

RESEARCH PAPER

Hospital Preferences for Health Care Services in Selected Areas under Khulna City of Bangladesh

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ABSTRACT

This study attempts to identify the determinants of hospital preferences for health care services in Khulna city of Bangladesh. A total of 296 respondents from slum areas living in Khulna city of Bangladesh participated in this study. Participants were selected through simple random sampling and surveyed using a semi-structured interview schedule. The association between public and private health care preferences and its socio-demographic determinants were examined through bivariate analyses (chi-square tests) in this study. Results indicate that respondents' age, educational status, occupation, residence and monthly income were significantly associated with their health service preferences ($p < .01$). On the other hand, sex and religion of the respondents were found not to be linked with public-private health care preferences ($p > .05$).

Key words: Health care, Preferences, Bangladesh

Introduction

Increasing urbanization, population density and persisting inequities in health outcomes across socioeconomic groupings have raised concerns internationally regarding the health of the masses (Bashar et al., 2012). Health care now-a-days is influenced by availability, quality and price of services as well as social group, health views, residences and personal features also keep an impact on health care services (Akter, 2012). In Bangladesh many people spend their lives in poverty and ill health. This creates a threat for them to choose a better place for treatment and this reason also creates some drawbacks for health care centers. Many people become more and more vulnerable to chronic diseases or physical disabilities during selecting health service centers (Munsur et al., 2010).

There are many personal, social, economic, and environmental factors that influence health service preferences of the people living in different places of Bangladesh (Marmot, 2005). But the most important factor that determines health service preferences includes socio-economic, age, cultural and religious (Shaikh & Hatcher, 2005). Mainly, the health service preferences are based on economic factors, educational levels, income status, cultural beliefs and practices. Other factors include environmental conditions, socio-demographic features and knowledge about the facilities,

gender issues, political environment, and the health care system itself (Katung, 2001). In addition, the cost of services, limited knowledge of illness and wellbeing, and cultural prescriptions are a barrier to the provision of better health service preferences (Kogevinas et al., 1997). Besides the choice of the people regarding health care differs from socio-demographic, socio-economic and cultural compositions which have an effect on their health care seeking behavior (Sayeed et al., 1997).

For choosing a better health care center, people face severe challenges in accessing and managing their health because lack of financial support, physical inaccessibility of health service providers, absence of family support, and practicing quacks are the major determinants deterring older people from healthcare services (Youssef, 1996). Most of the people in Bangladesh suffer from some basic human problems such as senile diseases, poor financial support and absence of proper health and medical care facilities, deprivation, socio-economic insecurity, exclusion and negligence (Chang, 1992). At present, a variety of factors have been identified as the leading causes of health service preferences of people, including poor socioeconomic status, lack of physical accessibility, cultural beliefs and perceptions, low income rate, nature of treatment, lack of cost bearer, religion, condition of hospitals, place of treatment, large family size and suitable health care issues (Thuan et al., 2008).

Patients' perception is very important in the assessment of service, quality of health sector and their satisfaction depending on their perceptions during the utilization of healthcare services (Sitiza & Wood, 1997). On the other hand, it is also evident that hospitals are providing same type of services towards their patients but not being able to deliver the quality services (Youssef, 1996). Many studies have shown various determinants related to health service preferences, including socio-demographic status, economic condition, nature of treatment, choice of private and public hospitals in health services between urban and rural communities and the factors associated with those differences as like internal and external features of the areas (Hossain et al., 2010). Given the context, understanding the nature of hospital preferences and factors which influence it is crucial for developing countries like Bangladesh for introducing effective interventions in health policy. Hence, this study was conducted to examine which factors essentially determine the public-private health care preferences in Khulna district of Bangladesh.

Materials and methods

This study is a cross-sectional research work conducted at ward no. 13 in Khalishpur slum area and ward no. 24 in Nirala residential area under Khulna City Corporation of Bangladesh. The study area was selected purposively and people living in this area aged 18 years or above were considered as the population of this study. Since it was impossible to collect information practically from all the people residing in those areas, we selected a small number of participants (sample) systematically for our survey. The respective ward commissioner offices informed us that as per the aforementioned criteria, the total population living in was 1293. Hence, we used the following formula for estimating our sample size obtained by solving the maximum error of the estimate.

$$n = \frac{n_0}{1 + \frac{n_0 - 1}{N}}$$

Where n_0 = Initial sample, N = Population size

Again,

$$n_0 = \frac{z_{\alpha/2}^2 pq}{d^2}$$

Where $z_{\alpha/2}$ = Standard normal deviate.

p = Assumed population in the target population estimated to have a particular characteristic.

d = Allowable maximum error in estimating population proportion.

