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# Health Seeking Behavior and Utilization of Health Care Services in the Village Development Committees of Ilam District of Nepal

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#### **ABSTRACT**

Background & Objectives: Preventive, promotive, curative, and rehabilitative health care services depend not only in availability & accessibility of it but also on awareness and attitude of the people and various inter-woven social structure that determines in making choice. The objective of this study was to explore health seeking behavior and utilization of health care services in the rural places in VDCs of Ilam district of Eastern Nepal. Materials & Methods: A cross sectional study was conducted in between period of March 25th 2013 to April 10th 2013 Fikkal and Pashupatinagar VDCs in Ilam district with sample of 300 people. Data was collected using a semi-structured questionnaire. Results: One fifth of the populations were found to be seeking traditional healers' service and 80 percent among modern treatment system were relying on private treatment facility for treating sickness. People who had lived more than 20 years in that place and who felt modern health services were costly were likely to use service of traditional healers. Similarly people suffering from chronic illness, having health facility more than 30 minutes and using stretcher or walking as means of transportation were using government health centers more compared to private services. Conclusion: Significant people still use traditional healers' service and the government health facility utilization was low as compared to private. The people living for longer period in that place and having the concept that modern health centers are costly were primary user of traditional healing system. Health facility nearby or people who could afford for automobile travel facilities were using costly private health centers.

**Key words:** Health seeking behavior, Modern medicine, Traditional healers, Utilization of health care services

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# INTRODUCTION

The health statistics reveals fair utilization of health care services provided by government of Nepal in recent years. Annual health report of 2969/2070 B.S. (2013/2014 AD) claims more than three quarters of the people of Nepal had used public health services in 2069/70. Eighty one percent of registered morbidity cases used free health care services and ninety one percent of the population who used free health care services did so at health posts and sub health posts, 5% at hospitals and 4% at PHCCs. The study done on geriatric population in Nepal concluded that health seeking behavior and utilization of health care services depends on social beliefs, socio-economic status, education level, awareness on health conditions and services, activities of daily living, having chronic disease, and regular medication. Social support organization plays vital role in health care utilization.<sup>2</sup> There are different types of health care delivery systems in They Nepal. are Allopathic, Ayurvedic, Homeopathic, Acupuncture, Unani. Yoga, meditation, and various indigenous system of treatment and healing systems. Nepalese population utilize various traditional systems of treatment in health care besides modern allopathic system. The treatment satisfaction of these traditional systems are substantial in Nepal. Despite of government claim, various studies done regarding health care shows the people are not satisfied with the modern health services, particularly with the services of government health services. According to a study done by Jwala et al, it was found that more than half of study population preferred traditional system (Ayurvedic and Homeopathy) to be better.<sup>3</sup> The women having less faith towards allopathic

medicine was corroborated by another study where just over one third (35.6 percent) of them reported full satisfaction with the services they received and perceived inaccurate diagnosis of the disease, inadequate supply of medicines, and absence of skilled service providers among the reasons for it.4 An analysis of the health seeking behaviour (HSB) of rural people of Nepal done by Lauren Gabler D.Phil showed that 69% chose to seek care outside home, 22% used traditional healers, 37% use allopathic providers and 12% pharmacies as their first option and 16% did nothing to deal with their illnessses.<sup>5</sup> Similarly study of Health seeking behavior among Rajbanshi community in Morang Nepal by Nawaraj Subba in 2001 revealed Dhami-Jhakri, Shaman retailers were common practices under self-medication and only 15.4% were using government health centers where as 72% used private clinics.6 Study done by Yamasaki-Nakagawa in Nepal 2001 found that women were having significantly longer delay before diagnosis of a disease when they visited traditional healers first. Though the Government of Nepal is committed to improve the health status of rural and urban people by delivering quality health services throughout the country through skilled human resources and various health facilities, preventive, promotive, curative and rehabilitative health care services depend not only in availability & accessibility but also on awareness and attitude of the people. This study finding can be used for assessment of the effectiveness and constrains of the health related programs and necessary steps for the improvement. This study has tried to assess the health care utilization status among the people and reasons for preferences of health care systems.

