

# Quality of Care, Physician–Patient Communication, and Patient Satisfaction: A Cross-Sectional Study in Selected Hospitals of Dhaka City, Bangladesh

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## ABSTRACT

**Background:** Physician-patient relationships play an important role in the delivery of high-quality medical care. There are many concerns reported by patients about service quality, communication with healthcare providers, and overall hospital experiences in Bangladesh. Despite government efforts to improve public hospital management in Bangladesh, patient-centered care remains overlooked. This study assesses care quality, physician–patient communication, and factors influencing patient satisfaction.

**Methods:** This study used a quantitative approach. Data were collected from 125 outdoor patients from two public hospitals. Survey interviews were conducted using a structured questionnaire based on convenience sampling. Chi-square test was used to determine the association of patient satisfaction in relation to care quality and physician–patient communication. Statistical significance is determined by  $P > 0.05$ .

**Results:** A total of 125 patients (45.6% male, 54.4% female) were analyzed (mean age = 26.62 years; SD = 5.95 years). The mean score of patients' satisfaction with quality of care and physician-patient communication were 2.56 and 2.49, respectively, indicating lower satisfaction. The majority (60%) of patients reported that doctors did not attentively listen, with 64.8% had consultations lasting less than five minutes. A significant association was found between the number of patients seen together and satisfaction ( $\chi^2 = 8.82$ ;  $p = 0.03$ ). Additionally, consultation time had a strong effect ( $\chi^2 = 21.199$ ;  $p = 0.000$ ), where patients with consultations under five minutes (81.63%) were more likely to express dissatisfaction than those who had consultations lasting over 15 minutes (1.02%).

**Conclusion:** The findings call for policies that foster patient-centered care by improving staff attitudes, consultation time, ethical oversight, and access to essential medicines to enhance trust and satisfaction in public healthcare.

**Keywords:** Physician-patient relations, Patient satisfaction, Communication, Quality of care, Hospitals

## Introduction

Patient satisfaction with the healthcare system has emerged as a key concern for governments in South Asia (Singhal et.al, 2024; Kumar & Anand, 2024; Subedi & Uprety, 2015). Studies indicate that patient satisfaction levels in both private and public hospitals across Asian countries remain relatively low (Karim et al., 2025; Begum et al., 2022; Kandu, Jain & Ghosal, 2023). Despite variations in healthcare systems, many patients report concerns related to service quality, communication with healthcare providers, and overall hospital experiences. These concerns highlight the central role of care quality, defined as the extent to which health benefits are maximized relative to necessity, in shaping patient satisfaction (Almomani et al., 2020; Campbell et al., 2000; Mohamed & Azizan, 2015).

The effective communication between physicians and patients is a fundamental element of medical practice which influence both treatment outcome and patients' satisfaction with the care (Agha et. al, 2009). Previous studies have revealed that successful physician–patient communication plays a key role in building stronger relationships, minimizing medical conflicts, and is strongly correlated with improved healthcare outcomes, including increased patient satisfaction, enhanced trust, greater patient loyalty, and better health results (Wang et al., 2024; Zakaria et al., 2024; Hamid et al. 2021). Successful communication not only contribute to enhanced patient satisfaction but also foster to treatment and health outcomes, reduced costs of medical malpractice, and increased work satisfaction for physicians (Gupta & Carr, 2008).

In Bangladesh, several studies have explored physician-patient communication (PPC) within hospital settings (Nessa, 2025; Hamid et. al, 2021; Ahmed, 2021). The majority of these studies report inadequate communication practices, particularly in public healthcare institutions, where issues such as rushed consultations, lack of active listening, and limited patient engagement were common. Patients generally report average quality of care

from doctors, with many patients expressing dissatisfaction due to long waiting times and quality of care (Akthar et al., 2023). A study conducted in seven public and private hospitals in Dhaka city reported that nearly half of the patients (48%) perceived doctors as lacking cordiality, while 66% indicated that prescriptions were not adequately explained, and 67% expressed dissatisfaction with the care received. In addition, a large proportion of patients noted that doctors did not allocate sufficient time (78%) and failed to listen attentively (74%). Consistently, the majority of patients (80%) attending public hospitals in Dhaka expressed negative perceptions of doctors' communication practices. In another prior study, significant differences were found between patient experiences in public and private healthcare settings, particularly in terms of consultation times, physician nonverbal behavior, and patient participation during consultations (Zakaria et. al, 2024). Patient satisfaction regarding medical consultations was significantly higher in private hospitals (80.9%) compared to public hospitals (43.1%). Collectively, these findings underscore substantial communication gaps that contribute to low overall patient satisfaction (Hamid et al., 2021).