Here we consider for 95% confidence interval for which the value of z is 1.96, thus we get the initial sample as

$$n_0 = \frac{(1.96)^2 \times 0.5 \times 0.5}{(0.05)^2} = 384$$

Where, $p = 0.5$

$q = 0.5$

$d = 0.05$

$$\text{Now, } n = \frac{384}{1 + \frac{384 - 1}{1293}} = 296$$

Hence, the sample size for this study was 296.

The respondents were selected through simple random sampling technique (lottery method without replacement) using the sample frame obtained from the respective ward commission offices. A total of 24 respondents could not either be reached or decided not to participate in this process making the response rate to be 92%. A thorough review of relevant literature was done for preparing the structured interview schedule used in this study. All the data were collected during the month of September to October, 2018 through face-to-face interviews.

The data collected were processed and analyzed through Statistical Packages for Social Sciences (SPSS) version 21 software. The main variable of interest, type of hospital preference, was categorized as 'public' and 'private' for bivariate analysis (chi-square) tests in this study. Besides, we included 22 items in the interview schedule, though only eight were used in the final analysis. The socioeconomic variables used in this study were age (≤ 29 years, 30-39 years, 40-49 years, ≥ 50 years), sex (male, female), religion (Muslim, Non-Muslim), educational status (illiterate, primary, secondary, higher), occupation (service holder, business, day laborer, no occupation), residence (residential area, non-residential area) and monthly income (no income, BDT ≤ 15000 , BDT 15001-30000, BDT ≥ 30001). These variables were found significant in some of the previous studies (Shaikh & Hatcher, 2005; Ahmed et al., 2013; Bearon & Koenig, 1990; Koenig, 1998; Alsubaieand et al., 2016).

For ethical clearance, we acquired both written and verbal consent from the participants in this study and followed strict standard of protecting their privacy. The participants were informed that participation in this study is voluntary and they had the freedom to terminate themselves from the interview process if they wished.

Results

Table 1 shows the socio-demographic information of the respondents. Findings reveal that more than one-third of the respondents (35.1%) belonged to the age group of 30 to 39 years. The average age of the respondents was 36.2 years. Majority of the respondents (64.2%) were male and more than half (54.1%) were Muslim. Majority of the respondents (54.4%) attained secondary level of education, and 20.6 percent of the respondents completed primary level of education. Around 80 percent of the respondents were engaged in different occupations while the rest were not working. Their average monthly income was 17102 (Taka). Majority of the respondents had an income of more than 20000 BDT.

This study analyzed the health care preferences of the participants on this study in terms of their hospital preference which is the main dependent variable for our bivariate analysis. Table 2 reveals the relationship between socio-demographic variables and type of hospital preferred by the respondents. It shows statistically significant relationship ($p < 0.05$) among age, educational status, residence, occupation and monthly income and the type of hospital preferences.

Table 1: Socio-demographic characteristics of the respondents

Variables	Categories	Frequency (n=296)	Percent
Age			
	≤29	90	30.4
	30-39	104	35.1
	40-49	70	23.6
	≥50	32	10.8
Sex			
	Male	190	64.2
	Female	106	35.8
Educational Status			
	Illiterate	14	4.7
	Primary	61	20.6
	Secondary	161	54.4
	higher	60	20.3
Religion			
	Muslim	160	54.1
	Non Muslim	136	45.9
Occupation			
	No occupation	65	22.0
	Service holder	92	31.1
	Business	75	25.3
	Day labour	64	31.1
Residence			
	Residential area	148	50.0
	Non-residential area	148	50.0
Monthly Income (in BDT)			
	No income	21	17.1
	≤15000	141	47.6
	15001-30000	83	28.0
	≥30001	51	17.2
Preferred Hospital			
	Public	161	54.4
	Private	135	45.6

Source: Authors' compilation, 2018

Table 2: Socio-demographic Characteristics and its Covariates

Variables	Categories	Type of Hospital Preferences		Chi-Square	p value
		Public	Private		
Age					
	≤29	17.9%	12.5%	15.68	.050
	30-39	17.2%	17.9%		
	40-49	13.9%	9.8%		
	≥50	54.4%	45.6%		
Sex					
	Male	68.1%	60.9%	1.69	.193
	Female	31.9%	39.1%		
Educational Status					
	Illiterate	1.5%	7.5%	84.67	p<.001
	Primary	4.4%	34.2%		
	Secondary	54.1%	54.7%		
	higher	40.0%	3.7%		
Residence					
	Residential Area	11.1%	38.9%	122.10	p<.001
	Non-residential Area	43.2%	6.8%		
Religion					
	Muslim	58.5%	50.3%	1.99	.158
	Non-Muslim	41.5%	49.7%		
Occupation					
	Service Holder	26.1%	73.9%	61.60	p<.001
	Business	58.7%	41.3%		
	Day Labor	89.1%	10.9%		
	No occupation	55.4%	44.6%		
Monthly Income					
	No Income	3.4%	3.7%	108.42	p<.001
	≤15000	40.2%	7.4%		
	15001-30000	9.1%	18.9%		
	>30001	54.4%	45.6%		

