# Motive for Using Specific Health Care Practices in Kathmandu Metropolitan City

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#### Abstract

This cross sectional analytical study tries to identify the reasons which motivate people to use specific health care practices and assess the relationship of factors affecting the health service utilization pattern on use of health services in Kathmandu Metropolitan City. The data for this study is collected from the Kathmandu Metropolitan City. A representative and random sample of 500 household is taken, using multistage sampling, with the probability of selection of study area proportional to their size. Data are collected with the help of semi-structured questionnaire and analyzed with SPSS13.0. Results are obtained by the frequency distribution and cross tabulation of the variables. Chi-square tests and logistic regression are run. Result suggests that families seek different types of providers for contrasting reasons and at varying stages of illness. Quality of care, severity/ nature of illness, belief in specific health care practices, income and service price all are significant in the choice of health care provider. Cost of care is important but is not an overwhelming factor in the choice of modern health care provider.

Keyword: Health seeking behavior, motive, reasons, health care practices

#### Introduction

Review of the global literature suggests that the utilization of health services is likely to depend on variety of demand factors and are classified as socio-demographic status, physical and financial accessibility, cultural beliefs and perceptions, social norms and traditions, women's autonomy, economic conditions, disease pattern and health service issues like cost of and access to care, and the quality and appropriateness of the services provided (Katung, 2001; Uchudi, 2001; Navaneetham & Dharmalingam, 2002; Fatimi, & Avan, 2002; Stephenson & Hennink, 2004). Strategic policy formation in all health care systems should be based on information related to health seeking behaviour and the factors determining these behaviours. This cross sectional analytical study tries to identify the reasons which motivate people to use specific health care practices and assess the relationship of factors affecting the health service utilization pattern on use of health services in Kathmandu Metropolitan City.

## **Materials and Methods**

Cross sectional descriptive and analytical study. The data for this study is collected from the Kathmandu Metropolitan City (KMNP).A representative and random sample of 500 household is taken, using multistage sampling, with the probability of selection of study area proportional to their size. Considering the multi-stage sampling, in this study KMNP is divided into a number of sectors as cluster in the first-stage within each such sector a number of wards are selected in the

second-stage, and from each selected wards a number of households are selected at the thirdstage for enquiry. A sample of these is selected at a random with probability proportionate to size.

## Statistical tools and software used

Both quantitative and qualitative data are collected from the fieldwork with the help of semistructured questionnaire and focus group discussion. All the collected quantitative data are entered into SPSS database and analyzed with SPSS13.0. Results are obtained by the frequency distribution and cross tabulation of the variables. Chi-square tests are performed to determine the significant associations between the use of different methods and these variables. Logistic regression is run to measure the extent of likelihood of occurrences of events. Separate models are run to test the significance of reason on use of health care practices. Reason given by the users of traditional and modern health care practices are compared to the reason given by the users of integrative (both) types of health care practices Results are discussed by looking at the odds ratio which is the exponent of the coefficient of the regression estimates and takes a value between zero and infinite.

#### Results

It is found that, 22% people tend to prefer to go to traditional health care provider, 40.8% people sought care from the modern health care services. Meanwhile 37.2 % of them may at the same time sought care from the both traditional as well as modern health care provider. Both treatments are used generally in tandem to ensure prompt cures. It is found that, even the same respondents use different health services for different ailment. In this study, respondents, who use to visit traditional health care provider for their health problem, are asked to give the most important reasons for selecting them.

Out of the 110 respondents who follow traditional health care practice, 80.9 % appraise quality of care as the most important reason for choosing a particular provider. Besides this, 69.1 % respondents said that they have faith in traditional health care, 62.7% said that it depends upon the severity or nature of illness. Factors apart from costs that militate against particular treatment are the previous experience (52.7%) and they are cost-effective (41.8%). Thirty three percent respondents are also alienated by the decision of household head. These factors create great obstacles against the more regular use of modern medical treatment. The respondents said that price and distance matter but are not the most important factors. People's income, service price, and distance all influence selections, but much less than had been believed. Factors causing people to use modern types of treatment are the desire to obtain quick recovery (17.2%) and the belief (55.9%).

