# Factors Affecting Choice Of Health Care Facilities Among The Adults of an Urban Community

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# **ABSTRACT**

**Introduction:** Health service delivery systems that are safe, accessible, high quality, people-centred, and integrated are critical for moving towards universal health coverage. World Health Organisation is supporting to improve the efficiency and effectiveness of health service delivery systems to all the population not only the patients. This study aims to identify the factors affecting the choice of health care facilities among the adults of an urban community and its association with the selected sociodemographic variables.

**Methods:** A descriptive cross-sectional study was conducted among the community residence with 120 respondents using non-probability purposive sampling technique. Data was collected using semi-structured interview schedule that was analysed by using descriptive statistical methods such as frequency, percentage, mean, standard deviation and inferential statistics such as chi-square test.

**Result:** The findings of the study revealed that majority (60.8%) of the respondents used private health care facilities and there was significant association of the choice of health care facility with the health care services related factors whereas no significant association was found with the selected sociodemographic variables.

**Conclusions:** Based on the study findings, it concluded that various health care services related factors like availability, affordability, acceptability and accessibility factors tends to affect the choice of health care facility.

**Key words:** Adults; Factors; Public health care facility; Private health care facility

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# **INTRODUCTION**

People's choices are determined by a complex interplay between a variety of patient and provider characteristics. In various Northwest European countries, there is a demand-driven health care system that stresses the importance of patient health care provider choice. In most European countries, patients are encouraged to actively choose their health care provider. Important reasons for promoting patient choice are to reduce waiting times and to encourage competition between providers.<sup>1</sup>

On the other hand, health care system in Nigeria has a mixture of private and public health care providers.<sup>2</sup> Unlike in many other developed nations, health care in Nigeria is not universally free. Choice of health care providing facility is an important decision for the patient seeking the best health care for oneself. This decision-making process is determined by factors external to the clients such as cost, accessibility as well as quality of services provided by the health care facilities. Satisfaction of services provided is a perception by the clients and must be considered by managers of health institutions when decisions to improve health facility services are to be made.<sup>2</sup>

Nepal is a developing nation with sub optimal health care services. Although the health care system in the country has been progressive, it is still far from perfection. According to Department of Health Survey (DOHS), Nepal, 533 hospitals were listed in the Health Management Information System under Department of Health Services in 2015/16, of which 118 (22%) were public hospitals and 415 (78%) non-public hospitals. Annual health report of 2015/16 claims more than 50% of the people of Nepal have used public health services in 2015/16. Eighty-one percentage of registered morbidity cases used free health care services and 91% of the population who used free health care services did so at health post, 5% at hospitals and 4% at Primary Health Care Centres.<sup>3</sup>

Nepal, being a developing nation, has to put in lot of efforts to improve in all the basic components of various sectors like health care, education, agriculture, transportation, industries etc. Though various measures are being launched in various parts of the nation, there is still lack of sufficient knowledge, accessibility, health supply and resources for the optimum level of developmental activities. Health care sector is one of those challenging sectors. Regarding the choice of health care, there are so many factors that could determine for their approach that could be accessibility wise, economic wise or resources wise. Therefore, this study was conducted to identify the factors affecting the choice of health care facilities either public or private and its association with the selected variables and clarify the tangentiality.

### **METHODS**

A descriptive cross-sectional study design was used to identify the factors (health care services related factors like availability, affordability, acceptability and accessibility) affecting the choice of health care facilities among the adults aged from 20 to 59 years. The study subjects were chosen from each household who had received health care services in recent one year of time, residing in Kageshwori Manohara Municipality, Kathmandu, Nepal. Data was collected for around two weeks through semistructured interview between 05 Jun 2019 and 22 Jun 2019. The study was initiated after getting approval from ward office of Kageshwori Manohara Municipality, Mulpani ward no.7. The statements were prepared in English and converted to local Nepali language for easy understanding. Interview schedule was divided into three parts: Part I related to socio-demographic information of the respondents. Part II related to use of health care facilities. Part III included the statements related to various factors affecting the choice of health care facility. The instrument was pre-tested on 10% of the total sample size i.e. twelve samples in the same community residents which were later excluded from the study, for correct understanding of the instrument and the necessary modification was done. Ethical approval was taken from Institutional Review Committee of Nepalese Army Institute of Health Sciences, Sanobharyang, Nepal. An informed written consent was obtained from each participant prior to data collection by explaining the purpose of the study. Confidentiality of the information was ensured by maintaining privacy while interviewing. Data analysis was done via statistical package for the social sciences (SPSS) version 20 programs through descriptive and inferential statistics. Chi-square test was used to

