 2011).

For the purpose of this study Bhattedanda health post with CHIS was selected purposively and another one health post without CHIS was selected with multistage sampling. Health posts of Lalitpur were divided into two clusters; urban (5 HP) and Rural (3 HP). Among three rural HP, Gotikhel HP was selected by simple random sampling. These two HP with CHIS and without CHIS were both from rural area and can be compared.

Client exit interview was used among the clients who visited these HPs to collect the data using questionnaire and check lists. Client satisfaction questionnaire were prepared by taking reference of Quality Insurance guideline of Management Division of Department of Health Service Nepal. HP in-charge of the two facilities was also requested to provide information through self administered questionnaire. Focus group discussion (FGD) was also conducted among community members in each HF for their perception on CHIS by using FGD guideline. Data were analyzed using SPSS version 16.

Table 1 shows the total no of clients which were taken as study population in two HPs; in which 54.5 percent were from Gotikhel HP and the rest 45.5 percent from Bhattedanda HP (CHIP). Among the clients of Bhattedanda HP, nearly three fourth (74.5 percent) had done CHIS. Almost half (41.1 %) of the respondents were of upper cast, followed by Disadvantage Ethnicities 36.5 percent and Lower cast was only 21.4% percent. Majority were Hindu (64.3%) followed by Buddhists (33.9 %) others were of 1.8 %. The percentage of illiterate population was 15.2 percent.

It took average 57.99 (SD± 46.37) minutes to reach HF. Average time taken to reach to Bhattedanda HF was 41.57 (SD± 30.62) minutes and 71.72 (SD± 52.68) minutes in Gotikhel. Almost half of the respondents (48.2 percent) reached HF within half an hour, 21.4% took 30-60 minutes and 30.4% took more than an hour to reach the HF. Similarly average time to wait in the HF for the consultation with health worker was 22.14 minutes (SD± 19.92). The average time taken in Bhattedanda was 41.57 (SD± 46. 30.61) minute where as it was 71.72 (SD ± 52.68) minutes in Gotikhel HF. The difference in time taken to get the services in HF with and without CHIS was statistically significant (P<0.05). Only around half of the respondents (53.6 percent) can get their seeking service within 15 minutes of reaching to the health facility, remaining has to wait more than 15 minutes and up to one hour to get service.

Table 3: Perception of Respondents on Behaviour of HSP and knowledge about CHIS

	Name of Health Post				Total		P
	Bhattedanda HP (HP with CHIS)		Gotikhel HP (HP without CHIS)				
	N	%	N	%	Number	%	
Perception about behaviour of HSP							
very good	41	80.4	44	72.1	85	75.9	0.053
Good	10	19.6	17	27.9	27	24.1	
Heard about CHIS							
Yes	40	78.4	10	16.4	50	44.6	0.000
No	11	21.6	51	83.6	62	55.4	

The perception of the respondents about HSP is shown in table 3. It shows 80% subjects from Bhattedada HF reported very good where as 72% subjects from Gotikhel reported very good. There was not statistically significant different between the perception of clients about behaviour of HSP in HP with and without CHIS (P>0.05).

In the aggregate, only 44.6 percent subjects had heard about CHIS. Further, 78.4% subjects from Bhattedanda HF and only 16.4% subjects

from Gotikhel had heard about CHIS. The difference in knowledge (heard) about CHIS programme was statistically significant (P<0.05) between HP with CHIS and without CHIS. Thus implementation of CHIS is also a major source of awareness about it.

Since Bhattedanda and Gotikhel are two health posts within similar rural setting and there is only one major difference is the availability of CHIS in Bhattedanda HP and not in Gotikhel HP. Table 5 shows that the client flow of Bhattedanda HP is higher as compared with Gotikhel HP. But the

Table 4: Summary Table of FGD Findings in the HF

	Bhattedanda HP	**Gotikhel HP**
Venue	Bhattedanda center	Gotikhel Bazaar
Number of Participants	6	6
Nature of Participants	Mixed (Male and Female), Married	Mixed (Male and Female), Married unmarried.
Key Findings		
Service utilization in the HF	• Opening time is 10-3; opens in other time too. • 24 hours emergency services.	• Opening time is 10-3 • 24 hours delivery services only
Service satisfaction	• Good and understanding behavior of service provider • Adequate medicines availability along with free available medicines under free health policy.	• Good and understanding behavior of service provider • No adequate medicines available.
Knowledge on CHIS	• Available in Bhattedanda. • Only Rs 200 charge for whole year. • Currently same charges for all citizens though it was different previously.	• Heard about animal insurance and other insurance • Not in Gotikhel HP.
Barriers on service utilization	• Small level organization need to upgrade it.	• Staffs regularity.
Measures to improve the quality of service in the HF	• Medical doctor in the HF should be continuing its service further.	• Different approaches such as insurance should be started.