The level of patient satisfaction in both public and private hospitals across Bangladesh remains low, despite variations in healthcare systems (Andaleeb, 2000). There is a general difference in patient satisfaction levels between public and private hospitals. An earlier study conducted in 2007 in Bangladesh examined patient satisfaction levels in both private and public hospitals in Dhaka, specifically at Dhaka Medical College and Mitford Hospitals. The findings revealed a mean satisfaction score of 3.49 for public hospitals and 3.95 for private hospitals, indicating comparatively higher patient satisfaction in private hospitals than in public hospitals (Andaleeb et al., 2007). Previous studies have also examined patient satisfaction with healthcare services in rural areas of two districts, revealing that 45.3% of

respondents rated the quality of care as average, while 50.6% reported experiencing long waiting times (Siddique et al., 2024). These factors indicate ongoing challenges in healthcare delivery, affecting both patient experience and overall satisfaction.

Patients in Bangladesh frequently find it difficult to understand prescribed medications and medical advice, resulting in sporadic communication between doctors and patients. The lack of clear explanations of treatment plans and insufficient guidance on medications contributes to confusion and non-adherence. A recent study conducted among 422 patients at a private medical college in Dhaka city revealed that a significant proportion of patients (42.9%) struggled to comprehend prescribed medications and medical guidance, underscoring persistent challenges in effective doctor–patient communication (Nessa et al., 2025).

Bangladesh is one of the most densely populated countries in the world, with a population exceeding 160 million and a density of 1,063 people per square kilometer. The country's healthcare sector is undergoing significant development, with an expanding medical workforce improving access to primary care. Currently, Bangladesh has approximately 82,500 registered doctors supporting its health system (Nessa et al., 2025). To deliver healthcare services from the primary to tertiary level, the Government of Bangladesh has established 429 Upazila Health Complexes, 110 Maternal and Child Welfare Centres (MCWCs), 62 district hospitals, 31 medical and dental colleges, 3 specialized maternal and child hospitals, and 22 postgraduate specialty facilities. In addition, 18,086 community clinics, 3,362 Union Health and Family Welfare Centres (UH&FWCs), and 30,000 satellite clinics have been set up to provide doorstep healthcare services (Ministry of Health and Family Welfare, 2023). Within this context, examining the quality of care, physician–patient communication, and patient satisfaction becomes particularly important.

In Bangladesh, the healthcare system continues

to struggle with issues like poor referral systems, overwhelming patient volumes, and insufficient doctor-patient communication (Hamid et al., 2021). Public dissatisfaction is further intensified by concerns over consultation costs, a lack of emotional support from physicians, and negative media coverage of medical incidents, all of which contribute to declining trust and increasingly affected doctor-patient relationships (Islam & Biswas, 2014). Physicians often face difficulties in providing healthcare services at the grassroots level. At the same times, they encounter harassment and even physical assaults from patients or their families. A common perception is that doctors place financial interests above patient well-being, leading to public outrage over deaths attributed to professional negligence. In many cases, people react with anger and seek revenge following unexpected deaths, often without proper investigation into the circumstances (Pavel et al., 2015).

While many health indicators have improved in Bangladesh in recent years, the efficiency and effectiveness of service delivery still remains low (Andaleeb, 2000). The country mostly ignored the importance of patient's perspectives in assessing quality of health care (Uddin et al., 2017). Notable studies have been conducted on healthcare quality in public hospitals and on the comparative analysis between private and public hospital care (Rahman, & Islam, 2024); however, very limited research has focused specifically on physician–patient communication and the quality of care in public hospitals in Dhaka City. Therefore, this study was carried out in order to assess the care quality provided by public hospitals to their patient, understanding how patients have been treated or communicated by physicians as well as measuring factors associated with patients' satisfaction for medical consultation.