			Preferred treatment method			
Reasons	Total	p value	Traditional 110 (22.0%)	Modern 204 (40.8%)	Both 186 (37.2%)	
	No. (%)*		No. (%)*	No. (%)*	No. (%)*	
Severity / nature of illness	327 (65.4)	.657	69 (62.7)	132 (64.7)	126 (67.7)	
Quality of care	346 (69.2)	.007	89 (80.9)	130 (63.7)	127 (68.3)	
Belief in particular health care	318 (63.6)	.012	76 (69.1)	114 (55.9)	128 (68.8)	
Past experience	206 (41.2)	.000	58 (52.7)	60 (29.4)	88 (47.3)	
Advice from relatives/friends	209 (41.8)	.001	56 (50.9)	65 (31.9)	88 (47.3)	
Near home	128 (25.6)	.184	22 (20)	51 (25)	55 (29.6)	
Decision of household head	165 (33)	.000	47 (42.7)	20 (9.8)	98 (52.7)	
Complementary	114 (22.8)	.614	26 (23.6)	50 (24.5)	38 (20.4)	
No side-effect	162 (32.4)	.000	54 (49.1)	0	108 (58.1)	
Inexpensive	155 (31)	.000	46 (41.8)	0	109 (58.6)	
Custom	144 (28.8)	.000	51 (46.4)	0	93 (50)	
Only medicine does not work	136 (27.2)	.000	70 (63.6)	0	66 (35.5)	
Provide treatment at home	85 (17)	.000	43 (39.1)	0	42 (22.6)	
Modern	180 (36)	.000	0	95 (46.6)	85 (45.7)	
Fast relief	90 (18)	.000	0	35 (17.2)	55 (29.6)	

Table 1: Reason behind the acceptance of specific method of health care

\* Multiple responses

From the study area hospitals are the most approachable but 22% respondents does not sought care at these facilities. People (40.8%) in general use modern treatment first even though they believe it causes side-effects. People try to use more than one type of treatment to ensure that they complement one another. Indeed, 24.5% respondents regard modern health care and 23.6% respondents consider traditional health care as complementary to each other. Belief in particular health care method and cost-effective is highly responded reason by the people of age group above 66, for using the traditional health-care services. More male and Brahmin as well as professional worker seek quality of care in choosing the health care method.

The dichotomous use of modern health care practices and various reasons for practicing is further analyzed using logistic regression. The dependent variable is coded 1 if the respondents have use modern health care practices and 0 if they had used both integrative traditional and modern health care practices. In case of variables like 'custom', 'only medicine does not work', 'Provide treatment at home', 'Inexpensive', 'no side effect', all of the respondents answered "no" hence these variables are not included in the analysis.

Table	2 : Loaistic	rearession	estimates	of the effe	ct of reaso	on for use	of modern	health c	arepractices
	<b>-</b> • <b>L</b> ogistic	regression	cottinates		ci of rease	ni joi asc	opinioacini	neathre	arepractices

Reason for use of modern health care	p value	Odds ratio	95% C.I. for odds ratio	
practices			Lower	Upper
Belief	.013	1.918	1.149	3.202
Near home	.457	1.225	.717	2.093
Past experience	.000	2.682	1.612	4.464
Advice from relatives/ friends	.111	1.499	.912	2.465
Decision of household head	.000	9.916	5.534	17.767
Ouality of care	.130	1.520	.885	2.613

.383	1.267	.744	2.156
.313	1.358	.750	2.459
.747	1.083	.667	1.759
.001	2.668	1.470	4.842
.000	.017		
	.383 .313 .747 .001 .000	.383 1.267   .313 1.358   .747 1.083   .001 2.668   .000 .017	.383 1.267 .744   .313 1.358 .750   .747 1.083 .667   .001 2.668 1.470   .000 .017 .

Omnibus Tests of Model Coefficients indicate that overall prediction is significant for this model ( $\chi^2$  = 122.791, p<0.001). Model summary shows -2 Log likelihood is 417.033 and is extremely good model for prediction and Nagelkerke R Square shows that only 36.0% of variation in outcome variable is explained by this model. Hosmer and Lemeshow test shows that model fits the data well ( $\chi^2$  = 5.268, p=0.729) since it produces insignificant chi square. The model is better in predicting modern health care practices (83.3%) as compared to both (63.4%).

Results from logistic regression shows that the likelihood of using modern health care practices by the people who give belief / faith in particular health care practices as a main cause is found significantly 1.918 times higher as compared to the people who didn't give such type of reason (p=0.013). Similarly, using modern health care practices is significantly 9.916 times higher among the respondents who give the reason that the use of particular health care practices depends upon the decision of household head (p<.0001). Probability of using modern medicine is significantly 2.668 higher in the people who give fast relief as the most important reason (p=.001). It is found that practice of modern medicine is 1.520 times higher in the people who seek quality of care. However, it is insignificant (p=0.130). Usage of modern medicine is found significantly 2.682 times higher in the people who give 'past experience' as the reason for using it (p<.0001).

The use of traditional health care practices and various reasons for practicing is further analyzed using logistic regression. The dependent variable is coded 1 if the respondents have use traditional health care practices and 0 if they had used both integrative traditional and modern health care practices. For those people who prefer traditional medicine, in case of 'modern' and 'fast relief' variables there are less than two levels of responses, hence excluded from the analysis.

