## Original article

# An assessment of patient's satisfaction with services in a tertiary care hospital

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#### Abstract:

Introduction: Health care quality is a global issue. The health care industry is undergoing a rapid transformation to meet the increasing needs and demands of its patient population. Hospitals should recognize the demands and health care choice of educated consumers. Patient satisfaction has become an established outcome indicator of quality and efficiency of health care system. Objectives: To assess certain domains of patient satisfaction with services in a private medical college hospital outside Dhaka and to find out the socio demographic variables. Materials & Method: A cross-sectional survey was conducted among the parents of paediatric patients attending a private medical college hospital after taking permission from ethical committee, authority. A pretested, semi structured questionnaire was used for study. Results: Most 253 (77.6%) of the respondents agreed that doctors office provide everything needed for complete medical care. Majority 234 (71.8 %) of the respondents strongly agreed that they can get the medical care without being set back financially. Most (98.5%) of the respondents agreed that they got medical care whenever needed. More than half (60%) of the respondents were satisfied about medical care received and 36% respondents were dissatisfied. Most (81.9%) of the respondents were satisfied with time spent by doctors, 72.1% were satisfied with accessibility and convenience to medical care, 53.9% 52.1% were satisfied with respondents were satisfied with technical quality, communication and 47.7% respondents were generally satisfied. Majority (51.2%) of the respondents were dissatisfied with financial aspect, 48.9% were generally dissatisfied, 45.7% were dissatisfied with interpersonal manner, 44.2% were dissatisfied with communication and 42.6% were dissatisfied with technical quality The comparison of average scored value between age, sex, education, occupation and income showed no significant differences.

Key Words: Patient satisfaction, Hospital services, quality care.

### Introduction:

Health care quality is a global issue. Health care industry is undergoing rapid transformation to meet the ever increasing needs & demands of its patient population. Hospitals are recognizing that educated consumers have health care choice & service demands. Respect for patients needs and wishes is central to any health care system<sup>1</sup>

Patient's perception about heath care is an important indicator of measuring quality of health care and clinical effectiveness<sup>2</sup>. Patient satisfaction is defined as the degree of congruency between a patient's expectation of ideal care & his / her perception of real care he/ she received<sup>3</sup>. It has many aspects and represents a vital marker of quality of health care delivery <sup>4</sup>. Patients satisfaction constitutes a significant – indicator of

health care quality <sup>5</sup>. Sense of quality depends on cultural habits & hence varies from one country to another <sup>6</sup>. It is true that the patients may have some difficulty in truthfully putting down their views for provided services and that reduce the validity of measurements. Nevertheless, satisfaction is a subjective concept for the patient and professional have to accept it's, existence, regardless of the validity of the patient's view <sup>7.8</sup>.

Patient's satisfaction is an expression of patient's judgment on the quality of care in all aspects but particularly as concerns the interpersonal process <sup>9</sup>. The first effort to assess patient's satisfaction with health services started from the nursing dept. in 1957in USA <sup>10</sup>. Now-a-days in developed countries like USA & Britain, measuring patient's satisfaction is legally established & constitutes a precondition for the accreditation of hospitals <sup>11</sup>. Various dimensions of patient's satisfaction have been identified- like admission/discharge, medical care, communication, technical quality, financial aspects, accessibility and conveyance, interpersonal manner etc.

Many studies have developed and applied patient's satisfaction as a tool for health care, for health care improvement and for health care services. With this view, the present study was conducted to assess patient's satisfaction with services in a private medical college outside, Dhaka.