## Methods

### Study design and settings

This cross-sectional study employed a quantitative approach and was conducted in two prominent public hospitals in Dhaka city: Dhaka

Medical College (DMC) and Bangladesh Medical University (BMU). Dhaka Medical College comprises 42 wards, 1,100 staff members, and approximately 2,341 doctors and interns, providing both outpatient and inpatient services around the clock (DMC, 2021). Similarly, BMU is a highly specialized hospital with 284 doctors and 300 staff members serving over 50,000 patients (BMU, 2025). These two institutions were selected for the study because they are among the largest, oldest, and most prominent public hospitals in Bangladesh, serving a wide range of patients, particularly those from marginalized communities seeking affordable treatment.

#### Study population

Outpatients, defined as individuals receiving treatment without hospital admission, at Dhaka Medical College and BMU were purposively selected as the study population. An additional inclusion criterion was that participants had received services from either hospital within the three months preceding the study.

#### Sampling and sample size

Convenience sampling was employed to select the study participants. The required sample size was calculated using G\*Power statistical software, which determined an ideal sample size of 198. However, the sample size was reduced to 125 due to the patients' conditions and the interviewer's limited access to them in hospital settings. In addition, the context of the public hospital outdoor waiting room limited the pool of eligible participants at the time of data collection. Data were collected from 125 respondents through a structured survey questionnaire, representing 63% of the calculated sample size. All respondents were selected based on availability.

#### Data collection techniques

A structured survey questionnaire was used as the primary data collection instrument. Data were collected between 10th and 30th September 2023 using a paper-based questionnaire written in Bangla, the participants' native language. Prior to the final data collection, a pre-test was conducted

with 10 participants to ensure clarity of the questions, and minor adjustments were made based on their feedback. The study relied on self-reported patient experiences to evaluate care quality and physician behavior.

#### Explanatory variables

Socio-demographic and economic factors were considered as explanatory variables in this study. Participants were asked several questions to gather information on age, gender, marital status, education, income, and occupation. These variables were selected based on an extensive review of the literature, including previous studies by Siddique et al., 2024; Uddin et al., 2017 and Zakaria et al., 2024).

Care quality was another explanatory variable in this study, measured using nine items derived from previous literature (Adhikary et al., 2018; Rahman & Islam, 2024; Uddin et al., 2017). These items included the appointment process, availability of medical equipment, patient load per consultation, privacy, hospital opening hours, staff attitude, cost of services, and access to free medicine from the hospital.

Physician–patient communication was another explanatory variable in this study. This construct was measured using nine items derived from previous research (Hamid et al., 2021; Uddin et al., 2017), including whether doctors listened attentively, explained prescriptions clearly, asked relevant health-related questions, provided adequate responses, and whether consultations were conducted in a timely manner, including waiting time and consultation duration.

#### Data collection instrument

The survey was administered through face-to-face interviews using a structured questionnaire comprising 30 questions. The instrument was designed to collect information on patient satisfaction with the quality of care provided by public hospitals, as well as the nature of physician–patient communication. After translation, content validation, and reliability testing, both constructs—care quality and physician–patient

communication—demonstrated satisfactory reliability, with Cronbach's alpha values exceeding 0.7. The questionnaire was built using instruments identified in the literature, with items adapted expertly to ensure contextual applicability (Eveleigh et al., 2012). It was designed for both patients and healthcare providers was developed by researchers at the University of Dhaka. In the initial phase, six patients participated in structured interviews at Dhaka Medical College, leading to necessary revisions of the questions. Questionnaires from studies were evaluated to ensure they targeted the quality of the relationships between patients and their primary care providers, as well as factors such as waiting time, communication, and patient-related variables like age, gender, education, income, socio-economic background, health status, care outcomes, and patient experiences (Dulewicz & Assem, 2013). For the translation version, forward–backward translation was undertaken with pilot testing to determine clarity, reliability, and construct validity.

The questionnaire was divided into three sections: the first section collected socio-demographic data, the second assessed perceptions of care quality using eight items with varied response categories, and the third focused on physician–patient communication, comprising nine items with response options designed to capture different degrees of patient experience and satisfaction.