find out the association of different variables to the choice of health care facilities considering p value of < 0.05 as significant association.

#### **RESULT**

Total 120 adults participated in the study. The sample showed that about one third (32.5%) of the respondents belonged to the age group 20 - 29 years and 10.8% of the respondents were in the range of 50 - 59 years with the mean age 35.7 years and standard deviation  $\pm$  9.9 where 59.2% of respondents were males. Majority (70.8%) of the respondents were married. Majority (70.8%) were from Brahmin / Chhetri ethnicities. Almost all (98.3%) of respondents could read and write, out of which 40.6% had their education up to secondary level and 37.5% were involved in business as their main occupation. Majority (69.2%) of the respondent belonged to nuclear family. Most of them (75.8%) had enough income for daily livelihood.

Majority (60.8%) of the respondents had used private health care facility within one year duration. Most (75.8%) of respondents had sought medical service for common medical conditions like fever, hypertension, chronic obstructive pulmonary disease etc. Minor proportion (4.2%) had visited health facilities for other conditions accounting like joint pain (1.7%), skin problem (1.7%) and paediatric illnesses (0.8%). Among all the medical attention seekers, 19.2% got admitted for their illness, out of which 15.8% had stayed for  $\leq$  eight days in the health care facility.

We found out that the main selected availability related factors were less waiting time (74.0%), clean and tidy environment (89.0%), well equipped (98.6%) among the people who chose private health care facilities and good reputation (83.0%) was the major factor which led to the choice among those who public health facility. This factor has the significant association with choice of health care facilities with p-value < 0.05.

Among the choices, our results showed that selected affordability related factors as cost of treatment (87.2%), freely available medicines (40.4%) and consultation (38.3%) are the major causes in their choice of public health care facility. This has significant association with the choice of health care facility with the p-value being < 0.05. The selected acceptability related factors mentioned

as timely response (84.9%), good explanation (83.6%), medical personnel answering the queries and confidentiality of words (90.4%) who chose private health facility, has significant association with the choice of health care facility with p-value

**Table 1.** Socio-demographic Characteristics of the Respondents (N = 120)

Variab	les	Frequency	Percentage
Mean a	<b>age</b> = 35.7 years and 9.9		
Sex			
	Male	71	59.2
	Female	49	40.8
Marita	l status		
	Married	85	70.8
	Unmarried	34	28.3
	Widowed / Widower	1	0.8
Ethnici	ity		
	Brahmin / Chhetri	85	70.8
	Janajati	28	23.3
	Others (Dalit and Madhesi)	7	5.9
Educat	ional status		
	Can read and write	118	98.3
	Can't read and write	2	1.7
If can 1 118)	read and write (n =		
	Primary level	25	21.8
	Secondary level	48	40.6
	Bachelor's level and above	45	38.1
Occupa	ation		
	Business	45	37.5
	Service	33	27.5
	Farmer	20	16.7
	Home-maker	10	8.3
	Others (Abroad and labour)	12	10.0
Family	Type		
	Nuclear family	83	69.2
	Joint family	37	30.8
Family Income (Participant's own word)			
	Enough for daily livelihood	91	75.8
	More than enough daily livelihood	23	19.2
	Not enough for daily livelihood	6	5.0

**Table 2.** Health Care Facilities related Information of the Respondents (N = 120)

Variables	Frequency	%
Used health care facility within the one year duration		
Private health care facilities	73	60.8
Public health care facilities	47	39.2
Purpose of the visit		
Medical condition	91	75.8
Surgical condition	12	10.0
Gynecology problems	12	10.0
Others (joint pain, skin problem, pediatric problems)	5	4.2
Admitted to any health care		
facility		
Yes	23	19.2
No	97	80.8
<b>Duration of admission (n = 23)</b>		
≤8 days	19	15.8
> 8 days	4	3.3

< 0.05. This association clarifies that the emotional health is as important as one's physical health.