#### Material and Methods:

This was a cross sectional study conducted in a tertiary care hospital situated in the rural part of Bangladesh. The hospital provides outpatient consultations and inpatient services to patients presenting to the hospital from other levels of care or on self referral. The study was carried out from January to June 2014 among the parents of paediatric patients admitted in the hospital and attending outpatient department. Sample size was calculated by using the formula,  $n = Z^2pq/d^2$ , where n =estimated sample size, p = prevalence of patient satisfaction about medical health care = 30.0% = 0.30 (estimated from pilot survey), q = 1-p = 1 - 0.30 = 0.70, Z = 1.96 value of Z corresponding to 95% confidence interval, d= margin of error (% of relative error) = 0.05. So, estimated sample size was,  $n = 1.96^2 \times 0.30 \times 07.0 / 0.05^2 = 322.69 = 323$ . Estimated sample size was 323, but we have taken 326. All the parents of paediatric patient who gave consent during data-collection period were eligible to be included in the study. A pre-tested, semi-structured questionnaire was used to collect data by face to face interview. The questionnaire has two parts consisting socio-demographic characteristics (sex, education,

occupation, monthly family income) and certain domains of satisfaction. The collected data were checked, verified and then entered into the computer. The analysis was carried out with the help of SPSS. All analyzed data were presented in the form of percentages. Chi-square tests were applied wherever applicable.

#### Result:

Out of 326 respondents, 312 (95.7%) were female and 14 (4.3%) were male. The mean age of the respondents was 30.39 ± 12.68 years. Most 136 (41.7%) of the respondents had education for 6-8 years. Among rest, 89 (27.3 %) respondents had education for 9-10 years, 74 (22.7%) had education for 1-5 years and 15 (4.6%) had education for 11-12 years respectively. Majority 276 (84.7%) of the respondents were house wives and 35 (10.7%) were garments worker. The mean monthly income of the respondents was Taka 14496 ± 6295. (Table: 1) Most 253 (77.6%) of the respondents agreed that doctor's office provide everything needed for complete medical care. Majority 234 (71.8 %) of the respondents strongly agreed that they can get the medical care without being set back financially. More than half 247(75.8%) of the respondents disagreed the ability of the doctors and 222(68.1%) respondents strongly disagreed that they pay more for medical care than they can afford (Table: 2). Most (98.5%) of the respondents agreed that they got medical care whenever needed and 93.6% respondents disagreed about the ability of the doctors who treated them (Table: 3). Most (60%) of the respondents were satisfied about medical care received and 36% respondents were dissatisfied (Table: 4). Most (81.9%) of the respondents were satisfied with time spent by doctors, 72.1% were satisfied with accessibility and convenience to medical care, 53.9% respondents were satisfied with technical quality, 52.1% were satisfied with communication and 47.7% respondents were generally satisfied. Majority (51.2%) of the respondents were dissatisfied with financial aspect, 48.9% were generally dissatisfied, 45.7% were dissatisfied with interpersonal manner, 44.2% were dissatisfied with communication and 42.6% were dissatisfied with technical quality (Table: 5). The comparison of average scored value between age, sex, education, occupation and income showed no significant differences. (Table: 06)

Table 1: Socio-demographic characteristic of the respondents

(n=326)

Sex	Frequency	Percentage
Female	312	95.7%
Male	14	4.3%
Total	326	100.0
Education	Frequency	Percentage
1-5 years	74	22.7
6-8 years	136	41.7
9-10 years	89	27.3
11-12 years	15	4.6
13-14 years	10	3.1
15 and above	02	0.6
Total	326	100.0
Occupation	Frequency	Percentage
House wife	276	84.7
Garments worker	35	10.7%
Farmer	02	0.6
Student	13	4.0
Total	326	100.0
Average monthly income	326	14496 ± 6295

Out of 326 respondents, 312 (95.7%) were female and 14 (4.3%) were male. The mean age of the respondents was  $30.39 \pm 12.68$  years. Most 136 (41.7%) of the respondents had education for 6-8 years. Among rest, 89 (27.3%) respondents had education for 9-10 years, 74 (22.7%) had education for 1-5 years and 15 (4.6%) had education for 11-12 years respectively. Majority 276 (84.7%) of the respondents were house wives and 35 (10.7%) were garments worker. The mean monthly income of the respondents was Taka 14496  $\pm$  6295. (Table: 1)

Table 2: Distribution of respondents by feeling of patient about medical health care received

