Bangladesh Journal of Political Economy

Vol. 27, No. 1 & 2, 2011, pp. 525-544
Bangladesh Economic Association
(ISSN 2227-3182)

Fallacy of Free Treatment

Masuda Yasmeen[1]
Rubaiul Murshed[2]
RC Robin[3]

Abstract

Bangladesh has a good healthcare infrastructure covering both rural and urban areas. There are 3,976 healthcare facilities in the public sector and 975 privately-run hospitals/clinics. The healthcare-delivery system of the country compares favorably with that of many other Asian countries. However, overall healthcare use/consumption in Bangladesh is low and is of great concern to society. A large number of people of Bangladesh, particularly in rural areas, remain with no or little access to health care facilities. Most government services are supposedly free apart from a small registration fee (5BDT). However, it is known that there are many hidden costs in any hospital visit, which makes institutional medical care an expensive experience for patients. This study deals with the 'fallacy' or misconception regarding free medical treatment in public hospitals prevailing among people.

Introduction

Bangladesh is a mostly rural, developing country of South Asia, located on the northern shore of the Bay of Bengal, covering 147,570 square km (Islam and Ullah 2009). With a population of 150 million, Bangladesh is 7th most populous

1. Ms. Masuda Yasmeen, Associate Professor, Department of Economics Dhaka University, Dhaka, Bangladesh
2. Dr. Rubaiul Murshed, Health Columnist & Chairman, Health Prior 21, Dhanmondi, Dhaka, Bangladesh
3. Dr. R. C. Robin, Clinical Coordinator, United hospital, Gulshan-2, Dhaka, Bangladesh

country in the world (Alam and Ahmed 2010). It has the highest population density in the world and is one of the poorest countries of the world with one third of her population beneath the poverty line, earning less than USD1 a day, and 85% of the poor reside in rural areas (Biswas, Lloyd-Sherlock and Zaman 2006). Bangladesh has a good healthcare network covering both rural and urban areas. There are 3,976 healthcare facilities in the public sector and 975 privately-run hospitals/clinics. The healthcare-delivery system of the country compares favourably with that of many other Asian countries. However, overall healthcare use/consumption in Bangladesh is low and is of great concern to society (Siddiqui and Khandaker 2007). A large number of people of Bangladesh, particularly in rural areas, remain with no or little access to health care facilities (Islam and Ullah 2009). In Bangladesh, 13% of treatment-seekers use government services, 27% use private/NGO services, and 60% unqualified services. It was observed that the overall use-rate for public healthcare services was as low as 30% (Siddiqui and Khandaker 2007), while the rate of utilization of private health cares facilities has been increasing (Andaleeb, Siddiqui and Khandakar 2007). On the other hand, the overall patient load in public medical college hospitals was approximately five times higher than that in other general hospitals (Siddiqui and Khandaker 2007).

In response to the growing disappointment in the role of the public healthcare sector, the number of private-run facilities has increased. An estimated 15% growth was observed between 1996 and 2000 in this sector. However, quality is a major concern both in public and private healthcare services (Siddiqui and Khandaker 2007)

Public hospitals exist in order to fulfill the government's obligation to provide free hospital services to all members of the community who need medical care. More broadly, governments provide public hospital services to reap the social benefits associated with the achievement of good health (such as higher workforce participation and productivity) and to minimize the social costs associated with poor health (such as the costs of infection outbreaks) (Banks 2009).

Private providers are outside the direct control of government. Private ownership generally includes both for-profit and non-profit providers. For example, private ownership would include health care facilities owned by individuals who seek to earn profits, clinics and hospitals owned by private employers, and those operated by religious missions and other non-governmental organizations (NGOs) (Hanson and Berman; Banks 2009). Private hospitals differ greatly in size, function and management. Of the private hospitals, there are large organizations operating

many hospitals, as well as smaller bodies running single hospital with only a few facilities (Banks 2009).

Background and rationale

The Government of Bangladesh is constitutionally committed to "the supply of basic medical requirements to all levels of the people in the society" and the "improvement of nutrition status of the people and public health status" (Islam and Ullah 2009).

