

Prevalence and Factors Associated with Health Services Utilization of Sindhupalchowk District, Nepal

Nilam Tamang,¹ Swechhya Baskota,² Prajita Mali,² Saru Paudel,¹ Lumnima Shrestha,² Dipa Giri,² Sudikshya Neupane,² Ajma Shrestha,² Apar Lamichhane³

¹MiTRA Samaj, Baluwatar, Kathmandu, Nepal

²Department of Public Health, Om Health Campus, Kathmandu, Nepal

³National Trauma Centre, Kathmandu, Nepal

ABSTRACT

Introduction: In Nepal, preference of health service for treatment is different for different people, which is affected by their level of knowledge, socio-demographic factors and so on. The objective of this study was to find the first preference of health services of the people for the treatment of their illness and factors affecting their preference.

Methods: A descriptive cross-sectional study was conducted among 260 respondents of Maneswara Ward, Sindhupalchowk district which was selected through systematic random sampling. Data collection was done after taking ethical approval. Face-to-face interview was done to collect the data through semi-structured questionnaire. Data was entered and analyzed in SPSS v16.

Results: One-third (36.9%) of the respondents were found to be visiting the traditional health services and more than half (63.1%) of the respondents visited modern health services. Education (0.016), duration of stay (0.014), type of disease (<0.001), distance to the health services (<0.001), modes of transportation (<0.001), affordability (0.013), waiting time (<0.001) and availability of health care provider (<0.001) demonstrated association with utilization of health services at 95% level of confidence ($p < 0.05$).

Conclusions: Despite of modern health facilities available within walking distance, still people prefer to go to the traditional healers for almost all the health problems at first hand with firm belief that they cure it. Hence, government still lacks effective programs to attract people towards modern health services to some extent. Hence, the awareness campaign regarding the benefits of modern health services should be initiated.

Keywords: health service; utilization; Nepal.

INTRODUCTION

Health services include all services dealing with the diagnosis and treatment of disease, or the promotion, maintenance and restoration of health.¹ There is increasing interest in the traditional medicine globally. Use of traditional primary health care is extensive in both developed and developing countries.²

In Nepal, some people prefer to visit traditional health services whereas some prefer modern health services for the treatment of their illness. The main aim of this study was to assess prevalence and factors associated with utilization of health services of Sindhupalchowk district. This research is expected to contribute toward a better understanding of health care utilization status among the people and reasons for preferences of health care systems in the medical anthropological perspective. The research findings are also helpful to those

Correspondence:

Ms. Nilam Tamang,

MiTRA Samaj, Baluwatar, Kathmandu, Nepal.

Email: nilamtmg01@gmail.com

who are interested and involved in treatment practice among the rural people.

METHODS

A community cross-sectional study was conducted among 260 people of Barhabise Municipality of Sindhupalchowk district, Nepal. Data were collected from May 2018 to June 2018. Ethical approval was taken from Nepal Health Research Council (Reg. no. 89/2018).

Sample Size calculation

Prevalence i.e. 19% was taken from a study conducted in Nepal.³ Sample size was calculated by using the formula given below

$$n = Z^2pq/d^2 = 236$$

Where,

$$p = \text{prevalence} = 19\% = 0.19,$$

$$q = \text{complement of prevalence} = 1 - 0.19 = 0.81,$$

$$Z = 1.96 \text{ at } 95\% \text{ Confidence Interval,}$$

$$d = \text{maximum allowable error (5\%)} = 0.05$$

Including non-response rate of 10%, the total sample size was 260.

The study population were the local people of ward no. 8 of Barhabise Municipality Household heads who were sick within last 12 months were included in the study. Similarly, in case of absent of household head, adult who were available at that time was included in the study.

Sampling technique

The list of all household heads of Maneswora Ward were collected from Barhabise Municipality. There are altogether nine wards in this municipality. Thus, Simple Random Sampling (Lottery Method) was done for the selection of ward by the supervisor and Ward No. 8 was selected and systematic

random sampling was done for selection of household head or respondents. Out of total 963 households in Maneswora Ward, 260 study samples were taken through the sample interval of 4 by the formula; Sample interval = total household / total sample size that i.e. $963 / 260 = 3.7 \approx 4$. Therefore, study samples were selected through systematic random sampling with the sample interval 4.