#### **Objectives:**

This study aimed to explore health seeking behavior, the utilization of health care services and practices in Ilam district of eastern Nepal.

#### MATERIALS AND METHODS

A community based descriptive cross sectional study was conducted between March 25th to April 10th 2013 in Ilam district of Eastern Nepal with sample of 300 people. The sample size was calculated based on prevalence of 56% visit to modern medicine from the study conducted by Bhanu B. Niraula. <sup>8</sup>

The sample size was calculated by using prevalence formula  $n=Z^2pq/L^2=300$ , where p= prevalence=56, q=complement of prevalence=100-p=44, Z=1.96 at 95% Confidence Interval and L= Maximum allowable error or precision (10% of p) = 5.6

The sampling unit was selected household which was selected by the help of the female community health volunteer (FCHV) in Fikkal and Pashupatinagar Village Development Committee of

Ilam District. Hundred and eighty households were included from Fikkal VDC and 120 from Pashupatinagar. The Three wards from each VDC was selected randomly to enroll in the study where the households were further selected at regular intervals calculated by dividing the roughly estimated population of the all three wards by allotted samples in each VDC with the help of FCHV. Inclusion criterion was 15 years above adult member in the family preferably head of the household who had consented for participation. Data was collected by house to house interview with pretested questionnaire by the third year medical students of B. P. Koirala Institute of Health Sciences during their residential posting in epidemiological skills in health management under School of Public Health and Community Medicine. Students were oriented and trained about the data collection. Proper data collection skills and entering them in the software was ensured prior to conduction of the research. Data was entered in excel software and analyzed using SPSS 11.5 software. Simple frequency, percentages, means and standard deviations were used to represent the data in tables in descriptive analysis and chi-square

Table 1. Socio-Demographic profile of Respondents

Characteri stics	Category	Frequency (N=300)	Perce ntage	
Current	15-19	20	6.7	
Age in	20-39	154	51.3	
years	40-59	96	32	
	≥ 60	30	10	
Mean age in	Mean age in years ± SD		$38.91 \pm 15.15$	
Gender	Male	175	58.3	
	Female	125	41.7	
Ethnicity/	Brahmin/ Chettri	115	38.3	
Caste	Hill Janjati	147	49	
	Terai Major	23	7.7	
	Dalit	15	5	
	Illiterate	51	17	
	Literate	249	83	
~ A.	Graduate/Post graduate	25	10.0	
Literacy	Certificate level	60	24.1	
	High school certificate	50	20.1	
	Middle school certificate	63	25.3	
	Primary school certificate	51	20.5	
Marital	Never married	36	12	
Status	Married/Living together	253	84.3	
	Widowed/Separated	11	3.7	
Occupation	Employed	276	92	
of HOH	Unemployed	24	8	
Duration	Up to 10 yrs	214	71.3	
of stay	11-20 yrs	44	14.7	
	21-30 yrs	29	9.7	
	31-40 yrs	8	2.7	
	41-50 yrs	5	1.7	
	No migration	151	50.3	
	Internal migration	84	28.0	
Migration	From India	23	7.7	
status	Jhapa	20	6.7	
	Other districts of Nepal	22	7.3	

test was applied to see the association with dependent variables. Binary logistic regression was applied to see the independent association with outcome variables. Variables whose p values were less than 0.2 were considered for logistic regression. Significance level was set at five percent. Ethical clearance was taken from the Institutional ethical review board and verbal consent was taken prior to the study among the participants.

#### **RESULT**

#### **Descriptive**

A community based cross-sectional study was done in VDCs of Ilam district of Nepal including 300 respondents and the analyses are presented in descriptive tables with the help of frequency and percentages.

Age-wise distribution of respondents showed that more than half (51.3%) of them belonged to the age group of 20-39. More than half (58.3%) were male. The major ethnic group was hill Janajati (49%). More than 80 percent were literate. Almost 92 percent of the head of households were employed corresponding with the Eastern regions' high economic activities. Half of the respondent's families were original settler (Table 1).

