

## Patients' attitude towards medical students at Combined Military Hospital, Dhaka

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### Abstract

**Introduction:** Patient is the best resource and most important component in medical education. One of the vital parts of clinical education is patients' cooperation and acceptance of medical students in their care.

**Aim:** To assess patients' attitude towards medical students at Combined Military Hospital (CMH) Dhaka, and to determine factors that may affect those attitudes.

**Methods:** This cross-sectional study was conducted at CMH Dhaka, an affiliated teaching hospital to Armed Forces Medical College (AFMC). One hundred and eighteen patients were interviewed face to face from January to June 2021 using a predesigned questionnaire.

**Results:** All study participants had responded to the questionnaire. Majority of the patients (98%) thought that students should examine patients as part of their medical training. All participants accepted students' presence during the medical consultation. 86.4% and 69.5% of the patients agreed students' involvement in general physical examination in presence and absence of a doctor respectively. In case of genital examination by students 33.9% and 30.5% patients were agreed to allow them in presence and absence of supervising doctor respectively.

**Conclusion:** Patients of this study show some overall positive attitudes. Patients like less number of students' involvement in their physical examination; however, majority of the patients realized the importance of patient examination by students as a part of their medical training.

**Key-words:** Patients' attitude, Medical students, Patients' examination.

### Introduction

Patient is the best resource and most important component in medical education. The linking between clinical experience and theoretical knowledge is important to improve medical skills, which is achieved by direct communication with real patients in hospitals<sup>1,2</sup>. Bed side teaching was the first to introduce in 1892 by Canada's most renowned physicians Sir William Osler (1849-1919). He described: "Medicine is learned by the bedside and not in the classroom"<sup>3</sup>. Bedside teaching provides an opportunity to

learn several clinical skills. These are history taking, communication, physical examination, decision making and professionalism<sup>4</sup>. Communication with patients improves clinical learning, professional skills and initiates doctor-patient relationship in future<sup>5</sup>. Patients can contribute to the education, better teaching opportunities and training of medical students by their positive attitude cooperation<sup>5,6</sup>.

It is shown in several studies that majority of patients have positive attitudes towards the medical students,<sup>7-10</sup> they also enjoyed their contribution in improving the medical training and healthcare for the population<sup>5,8,9,11</sup>. However, these attitudes vary due to various socio-demographic factors and cultural issues across the regions and countries<sup>8</sup>. These factors include female gender<sup>12-14</sup> male student's gender<sup>15</sup> and Islam religion<sup>15,16</sup>. A minor number of patients refuse, or feel negative about the students' involvement in their care in many hospitals worldwide<sup>17</sup>.

Armed Forces Medical College (AFMC) conducts a five years' undergraduate medical program for the Bachelor of Medicine and Bachelor of Surgery (MBBS) degree, which is divided into four phases. Clinical teaching takes place in the second to fourth phases of medical training. During these three and half years, medical students are passed through a hospital rotations and clinical attachments in medical and surgical departments where they spend about four hours a day. During these rotations, medical students are exposed to supervise patient-based clinical teaching and are taught communication and examination skills. In Combined Military Hospital (CMH) Dhaka, patients' acceptance of AFMC students was not assessed. Our objectives are to assess patients' attitude towards medical students at CMH Dhaka, to assess if the student's gender has an effect on the patients' acceptability and to determine factors that may affect this attitude in order to act upon them for better bedside teaching.

### Materials and Methods

This was a cross-sectional descriptive study conducted in Combined Military Hospital, Dhaka. Answers to the structured questionnaire were collected by face-to-face interviews with a random sample of admitted patients. The study period was from beginning of January to end of June 2021. Similar studies<sup>17,18</sup> were consulted to design the questionnaire for this study. The

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validity and clarity of the questionnaire was ensured from 10 samples of patients and minor changes were made as few questionnaires were generated from the patients' ideas.

The questionnaire contained 23 items, which includes demography, socio-economic condition, questions to assess patients' attitudes and their preferences in being examined by medical students. Face-to-face interviews using the questionnaire were conducted by single surgical trainee officers. Interviews took place at surgical wards, orthopaedic wards, gynaecology wards and officers' wards.