The establishment of community clinics is one of the top priority programs of the government and there is plan to gradually establish 18,000 community clinics in the rural area with one community clinic for every 6,000 people (Health Bulletin 2010). The government provides health services through a network of primary, secondary and tertiary level hospitals. The hospital and health facilities, which are located in the upazila level and below, are generally termed as primary health care centers (Health Bulletin 2010). District hospitals are usually termed secondary hospitals as these have fewer specialty cares. These hospitals deal with referred cases of the thanas for further improved treatment with limited specialist, diagnostic and laboratory services. Eighty percent beds of these hospitals are free of cost. There are also different type of special care centers, such as, infectious diseases hospital, tuberculosis hospital and leprosy hospital, which fall under secondary care health facilities (Health Bulletin 2010; Islam and Ullah 2009). Apart from these hospitals there are 24 school health clinics and 72 urban dispensaries at district level which provide only out-door services (Islam and Ullah 2009). Medical college hospitals are located in the regional level and provide specialty care in many disciplines for people across the nation. A wider range of better laboratory facilities are available here for the diagnosis of difficult and complicated cases. These hospitals are called tertiary hospitals. Tertiary hospitals also include the national level super specialty hospitals or centers, which provide high end medical services for only one field (Health Bulletin 2010; Islam and Ullah 2009). Government medical college hospitals have bed capacities varying from 250-1050, of which a maximum number of beds are free (Islam and Ullah 2009). Bangabhandhu Sheikh Mujib Medical University (BSMMU) and its affiliated hospital is the only medical university in Bangladesh. Both the university and the hospital are autonomous. It has 1212 beds of which 452 are free beds (Health Bulletin 2010).

The efforts of the Government of Bangladesh, NGOs and private service providers in the country's health sector have been rewarded with some success,

especially in primary health care with its focus on prevention. Some success has be achieved in immunization and the child and maternal mortality. While the efforts are in the right direction, the public health sector is plagued by uneven demand and poor quality services. The negative attitudes and behaviors of doctors and nurses are major hindrances to the utilization of public hospitals. The situation is further compounded by unavailability of drugs, and long travel and waiting times. These factors play a powerful role in shaping patients' negative attitudes and dissatisfaction with health care services. Unfortunately the quality of service is being ignored in the private health care sector as well. Some of its main drawbacks include lack of standard treatment protocols, qualified nurses and unnecessary diagnostic tests (Andaleeb, Siddiqui and Khandakar 2007).

Even though there are more free beds available than paying beds, the health facility is not sufficient. The supply of medical and surgical equipment is inadequate. Further, misuse, mismanagement and corruption, along with limited health amenities, weakened the overall health system (Islam and Ullah 2009). With the quality of services showing little signs of improvement, a large number of Bangladeshi patients who are able to afford it are going to foreign hospitals, despite the financial costs. This also results in huge losses of foreign exchange for Bangladesh, estimated at Tk.500 million a year (Andaleeb, Siddiqui and Khandakar 2007).

A major consequence of the growing urban population is the rapid growth of slums. Due to overcrowded, unsanitary and substandard dwellings, they are at high risk of contracting communicable diseases. The Ministry of Local Government, Rural Development and Cooperatives (MOLGRD&C) is responsible for urban health services. The city corporations and the municipalities with the support of NGOs like USAID and ADB provide urban health services for the poor (Nasreen et al 2007).

As of March 2010, 2506 non-government organizations (NGOs) operate in Bangladesh and out of them 48% of the big and 60% of small NGOs provide health care services in the rural, urban and semi-urban areas where government's services are inadequate. NGOs and private providers are doing better than public sector providers in the delivery of both maternal and child health services (Alam and Ahmed 2010).

Health care consumers today are more sophisticated than in the past and now they demand increasingly more accurate and valid health care service. Patient-centered outcomes have taken center stage as the primary means of measuring the effectiveness of health care delivery. Health care organizations are operating in an

extremely competitive environment, and patient satisfaction has become a key to gaining and maintaining market share (Kumari et al 2009).

Access to basic health services of acceptable quality is still denied to many of the world's poorest people. Payments for health services, in the form of user fees, are likely to present a barrier to access. Yet, a shortage of resources at the facility level is a contributor to failure to deliver quality services, and this also presents a barrier to access. Some have argued that user charges can generate vital resources at the local level and help provide good quality services; while others have highlighted their negative effects (Lagardea and Palmera 2008).

Even where health care services are available, the cost of seeking care may delay or prevent poor households from accessing them. The cost of seeking care may be thought of as comprising direct costs (such as user fees), indirect costs (such as for transportation) and opportunity costs (such as lost wages). Such costs weigh more heavily upon poor households than non-poor (WHO: Reaching the poor).

Once it was thought that user fees would be an appropriate financing mechanism but the results of research undertaken by WHO and the World Bank showed that the outcome of the removal of user fees in Uganda was very favorable for poor people. In developing countries governments should expand their health budgets and donors should provide increased aid in health sector (Yates 2009).

On the other hand, if health care becomes free for patients, overutilization is a risk, especially for first-line outpatient care in urban areas. Lump-sum copayment can reduce this risk. If lump-sum payment does not curtail overutilization, the percentage-of-price option can be considered (de Roodenbekea 2004).