#### Statistical analysis

Two statistical software packages were used for data analysis. Initially, SPSS Statistics v.25 was

employed for data coding, sorting, and cleaning, as well as for calculating descriptive statistics, including frequencies, percentages, means, and standard deviations. The cleaned data were then imported into STATA 14 (64-bit) to examine the relationships between dependent and independent variables. Chi-square tests were conducted to assess the associations between care quality and patient satisfaction, as well as between physician–patient communication and patient satisfaction. For the data presentation, descriptive statistics such as percentages, means, and standard deviations were used. A probability value of  $P > 0.05$  was considered statistically significant.

## Results

### Background characteristics

Table 1 presents the socio-demographic characteristics of the surveyed respondents. The largest proportion of respondents (49.6%) were aged 18–25, while the smallest proportion (8.0%) were aged 31–35 (mean age=26.62, SD=5.95 years). In terms of gender distribution, 54.4% were female and 45.6% were male. Regarding marital status, most respondents (68%) were unmarried, while 32% were married. Concerning educational attainment, 46.4% had completed higher secondary education, whereas only 3.2% were illiterate. When categorized by occupation, the majority of respondents (64.8%) were students, and only 3.2% were engaged in business. Additionally, 34.43% of respondents reported a monthly income of less than Tk. 15,000 or within the range of Tk. 15,000–30,000 (Table1).



**Table 1.** Socio-demographic characteristics of the participants (n=125)

Variables	Number	Percentage
<i>Age</i>		
18-25	62	49.6
26-30	35	28.0
31-35	10	8.0
Above 35	18	14.4
<i>Gender</i>		
Female	68	54.40
Male	57	45.60
Married	40	32
Unmarried	85	68
<i>Education</i>		
Illiterate	4	3.20
Primary	13	10.40
Secondary	18	14.40
Higher secondary	58	46.40
Graduate and above	32	25.60
<i>Income (in Taka)</i>		
<15000	43	34.43
15001-30000	43	34.43
30001-45000	26	20.80
45001-60000	9	7.20
>600001	4	3.20
<i>Occupation</i>		
Service Holder	14	11.20
Business	4	3.20
Housewife	20	16.00
Day labors	2	1.60
Student	81	64.80
Others	4	3.20
<i>Name of hospital</i>		
Dhaka Medical College	68	54.4
Bangladesh Medical University	57	45.6

**Note:** 1 Taka=0.0083 \$US

#### Care quality in public hospitals

Table 2 provides an overview of care quality in public hospitals based on survey responses. The mean satisfaction score for care quality was 2.56, indicating a generally low level of satisfaction, with the majority of respondents (46.4%) reporting dissatisfaction. Nearly 40% of respondents rated the appointment process as poor, whereas only

7.2% considered it good. The findings also revealed that 54.4% of respondents reported inadequate availability of essential medical equipment. Additionally, almost half of the respondents (49.6%) indicated that doctors consulted 1–2 patients simultaneously, while 36% reported that doctors attended to 3–4 patients at the same time (Table2).

**Table 2.** Patients' self-reported response regarding the quality of care (n=125)

Variables	Number	Percentage
<i>Appointment process</i>		
Good	9	7.2
Fair	34	27.2
Poor	49	39.2
Very poor	33	26.4
<i>Cost affordability</i>		
Affordable	120	96.0
Not affordable	5	4.0
<i>Number of patients consulted at the same time</i>		
<2	62	49.6
3-4	45	36.0
5-6	11	8.5
>7	7	5.6
<i>Patients' privacy</i>		
Excellent	2	1.6
Good	30	24.0
Fair	38	30.4
Poor	55	44.0
<i>Hospital opening hour</i>		
Convenient for patients	58	46.4
Inconvenient for patients	67	53.6
<i>Free medicine provided from hospital</i>		
Never	53	42.4
Seldom	43	34.4
Sometimes	26	20.8
Often	3	2.4
<i>Waiting time for ticket collection</i>		
<30 minutes	7	5.6
31min to 59 Minute	41	32.8
1- 2 Hours	21	16.8
> 2 hours	56	44.8
<i>Satisfaction with care quality (Mean = 2.56, SD = .927)</i>		
Very dissatisfied	11	8.8
Dissatisfied	58	46.4
Neutral	31	24.8
Satisfied	24	19.2
Very satisfied	1	0.8

Although nearly all participants (96%) considered the cost of services affordable, a significant portion (53.6%) found the opening hours inconvenient (Table 2). Regarding patient privacy during consultations, 44% of respondents described it as poor. The study also found that 64.8% of participants reported that the attitude of medical staff was sometimes favorable and sometimes unfavorable, 42.4% never received free medicines, and 44.8% waited more than two hours to collect tickets.