Focused group discussions were conducted among the community members of Bhattedanda and Gotikhel VDCs. The participants were selected purposively in each VDC. The numbers of participant were 6 in each group with heterogeneous characteristics.

The main objective of the discussion is to draw the participant's knowledge and perception about community health insurance scheme.

Table 5: Case load of HP

Name of HP	FY 066/67	FY 066/67	FY 066/67	Current Balance
Bhattedanda HP	6648	5948	4103	385842.75
Gotikhel HP	2240	2370	2761	375519.00

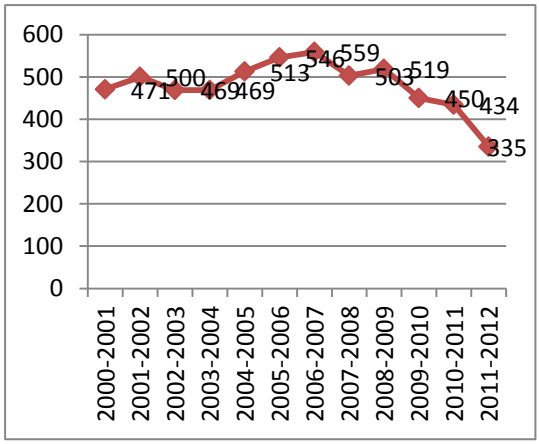

Figure 2: Trend of CHIS in Bhattedanda HP

The CHIS was implemented in Bhattedanda since 2042 BS (1985AD). The trend of insured household (HH) is in increasing order in the period of FY2057/058 (July 16, 2000-July 15, 2001) to FY 2063/064(July 17, 2006-July 16, 2007). Whereas after the implementation of Free Health Service by Government of Nepal is in decreasing order after FY 2064/065(July 17 2007-July 16 2008) to FY 2068/2069((July 17 2011-July 16 20012).

Fig 2 shows that the trend of no of household insured in Bhattedanda HP is in increasing order up to FY 2063/63 then after this is in decreasing order. In last FY 2068/69 only 335 household have done insurance.

DISCUSSION

Effectiveness of service delivery and utilization of in the health service is an important indicator affecting the quality of life of people. This study tries to assess effectiveness of service delivery in health facility with and without community health insurance scheme.

The highest numbers of the respondents (19.6 percent) were from the age group of 20-24. The proportion of senior citizens (≥60) was only 1.8 percent. The proportion of female clients was higher as compared with male. This study shows consistent data with the proportion of female patient was more in Lalitpur (DPHO Lalitpur 2068/69) as well as proportion of female was higher in inpatient mortality in Nepal (DOHS 2010/11).

In this study, there was significant difference between the time taken to get the service and cleanliness of the health posts environment between HP with and without community health insurance scheme but this findings is not consistent with another study carried by Devadasan (2011) which found that; there was no significant difference in the levels of satisfaction between the insured and uninsured patients.

In the context of behavior of service providers there was no significant difference between HP with and without community health insurance scheme. Community people taken CHIS programme as the supplement to fulfill the continuity in supply of medicine as well as increases the service status.

This study found the knowledge about the CHIS programme was more in the community people where CHIS programme was implemented. Thus implementation of CHIS programmed can be taken as the source of awareness also.

In the study, the proportion of case load was higher in HP with CHIS programme in last three consecutive years as compared with the HP without CHIS. The trend of number of household insured in CHIS programme is in decreasing order after the implementation of free health service policy by Government of Nepal. There is high drop-out rate in the CHIS programme in Bhattedanda HP from FY 2063/064 since the implementation of free health programme in the country. This finding is consistent with Gautam (2011) showing CHI programme was witnessing a high dropout rate—more than 50 percent (Gautam, 2011).

In a nutshell, CHIS enhance the regularity in medicine supplies and community trust in receiving services from the HF resulting in client satisfaction; and incorporating CHIS in Free Health Policy seem to enhance the quality of health services currently available.

This study has several limitations too. The sample size was small and findings of this study can not be generalized to other health facilty with CHIS programme. Further, the guardian was taken as the respondents for client exit interview in case of less than 10 years old person. This study has used only limited variables to analyse the data.

In spite of these limitations the strength of this study is that this the first attempt for comparative study conducted in Nepal with the purpose to measure the effectiveness in health care delivery system between HP with and without CHIS. Further study need to be carried out to know the real effectiveness of CHIS and to implement it in the other HFs.

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