Table 2 shows the morbidity pattern among the respondents where around 37 percent were found to have chronic disease and almost 14 percent had acute illness. Chronic diseases were more common among the higher age peoples whereas acute illness were common among lower age group. The most common chronic diseases were endocrinal diseases (56.6%), psychiatric problems (18.6%) and Gastrointestinal problems. Respiratory illness (75.6%) was highest among acute illness.

Table 3 shows practice of health services used by respondents. Almost 19 percent were utilizing the service of traditional healers in the region and almost 80 percent seeking the service of private medical service. The distance from their residence to nearest health care facility was less than 30 minutes in 80 percent of respondents. The commonest means of transportation was by foot (71.3%) followed by public transport (20.7%). Almost 86% of respondents preferred to visit hospital in case of emergency. About one in three respondents had utilized the free governmental health services. Better treatment and accessibility were commonest reasons for choosing the government health facility. Major portion of the respondents experienced kind and polite behavior of health care provider, but seven percent felt being not friendly or rude. Improving manpower and

**Table 2.** Morbidity pattern of Respondents

CI ·		₹7	N.T.
Characteris	Age Group	Yes	No
tics	in Yrs	N (%)	N (%)
Chronic	15-19	5(25.0)	15(75.0)
disease	20-39	54(35.1)	100(84.9)
status	40-59	40(41.7)	56(59.3)
	60 and more	14(46.7)	16(53.3)
	Total	113 (37.7)	187 (62.3)
Acute	15-19	3(15.0)	17(85.0)
disease	20-39	21(13.6)	133(76.4)
status	40-59	14(14.6)	82(84.4)
	60 and more	3(10.0)	27(90.0)
	Total	41 (13.7)	259 (86.3)
Sickness	Categories	Frequency	Percentage
category	Ü		
	Endocrinal	64	56.6
	Diseases		
Chronic	GI Diseases	18	15.9
Diseases	Respiratory	5	4 4
	Diseases	3	7.7
	Tumors	5	4.4
		•	
	Psychiatric	21	18.6
	problems		
	Total	113	100.0
			== /
Acute	Respiratory	31	<b>75.6</b>
Acute Diseases	Problems	31	75.6
		5	12.2
	Problems		
	Problems Eye/Ear	5	12.2

communication skills was the commonest answer (41%) suggested for improving health services. Nearly half of the people consider modern health care system to be costly and one fourth reported about unavailability of adequate facility.

#### **Bivariate analysis and Logistic Regression**

Health care utilization was assessed in terms of services utilized between modern and traditional medicine and whether private or government services were preferred. These variables were analyzed with demographic characteristics, morbidity, attitude towards the service and practices regarding health service utilization to assess the determining factors in choosing these services.

Table 4 reveals the relationship of various independent variables with treatment facility preferred. In bivariate analysis, increasing age (p for trend<0.05) and people who felt modern medicine was costly were found to be significantly utilizing the services of traditional healers as compared to modern medicine. In logistic regression attitude towards modern medicine had independent effect in choosing the mode of treatment (OR: 2.1, 95% CI: 0.2-2.6). Similarly duration of stay which had no relation in bivariate analysis also had independent effect in choosing health systems after adjustment (OR: 0.4, 95% CI: 0.1-0.9).