The tool used for data collection was semi-structure questionnaire. Questionnaire was developed based on the objectives and variables used for this study. Semi-structure questionnaire consisted of socio-demographic characteristics, health related information, and types of health services utilization.

Pre-test of the questionnaire was carried out at the similar environment but to different population. Pretesting (10% of total sample size) i.e. 26 sample size was done at Paiyatar of Kapan Municipality. Needed corrections were done and final questionnaire was prepared.

Face to face interview was used for data collection technique. After data collection, all the data were entered and analyzed using SPSS version 16. Based on the distribution and variance, appropriate statistical tests were used for analysis. Univariate analysis was done and presented using frequency and percentage. Bivariate analysis was done by using chi-square test ($p \leq 0.05$). Chi-square test was conducted to see the association between health services utilization.

RESULTS:

The table 1 reveals utilization of health services by respondents. 36.9% first visited traditional healers (TH); 21.5% visited THs exclusively; while 54.8% visited both (first visited a TH and then visited the health post or hospitals or pharmacy). Similarly, 63.1% first

visited either HP/ Hospital/pharmacy; 50.4% visited modern health service exclusively; while 45.2% prefer both (visited a modern health services and then visited TH).

Table 1. Utilization of Health Services (n= 260)

Prevalence of Health Services	Frequency	Percentage
Traditional	96	(36.9)
Traditional Only	56	(21.5)
Both but first preference is traditional	40	(54.8)
Modern	164	(63.1)
Modern Only	131	(50.4)
Both but first preference is modern	33	(45.2)

The table 2 shows the reasons for choosing traditional health services. And the reasons were believe(38.5%) followed by affordable (19.8%), good services (17.7%), near (14.6%) and recovery of disease (9.4%). Similarly, table shows the reasons for choosing modern health services and the reasons were not believing in Dhami/Jhakri (36%), followed by hospital treatment needed disease (25%), early diagnosis and treatment(20.7%) and recovery of disease (18.3%).

Table 2. Reasons for choosing Traditional and Modern Health Services

Reasons	Frequency	Percentage
Traditional Health Services (n=96)		
Believe	37	38.5
Good services	17	17.7
Affordable	19	19.8
Near	14	14.6
Recovery of disease	9	9.4
Modern Health Services (n=164)		
Don't believe in dhami/jhakri	59	36.0
Early diagnosis and treatment	34	20.7
Recovery of disease	30	18.3
Hospital treatment needed disease	41	25.0

The table 3 shows that there was association

of health services utilization with education, duration of stay and type of disease. Other factors such as age, gender, type of family, ethnicity, religion, marital status and occupation were not found associated with utilization of health services.

Table 3. Association of health services utilization with socio-demographic characteristic (n=260)

Variables	n(%)	Health Services		P-value
		Traditional n (%)	Modern n (%)	
Age				
Less than 38 years ^a	129 (49.62)	52 (54.2)	77 (47)	0.261
38 years and above ^b	131 (50.38)	44 (41.6)	87 (53)	
Gender				
Male	126 (48.5)	46 (47.9)	80 (48.8)	0.893
Female	134 (51.5)	50 (52.1)	84 (51.2)	
Type of Family				
Nuclear	193 (74.2)	69 (71.9)	124 (75.6)	0.506
Joint	67 (25.8)	27 (28.1)	40 (24.4)	
Education				
Illiterate	121 (46.5)	54 (56.2)	67 (40.9)	0.016*
Literate ^c	139 (53.5)	42 (43.8)	97 (59.1)	
Ethnicity				
Relatively disadvantage ^d	168 (64.6)	65 (67.7)	103 (62.8)	0.425
Brahmin/chettri	92 (35.4)	31 (32.3)	61 (37.2)	
Religion				
Hindu	137 (52.7)	51 (53.1)	86 (52.4)	0.915
Non-Hindu ^e	123 (47.3)	45 (46.9)	78 (47.6)	
Marital status				
Married	227 (87.3)	82 (85.4)	145 (88.4)	0.483
Unmarried	33 (12.7)	14 (14.6)	19 (11.6)	
Occupation				
Agriculture	174 (66.9)	64 (66.7)	110 (67.1)	0.946