Association between patient satisfaction and care quality

Chi-square tests were conducted to evaluate whether there was a significant relationship between care quality and patient satisfaction in public hospitals (Table 3). The analysis showed that the number of patients consulted simultaneously, the level of patient privacy, and the availability of medical equipment were all significantly linked to satisfaction levels. A significant association was found between the number of patients seen together and satisfaction ( $\chi^2 = 8.82$ ;  $p = 0.03$ ). Dissatisfaction was more common among patients who were consulted with

more than six others (85.71%) compared to those seen with one or two other patients (69.35%).

Patient privacy during consultations also demonstrated a moderate association with satisfaction ( $\chi^2 = 12.77$ ;  $p = 0.005$ ). Dissatisfaction was reported by 51.65% of those experiencing poor privacy, compared to 31.87% with fair

privacy, 15.38% with good privacy, and just 1.1% with excellent privacy. Similarly, the availability of medical equipment was strongly associated with satisfaction ( $\chi^2 = 11.36$ ;  $p = 0.003$ ). Patients who reported equipment was available were more likely to be satisfied (37.84%) than those who found it unavailable (10.29%) (Table3).

**Table 3.** Association between care quality and patient satisfaction in public hospitals

Variables	Satisfied n (%)	Dissatisfied n (%)	$\chi^2$	P-value
<i>Number of patients receiving consultations simultaneously</i>				
1-2	19 (30.65)	43 (69.35)	8.82	0.03
3-4	4 (8.89)	41 (91.11)		
5-6	1 (9.09)	10 (90.91)		
6+	1 (14.29)	6 (85.71)		
<i>Patients privacy</i>				
Excellent	1 (2.94)	1 (1.1)	12.77	0.005
Good	16 (47.06)	14 (15.38)		
Fair	9 (26.47)	29 (31.87)		
Poor	8 (23.53)	47 (51.65)		
<i>Availability of medical equipment</i>				
Yes	14 (37.84)	23 (62.16)	11.36	0.003
No	7 (10.29)	61 (89.71)		
Not sure	4 (20.00)	16 (80.00)		
<i>Waiting time for the ticket collection</i>				
<30	3 (42.86)	4 (57.14)	4.009	0.260
31-59	34 (82.93)	7 (17.07)		
1-2 hours	15 (71.43)	6 (28.57)		
> 2 hours	15 (71.43)	9 (16.07)		
<i>Free medicine provided from the hospital</i>				
Never	4 (16.98)	44 (83.02)	4.418	0.220
Seldom	9 (20.93)	34 (79.07)		
Sometimes	5 (19.23)	21 (80.77)		
Often	1 (33.33)	2 (66.67)		

Physician-patient communication in public hospitals

Table 4 presents the modes of physician communication with patients in public hospitals. More than half of the respondents (60.0%) reported that doctors did not listen attentively to their health problems. The study also found that approximately 8 out of 10 respondents (81.6%) reported that doctors asked only brief questions about their health issues, while only a small proportion (5.6%) mentioned that doctors inquired about previous health reports. Additionally, 62.4% of respondents stated that doctors did not ask enough health-

related questions.

Just over a quarter of respondents (36%) experienced waiting times of more than one hour to enter the doctor's room due to long queues, and more than half (60%) reported that doctors did not visit the hospital on time. Only a small proportion (4.8%) received consultations longer than 15 minutes, whereas a large majority (65%) had consultations lasting less than five minutes. The mean score of patient satisfaction with physician communication was 2.49, which was lower than satisfaction with care quality, with 52.8% of patients reporting dissatisfaction (Table4).