The selected accessibility related factors like easy availability of transportation (80.8%) and low travel time (74.0%) were important while choosing private health care. This has significant association with the choice of health care facilities with p-value < 0.05. This is because of the universal fact that the duration of distance and means of transportation is of great importance as waste of time is waste of money.

We did not find any significant association of socio-demographic variables with the choice of health care facilities. This is explained by the fact that Kathmandu's literacy rate is increasing day by day (it was 89.6% according to 2011 census) and everyone is taking the health factor as the prime thing. Hence, there is no socio-demographic background which could affect the choice of health care facility. Rather, this choice is entirely dependent upon the quality of services that the health care facilities provide to the people.

# **DISCUSSION**

The present study revealed that majority (60.8%) of respondents has used private health care facility out

**Table 3.** Association of Availability Related factor with the Choice of Health Care Facility

Variables	Choice of Care Fac	ility	Chi-	p- value
	Private health care	Public health care	square value	
	(N = 73) $f%$	(N = 47) $f %$		
Less waiting time for consultation				
Yes	54 (74.0%)	9 (19.1%)	34.461	0.000
No	19 (26.0%)	38 (80.9%)		
Clean and tidy environment of the health care facility Yes No	65 (89.0%) 8 (11.0%)	27 (57.4%) 20 (42.6%)	15.954	0.000
Well equipped health care facilities with the needed facilities and services* Yes	72 (98.6%) 1 (1.4%)	42 (89.4%) 5 (10.6%)	5.171	0.034
Good reputation of doctors and the health care facility Yes	47 (64.4%) 26	39 (83.0%) 8	4.869	0.027
INU	(35.6%)	(17.0%)		

<sup>\*</sup>Fisher's Exact Test

of which 91.8% chose private health care facility as the reception staffs were easy to approach, 98.6% believed that the private facility is well-equipped and 90.4% believed that the staffs at private set up are friendly, cooperative and respectful. Our finding is consistent with a similar type of study done in Oman revealing that the selection of hospital was made when hospital staffs were friendly and helpful (68.2%) and when the facility was equipped with modern equipment (60.3%) and

**Table 4.** Association of Affordability Related factor with the Choice of Health Care Facility

Variables	Choice of Health Care Facility		Chi-	p- value
	Private health care		square value	value
Cost of treatment, consultation fee and medicine are within the capacity to pay				
Yes	44 (60.3%)	41 (87.2%)	10.059	0.002
No	29 (39.7%)	6		
Medicines are available free of cost				
Yes	11 (15.1%)	19 (40.4%)	9.805	0.002
No	62 (84.9%)	28 (59.6%)		
Free consultation				
Yes	7 (9.6%)	18 (38.3%)	14.288	0.000
No	66 (90.4%)	29 (61.7%)		

when the doctors treated patients in a friendly manner (65.3%).<sup>4</sup>

The present study revealed that adults preferred to visit private health care facilities (60.8%) as compared to the public health care facility (39.2%). They were satisfied with the less waiting time (74.0%), clean and tidiness (89.0%), equipment and resource (98.6%), timely response (84.9%) and competent doctors and nurses (93.2%). This is in agreement with a study done among Ghanaian health seekers where 44.7% of the respondents were satisfied with the lesser wait time, better conditions and accessibility of private health facility in comparison to public health care facility.<sup>5</sup>

The present study showed that there is significant association of selected affordability related factors (Cost of treatment, freely available medicines and consultation) and selected acceptability related factors (timely response, good explanation, medical personnel answering the queries and confidentiality of words) with the choice of health care facility. This is consistent with similar study done in North-