Patient satisfaction questionnaire (PSQ 1-18)	Number	Feeling of patient about medical care received (n= 326)				
	% of total	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
Doctors are good about explaining the reason for medical test (PSQ-1)	Number % of total	131 40.2%	177 54.3%	6 1.8%	7 2.1%	5 1.5%
I think my doctor's office has everything needed to provide complete medical care (PSQ-2)	Number % of total	66 20.2%	253 77.6%	6 1.8%	0	0.3%
The medical care I have been receiving is just about perfect (PSQ-3)	Number % of total	215 66.0%	91 27.9%	16 4.9%	1 0.3%	3 0.9%
Sometimes doctors make me wonder if their diagnosis is correct (PSQ 4)	Number % of total	9 2.8%	47 14.4%	22 6.7%	180 55.2%	68 20.9%

I feel confident that I can get the medical care I need	Number	234	66	7	17	2
without being set back financially (PSQ-5)	% of total	71.8%	20.2%	2.1%	5.2%	0.6%
When I go for medical care, they are careful to check	Number	233	81	10	2	2
everything when treating and examining me (PSQ-6)	% of total	71.5%	24.8%	3.1%	0.6%	0.6%
I have to pay more for my medical care than I can afford	Number	0	5	6	93	222
(PSQ-7)	% of total	0	1.5%	1.8%	28.5%	68.1%
I have easy access to the medical specialists I need (PSQ-	Number	52	54	1	217	2
8)	% of total	16.0%	16.6%	0.3%	66.6%	0.6%
Where I get medical care, people have to wait too long for	Number	44	205	5	61	11
emergency treatment (PSQ-9)	% of total	13.5%	62.9%	1.5%	18.7%	3.4%
Doctors act too businesslike and impersonal toward me	Number	3	44	20	47	212
(PSQ-10)	% of total	0.9%	13.5%	6.1%	14.4%	65.0%
My doctors treat me in a very friendly and courteous	Number	52	196	39	15	24
manner (PSQ-11)	% of total	16.0%	60.1%	12.0%	4.6%	7.4%
Those who provide my medical care sometimes hurry too	Number	31	198	17	33	47
much when they treat me (PSQ-12)	% of total	9.5%	60.7%	5.2%	10.1%	14.4%
Doctors sometimes ignore what I tell them (PSQ-13)	Number	5	27	18	221	55
	% of total	1.5%	8.3%	5.5%	67.8%	16.9%
I have some doubts about the ability of the doctors who	Number	6	8	7	247	58
treat me (PSQ 14)	% of total	1.8%	2.5%	2.1%	75.8%	17.8%
Doctors usually spend plenty of time with me (PSQ-15)	Number	66	239	10	10	1
	% of total	20.2%	73.3%	3.1%	3.1%	.3%
I find it hard to get an appointment for medical care right	Number	68	195	7	54	2
way (PSQ-16)	% of total	20.9%	59.8%	2.1%	16.6%	0.6%
I am dissatisfied with some things about the medical care I	Number	4	94	12	194	22
receive (PSQ-17)	% of total	1.2%	28.8%	3.7%	59.5%	6.7%
I am able to get medical care whenever I need it (PSQ-18)	Number	226	95	3	2	0

Most 253 (77.6%) of the respondents agreed that doctors office provide everything need to complete medical care. Majority 234 (71.8%) of the respondents strongly agreed that they can get the medical care without being set back financially. More than half 247(75.8%) of the respondents disagreed the ability of the doctors and 222(68.1%) respondents strongly disagreed that they pay more for medical care than they can afford. (Table: 2)

Table 3: Percent distribution of satisfied, dissatisfied and uncertain of patient about medical care

Patient satisfaction questionnaire (PSQ 1-18)	Number % of total	Feeling of preceived	Total		
		Satisfied	Dissatisfied	Uncertain	
Doctors are good about explaining the reason for medical test (PSQ-1)	Number % of total	308 94.5%	12 3.7%	6 1.8%	326 100.0%
I think my doctor's office has everything needed to provide complete medical care (PSQ-2)	Number % of total	319 97.9%	1 0.3%	6 1.8%	326 100.0%
The medical care I have been receiving is just about perfect (PSQ-3)	Number % of total	306 93.9%	4 1.2%	16 4.9%	326 100.0%