The purposes and nature of the study explained to the patients and consent obtained. The participants were clearly assured that their participation in this study was voluntary. Also, they were assured the anonymity and the confidentiality of the collected data and their participation would not affect the medical care. Data were entered into SPSS (Version 23) and statistical analysis was done.  $p$  value of less than 0.05 was considered statistically significant.

## Results

One hundred and eighteen patients were enrolled and none of them refuses the interview. Sociodemographic characteristics are presented in Table-I. The average age of participants was 37.5 years. Among all study participants, 60 (50.8%) were males and 98 (83.1%) were married, 35.6% of them had high school level education and 33.9% participant were uniformed personal.

**Table-I:** Sociodemographic characteristics of patients in CMH, Dhaka (n=118)

	Variable	Patients No (%)
<b>Age</b>	Mean	37.5 ± 13.4
<b>Sex</b>	Male	60 (50.8)
	Female	58 (49.2)
<b>Marital Status</b>	Married	98 (83.1)
	Unmarried	20 (16.9)
<b>Educational Level</b>	No formal education	4 (3.4)
	Elementary (below SSC)	16 (13.6)
	Secondary School certificate (SSC)	32 (27.1)
	Higher School certificate (HSC)	42 (35.6)
	University	24 (20.3)
<b>Occupation</b>	Housewife	38 (32.2)
	Civil Service	14 (11.9)
	Civil in Army	10 (8.5)
	Uniformed person	40 (33.9)
	Retired army person	8 (6.8)
	Students	8 (6.8)

Table-II shows a general positive attitude to the students' activities in their medical care. Of the patients interviewed, 100% of the patients were agreed to permit the medical students to read their medical file, to take your medical history and personal detail from. Majority of the participants agreed to allow the students to present in operation room (98.3%), during their general physical examination (96.6%), and also allow them to do general examination in presence of doctor (86.4%) and minor procedures on them (81.4%).

Regarding clinical genital examination, only 33.9% and 30.5% patients agreed to be examined by students in presence and absence of a supervising doctor respectively, but 50.8% accepted the presence of students during their genital examination. Among 118 study participants, 62 (52.5%) would prefer students with their gender, 116(98.3%) did not feel difficulties in discussing their personal history with student and only 26(22.0%) patients know that they have right to refuse the presence of medical students to be involved in their care.

**Table-II:** Patients' answers to the questionnaire in CMH, Dhaka, July 2021 (n=118)

Question	Yes (Freq. %)	No (Freq. %)
Would you permit presence of medical students during consultation in ward round?	118 (100)	0 (0)
Would you permit medical students to read your medical file?	118 (100)	0 (0)
Would you permit medical students to take your medical history and personal detail from?	118 (100)	0 (0)
Do you accept the presence of students during your general physical examination?	114 (96.6)	4 (3.4)
Would you allow medical students to examine you in the presence of a doctor?	102 (86.4)	16 (13.6)
Would you permit medical students to examine you without the presence of a doctor?	82 (69.5)	36 (30.5)
Do you accept the presence of students during your genital examination?	60 (50.8)	58 (49.2)
What will be your answer if medical students want to examine your genitalia in presence of a doctor?	40 (33.9)	78 (66.1)
What will be your answer if medical students want to examine your genitalia without the presence of a doctor?	36 (30.5%)	82 (69.5%)
Will you prefer to be the student of your gender?	62 (52.5)	56 (47.5)

Question	Yes (Freq. %)	No (Freq. %)
Will you allow students to be present in operation room if you were having surgery?	116 (98.3)	2 (1.7)
Would you permit medical students to perform minor medical procedures on you (IV cannula, IV/IM injection, drawing blood, inserting catheter etc.)?	96 (81.4)	22 (18.6)
Do you feel difficulties in discussing your personnel history with student?	2(1.7)	116(98.3)
Do you believe you have the right to refuse students involvement in your care?	26(22)	92(78)