In a mixed European healthcare system (such as that of Greece), significant performance differences are evident between private and public hospital service providers in terms of several indicators such as average bed capacity, average occupancy rate, nurse staffing rates, average length of patient stay, and payment per discharge. The public hospital sector performed better than did private for profit (PFP) competitors in terms of all measures (Kondilis et al 2011).

Kumari et al (2009) determined the areas and causes of low satisfaction among the patients and found that overall patient satisfaction regarding doctor patient communication decreased significantly from tertiary level (73.3%) through secondary (68.0%) to primary level (60.5%) health facilities. The total satisfaction regarding explanation about the disease (54.3%), treatment (57.6%), investigations (59.4%) and advice about prevention (21.6%) was quite low. The overall satisfaction regarding examination and consultation was significantly

higher at the tertiary (81.6%) and secondary (81.3%) level, as compared to the primary level health facilities (59.6%).

Nahar and Costello (1998) considered the hidden costs in free government maternity clinic as a major contributor to low utilization of maternity services, especially among low-income groups.

Prices are to be paid by clients for different services, which are supposed to be free of charge, in thana health complex the charge was 33 taka per patient per service and 50 to more than 200 taka in private hospital (Ahmad 2003).

Khan and Zaman (2010) found that the average cost for a spontaneous vaginal delivery from the hospital's side was 2688 rupees and from the patient's perspective 5278 rupees in Pakistan. The average cost for a Caesarean section from the hospital side was 10868 rupees and 13678 rupees from the patient's side (Khan and Zaman 2010).

Ahmad (2003) claimed that clinicians advertise their private practice at the government hospital, prescribe inappropriate drugs and investigation. They commonly receive a commission from private diagnostic services to refer patients to them (Ahmad 2003).

Akter et al (2008) revealed that the average cost of antimicrobial course(s) per patient of pneumonia were great in private hospital while that of diarrhoea was higher in public hospital. In a Chinese study it was suggested that private clinics tend to be lower cost and of lower quality. Another Chinese author and his colleagues reported from a survey that the prices charged by non-governmental hospitals are generally lower than or equal to those of government hospitals (Eggleston et al 2009).

Pongsupap and Lerberghe (2006) described the difference of cost in private and public hospital. The average total cost of a consultation in the public facilities was higher than that of a consultation in private clinics.

Siddiqui and Khandaker (2007) demonstrated that the perceived cost of private hospitals is significantly higher than that of public hospitals in the minds of Bangladeshi patients. The quality of service in private hospitals scored higher than that in public hospitals for nursing care, tangible hospital matters, i.e. cleanliness, supply of utilities, and availability of drugs. The overall quality of service was better in foreign hospitals compared to that in private hospitals in Bangladesh in all factors, even the 'perceived cost' factor.

Andaleeb (2000) compared the quality of services provided by private and public hospitals in urban Bangladesh. Because private hospitals are not subsidized, it was felt that the incentive structure would induce them to provide better services than public hospitals on the measures of service quality.

Camilleri and O'Callaghan (1998) found that private hospitals were expected to offer a higher quality service, particularly in the "hotel services", than the public sector. The private sector is more successful in meeting the particular demands of elderly satisfaction, i.e. better availability and flexible payment systems (Biswas, Lloyd-Sherlock and Zaman 2006).

Most government services are supposedly free apart from a small registration fee (5 BDT). Wealthier patients may choose paying wards or private cabins costing from 50 to 220 taka per day (Nahar and Costello 1998). Generally, only a few of the patients are actually charged the set fee, with the remaining ones being exempted due to poverty or other privileged categories (e.g. school children, or disabled war veterans) (Shepard, Hodgkin and Anthony 1998). In some hospitals, "leakage" in collections occurs between the patient and the hospital account. While the patient may pay an "informal" fee, it may be retained by a gatekeeper, personal attendant, aide, nurse, physician, or deposited in a location other than the official hospital account (Shepard, Hodgkin and Anthony 1998). It is known, however, that there are many hidden costs in any hospital visit - unofficial medical charges, the costs of porters and ayas (female helpers), travel and food expenses - which could make institutional medical care an expensive experience for patients (Nahar and Costello 1998). Some sort of fallacy, in other words 'misconception' regarding free treatment in public hospitals is prevailing in the people. Being a developing country this kind of hidden cost also exists in our public hospitals, which are supposed to be free of cost. Only a few studies have been done to examine this issue. So we designed this cross-sectional descriptive study to make clear the misconception about free treatment of public hospitals.

The objective of the present study was to find out 'What the general people understand about free treatment and how much cost is involved in different phases of medical treatment?'