Variables	n(%)	Health Services		P-value
		Traditional n (%)	Modern n (%)	
Non-agriculture ^f	86 (33.1)	32 (33.3)	54 (32.9)	
Duration of Stay				
Less than or equal to 19 years ^g	50 (19.23)	26 (27.1)	24 (14.6)	0.014*
More than or equal to 20 years ^h	210 (80.77)	70 (72.9)	140 (85.4)	
Types of diseases				
Acute disease	208 (80.0)	89(92.7)	45 (27.4)	<0.001*
Chronic disease	52 (20.0)	7(7.3)	119 (72.6)	

* indicates P-value <0.05, a includes less than 38 years : 15-35 years, b includes 38 and above years, c includes literate, primary, lower secondary, secondary, higher secondary, diploma and above,d includes dalit, disadvantaged janajatis and other marginalized group, e includes buddhist, christian, muslim and others, f includes business, foreign employment, government job, private job and daily wages, g includes < 10 years and 10-20 years, h includes ≥ 20 years.

The table 4 demonstrates that an affordability was associated with health services utilization with P-value 0.013. Similarly, distance to health services, modes of transportation, waiting time, availability of care provider, satisfaction with care provider and services were found associated with health services utilization with P-value <0.001.

Table 4. Association of health services utilization with other variables (n=260)

Variables	Health Services		P-value
	Traditional n(%)	Modern n(%)	
Distance to health services			
Less than 30 min ^a	89(92.7)	72(43.9)	<0.001*
30 min and more ^b	7(7.3)	92(56.1)	
Mode of transportation			
Traditional ^c (foot, stretcher)	91(94.8)	73(44.5)	<0.001*
Modern ^d (bike, ambulance, bus)	5(5.2)	91(55.5)	

Expenditure during treatment			
Free	53(55.2)	74(45.1)	0.116
Paid	43(44.8)	90(54.9)	
Affordability			
Yes	93(96.9)	144(87.8)	0.013*
No	3(3.1)	20(12.2)	
Waiting Time			
Less than 30 min	94(97.9)	145(88.4)	<0.001*
30 min and above ^e	2(2.1)	19(11.6)	
Availability of care provider			
Yes	74(77.1)	89(54.3)	<0.001*
No	22(22.9)	75(45.7)	
Satisfaction with care provider			
Yes	95(99.0)	112(68.7)	<0.001*
No	1(1.0)	51(31.3)	
Satisfied with provided services			
Yes	95(99.0)	104(63.4)	<0.001*
No	1(1.0)	60(36.6)	

DISCUSSION

Modern/traditional Treatment System

The various percentages of modern and traditional health service utilization are reported in Nepal by different studies. A study done on Chhatara VDC in Bajura District by Krishna Prasad Chapagai mentioned 38.75% visited traditional healers and 61.25% visited modern health centers exclusively⁴ whereas in my study 21% visited traditional healers and 50.4% visited modern health services exclusively which was less than the above study. Since Sindhupalchowk is developed than Bajura such discrepancy in results may be seen and other reasons may be different geographical distribution and study population. Similarly, a study done on Dulikhel Municipality showed preference for exclusively traditional healers was 19% and modern health services 58.5% which was similar to my study.⁵

My study found that majority of the respondents (63.1%) first visited modern health services but this result has been found to be in contrast with a study done in Sindhupalchowk district, majority of respondents 51% seek traditional healer for the illness.⁶ Such difference may be due to different study population. However similar findings as my study were showed in studies done in Eastern Hilly Region of Nepal and Northwest Ethiopia.^{3,7} This indicates that majority of the people prefer modern health services. The reason behind this may be innovation and advancement in the modern medicine.