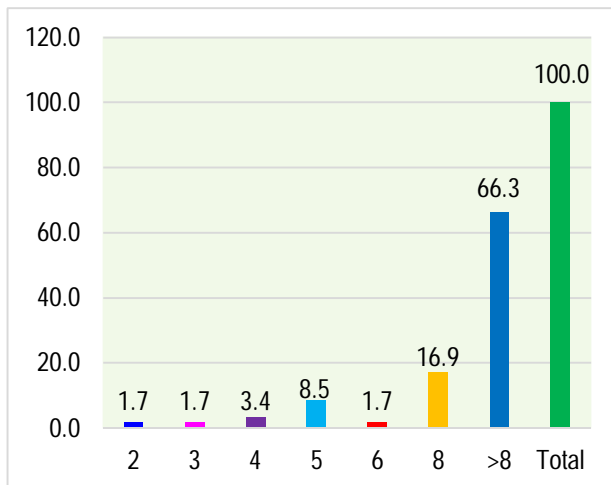


Figure-1: Patients' views regarding the number of medical student present at clinical round

Negative attitude was more in educated than less educated patient (OR 1.84, CI 95%, p= 0.084). Female patients were more likely to accept female students, while male patients had less gender preference (Table-III). Females to like female students appeared higher than that of males to like male students in their clinical care (OR 0.3362; 95% CI, p = 0.0015).

Table-III: Patients' gender preference and correlation to sex and education (n=118)

Will you prefer to be the student of your gender?		
	Yes (Freq. %)	No (Freq. %)
<b>Sex</b>		
Male	16 (26.7)	44 (73.3)
Female	46 (79.3)	12 (20.7)
<b>Marrital status</b>		
Married	52 (53.1)	46 (46.9)
Unmarried	10 (50.0)	10 (50)
<b>Education level</b>		
No formal education	0 (0)	4 (100)
Below SSC	8 (50)	8 (50)
SSC	12 (37.5)	20 (62.5)
HSC	22 (52.4)	20 (47.6)
University	20 (83.3)	4 (16.7)

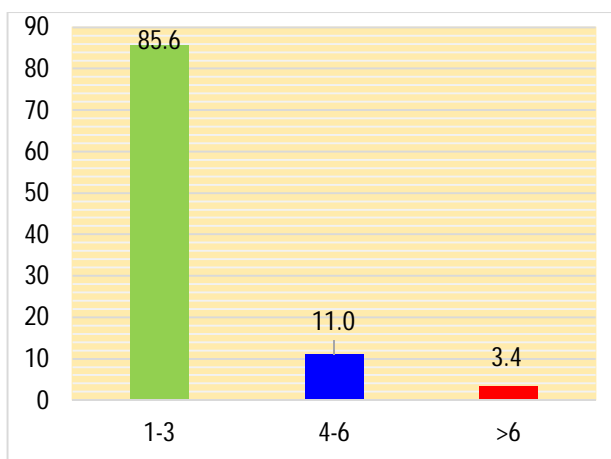


Figure-2: Patients' views regarding the number of medical student involved during clinical examination

Patients' preferences regarding the number of medical students' involvement in clinical round and their physical examination are shown in Figure-1 and Figure-2. Patients preferred a good number of students during the clinical round (66.3 % of patients preferred the presence of more than 8 students) and preferred to be examined by one to three students only (85. 6%). Majority of the patients (98%) have realized the importance of patient examination as a part of medical training, while only 2% of them are not sure about its importance (Figure-3).