Subjects and methods

Study design: The study was a cross sectional and descriptive in nature.

Duration of study: The study was conducted during the period from June 2009 to May 2010. To conduct this study symmetrically the specified period was divided into different phases of activities.

Place of study: The study was conducted in two medical college hospitals in Dhaka, one public and one private. Shaheed Suhrawardy Medical College Hospital, a public hospital with 500 beds and outdoor facilities and Bangladesh Medical College Hospital, a tertiary level private medical college hospital with 500 beds equipped with modern facilities were purposively selected for the study. Both the hospitals provide care for patients from all socioeconomic groups from the whole country, mainly from urban and peri-urban areas.

Study population: Patients that came to receive medical service from the above mentioned two hospitals in the year 2009 were the study population.

Ethical issues: Informed consent was taken from all participants and confidentiality was maintained in all aspects of the data collection.

Sample size and sampling technique: A total of 140 patients, 70 from each hospital, who had been admitted for more than 5 days in free bed and willing to be interviewed were purposively selected for the study. Data were collected by direct interview of patients. A pre-tested structured questionnaire was used to collect the information.

Data analysis: Data were analyzed by computer based statistical program SPSS version 12 for windows, expressed as frequency and percentage. Association between two variables was done by chi-square test. Confidence interval was 95% and p value <0.05 was considered as significant.

Result and findings

Characteristics of the participants

The participants of the present study were most early adults and middle aged. About twenty-six per cent of participants were illiterate. Forty-four percent were unemployed or housewife. Regarding employment, private service (14.3%), agriculture (14.3%) and day labourer (15%) occupied almost the same share. Almost 98% of the participants were Muslim. 56.5% of the patients had 0-2 children and 31.5% had 3-5 children (Table 1).

More than two-thirds of the patients of both public (70.0%) and private (72.9%) hospitals are poor class people having monthly family income 5000 BDT. Only 2.9% of the patients of private hospital have monthly family income of 15001-20000 BDT. Almost three-quarters of the patients of private hospital (75.7%) and two-thirds of patients of public hospital (62.9%) were admitted in the hospital for 5-15 days. Similarly 72.9% of the patients of public hospitals and 75.7% patients

Table 1

Variables	Frequency (%)
Age	
11-20	15(10.7%)
21-30	27(19.3%)
31-40	33(23.6%)
42-50	26(18.6%)
51-60	26(18.6%)
61-70	7(5.0%)
71-80	5(3.6%)
81-90	1(0.7%)
Education	
illiterate	36(25.7%)
Primary level	63(45%)
Secondary level	28(20%)
College level	11(7.9%)
University level	2(1.4%)
Occupation	
Unemployed /housewife	62(44.3%)
Agriculture	20(14.3%)
Day labor	21(15.0%)
Business	10(7.1%)
Government service	6(4.3%)
Private service	20(14.3%)
NGO worker	1(0.7%)
Religion	
Muslim	137(97.9%)
Non-Muslim	3(2.1%)
Number of children	
0-2	79(56.5%)
3-5	44(31.5%)
6-9	17(12.1%)

of private hospitals had been suffering from diseases for 5 -15 days (Table 2). 29 (20.7%) patients had surgery before coming to the hospital.

In public hospitals 51.4% patients spent 5000 or less Taka and 38.6% patients spent 5001-15000 Taka. Similarly in private hospital 58.6% patients spent 5000 or less Taka and 27.1% patients spent 5001-15000 Taka (Figure-1).

55(78.6%) patients of public hospital and 46(65.7%) patients of private hospital spent 1001-5000 BDT for buying medicine. 11.4% patients of public hospital and 15.7% patients of private hospital spent 5001-10000 BDT for buying medicine.

Table 2

Variables	Total (n=140)	Public hospital (n=70)	Private hospital (n=70)
	n (%)	n (%)	n (%)
Income(BDT)			
?5000	100(71.4%)	49(70.0%)	51(72.9%)
5001-10000	22(15.7%)	11(15.7%)	11(15.7%)
10001-15000	16(11.4%)	10(14.3%)	6(8.6%)
15001-20000	2(1.4%)	0(0.0%)	2(2.9%)
Admitted time			
<5 days	25(17.9%)	15(21.4%)	10(14.3%)
5-15 days	97(69.3%)	44(62.9%)	53(75.7%)
16-30 days	14(10.0%)	8(11.4%)	6(8.6%)
>1 month	3(2.1%)	3(4.3%)	0(0.0%)
>6 month	1(0.7%)	0(0.0%)	1(1.4%)
Disease duration			
5-15 days	104(74.3%)	51(72.9%)	53(75.7%)
16-30 days	17(12.1%)	8(11.4%)	9(12.9%)
>1 month	8(5.7%)	5(7.1%)	3(4.3%)
>6 month	5(3.6%)	3(4.3%)	2(2.9%)
>1 year	6(4.3%)	3(4.3%)	3(4.3%)

43(61.4%) patients of public hospital and 36(51.4%) patients of private hospital spent 1000-5000 BDT for investigation. 22(31.4%) patients of public hospital and 24(34.3%) patients of private hospital spent 0-1000 BDT for investigation.