**Table 5.** Association of Acceptability Related factor with the Choice of Health Care Facility

Variables	Choice of Health		Chi-	p-
	Care		square	value
	Private	Public	value	
	health	health		
	care (n = 73)	care (n = 47)		
	f%	f%		
Timely				
response				
system of the				
diagnostic				
investigations				
Yes	62	22	19.788	0.000
	(84.9%)	(46.8%)		
No	11	25		
	(15.1%)	(53.2%)		
<b>Explanation of</b>				
the health				
problems and				
treatment in a				
good manner				
Yes	61	21	19.974	0.000
	(83.6%)	(44.7%)		
No	12	26		
110	(16.4%)	(55.3%)		
Maintained the	, ,	, ,		
dignity by				
keeping the				
words of				
confidentiality				
Yes	66	36	4.28	0.039
	(90.4%)	(76.6%)	0	
No	7 (9.6%)	11		
110	7 (2.070)	(23.4%)		
		(=570)		

Central Nigeria which showed a statistical relationship between the health seeking preferences and the reason for choosing a particular health care service.<sup>6</sup> Amongst the reasons provided by the respondents, the cost of medication (42.2%), presumed skills of the staff (21.4%) and the proximity to the health facility (20.8%) were the most important ones. The attitude of the staff (15.6%) constituted the least important reason for the choice.<sup>6</sup>

We found that there is a significant association of selected accessibility related factors like easy availability of transportation, lesser travel time, lesser waiting time, clean and tidy environment, well equipped and good reputation while choosing health care facilities. Similar study from Riyadh, Saudi Arabia had showed variables like location of health care facility and waiting time were

**Table 6.** Association of Accessibility Related factor with the Choice of Health Care Facility

Variables	Choice of Health Care Facility		Chi-	p- value
	Private health care (N = 73) f%	Public health care (N = 47) f%	square value	
Easy availability of transportation				
Yes	59 (80.8%)	21 (44.7%)	16.806	0.000
No	14 (19.2%)	26 (55.3%)		
The travel time is low to reach the health care facility				
Yes	54 (74.0%)	18 (38.3%)	15.162	0.000
No	19 (26.0%)	29 (61.7%)		

statistically significant in choosing the health care facility.<sup>7</sup>

## **CONCLUSIONS**

Based on the study findings it concludes that the study population chose private health care facility over public health facility. The choice was made considering availability, affordability, acceptability and accessibility related factors of health care service. Therefore, the hospitals or any organisations involved in the health care delivery should focus on the prime aspects of efficient and effectiveness of quality of health care which should be easily available, affordable, accessible as well as acceptable.

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**Table 7.** Association of selected Socio-demographic Variables with the Choice of Health Care Facility (N = 120)

Socio- demographic variables		Choice o	Chi-	p-	
		care fa Private	Public	squa	value
variad	ies	health	health	re value	
		care	care	value	
		(N = 73)	(N = 47)		
Age					
8-	20-36	34	27	1.352	0.245
		(46.6%)	(57.5%)		
	37-59	39	20		
		(53.4%)	(42.5%)		
Gende	r				
	Male	43	28	0.005	0.942
		(58.9%)	(59.6%)		
	Female	30	19		
		(41.1%)	(40.4%)		
Ethnic	ity				
	Brahmin /	47	38	3.753	0.053
	Chhetri	(64.4%)	(80.8%)		
	Others	26	9		
		(35.6%)	(19.2%)		
Marita	ıl status				
	Married	52	33	0.014	0.904
		(71.2%)	(70.2%)		
	Single	21	14		
		(28.8%)	(29.8%)		
Educa status					
	Can read	73	45	3.159	0.790
	and write	(100.0%)	(95.7%)		
	Can't read	0 (0.0%)	2 (4.3%)		
	and write				
Family	<b>Type</b>				
	Nuclear	53	30	1.032	0.310
	family	(72.6%)	(63.8%)		
	Joint	20	17		
	family	(27.4%)	(36.2%)		
Family	Income				
	Enough for	57	40	0.911	0.340
	daily	(78.1%)	(85.1%)		
	livelihood		=		
	More than	(21.00()	(14.00()		
	enough for	(21.9%)	(14.9%)		
	daily livelihood				
Numb					
Number of Family members					
1 anny	≤ 5	51	30	0.474	0.491
	<i>_ _ J</i>	(69.9%)	(63.8%)	0.7/4	U.771
	> 5	22	17		
	. 5	(30.1%)	(36.2%)		
		(5 3.1 / 0)	(20.270)		