Demographic Factors in Health Care Utilization

Similar study done in Eastern Hilly Region and in Bhimtar, Sindhupalchowk Districts found that basic demographic factors did not show any association in bivariate analysis in choosing between traditional and modern methods.^{3,6} But in this study, only education, duration of stay at this locality and type of disease showed association at 95% level of confidence ($p < 0.05$).

Distance of health center and means of transportation

Hindering factors for the utilization of health services are far distance of health care centre (35%) in the study in Bhimtar, Sindhupalchowk district of Nepal.⁶ This study found association between distance of health facility and means of transportation with utilization of health services at 95% level of confidence ($p < 0.05$). But similar study done in Eastern Hilly Region demonstrated that no association was found between distance of health facility and means of transportation and choice of treatment systems (modern and traditional).³ All above discussion showed that distance to the health facility and modes of transportation are one of the factors affecting the utilization of health services.

Affordability and availability of care provider

Almost all the respondents could afford the traditional health services but 87.8% respondents could not afford the modern health services. In the study named Service quality and effectiveness of privately run traditional medicine based health service providing centers in Kathmandu Valley found affordability is another contributing factor that influence or force the patients to reach to the traditional medicine based hospitals.⁸ A study of Chhatara VDC in Bajura District found the reason of attraction towards traditional healing method is; that is cheap and locally available.⁴ A study done by Nawaraj Subba revealed that 73.1% patients were reporting to be unable to afford the expenses for treatment.⁹

In my study, almost 90% there were not available of the health worker, medicine and equipments in government health facilities. The main reason for not utilizing health services were lack of female doctors (43.75%), no lab facilities (31.25%), lack of doctors (25%) and lack of medicine (25%) in the study in Bhimtar, Sindhupalchowk district of Nepal.⁶ In this study affordability and availability of care provider were found to have significant association with utilization of health services. Therefore, from above discussion we can conclude that affordability and availability is key issue in seeking health services.

Satisfaction with care provider and service provided

Almost all respondents were satisfied with care provider and services in traditional health services but only 68.9% and 63.4% respondents were satisfied with care provider and services in modern health services respectively whereas the study done in Chatara VDC in Bajura District also revealed that significant numbers of people

(45%) were not satisfied with modern health cares which was consistent findings of my study.⁴ There was significant association between the satisfaction and utilization of health services in this study. But in the study done in Dhulikhel Municipality there was not significant association with satisfaction with medical care and utilization of health services.⁵ This may be due to the different study population and study area. Therefore, in order to increase health service utilization, satisfaction with care provided and service provided play an important role.

Reasons for utilizing health services

In my study the reasons for choosing modern health services were don't believe in Dhami/Jhakri (36%), followed by hospital treatment needed disease (25%), early diagnosis and treatment (20.7%) and recovery disease (18.3%) and the reasons for choosing traditional health services were believe (38.5%) followed by affordable (19.8%), good services (17.7%), near (14.6%) and recovery of disease (9.4%). According to the study done in South Africa, reasons for visiting traditional healers included continuity of care and a belief in their effectiveness.¹⁰ Similarly, cheap, locally available and regular services were the opinion of the respondents on traditional healing practices in the study done in Phoksundo VDC of Dolpa District and Chatara VDC of Bajura District.^{11,4} The study also revealed the hindering factors for health seeking behavior that are doctors not available (25%), lack of medicines (25%), no lab facilities (31.25%), costly (37.5%), no female doctors (43.75%), and too far to reach (35%).⁶ A study conducted in Chatara Vdc in Bajura District found that health worker donot visit home of people during illness and if they visit, they donot come in time, additionally, they take high charge. So most of the people were attracted towards traditional health services.⁴

CONCLUSIONS

The utilization of health care services among people living in Maneswora Ward was assessed. Despite of modern health facilities available within walking distance, still people of this ward prefer to go to the traditional healers for almost all the health problems at first hand with firm belief that they cure it. Hence, government still lacks effective programs to attract people towards modern health services to some extent.

CONFLICT OF INTEREST: None

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