Figure 1 : Bar diagram showing money spent for treatment purpose

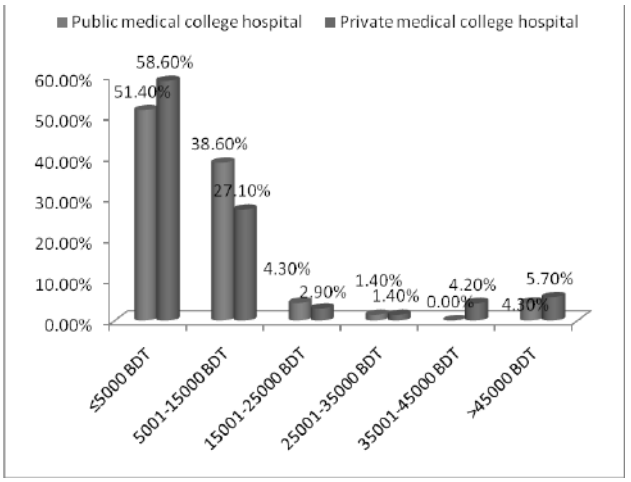


Table 3 : Money spent for buying medicine, investigation and living in the

Variables	Total (n=140)	Public hospital (n=70)	Private hospital (n=70)
Money spent for buying medicine (BDT)			
0-1000	9(6.4%)	3(4.3%)	6(8.6%)
1001-5000	101(72.1%)	55(78.6%)	46(65.7%)
5001-15000	19(13.6%)	8(11.4%)	11(15.7%)
15001-25000	6(4.3%)	1(1.4%)	5(7.1%)
25001-35000	2(1.4%)	2(2.9%)	0(0.0%)
35001-45000	1(0.7%)	1(1.4%)	0(0.0%)
>45000	2(1.4%)	0(0.0%)	2(2.9%)
Money spent for investigation (BDT)			
0-1000	46(32.9%)	22(31.4%)	24(34.3%)
1000-5000	79(56.4%)	43(61.4%)	36(51.4%)
5001-15000	11(7.9%)	4(5.7%)	7(10.0%)
15001-25000	2(1.4%)	1(1.4%)	1(1.4%)
25001-35000	1(0.7%)	0(0.0%)	1(1.4%)
35001-45000	1(0.7%)	0(0.0%)	1(1.4%)
Money spent to live in city where hospital is situated (BDT)			
No expenditure	122(87.1%)	58(82.9%)	64(91.4%)
0-1000	13(9.3%)	10(14.3%)	3(4.3%)
1001-5000	4(2.9%)	2(2.9%)	2(2.9%)
5001-15000	1(0.7%)	0(0.0%)	1(1.4%)
Money spent by family members to live in city where hospital is situated (BDT)			
No expenditure	97(69.3%)	40(57.1%)	57(81.4%)
0-1000	15(10.7%)	11(15.7%)	4(5.7%)
1001-5000	26(18.6%)	19(27.1%)	7(10.0%)
5001-15000	2(1.4%)	0(0.0%)	2(2.9%)
Source of medical cost (BDT)			
Patient himself	14(10.0%)	5(7.1%)	9(12.9%)
Friends	21(15.0%)	6(8.6%)	15(21.4%)
Relatives	105(75.0%)	59(84.3%)	46(65.7%)
Amount of money getting from sold proper ties			
<5000	7(5.0%)	4(5.7%)	3(4.3%)
5001-15000	9(6.4%)	3(4.3%)	6(8.6%)
15001-25000	3(2.1%)	1(1.4%)	2(2.9%)
25001-35000	1(0.7%)	1(1.4%)	0(0.0%)
35001-45000	1(0.7%)	1(1.4%)	0(0.0%)
45001-55000	1(0.7%)	1(1.4%)	0(0.0%)
>55000	2(1.4%)	0(0.0%)	2(2.8%)
total	24(17.1)	11(15.6%)	13(18.6%)

10(14.3%) patients of public hospital and 3(4.3%) patients of private hospital spent 0-1000 BDT to live in city where hospital is situated. Most of the patients had not to spend money for residence.