Reason for use of traditional health	р	Odds	95% C.I. for odds ratio	
care practices	value	ratio	Lower	Upper
Belief	.694	1.126	.623	2.037
Near home	.078	.566	.300	1.067
Past experience	.418	1.250	.728	2.148
Advice from relatives/ friends	.440	1.234	.723	2.105
Provide treatment at home also	.001	2.817	1.571	5.049
No side effect	.026	.532	.306	.927
Inexpensive	.005	.463	.271	.791
Decision of household head	.120	.655	.384	1.116
Custom	.585	.863	.508	1.466
Quality of care	.032	1.999	1.059	3.772
Only medicine does not work	.000	3.717	2.145	6.441
Severity / nature of illness	.857	1.054	.593	1.876
Complementary	.461	1.281	.663	2.476
Constant	.024	.281		

Table 3: Logistic regression estimates of the effect of reason for use of traditional health care practices

Omnibus Tests of Model Coefficients indicate that overall prediction is significant for this model ( $\chi^2$  = 59.144, p<0.001). Model summary shows -2 Log likelihood is 331.465 and is extremely

good model for prediction and Nagelkerke R Square shows that only 24.7% of variation in outcome variable is explained by this model. Hosmer and Lemeshow test shows that model fits the data well ( $\chi^2$  = 7.642, p=0.469) since it produces insignificant chi square. The model is better in predicting both types of health care practices (83.3%) as compared to traditional (54.5%).

Results from logistic regression shows that the likelihood of using traditional health care practices by the people who give use of traditional health care practices depends upon the decision of household head as a main reason is found less as compared to the people who didn't give such type of reason and it is insignificant (p=0.120). The probability of using traditional health care practices by the people who give belief / faith in particular health care practices as a main cause is found 1.126 times higher as compared to the people who didn't give such type of reason. However, it is insignificant (p=0.694). Likewise, using traditional health care practices is significantly 3.717 times higher among the respondents who give the reason that medicine alone does not work for them (p<.001). Odds of using traditional medicine is 1.054 times higher in the people who give severity / nature of illness as the most important reason (p= .857). It is found that practice of traditional medicine is found less likely in people who said that traditional medicine is cost effective and there are less chances of having side effect by the medication provided by its practitioners. However it is statistically significant (p=.005, p= .026).

The most significant findings, however, are related to the importance of the nature of disease and quality of care on peoples' choice of provider. It is found that when, high quality care is important to successful handling of a disease, people give belief as the primary reason for selecting a health care provider. The majority of people surveyed sought treatment beyond the closest and cheapest government health care services. This indicates that distance to quality health care providers is not as important in choice of health care providers.

#### Discussion

The reasons for use of traditional and modern health care differed with age, sex, caste, religion, occupation, marital status, education and income. User's perceptions are shaped by their cultural values, previous experiences, time expend to seek treatment, household size and income, distance and cost of health care.

The type of symptoms experienced for the illness and the number of days of illness are major determinants of choice of health care provider. Furthermore, the attitude of the health provider and patient satisfaction with the treatment play a role in choice of provider. Peoples are generally more likely to use low cost services. Some study stated that low costs and proximity of services are the two most important factors that attracted people towards particular services (Ndhlovu, 1995). Other studies have shown that, rather than prices, it is indeed the quality of services provided that has a large effect on the choice of health care providers (Litvack & Bodart, 1993; Chawla & Ellis, 2000; Mariko 2003; Sahn et al., 2003). Features of the service outlet and self-belief in the service provider also play a major role in decision making about the choice of particular healthcare method (Newman et al., 1998; Ndyomugyenyi et al., 1998; Sadiq & Muynck, 2002).

A number of studies in Nepal have shown that person seek different types of healers based on their perception and beliefs regarding the illness problems, which in turn are influenced and defined by their social surrounding and network of relationships (Subedi, 1988). These factors result in delay in treatment seeking and are more common amongst women, not only for their own health but especially for children's illnesses (De Zoysa et al., 1984; Kaona et al., 1990; McNee et al., 1995; Nakagawa et al., 2001; Thakur, 2002). Cultural beliefs and practices often lead to self-care, home remedies and consultation with traditional healers (Nyamongo, 2002). Some of the cultural issues are family dynamics which may mean people cannot easily attend or take up services without the support of family members. Advice of the elder women in the house is also very instrumental and cannot be ignored (Delgado et al., 1994). This study result also depicts that peoples (42.7%) are also alienated by the decision of household head. However, cultural practices and beliefs have been prevalent regardless of age, socio-economic status of the family and level of education (Stuyft et al., 1996; Perez-Cuevas et al., 1996; Geissler et al., 2000). They also affect awareness and recognition of severity of illness, gender, availability of service and acceptability of service (Aday & Anderson, 1974).