Table 3. Practice of health services used by respondents

Health Care Utilization	Category	Frequency (N=300)	Percentages
Treatment system	Traditional healing	56	18.7
	Modern medicine	244	81.3
Highest health centre	Government (PHCC/District Hospital /Zonal Hospital)	62	20.7
visited	Private(India/Other)	238	79.3
Distance to nearest health facility	Less than 30 minute	240	80.0
lacility	30-60 minute	37	12.3
	> 1 hour	23	7.7
Mode of transportation to	On foot	214	71.3
health care facility	Stretcher	4	1.3
•	Ambulance	6	2.0
	Public transport	62	20.7
	Motorbike	14	4.7
Mode of transportation	Traditional transport methods ( walking/ Stretcher)	218	72.7
	Modern transport (Public transport/Ambulance/ Motorbike)	82	27.3
Frequency of utilization of	Once in a year	74	24.7
health services	Twice in a year	89	29.7
	Thrice in a year	22	7.3
	> 3 times in a year	115	38.3
Preference in case of	PHCC/SHP	42	14.0
emergency	Hospital	258	86.0
Free governmental health	Yes	92	30.7
services utilized	No	208	69.3
Reason for preference to	Better treatment	32	51.6
Government health centre	Customs and beliefs	2	3.2
	Financial reasons	2	3.2
	Accessibility	26	42.0
Health programmes	Yes	101	33.7
conducted in village	No	199	66.3
Behaviour of health care	Kind and polite	188	62.7
providers	Not friendly/rude	21	7.0
	Satisfactory	91	30.3
Suggestion to improve	No suggestion	66	22.0
Government health	Improve manpower and communication skills	123	41.0
services	Improve infrastructure/health training/free services	111	37.0
Attitude of people towards	Costly	132	44.0
modern medicine	Facilities not available locally	75	25.0
	Will lead to healthy Community	93	31.0
	,		

Table 5 shows association between the independent variables with highest health center visited. Duration of stay in that place, migration status, chronic disease, distance to nearest health facility and mode of transportation to health facility was significantly associated with the highest center visited within one year in bivariate analysis. Whereas, after adjustment in binary logistic regression, distance to nearest health facility (adj.

OR: 0.3, 95% CI: 0.1-0.7), mode of transportation (adj. OR: 4.0, 95% CI: 1.6-9.9) and chronic disease status (adj. OR: 0.4, 95% CI: 0.2-0.8) were found to be associated with the highest health center visited. However, association could not be established with other variables.

# **DISCUSSION**

Ilam is a flourishing district in terms of economy in

Table 4. Association of mode of treatment with various variables

Characteristics	Treatment system				
	Traditional Medicine	Modern Medicine	OR (95%CI)	Adj. OR (95% CI)	
<b>Duration of stay at this locality</b>					
Up to 10 years	34(15.9)	180(84.1)	0.5(0.2,1.2)	0.4(0.1,0.9)*	
11-20 Years	11(25.0)	33(75.0)	0.9(0.4,2.5)	1.0(0.3,3.1)	
21-30 Years	11(26.2)	31(73.8)	1	1	
Migration status					
No migration	45(19.1)	190(80.9)	1.2(0.6,2.4)	1.6(0.7,3.9)	
Migration	11(16.9)	54(83.1)	1	1	
Chronic Diseases status	10(150)	0.5(0.4.4)	0 = (0 . 1 . 1 . 1)	0.0(0.1.1.7)	
Yes No	18(15.9)	95(84.1)	0.7(0.4,1.4)	0.8(0.4,1.7)	
Acute Disease status	38(20.3)	149(79.7)	1	1	
	6(14.6)	35(85.4)	0.7(0.3,1.8)	0.8(0.3,2.1)	
Yes No	50(19.3)	209(80.7)	, ,	1	
Distance to nearest health facility	30(17.3)	207(00.7)		1	
Less than 30 min	41(17.1)	199(82.9)	0.6(0.3,1.2)	1.1(0.5,2.4)	
	15(25.0)	45(75.0)		1	
30 minutes and more	10(20.0)	(,,,,,		•	
Mode of transportation	27(17)	101(02)	0.6(0.4.1.2)	0.6(0.2.1.2)	
Traditional (foot/stretcher)	37(17)	181(83)	0.6(0.4,1.3)	0.6(0.3,1.3)	
Modern (public transport/ ambulance/ bike)	19(23.2)	63(76.8)		1	
Attitude towards modern medicine					
Costly Facilities not available locally Will lead to healthy Society	35(26.5) 10(13.3) 11(11.8)	97(73.5) 65(86.7) 82(88.2)	2.7(1.3,5.6)** 1.1(0.5,2.9)	2.1(1.1,5.6)* 0.8(0.3,2.1) 1	
Behaviour of Health Care Provider					
Kind and polite	38(20.2)	150(79.8)	0.8(0.3,2.4)	0.8(0.2,2.6)	
Satisfactory	13(14.3)	78(85.7)	0.5(0.2,1.7)	0.5(0.1,1.8)	
Not friendly/rude	5(23.8)	16(76.2)	1	1	

<sup>\*</sup> p<0.05, \*\* p<0.01, Adjusted with age, ethnicity, gender, marital status, literacy and occupation.