Sometimes doctors make me wonder if their diagnosis is correct (PSQ 4)	Number	56	248	22	326
	% of total	17.2%	76.1%	6.7%	100.0%
I feel confident that I can get the medical care I need without being set back financially (PSQ-5)	Number % of total	300 92.0%	19 5.8%	7 2.1%	326 100.0%
When I go for medical care, they are careful to check everything when treating and examining me (PSQ-6)	Number % of total	2 .6%	10 3.1%	314 96.3%	326 100.0%
I have to pay more for my medical care than I can afford (PSQ-7)	Number	315	6	5	326
	% of total	96.6%	1.8%	1.5%	100.0%
I have easy access to the medical specialists I need (PSQ-8)	Number	106	219	1	326
	% of total	32.5%	67.2%	0.3%	100.0%
Where I get medical care, people have to wait too long for emergency treatment (PSQ-9)	Number	250	72	4	326
	% of total	76.7%	22.1%	1.2%	100.0%
Doctors act too businesslike and impersonal toward me (PSQ-10)	Number	47	259	20	326
	% of total	14.4%	79.4%	6.1%	100.0%
My doctors treat me in a very friendly and courteous manner (PSQ-11)	Number	248	39	39	326
	% of total	76.1%	12.0%	12.0%	100.0%
Those who provide my medical care sometimes hurry too much when they treat me (PSQ-12)	Number	229	80	17	326
	% of total	70.2%	24.5%	5.2%	100.0%
Doctors sometimes ignore what I tell them (PSQ-13).	Number	32	276	18	326
	% of total	9.8%	84.7%	5.5%	100.0%
I have some doubts about the ability of the doctors who treat me (PSQ 14)	Number	14	305	7	326
	% of total	4.3%	93.6%	2.1%	100.0%
Doctors usually spend plenty of time with me (PSQ-15)	Number	305	11	10	326
	% of total	93.6%	3.4%	3.1%	100.0%
I find it hard to get an appointment for medical care right way (PSQ-16)	Number	263	56	7	326
	% of total	80.7%	17.2%	2.1%	100.0%
I am dissatisfied with some things about the medical care I receive (PSQ-17)	Number	98	216	12	326
	% of total	30.1%	66.3%	3.7%	100.0%
I am able to get medical care whenever I need it (PSQ-18)	Number % of total	321 98.5%	2 0.6%	3 0.9%	326 100.0%

Most (98.5%) of the respondents were satisfied with availability of medical care and 93.6% respondents were dissatisfied about the ability of the doctors who treated them. More than half 248 (76.1%) of the respondents were satisfied with doctors behaviour. (Table: 3)

Table 4: Distribution of respondents according to satisfaction level about medical care

Distribution of respondents according to satisfaction level about medical care	Frequency *	percentage
Satisfied	3521	60.0
Dissatisfied	2136	. 36.4
Uncertain	211	3.6

<sup>\*</sup> Multiple responses

Most (60%) of the respondents were satisfied about medical care received and 36% respondents were dissatisfied. (Table: 4)

Table 5: Distribution of respondents by satisfaction scale

Scale	Satisfied	Dissatisfied	Uncertain	Total
General satisfaction	47.7%	48.9%	3.4%	100%
Technical quality	53.9%	42.6%	3.5%	100%
Interpersonal Manner	45.2%	45.7%	9.0%	100%
Communication	52.1%	44.2%	3.7%	100%
Financial Aspects	46.8%	51.2%	2.0%	100%
Time Spent with Doctor	81.9%	14.0%	4.1%	100%
Accessibility and Convenience	72.1%	26.8%	1.2%	100%