Belief with aspects of care, particularly its dependence on medications, is an important part in people's motivation to follow traditional health care practices. Results also suggest that the modern health care systems lacks integration, differences in the quality of services and ignorance of social and spiritual dimensions, is also an important motivation for turning to traditional health care in this particular population which supports the results from the various studies (Marriot, 1955; Carstairs, 1965; Stone, 1976; Shrestha, 1979; Aryal, 1983; Young, 1989; Millar, 1997; Astin, 1998; Lyon, 1998).

Considerations of service quality and disease severity as well as nature of illness also dominate choice of traditional as well as modern method of health care. As quality of care increases people's choice probability also increases. Evidence from the literature suggests that quality of care (Larsen, 1976) and severity/ nature of illness (Young, 1989; Niraula, 1994) are the most important factor in the choice of health care providers. This study also found that the majority of users appraise quality of care (69.2%) and severity/nature of illness (65.4%) as the most important reasons for choosing a particular provider. But the result contradicts the study by Justice (1981) in that she found the choice of traditional healers is probably because of other factors rather than the nature of illness.

Cost has undoubtedly been a major barrier in seeking appropriate health care. Inclined to differential degree of use of different health care practices and important factors accepting behind such practice are found faith and costs of treatment. Most respondents have said that price is important determinants of the choice of health provider. Previous studies have also shown that price, income, and distance are important determinants of the choice of health provider (Paneru et al., 1980; Aryal, 1983; Akin et al., 1986; Sauerborn et al., 1989; Niraula, 1994; Bhuiya et al., 1995; Tembon, 1996; Noorali et al., 1999; Islam, & Tahir, 2002). Similarly in this study also near about half respondents said that they use traditional methods because they think that it is cost-effective. Alike to various study (Aryal, 1983; Young, 1989; Sauerborn et al., 1989; Miller, 1997; UNICEF, 2001; Subba, 2004) results from this study also suggest that modern health care method is costly. To the respondents cost means not only the consultation fee or the expenses incurred on medicines but also the cost spent to reach the provider and that's why the total amount spent for treatment turns out to be huge.

Availability of the transport, physical distance of the facility and time taken to reach the facility definitely influence the health seeking behaviour and health services utilization (Moazam & Lakahani, 1990). The effect of distance on service use becomes stronger when combined with the scarcity of transportation and with impoverished roads, which contributes towards increase costs of visits (Sauerborn et al., 1989; Kleinman, 1991; Bhuiya et al., 1995; Noorali et al., 1999; Islam & Tahir, 2002). The respondents said that quality and severity of illness are significant in the choice of health care providers and that price and distance matter but are not the most important factors. This study results support the conclusion of Akin *et. al.*, (1986) in that it is said; while distance is an important determinant of health provider choice it is not as important as has been believed. The reasons patients give for choosing a particular health provider are the best predictor of their decisions. Thus distance factor doesn't play a major role in seeking the health care.

the result of the UNICEF (2001) study of Patan Hospital where it is found that the longer the distance the lower the number of the patients at the hospital. It also contradicts with the findings by Niraula (1994) where he identify that people who are close to the roads, where the health post is located, are found to seek modern treatment more than people who are far away.

More startling is the finding that 63.6% of individuals who utilize traditional health care believed that only medicine in the form of tablet would not work in their health problem. They have found little or no relief from modern medical interventions. These data are contrary to a previous observation that CAM users are not, in general, dissatisfied with conventional medicine (Astin, 1998). But for modern health care users, as Pigg (1995) also noted, use of modern health care is connoted with the modernity, social status and social class.

#### Conclusion

The health seeking behavior is complex and has multiple factors responsible for people's choice of health care practices. Result suggests that families seek different types of providers for contrasting reasons and at varying stages of illness. Quality of care, severity/ nature of illness, belief in specific health care practices, income and service price all are significant in the choice of health care provider. The most significant findings, however, are related to the importance of the nature of disease and quality of care on peoples' choice of provider. Yet the finding is not new this finding holds in both traditional and modern health care. Distance factor seems to be a trivial factor in the choice of health care provider. The majority of people surveyed sought treatment beyond the closest and cheapest government health care services. This indicates that distance to quality health care providers is not as important in choice of health care providers. Cost of care is important but is not an overwhelming factor in the choice of modern health care provider. Respondents say that price is important, but only when they are suffering from diseases they do not believe require high levels of quality. All respondents seek the highest quality of care available when quality is important.

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