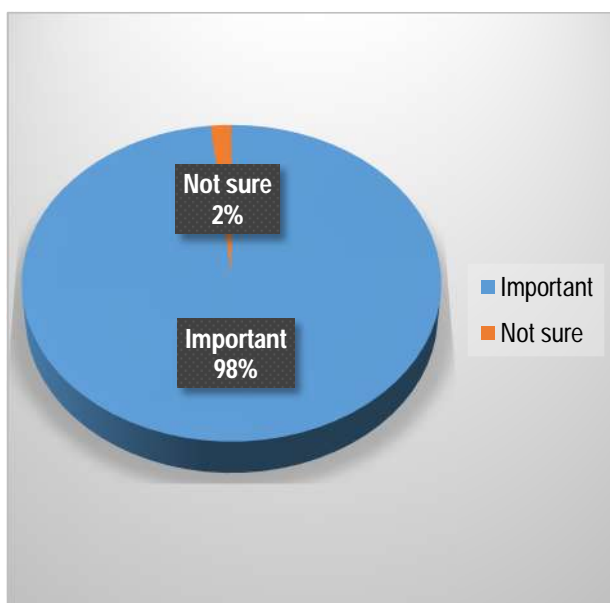


Figure-3: Patients' views regarding the importance of patient examination as a part of medical training

## Discussion

Combined Military Hospital, Dhaka is a teaching hospital and also treats a good number of civil patients in addition of military patients. It is worthy to note that this service hospital is completely free of charge for the military personnel. This study was conducted to understand the patients' acceptability regarding the involvement of medical students in their health care and medical teaching and, the overall acceptability was high, similarly to what was reported in many other studies<sup>10,12,18,19</sup>.

Most of the study participants responded that they would not object if students read their medical files, took their medical history and personal details, presence during general physical examination and even perform general physical examination in the presence of a supervisor. This high percentage of positive attitude probably due to their minimal physical contact with students and students are not involved in providing their medical care<sup>17</sup>. Other possible reasons that were noted in different literature were the opportunity to discuss their problem, physicians and medical students may spend extra time with them and patients' personal satisfaction to contribute to medical education<sup>10,20-23</sup>.

Abdulghani and colleagues reported that 45.1% of patients believed that they had not the right to refuse medical students<sup>19</sup>. Similar studies of Temesgen<sup>18</sup> showed 48.6% and Alawad<sup>17</sup> found more than 89% of patients were not aware of rights to refuse the medical students in their active medical care. Our study revealed that only 26(22.0%) patients were indeed aware of their rights to refuse the active involvement of the medical students.

A minority of participants refused students to examine them with even the presence of a supervising doctor; however, this refusal was high (86.4% vs 69.5%) when the patients were asked if they would permit medical students to examine them without a doctor. As the degree of student involvement increases with the patient (from observation to direct contact such as examination and procedures), the refusal rate also increases. The refusal rate is further increased when the parts examined were obviously sensitive (genital examination). This may be due to religious and privacy-related concerns; other reasons reported in the literature, was low confidence on examination skills of students to detect physical findings<sup>12,24</sup>. The refusal rate was lower when examination was supervised by doctors. Patients feel safe and comfortable in presence of supervisor<sup>10</sup> and this finding is consistent with other studies<sup>12,24,25</sup>.

Both the gender and educational level of the patients influence their attitude to medical students. Female patients liked female students to care for them. This gender preference also found in several studies<sup>17,26,27,28</sup>. It was demonstrated that patients come to know more about their condition while teacher and student discusses about their disease during clinical round; this uplift the

personal satisfaction of the patient, which encourage them to help students to learn<sup>29</sup>. However, use of medical term and English language in clinical; it is difficult to understand by most patients. But the patient gets extra-time and free discussion about their ailment with students in their native language; this may remove the barriers to students' involvement and allow the high degree of acceptance among the patient.

This study also reported patients' views regarding the number of medical students to be present around the bed during the clinical ward round; as well as with regard to the number of medical student to be involved actually in their clinical examination. Present study also showed that most of the patients preferred presence of more than eight students' clinical ward round for each bed. In clinical round our usual practice is to divide the students with small groups of 10 students. The importance of patient examination as part of medical training was realized by majority of the participants.

## Conclusion

The study concluded that the patients of this military hospital have overall positive attitudes to the medical students. Patients' gender as well as their education level determined their attitudes and preferences. Patients preferred lower number of students to be involved in physical examination and this is more marked in case of genital examination. However, majority of the patients realized the importance of patient examination by students as a part of their medical training.

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