Eastern Nepal. It is famous for tea, milk, broom, ginger, and cardamom production. Like any hills of Nepal, people also practice their distinct traditional healing practices besides modern medicine.

#### Morbidity

Morbidity pattern of the population in this study revealed around 38% were suffering from chronic diseases. The most common chronic disease were endocrinal diseases (56.6%)followed psychiatric problems (18.6%). Acute illness was found to be 13.7 % reported by the respondents in the last 15 days and the most common acute illness was respiratory (75.6%). The Nepal Living Standard Survey (NLSS 2010/2011) report reveals the increase in the burden of illness in the last 15 years but the pattern is just opposite where incidence of acute illness (20%) exceeds chronic illness (12%). Gastrointestinal and kidney/liver

diseases were the most common chronic problems and cold and fever symptoms were the most common acute illnesses. A study done on Rajbansi showed 50.8% headache/ bodyache/ weakness, 44.0% ARI, and 30.8% fever. The annual health report records 52% visiting to government health centers for some kind of sickness as percentage of total population in 2012/2013 AD in Ilam district. A study in rural Nepal revealed almost similar burden of disease where 53% of their household had been ill within the past year. A study done on health care utilization in rural Nepal mentions that despite satisfactory coverage of health programs, 22 per cent of population suffered from some health problems reported in one month.

#### **Modern/traditional Treatment System**

The various percentages of modern and traditional health service utilization are reported in Nepal by

Table 5. Association between highest levels of health center visited with various variables

Variables	Highest Health Center visited		OR (95% CI)	Adj. OR (95% CI)
	Govt. (%)	Private (%)	OK (93 % CI)	Auj. OK (93/0 CI)
Duration of stay at this locality	· · ·			
Up to 10 years 11-20 Years 21-30 Years	50(23.4) 9(20.5) 3(7.1)	164(76.6) 35(79.5) 39(92.9)	4.0(1.2,13.4)* 3.3(0.8,13.3) 1	2.5(0.6,9.6) 2.4(0.5,10.9) 1
Migration status No migration				
Migration	40(26.5) 16(19.0)	111(73.5) 68(81.0)	3.1(1.3,7.5)* 1	2.1(0.7,5.7) 1
Chronic Diseases status				
Yes No	13(11.5) 49(26.2)	100(88.5) 138(73.8)	0.4(0.2,0.7)** 1	0.4(0.2,0.8)* 1
Acute Disease status				
Yes No	8(19.5) 54(20.8)	33(80.5) 205(79.2)	0.9(0.4,2.1) 1	1.1(0.4,2.8) 1
Distance to nearest health facility				
Less than 30 min	40(16.7)	200(83.3)	0.3(0.2,0.6)**	0.3(0.1,0.7)**
30-60 min	22(36.7)	38(63.3)	1	1
Mode of transportation				
Traditional (foot/stretcher)	54(24.8)	164(75.2)	3.0(1.4,6.7)**	4.0(1.6,9.9)**
Modern (public transport/ambulance/bike)	8(9.8)	74(90.2)	1	1
Attitude towards Modern Medicine				
Costly Facilities not available locally Will lead to healthy community	25(18.9) 17(22.7) 20(21.5)	107(81.1) 58(77.3) 73(78.5)	0.9(0.4,1.6) 1.1(0.5,2.2) 1	0.6(0.3,1.4) 1.1(0.5,2.7) 1
<b>Behavior of Health Care Provider</b>				
Kind and polite	46(24.5)	142(75.5)	3.1(0.7,13.7)	1.9(0.4,9.5)
Satisfactory	14(15.4)	77(84.6)	1.7(0.4,8.3)	1.6(0.3,8.7)
Not friendly/rude	2(9.5)	19(90.5)	1	1

<sup>\*</sup> p<0.05, \*\* p<0.01, Adjusted with age, ethnicity, gender, marital status, literacy and occupation.