Most (81.9%) of the respondents were satisfied with time spent by doctors, 72.1% were satisfied with accessibility and convenience to medical care, 53.9% respondents were satisfied with technical quality, 52.1% were satisfied with communication and 47.7% respondents were generally satisfied. Majority (51.2%) of the respondents were dissatisfied with financial aspect, 48.9% were generally dissatisfied, 45.7% were dissatisfied with interpersonal manner, 44.2% were dissatisfied with communication and 42.6% were dissatisfied with technical quality. (Table: 5)

Table 6: Comparison of average scored value through PSQ 1-18 by socio-demographic groups

Groups	Variables	N	Mean ± SD	z-test / t-test for means	Comments		
				z-value / t- value	p-value	diagong one, tag	
Age	Age up to 25 years	136	$3.780 \pm 0.448$	- 1.451	0.148	Not significant	
	Age > 25 years	190	3.849 ±0.383				
Sex	Male	14	3.861±0.161	0.864	0.397	Not significant	
	Female	312	3.818±0.420				
Education	Up to 8 class	210	3.799±0.443	- 1.354	0.117	Not significant	
	9 class and above	116	3.859±0.347		y y		
Occupation	Housewife	276	3.815±0.442	- 0.766	0.446	Not significant	
	Garment worker	35	3.846±0.184			1	
Occupation	Housewife	276	3.815±0.442	- 1.048	0.304	Not significant	
	Students + farmer	15	3.867±0.162			500	
Occupation	Garment worker	35	3.846±0.184	- 0.395	0.696	Not significant	
	Students + farmer	15	3.867±0.162				
Income	< 15000 thousand	171	3.790±0.428	- 1.399 0.163	0.163	Not significant	
	15000 and above	155	3.363±0.393				

The comparison of average scored value between age, sex, education, occupation and income showed no significant differences. (Table: 06)

#### Discussion:

The present study attempted to assess the satisfaction of the patients with various aspects of health care in a tertiary care hospital. The results of the study indicate that most of the respondents interviewed were satisfied with the services they received. Very few similar studies have been done and therefore we lack the data for comparison. Yet, the findings of the survey are quite helpful if they are transformed into actions for improving the quality of health care.

Our study shows a high level of satisfaction (81.9%) regarding overall time duration given by doctors. The study done in Punjab, North India showed 94% respondents stated that the time devoted by doctor on them was adequate. <sup>12</sup> Anand D et

al and Sodani P.R. et al observed that the satisfaction regarding time duration given by doctor was satisfactory. <sup>13,14</sup> In the current study it was seen that 76.1% respondents were satisfied regarding behaviour of the doctor. Higher figures were observed in the study done by Bhattacharya A et al (98.2%) <sup>15</sup> Singh S et al. (88%) <sup>12</sup> and Kulkarni MV et al. (87.76%) <sup>16</sup>. On the other hand, a study conducted by Qadri SS et al found that 66.8% respondents were satisfied with behaviour of doctors. <sup>17</sup>

About half of the respondents 52.1% were satisfied with communication which is almost similar with the findings noted by Sarker J et al (53.4%). Sharma R et al stated that

the overall satisfaction regarding the doctor-patient professional and behavioural communication was more than 80% at almost all the levels of health care facilities <sup>19</sup>. General satisfaction of patients with services received from this tertiary care hospital came out to be 47.7%. The overall satisfaction of patients with services received from a tertiary care hospital in Hariana showed 79.3% <sup>17</sup>, a study done in Andhra Pradesh showed 63% satisfaction<sup>20</sup>, SA Deva et al noted that 80% <sup>21</sup> and Kumari R et al observed 81.6% <sup>22</sup> were satisfied with services received from the tertiary care institute. Our study shows a high level of dissatisfaction (51.2%) regarding financial aspect. Similar finding was observed in the study done by Anand D et al.<sup>13</sup>

#### Conclusion:

Our study has identified some of the deficiencies in health services provided by this referral teaching hospital, which needs to be addressed by the hospital management authority and plan for better management of health problems to meet the patients' expectations.

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