11(15.7%) patients of public hospital and 4(5.7%) patients of private hospital spent 0-1000 BDT, 19(27.1%) patients of public hospital and 7(10.0%) patients of private hospital spent 1001-5000 BDT by family members to live in city where hospital is situated. Most of family members had not to spend money for residence.

6(8.6%) and 59(84.3%) of the patients of public hospital arranged money for treatment from friends and a relatives respectively. 15(21.4%) and 46(65.7%) of the patients of private hospital arranged money for treatment from friends and relatives respectively (Table 3).

Private doctors were the most preferred option for seeking health services by both public hospital respondents (65.7%) and private hospital respondents (71.4%)

Table 4 : Choice of health services

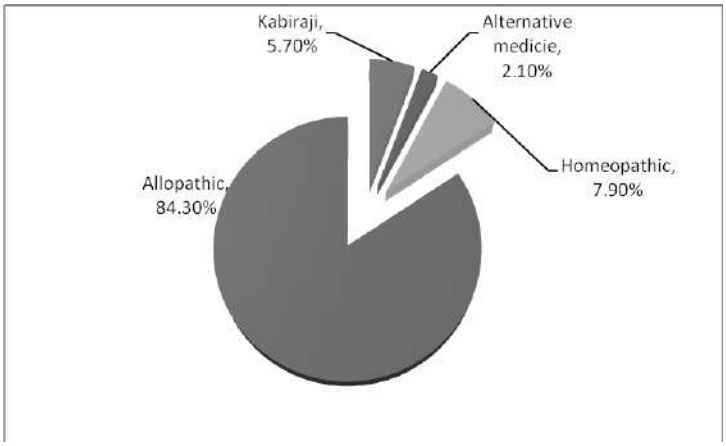
Variables	**Total (n=140)**	**Public hospital (n=70)**	**Private hospital (n=70)**
Choice of health services			
	n(%)	n(%)	n(%)
H&FP worker	2(1.4%)	0(0.0%)	2(2.9%)
Union health center	5(3.6%)	5(7.1%)	0(0.0%)
Upa-zilla health center	7(5.0%)	2(2.9%)	5(7.1%)
District sadar hospital	27(19.3%)	15(21.4%)	12(17.1%)
Private doctor	96(68.6%)	46(65.7%)	50(71.4%)
Pharmacy	3(2.1%)	2(2.9%)	1(1.4%)
Reason for coming to medical college hospital			
Treatment not possible in ot her hospitals	2(1.4%)	2(2.9%)	0(0.0%)
Treatment failure in other hospitals	3(2.1%)	0(0.0%)	3(4.3%)
For better treatment	129(92.1%)	64(91.4%)	65(92.9%)
Beds not available in other hospitals	5(3.6%)	4(5.7%)	1(1.4%)
Knowledge regarding free treatment in medical college hospital			
Yes	39(27.9%)	24(34.3%)	15(21.4%)
No	61(43.6%)	36(51.4%)	25(35.7%)
Not sure	40(27.9%)	10(14.3%)	30(42.9%)

followed by district sadar hospital. 91.4% of the participants of public medical college hospitals and 92.9% participants of private medical college hospitals came to the medical college hospital for better treatment. 24(34.3%) participants of public hospital and 15(21.4%) participants of private hospital know that hospitals serve free treatment for the patients. Other participants do not know it or they are not sure about it. They had learned regarding free treatment in medical college hospital from their relatives (10.7%), friends (8.6%), media (4.3%), teacher and others (2.1%) (Table 4).

84.3% participants take allopathic treatment when they get sick. Other treatments they avail are Homeopathic (7.9%), Kabiraj (5.7%) and Alternative medicine (2.1%)(Figure-2).

19(27.1%) patients of public hospital and 59(84.3%) patients of private hospital responded that they got priority services in medical college hospital. 28(40%)

Figure 2 : Pie chart showing treatment option before coming to hospital



patients of public hospital and 54(77.1%) patients of private hospital responded that they got technical services in medical college hospital. 37(52.9%) patients of public hospital and 61(87.1%) patients of private hospital responded that they got sufficiency of doctors and other medical staff. 58(82.9%) patients of public hospital and 60(85.7%) patients of private hospital responded that the doctors of medical college hospitals were highly qualified . 41(58.6%) patients of public hospital and 54(77.1%) patients of private hospital responded that the nurses of medical college hospitals were highly qualified(Table 5)

4(2.9%) participants believe that the responsibility for any disability produced during treatment will have to be taken by them while other participants are not sure about the responsibility. Among all, 13(9.3%) respondents think that they get better treatment in a private clinic if they spend little more amount of money, 96(68.6%) do not think it and 31(22.1%) respondents are not sure about it.