different studies. The study done on rural hilly population of central Nepal by Mansamine Jimba mentions 81% of the population visited traditional healers as first option, 55% visited traditional healers then to government health services whereas proportion who visited government health services and traditional healers exclusively were 19% and 26% respectively. Our study found that majority of respondents (81.3%) were utilizing the service of modern medicine and 19% traditional healer which was just in contrast with the findings of above study. The study done by Nawaraj Subba showed substantial proportion of traditional medicine

utilization (26%).<sup>6</sup> A study done on elderly people showed high utilization of traditional healers where preference for seeking care in Traditional healers were almost 33% and modern health services 58.5%.<sup>2</sup> An analysis of the health seeking behavior of rural hill people of Nepal done by Lauren Gabler D.Phil showed 22% used traditional healers, 37% use allopathic providers and 12% pharmacies as their first option to treat their illnesses.<sup>5</sup> Study done in Benighat revealed that despite the presence of the health post in the area for about two decades, about 42 per cent of the people go to a traditional healer instead.<sup>8</sup> This infers that around one fifth of

the population are still utilizing the service of traditional medicine and it is found even more in rural and among older age groups in Nepal.

Whatever the choice of health systems, be it a modern or traditional, majority of the respondents preferred to go to big hospitals in case of emergency (86%) and 14% mentioned PHC/SHP as emergency rescue. In a study on awareness regarding allopathic system in Nepal, the preference of Allopathic system in case of medical emergency were 79% and Ayurvedic 20% but for common health problems traditional systems were more utilized (Ayurvedic 48%, and homeopathic 17%) than allopathic 35%.<sup>3</sup>

### Government/private

Government health record reports high utilization of public health services where the utilization was about nine in ten (87.95%) in 2069/70.1 This is in contrast with our study where though majority of the population utilized modern medicine, the utilization of government services was found to be less (20%) as compared to private service (79.3%). The findings of N Subba was similar where private clinic was utilized by 72.0%. But visit for antenatal checkup in the government hospital was found to be more (52%) than private service (48%) in a study done in Eastern Nepal. 12 The reason for more antenatal checkups in government health centers and hospitals might be because of free services and medications provided to the client along with the incentive package of safe motherhood programs.

Annual health 2069/70 reports 71.4 percentage of population were found utilizing free health care services among total reported morbidity. This facility was utilized by ultra-poor destitute (45%), poor (34%), senior citizen (15.5%) and disabled (around 3%) among the targeted groups. But the free governmental health services utilization was found to be less (30.7%) in our study as compared to National report (Table 3)

# **Demographic Factors in Health Care Utilization**

Every cultures have its own ways of defining diseases and prescribed means to intended to promote health and prevent illness or to restore health when illness occurs. <sup>13</sup> The choice in health seeking behavior and utilization of health service depends on credibility of the services and attitude towards treatment system as well besides sociodemographic variables <sup>8</sup> and health condition. NR Subba concludes in his study that mere establishment of health centers and training for health workers is not enough to ensure the access of

health service, but also requires thorough socioeconomic assessment, cultural and behavioural diagnosis.<sup>6</sup>

Basic demographic factors in this study did not show any association in bivariate analysis in choosing between traditional and modern methods but use of traditional healing system was found to be more with increasing age (p for trend<0.05) though not significant after controlling for other variables. Older generation people are rooted in tradition hence still go for traditional medicine as compared to youngsters who are modern and rational in thinking. This was exhibited in the study done on geriatric people where 41.5% were preferring traditional healers for seeking care.<sup>2</sup> This was also mentioned in a study where women who were above 35 years favoured traditional modes of treatment from local healers and showed a tendency of distrust towards modern medicine.<sup>8</sup>

#### **Duration of stay and migration**

People settled for longer period in any rural community especially hills are thought to be traditional in outlook who usually follow the traditions of their predecessors including the healing systems as well. Our study showed that people who had lived for less than 10 years had 60% less tendency of utilizing the service of traditional healers than who had lived more than 20 years (adj. OR: 0.4, 95% CI: 0.1-0.9) in multivariate analysis. Migration status showed that the original settlers were using the services of traditional healers more than the people who had immigrated but was not statistically significant.