**Table 4.** Physician-patient communication during patients visit in public hospitals (n=125)

Variables	Number	Percentage
<i>Did the doctor attentively listen patient's health problems?</i>		
Yes	50	40.0
No	75	60.0
<i>Categories of questions asked by the doctor in the last consultation</i>		
Short question	102	81.6
Detailed questions	16	12.8
Seeking previous reports	7	5.6
<i>Did the doctors ask sufficient questions regarding your health?</i>		
Yes	46	36.8
No	78	62.4
<i>Time waited to see the doctor (in minute)</i>		
<10	4	3.2
11-30	42	33.6
31-60	34	27.2
>60	45	36.0
<i>During the last visit, the doctor attended the patient on time</i>		
Yes	27	21.6
No	75	60.0
Don't know	23	18.4
<i>Doctor consultation time (in minutes)</i>		
<5	81	64.8
5-10	27	21.6
11-15	11	8.8
>15	6	4.8
<i>Patient satisfaction with physician communication (Mean = 2.49, SD = .938)</i>		
Very dissatisfied	12	9.6
Dissatisfied	66	52.8
Neutral	20	16.0
Satisfied	27	21.6

The Chi-square test was used to examine the association between physician-patient communication and patient satisfaction (Table 5). Findings showed a moderate link between doctors' attentive listening to patients' health concerns and patient satisfaction ( $\chi^2 = 21.199$ ;  $p = 0.000$ ), with 77.78% of patients who felt listened to reporting satisfaction compared to 18.52% who did not. Additionally, consultation time had a strong effect ( $\chi^2 = 21.19$ ;  $p = 0.000$ ), where patients with consultations under five minutes (81.63%) were more likely to express dissatisfaction than those who had consultations lasting over 15 minutes (1.02%). Answers to patient queries also significantly influenced satisfaction ( $\chi^2 = 12.10$ ;

$p = 0.017$ ), as 14.81% of patients who always received answers were satisfied compared to 22.22% of those who never did. However, there was a moderate negative association between doctors asking sufficient health-related questions and patient satisfaction ( $\chi^2 = 24.47$ ;  $p = 0.000$ ,  $v = -0.44$ ), with 71.54% of patients reporting dissatisfaction when doctors did not ask enough questions versus 24.05% dissatisfaction when they did. Furthermore, Patients were more satisfied when doctors attended to them on time ( $\chi^2 = 18.98$ ,  $p < 0.001$ ). This summary captures the significant associations and statistical values reflecting the impact of various communication aspects on patient satisfaction in the study (Table5).

**Table 5.** Association between variables related to physician–patient communication and patient satisfaction

Variables	Satisfied n (%)	Dissatisfied n (%)	$\chi^2$	P-value
<i>Carefully listened to patients' health concerns</i>				
Yes	21 (77.78)	28 (28.87)	21.19	0.000
No	5 (18.52)	61 (62.89)		
No Opinion	1 (3.7)	8 (8.25)		
<i>Doctor consultation time (in minutes)</i>				
<5	1 (3.70)	80 (81.63)	65.21	0.000
5-10	12 (44.44)	15 (15.31)		
11-15	9 (33.33)	2 (2.04)		
15+	5 (18.52)	1 (1.02)		
<i>Doctors answered all of the patients' questions</i>				
Never	1 (3.70)	4 (4.08)	12.10	0.017
Seldom	11 (40.74)	52 (53.06)		
Sometimes	5 (18.52)	31 (31.63)		
Often	6 (22.22)	9 (9.18)		
Always	4 (14.81)	2 (2.04)		
<i>Doctors asked a sufficient number of health-related questions</i>				
Yes	21 (77.78)	25 (24.05)	24.47	0.000
No	6 (22.22)	73 (71.54)		
<i>Doctor attended the patient on time</i>				
Yes	14 (51.85)	13 (48.15)	18.98	0.000
No	11 (14.67)	64 (85.33)		
Don't know	2 (8.70)	21 (91.30)		

## Discussion

The current study found that the mean satisfaction score for care quality was 2.56, indicating low satisfaction in public hospitals. A similar pattern was observed in a previous study conducted in Bangladesh, which reported an overall patient satisfaction level of 65% (51% in public hospitals and 75% in private hospitals), with satisfaction rates of 56.5% in the hospital environment and 67% in physician care (Begum et al., 2022). However, another study conducted at Dhaka Medical College and Mitford Hospital showed substantially better results, with a mean satisfaction score of 3.93 on a five-point scale—above the midpoint of 3.0—where both public and private hospitals in Bangladesh performed commendably with scores of 3.49 and 3.95, respectively (Khandakar, 2014). This aligns with findings from a previous study conducted in India, where the mean overall perceived healthcare quality score was 3.01 ( $\pm 0.46$ ) and the general satisfaction score was 3.06 ( $\pm 0.63$ ). The study reported a moderate positive correlation between

perceived healthcare quality and overall patient satisfaction (Malathi et al., 2025).