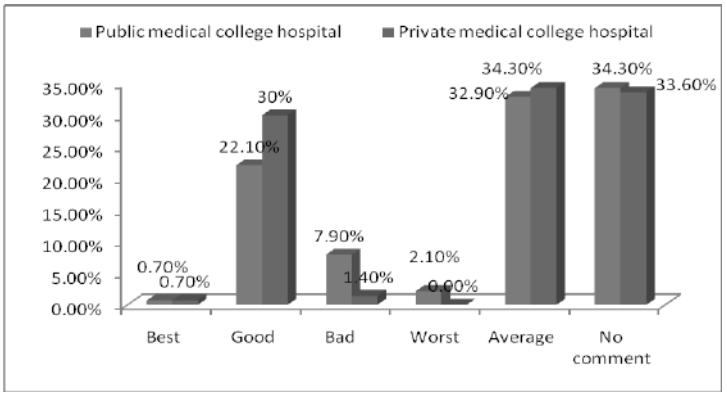
Table 5 : Quality of Hospital Personnel

Variables	Total (n=140)	Public hospital (n=70)	Private hospital (n=70)
Getting priority ser vices in medical college hospital			
	n(%)	n(%)	n(%)
Yes	78(55.7%)	19(27.1%)	59(84.3%)
No	33(23.6%)	31(44.3%)	2(2.9%)
Not sure	29(20.7%)	20(28.6%)	9(12.9%)
Getting technical services in medical college hospital			
Yes	82(58.6%)	28(40%)	54(77.1%)
No	3(2.1%)	2(2.9%)	1(1.4%)
Not sure	55(39.3%)	40(57.1%)	15(21.4%)
Sufficiency of doctors and other medical staffs			
Yes	98(70%)	37(52.9%)	61(87.1%)
No	15(10.7%)	15(21.4%)	0(0.0%)
Not sure	27(19.3%)	18(25.7%)	9(12.9%)
Doctors are highly qualified			
Yes	118(84.3%)	58(82.9%)	60(85.7%)
Not sure	22(15.7%)	12(17.1%)	10(14.3%)
Nurses are highly qualified			
Yes	95(67.9%)	41(58.6%)	54(77.1%)
No	17(12.1%)	13(18.6%)	4(5.7%)
Not sure	28(20.0%)	16(22.9%)	12(17.1%)

According to opinion of respondents 30% commented that private medical college hospitals were good and 22.1% commented that public medical college hospitals were good. Thirty-four percent and almost 33% described respectively that the services of private and public medical college hospitals are of average quality (Figure-3)

Table 6 shows that the misconception was significantly associated with age ($p<0.001$) and gender ($p<0.001$). 48(73.8%) of higher age group (41-90 years) patients and 25(33.33) of lower age group (11-40 years) patients believe that medical college hospitals offer free treatment. 54(75.1%) male and 18(28.6%) female patients believe that medical college hospitals offer free treatment. There

Figure 3 : Bar diagram: Opinion of participants regarding service quality regarging public and private medical colleges.



was no association between misconception of free treatment and religious belief (p=0.592) and occupation (p=0.186) of the respondents.

Discussion and conclusion

We included 140 patients from two medical hospitals, one government and the other private, of Dhaka city. Both hospitals have free beds for patients. We intended to find the cost borne by patients of free medical beds both in private and government medical college hospital.

Table 6 : Association between fallacy of free treatment and respondents age, sex, religious belief and occupation

Variables	Fallacy (misconception) of free treatment			Chi-square	p
	Total n (%)	Present n (%)	Absent n (%)		
Age of the respondents					
Lower age (11-40 years)	75(53.57%)	25(33.33)	50(66.7%)	22.9	.000
Higher age (41-90 years)	65(46.42%)	48(73.8%)	17(26.2%)		
Sex of the respondent					
Male	77(55%)	54(75.1%)	23(29.9%)	23.96	.000
Female	63(45%)	18(28.6%)	45(71.4%)		
Religious belief of the respondents					
Muslim	137(97.85%)	75(54.7%)	62(45.3%)	.542*	.592
Non-Muslim	3(2.15%)	1(33.3%)	2(66.7%)		
Occupation of the respondents					
Employed	78(55.7%)	44(56.4%)	34(43.6%)	1.750	.186
Unemployed	62(44.3%)	28(45.2%)	34(54.8%)		