Similarly, people who were living in that place for less than 10 years were four times more likely to utilize the service of government services (OR: 4.0, 95% CI: 1.2-13.4) than who had lived there for more than 20 years but this was not significant on multivariate analysis. The people who had migrated to that place were thrice more likely to utilize the government health services as compared to original settlers (OR: 3.1, 95% CI: 1.3-7.5) which was not significant after adjustment.

# Distance of health center and means of transportation

This study found almost 80% had health facility within 30 minutes of walking distance. The commonest means of transportation was found out was on foot (71.3%) followed by public transport (20.7%). No association was found between distance of health facility and choice of treatment systems (modern and traditional). But studies have shown role of distance to health centers in making

choice of health systems. People who were close to health post location were found to seek modern treatment more than people who were far away reasoning distance as a main reason for not visiting the health centers. Study done in Thailand by Sharma SK <sup>14</sup> and a study done on reproductive tract infections among women by Puthuchira R AK in India <sup>15</sup> also concludes distance to health facility, poor transportation, and poor health facilities besides other factors as the main reasons for not seeking appropriate care.

The distance of health center more than 30 minutes (adj. OR:0.3, 95% CI: 0.1-0.7) and foot/stretcher as means of transportation to health centers remained as independent factor for public health care facility utilization after adjustment (adj. OR:4.0, 95% CI:1.6-9.9). This could be possibly due to existence of only government health facility in the area whose health center is far and less presence of private clinics. This was in contrast with a study which found that population living within 2 KM from local health facility were utilizing health services more (48%) as compared to who lived beyond 2 KM (21%). 11

#### Attitude towards modern medicine

Big chunk people (44%) thought that modern health system was costly and one in four people thought that the facilities are not available at local health centers (Table 3). Similar finding was revealed by Subba NR where almost 73.2% were unable to afford the cost for treatment.6 The perceived inadequate quality of health services of the government health facilities was also mentioned by a National report<sup>16</sup> and a study done DK Yadav in Dhanusha district<sup>11</sup> as one of the big reason for average Nepalese women in not utilizing the Government health services. One among the big reason for not delivering in the institution by Muslim women of Biratnagar was perception that the service was costly (30%) besides unawareness  $(60\%)^{17}$ 

Attitude towards modern medicine remained as an independent predictor of mode of treatment in our study. People who thought modern medicine was costly were twice likely to use traditional healers' service as compared to those who thought it could make healthy community (adj. OR:2.1, 95% CI:0.2-2.6 Table 4). Traditional medicine, as compared to modern Allopathic medicine, has benefit of low cost, local origin, tested and tried by generations, credibility of the healer. This is also explained by a study where almost one in five respondents mentioned high cost for not utilizing the modern medicine.<sup>8</sup>

Though majority utilized the private health service, slightly more than half of the people who utilized the government facility perceived it could provide better treatment (Table 3). The accessibility and financial reasons were among other reasons to prefer government provided health center. Service satisfaction as a reason for visit to government health centers was also revealed in the study done by Subba NR (82.8%) followed by accessibility in terms of distance (26.2%), custom (13.7%), and cost (9.7%). Difficult to access was one of the big reason among women for not opting antenatal care living far off from the health centers shown by study done by Yadav DK.<sup>11</sup> But by a study done on women showed contrasting result where the level of satisfaction regarding the services of public health facilities were found to be low (35.6%) and the reason were perceived inaccurate diagnosis of the disease, inadequate supply of medicines, and absence of skilled service providers.<sup>4</sup>

Our study showed more than 90% people had experienced polite or satisfactory behavior, while only 7% felt unfriendly or rude (Table 3). Though a study by Bhanu Niraula reported that 22% mentioned bad treatment at health post for not utilizing the health because of bad treatment at the health post.<sup>8</sup>

# **CONCLUSION**

Despite of modern health facilities available within walking distance, still some segment of people prefer to go to the traditional healers for almost all the health problems at first hand with firm belief that they cure it. Within modern health system, people prefer to go to the private clinics, distant higher centers and India for treatment as compared to government health centers nearby. They believed that health care providers and infrastructures in their area are not good enough. The people living for longer period in that place and having the concept that modern health centers are costly were primary user of traditional healing system and nearby health facility and people who could afford for automobile travel facilities were using costly private health centers.