<sup>\*</sup>Fisher's Exact Test

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#### REFERENCES

- 1. Victoor A, Delnoij DM, Friele RD, Rademakers J. Determinants of patient choice of healthcare providers: a scoping review. BMC Health Serv Res. 12(272):10-186. DOI: https://doi.org/10.1186/1472-6963-12-272
- 2. Uchendu OC, Ilesanmi OS, Olumide AE. Factors influencing the choice of health care providing facility among workers in a local government secreteriat in South Western Nigeria. Ann Ib Post Grad Med. 2013;11(2):87-95. PMID: 25161426
- 3. Department of Health Survey. (2073-2074). Glimpse of annual report. Nepal: Ministry of Health and Population. Retrieved from: https://publichealthupdate.com/annual-report-of-the-department-of-health-services-dohs/
- 4. Al-Balushi S, Khan FR. Factors influencing the preference of private hospitals to public hospitals in Oman. IJMIER. 2017 Sep: 2395-7662. DOI: 10.18510/ijmier.2017.323
- 5. Tenkorang EY. Health provider characteristics and choice of health care facility among Ghanaian health seekers. Health Syst reform. 2016 Apr 2;2(2):160-70. DOI: 10.1080/23288604.2016.1171282
- Audu O, Bako IA, Abdullahi AU, Nanben VO, Avidime S. Sociodemographic correlates of choice of health care services in six rural communities in North Central Nigeria. Adv Public Health. 2014 Dec 22;2014. DOI: https://doi.org/10.1155/2014/651086
- 7. Al-Ghanim SA. Factors influencing the utilisation of public and private primary health care services in Riyadh city. JKAU Mar Sci Econ & Adm. 2004;19(1):3-27. DOI:11.01.1426H
- 8. Gil MR, Choi CG. Factors affecting the choice of national and public hospitals among outpatient service users in South Korea. Inquiry. 2019 Apr; 56:0046958019833256. DOI: https://doi.org/10.1177/0046958019833256
- 9. Karkee R, Kadariya J. Choice of health-care facility after introduction of free essential health services in Nepal. WHO South East Asia J Public Health. 2013;2(2):96-100. DOI: 10.4103/2224-3151.122941
- 10. Liu Y, Kong Q, Yuan S, van de Klundert J. Factors influencing choice of health system access level in China: A systematic review. PLOS ONE. 2018 Aug 10;13(8):e0201887. DOI: https://doi.org/10.1371/journal.pone.0201887
- 11. Mosadeghrad AM. Patient choice of a hospital: implications for health policy and management. Int J Health Care Qual Assur. 2014 Mar 3. DOI: https://doi.org/10.1108/ijhcqa-11-2012-0119
- 12. Dharmesh M, Devendra S. Factors affecting patients' decision in selection of hospital. Strateg Manag J. 2014;25 (3):5-10. Retrieved from: https://ideas.repec.org/a/brc/journl/v25y2014i3p5-10.html
- 13. Patel PD, Singh MB. (2075). Essential textbook of nursing research and biostatistics. Kathmandu: Samiksha Publication Private Limited.
- 14. Tang C, Xu J, Zhang M. The choice and preference for public-private health care among urban residents in China: evidence from a discrete choice experiment. BMC Health Serv Res. 2016 Dec;16(1):61-1. DOI: https://doi.org/10.1186/s12913-016-1829-0
- 15. Thapa AK, Adhikari SR. Characteristics of morbidity and choice of health care facilities in Nepal. J Adv Res. 2015;2(2):47-55. DOI: https://doi.org/10.3126/jaar.v2i2.16605
- 16. United Nation International Children's Education Fund. (2018). A vision for primary health care in the 21st century. Kazakastan: World Health Organisation. Retrieved from: https://apps.who.int/iris/handle/10665/328065