Source: Authors' compilation, 2018

Discussion

Hospital is one of the most central organizations that serve people during bad moments of their life. It carries a broad range of acute, recovering and mortal care, using diagnosis and therapeutic services in response to acute and chronic conditions arising from disease as well as injuries and genetic anomalies. Patients using these facilities except those referred by other centres or emergency cases do not select a hospital by chance (Malik & Sharma, 2017). Moreover, hospitals are the center of gravity for providing care and should be studied from different aspects. As hospitals are the most important center of providing health care, patients' expectations and preferences from several dimensions need to be considered (Bahadori et al., 2016). Considering this fact, the present study attempted to identify the socio-demographic determinants associated with respondents choice of a hospital preference. However, certain limitations may arise in the study. First of all, this study may not show the actual scenario of Bangladesh because justifying two ward is difficult to generalize the whole. If the scope of this study increased may be it would help the researchers to explore more determinants. Besides, it was too tough to get actual information from the respondent because they did not want to waste their time. The study also includes a dearth of personnel, time and budget issues.

In investigating people's perception regarding health service preferences the study found a significant relationship with respondents' socio-demographic status. The study explored that, age is a determinant, significantly associated with health service preferences of the respondents and this is related to the previous studies (Shaikh & Hatcher, 2005; Ahmed et al., 2013). In other study, it is found as you get older the rate of preference of public hospital falls because of the number of patients is higher in public hospitals (Ozkoc, 2013). Though the Constitution offers equal treatment and access to all resources and opportunities, the women in Bangladesh are ill-treated and offered less facilities than men. Even they are not enough conscious regarding health service preferences. Surprisingly, the study found no significant relationship between sex and type of hospital preferences. This is in line with the findings of Alsubaie and his colleagues (2016). Another demographic and health survey conducted in Abuja city of Nigeria (2008) found that majority of the women and men have no health insurance coverage (98 and 97 percent, respectively). This fact is also true for the target population of this study.

In the health and medical sciences, there is growing recognition that religious and spiritual concerns are important for understanding health-related behaviors, attitudes, and beliefs (Bearon & Koenig, 1990; Koenig, 1998). Religious beliefs influence peoples health care beliefs and practices which are significantly different based on the persons religion (Rumun, 2014). But this study reveals insignificant differences between religion and treatment preferences of the respondents in that selected area. Literature suggests that regional variations in preferences can lead to variations in the care that patients actually receive (Nicholas et al., 2011). The present study also found a significant relationship with

respondents' residence and type of hospital preferences. Previous research has highlighted the pervasiveness and persistence of area variations in care and patients health service preferences (Onyeonoro et al., 2016; Eberhardt & Pamuk, 2004).

Literature suggests that there is a significant relationships between monthly income (Biswas et al., 2009; Onyeonoro et al., 2016) and patients' type of health service preferences. Monthly income and patients' hospital preferences are consistent with the studies conducted by Somkotra (2013), stated that income and productive resources are good predictors of quality health. Individual's income enhances their capability, knowledge, access, and acceptability of modern medical treatment. People living on low incomes have been identified as standing higher risk of suffering serious illness and death than those in upper level of income. This is also true for the people with reasonably low expenditure (Dealey, 2005). Occupation is a job or profession through which people earn money. This study revealed a significant relationship between respondents occupation and their type of hospital preferences. This is similar to the study of Bin (1998) which stated that, peoples who earn more were more likely to get treatments in private hospitals and those who earn less treated in a public hospital.

Conclusion

This study was designed to investigate whether patients' socio-demographic characteristics influence hospital preferences in Khulna city of Bangladesh. Findings reveal some potential determinants that influence a patient's choice of a hospital i.e. age, education, occupation, residence, and monthly income. Most of the people chose public hospital because of the low cost while differences in terms of patient's maturity, and knowledge would also determine their health care preferences. Besides, since one's dwelling place and profession are associated with one's socioeconomic status, these factors would contribute to the health care choices. Therefore, we recommend that low cost health care service with quality treatment needs to be introduced while regular monitoring and easy access to those services should be ensured by the government.

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