The findings of this analysis were compared with studies from neighbouring countries, such as Nepal and Sri Lanka (Kandu et al., 2023; Madhuwanthi & Marasinghe, 2021). Based on quantitatively summarised meta-analysis the results from Nepal indicated that hospital service quality was generally moderate, while the study conducted among female patients in Sri Lanka reported that nearly all participants (99.7%) were satisfied with the overall services provided by outpatient departments.

In this study, factors such as maintaining patient privacy, the number of patients receiving consultations simultaneously, and the availability of medical equipment were found to be associated with patient satisfaction. Previous studies conducted in Bangladesh have demonstrated a clear relationship between patient satisfaction and various explanatory factors doctors presence, tangibles (Andaleeb et al., 2007), with service quality emerging as a key determinant

(Khandakar, 2014). Research from other countries has also identified several contributing factors to high-quality clinical care, including favorable nurse-to-patient ratios, effective doctor–patient communication, patient privacy (Jha et al., 2008), a clean environment (Maseko & Harris, 2018), adequate consultation time (Karim et al., 2025), shorter waiting periods (Singh, Kaur, & Rochwani, 2013), long waiting time (Mohiuddin, 2020), including availability of sufficient medical equipment (Khandakar, 2014; Almomani et al., 2022) as well as improving the availability of drugs and prescribed diagnostic services (Hasan et al., 2024). These findings collectively emphasize the importance of ensuring adequate consultation time, reduced waiting periods, a clean environment, sufficient medical equipment, and effective physician communication to enhance patient satisfaction.

The results show that half of the patients (50%) reported that doctors consulted two patients simultaneously and expressed concerns about poor privacy. Nearly three-quarters of patients felt that the attitude of medical staff toward them was sometimes favorable and sometimes unfavorable, and they found the hospital's opening hours inconvenient. Furthermore, 42% of patients reported not receiving any free medicines from the hospital, while 32% received them only occasionally. The study also found that longer waiting times were negatively associated with patient satisfaction, indicating a three- to nine-fold higher likelihood of reduced satisfaction. These findings are supported by several studies conducted in Bangladesh and India (Gautam et al., 2022; Siddique et al., 2024; Singh et al., 2013; Zakaria et al., 2024). The results suggest that reducing patient waiting times—for example, by implementing an online appointment booking system—may improve patient satisfaction.

The mean score of patient satisfaction regarding physician–patient communication was 2.49, indicating low satisfaction. Nearly 63% of patients reported dissatisfaction because doctors did not listen attentively to their health problems, and a

significant proportion stated that doctors did not provide clear explanations of prescriptions. These findings are consistent with previous studies conducted in Bangladesh and Ethiopia (Hamid et al., 2021; Gessesse et al., 2022). However, contrasting results were observed in a secondary analysis conducted by Rahman (2023), which found that 73.2% of patients perceived that doctors invested adequate time, 66.8% believed that doctors listened attentively, and 72.8% received clear explanations about their prescribed medications. This discrepancy may be due to differences in study design and study areas. The inconsistency highlights the urgent need to improve doctor–patient relationships, particularly in public hospitals in Dhaka City.

We also found that most respondents (81%) were asked only very brief questions about their health issues, and doctors rarely (51%) or sometimes (27%) answered them. In contrast, van den Brink-Muinen et al. (2000) found that physicians in the Netherlands discussed health issues with patients in 89.5% of cases, 88.3% in the UK, and 84.9% in Belgium, compared to Spanish (74.3%) and Swiss (83.4%). Similarly, Kanwal et al. (2019) reported higher mean scores of 4.88 for explaining the disease and 4.39 for listening to patients' questions, indicating a positive scenario. These contrasting findings suggest that the poorer situation in Bangladeshi hospitals, compared to other countries, may limit interaction between physicians and patients. This highlights the need to improve the doctor–patient ratio and implement training programs to enhance communication skills, ensuring that doctors have sufficient time to engage with patients and provide clearer, more thorough explanations.