***** Fisher's Exact Test

The participants of the present study were most early adults and middle aged. About twenty-six per cent of participants were illiterate. Forty-four percent patients were unemployed or housewife. Almost 98% participants were Muslim. More than two-thirds of the patients of both public (70.0%) and private (72.9%) hospitals are poor class people having monthly family income ?5000 BDT. 72.9% patients of public hospitals and 75.7% patients of private hospitals had been suffering from diseases for 5 -15 days. 55(78.6%) patients of public hospital and 46(65.7%) patients of private hospital spent 1001-5000 BDT for buying medicine. 11.4% patients of public hospital and 15.7% patients of private hospital spent 5001-10000 BDT for buying medicine. 43(61.4%) patients of public hospital and 36(51.4%) patients of private hospital spent 1000-5000 BDT for investigation. 22(31.4%) patients of public hospital and 24(34.3%) patients of private hospital spent 0-1000 BDT for investigation. It is worth noting that the patients of both public and private hospitals have to buy almost the same medicine and had to spend almost equal amount of money for investigation. Our findings are supported by other researchers (Nahar and Costello 1998; Ahmad 2003; Khan and Zaman 2010; Akter et al 2008; Pongsupap and Lerberghe 2006).

Nahar and Costello (1998) assessed the cost and affordability of `free' maternity services at government facilities in Dhaka, Bangladesh, and found that the mean cost for normal delivery was 1275 BDT and for caesarean section 4703 BDT. They considered these hidden costs in free government maternity clinic as a major contributor to low utilization of maternity services, especially among low-income groups (Nahar and Costello 1998).

Khan and Zaman (2010) conducted a hospital based cost accounting cross sectional study to determine the average cost of vaginal delivery and Caesarean section from two perspectives, the patient's and the hospital. The average cost for a spontaneous vaginal delivery from the hospital's side was 40 US$ (2688 rupees) and from the patient's perspective 79 US$ (5278 rupees). The average cost for a Caesarean section from the hospital side was 162 US$ (10868 rupees) and 204 US$ (13678 rupees) from the patient's side. They concluded that the apparently "free" maternity care at government hospitals involves substantial hidden and unpredicted costs (Khan and Zaman 2010).

Ahmad (2003) explained that there is growing evidence of both over-prescribing and inappropriate prescribing of drugs. Laboratories and other diagnostic facilities also provide incentives for over-investigation. Physicians commonly receive a commission from private diagnostic services to refer patients to them. This raises the cost of the investigation to the patient in public hospital (Ahmad 2003).

Akter and associates (2008) undertook a study to estimate the cost between private and public hospitals for antimicrobial treatment of the admitted paediatric patients who were suffering from pneumonia or diarrhoea - the two most common infectious paediatric problems in Bangladesh. The treatment charts of 107 admitted paediatric patients who received antimicrobial agent(s) for the treatment of pneumonia (88) or diarrhoea (19) were reviewed daily from the day of admission of the patients till their discharge from the hospitals. The study revealed that the average cost of antimicrobial course(s) per patient of pneumonia were higher in private hospital while that of diarrhoea was higher in public hospital (Akter et al 2008) .

Pongsupap and Lerberghe (2006) described the difference of cost in private and public hospital. Drug charges were the highest in private hospitals ($US 9.9) and lowest in public health centres ($US 1.4). The cost of the suggested investigations was highest in private hospitals (average $US 31.6), and lowest in private clinics run by GPs (average $US 3.6). The total cost to the patient i.e., consultation fee if charged, drug costs, and cost of recommended investigations was highest in private hospitals (average $US 45.7), and lowest for consultations with GPs in private clinics (average $US 11.1) and in health centres (average $US 5.7). The average total cost of a consultation in the public facilities was higher than that of a consultation in private clinics (Pongsupap and Lerberghe 2006).

Most of the patients did not have to spend money for residence; probably they have residence in the town. Private doctors were the most preferred option for seeking health services by both public hospital respondents (65.7%) and private hospital respondents (71.4%), followed by district sadar hospital. Private medical practitioners and district sadar hospitals are easy to reach for the rural people. 91.4% participants of public medical college hospitals and 92.9% participants of private medical college hospitals came to the medical college hospitals for better treatment. Medical college hospitals engage highly educated medical professionals, so they expect good care from them.

According to opinion of respondents, 30% commented that private medical college hospitals were good and 22.1% commented that public medical college hospitals were good. Thirty-four percent and almost 33% described respectively that the services of private and public medical college hospitals are of average quality. These findings are disappointing. Neither public nor private medical college hospitals of the country have achieved confidence of patients.

The study also revealed that the age and sex of the respondents were associated with the misconception of free treatment offered by medical college hospitals.

Due to constraints of time, financial support and facilities, the sample size in the study and the number of variables had been kept limited to some selected indicators. The two medical hospitals from where we collected data are located in the capital city. So the findings may not represent the situation of the whole country. So the findings of this study should be used with caution until validated by a large sample size, including patients from rural hospitals.

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