#### Limitation of the study:

This study could not cover large areas due to time, manpower and geographical constraints. We have interviewed to any family member above 15 years of age which might cause bias in actual representation of perception of the household.

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#### REFERENCES

- Department of Health Services. Annual Report 2069/2070
   B.S, (Report), Government of Nepal, Ministry of Health and Population, Department of Health Services, Kathmandu Nepal.
- Sanjel S, Mudbhari N, Risal A, Khanal K. The utilization of health care services and their determinants among the elderly population of Dhulikhel Municipality. Kathmandu Univ Med J. 2012;37(1):34-9.
- Jawla S, Gupta AK, Singla R, Gupta V. General awareness and related popularity of allopathic system of medicine. Journal of Chemical and Pharmaceutical Research. 2009;1(1):105-12.
- The World Bank, 2001(Report). Understanding the access, demand and utilization of health services by rural women in Nepal and their constraints; 2001 June. Available at: http://www.healthnet.org.np/healthstat/worldbank/womenhealth.pdf.
- Gabler L. Health in the hills (Thesis): An analysis of the health seeking behaviour (HSB) of the people in rural Nepal. University of Oxford for Department of Public Health 2012.
- Subba NR. Health seeking behavior of Rajbansi Community in Katahari and Baijanathpur of Morang District, Nepal. Journal of Nepal Health Research Council. Oct 2004;2(2):14-8.
- Yamasaki-Nakagawa M, Ozasa K, Yamada N, Osuga K, Shimouchi A, Ishikawa N, Bam DS, et al. Gender difference in delays to diagnosis in Health Care seeking behavior in Rural area of Nepal. Int J Tuberc Lung Dis. 2001 Jan; 5(1):24-31.
- 8. Niraula BB. Use of health services in Hill villages in Central Nepal. Health Transition Review. 1994;4:151-66.
- Central Bureau of Statistics. Nepal Living Standards Survey 2010/11 (Statistical report). Volume one. National planning commission secretariat, Government of Nepal; November 2011 November .p.101-16.
- Jimba M, Poudyal AK, Wakai S. The Need for Linking Healthcare-Seeking Behavior and Health Policy in Rural Nepal. HEALTHCARE-SEEKING BEHAVIOR AND HEALTH POLICY, NEPAL. June 2003;34(2):462-3.
- Yadav DK. Utilization Pattern of Health Care Services at Village Level. J Nepal Health Res Counc. Apr 2010;8 (16):10-4.
- Bhandari B, Pokhrel B, Bhatta B, Karn R, Pokhrel A, Jha
   N. Utilization of Maternal Health Care Services in Belbari

- VDC of Eastern Region of Nepal. Journal of Nobel Medical College. 2011;1(1):53-8.
- 13. Helman Cecil G. Cultural factors in Epidemiology. Culture Health and Illness. Third Edition, Butterworth-Heinman Ltd, Oxford; 1994.p.19.
- 14. Sharma SK, Vong-Ek P. Perceptions and Care Seeking Behaviour of Obstetric Complication in Thailand. KUMJ. 2012;38(2):63-70.
- 15. Ravi RP, Ravishankar AK. Care Seeking Behaviour and Barriers to Accessing Services for Sexual Health Problems among Women in Rural Areas of Tamilnadu State in India. Journal of Sexually Transmitted Diseases. 2014;2014:1-8.
- Ministry of Health and Population. Nepal Population Report 2011. Government of Nepal, Population Division, Ramshahpath, Kathmandu, Nepal; 2012.p.88.
- 17. Pokhrel BR, Sharma P, Bhatta B, Bhandari B, Jha N. Health seeking behavior during pregnancy and child birth among Muslim women of Biratnagar, Nepal. Nepal Med Coll J. 2012;1(2):125-8.