Additionally, the findings showed that most respondents experienced long waiting times, ranging from 30 minutes to more than one hour, before entering the physician's room for consultation. Nearly three-quarters of patients reported having consultations lasting less than five minutes, while only 4% reported receiving consultations longer than 15 minutes. Such limited

consultation time significantly reduces patient satisfaction. Similar results have been reported in previous studies (Das et al., 2021; Gautam et al., 2022; Siddique et al., 2024; Zakaria et al., 2024), which found that long waiting times and very short consultations—often under five minutes—contribute to decreased patient satisfaction.

Patient frustration can result from long waiting times. Additionally, insufficient consultation time may prevent doctors from fully addressing patients' health concerns, explaining prescriptions clearly, or providing treatment recommendations through proper discussion. These findings underscore the importance of reducing waiting times and extending consultation durations to enhance patient satisfaction.

The current study also found that factors such as attentively listening to patients' health problems, providing clear explanations of prescriptions, discussing prescriptions with patients, and offering longer consultation times (more than ten minutes) were significantly associated with higher patient satisfaction. These findings are consistent with previous studies (Das et al., 2021; Uddin et al., 2017; Siddique et al., 2024), which suggest that these factors can positively influence patient satisfaction. By involving patients in their treatment decisions and listening to their concerns, trust is increased, anxiety is reduced, and patient satisfaction is enhanced. This underscores the importance of ensuring these factors, as they can significantly improve patient satisfaction, healthcare outcomes, and the overall quality of care in public hospitals.

This study has several important limitations. Firstly, although the calculated sample size was 384, data were collected from only 125 respondents. This small sample size greatly reduces the study's statistical power and raises the chance of a Type II error, which could hide real associations. Secondly, the use of convenience sampling creates selection bias since the participants may not accurately represent the larger patient population. Because of this, the findings should be interpreted carefully, and generalizations

to other settings or populations should be avoided. Thirdly, self-reporting may have introduced response bias, reducing the accuracy of the findings. These findings should be confirmed by future research employing probability-based sampling methods and larger, more representative samples.

### Conclusion

Our study found low levels of patient satisfaction concerning both the quality of care and the nature of doctor–patient communication. The findings showed significant associations between patient satisfaction and factors such as consultation duration, healthcare providers' attentiveness, privacy during consultations, and availability of medical equipment. This study reveals critical gaps in patient satisfaction and emphasizes the importance of patient-centered care within public hospitals. Many patients reported long waiting times and expressed dissatisfaction with the large number of patients seen simultaneously, inconvenient hospital hours, and the unfriendly attitudes of medical staff. These findings suggest that reducing waiting times, ensuring convenient hospital hours, and promoting empathy among medical staff could improve patient satisfaction. Furthermore, a significant number of patients felt that doctors did not listen attentively, clearly explain prescriptions, provide sufficient consultation time, or ask detailed health-related questions. Only a small percentage of patients received free medicines, highlighting the need for extended consultation times, attentive listening, clear prescription explanations, detailed health-related inquiries, and better access to essential medicines to foster higher patient satisfaction and improved healthcare outcomes. Addressing these structural issues such as reported long waits, unfavorable staff attitudes, and improving physician–patient interactions is critical for enhancing patient satisfaction.

The study's findings have important policy implications for improving healthcare in public hospitals. Key recommendations include addressing shortages of medical equipment,

providing medical staff with proper education and training to enhance patient attitudes, and establishing an active ethics standards board to monitor professional conduct among healthcare providers. These reforms highlight the need for systemic changes that focus on both the interpersonal and structural aspects of healthcare delivery, aiming to improve patient satisfaction and overall health outcomes. Prioritizing these areas can guide policymakers and authorities in making effective improvements to the healthcare sector.

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### Conflicts of interest

All authors declared no conflicts of interest.

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### Ethical considerations

Initially, the academic institutional review committee of the Department of Sociology at Dhaka University granted permission to conduct the study. In addition to an informed consent statement outlining the study's objectives, procedures and the right to withdraw was included on the first page of the questionnaire. Some participants provided written consent, while others gave verbal consent prior to the proceedings.

### Code of Ethics

2017-18-13/06/2022/98

### Authors' contributions

Conceptualization was done by M.L.K. and S.E.H.; methodology was adopted by M.L.K. and

S.E.H.; data collection and original draft by M.L.K.; and supervision, data analysis and editing by S.E.H. All authors reviewed and approved the final manuscript and are responsible for addressing any questions related to the article.

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