



Journal Homepage: - www.journalijar.com
**INTERNATIONAL JOURNAL OF
 ADVANCED RESEARCH (IJAR)**

Article DOI: 10.21474/IJAR01/3374
 DOI URL: <http://dx.doi.org/10.21474/IJAR01/3374>



RESEARCH ARTICLE

PATIENT'S PERSPECTIVE ON BEDSIDE TEACHING: A CROSS-SECTIONAL STUDY.

Rakan Alasqah¹, Ahmad Maqadmi¹, Abdulaziz Bin Obaid¹, Shroug AlGhamdi², Faisal Mahmood¹, Emad AlKhotani¹ and Rami Nassi³.

1. Internship, School of Medicine, Umm Al-Qura University, Makkah, Saudi Arabia.
2. 6th Year medical student, School of Medicine, Umm Al-Qura University, Makkah, Saudi Arabia.
3. Department of Pathology, School of Medicine, Umm Al-Qura University, Makkah, Saudi Arabia.

Manuscript Info

Manuscript History

Received: 26 December 2016
 Final Accepted: 16 January 2017
 Published: February 2017

Key words:-

bedside teaching; patients' acceptability;
 medical students; medical education;
 clinical skills

Abstract

Background: Bedside teaching is an important part of the medical education system. It is extremely impossible to develop good physicians without the interaction with the cases. The lack of students' experience and the lack of privacy of the patients may cause negative attitude of the patients toward the students and may limit the benefit of bedside teaching. In this study we are trying to evaluate the attitude of patients and their perspective toward bedside teaching.

Method: Cross-sectional study. A self-administered questionnaire was distributed among inpatients from 4 different hospitals in the holy city of Makkah, Saudi Arabia.

Results: A total of 300 participants completed the questionnaire, 149 of them were males (49.7%) and 151 were females (50.3%). 90.3 % (271) of the patients allow both male and female medical students to view their medical file, 90 % (270) patients allowed both genders to take their medical history and personal data in the presence of a doctor, and 81.7 % (245) allowed both genders to do so even in the absence of a doctor. The majority of patients allowed both male and female medical students to be present during rounds (266; 88.7 %), in OPDs (260; 86.7 %), and in the operation room if they were having surgery (196; 65.3 %). Regarding physical examination, 77 % (231) allowed both genders to be present while a doctor is examining them, 67.3 % (202) allowed both genders to examine them in the presence of a supervising doctor, and 56 % (168) allowed themselves to be examined by both genders even in the absence of a supervising doctor. When patients were asked about their acceptance regarding diagnostic and other procedures, 77.7 % permit male and female medical students to be only present, while 54.7 % (164) permit them to perform such procedures

Conclusion: The study showed an overall positive attitude toward medical students regarding bedside teaching and education in different hospitals in the city of Makkah, Saudi Arabia. This attitude however was influenced by different sociodemographic aspects, especially gender, level of education and monthly income. The majority of patients knew that they had the right to refuse medical students.

Copy Right, IJAR, 2017., All rights reserved.

Corresponding Author:- Rakan Alasqah.

Address:- Internship, School of Medicine, Umm Al-Qura University, Makkah, Saudi Arabia.

Introduction:-

Bedside teaching is an important part of the medical education system. It is extremely impossible to develop good physicians without the interaction with the cases. The lack of students' experience and the lack of privacy of the patients may cause negative attitude of the patients toward the students and may limit the benefit of bedside teaching [1]. In this study we are trying to evaluate the attitude of patients and their perspective toward bedside teaching. Bedside teaching is an important part of medical education system as it is facilitator of student development of professional skills as well as communication skills, they also act as exemplars of their conditions and diseases [2].

Patients' autonomy gives them the right to refuse medical students. This issue makes the bedside teaching a conflict to be a cornerstone in medical education. In a study has been done at the University of Newcastle in Australia, 100% of students thought that bedside teaching was the most effective way of learning clinical skills such as communication and physical examination [3]. Thus direct contact of the students with patients would play a crucial role in the development of clinical reasoning, communication skills, professional attitudes and empathy.

Convincing the patients of the great benefits of bedside teaching would create a sense of personal health care and trust, and enhances the respect that develops with the teaching doctor. These can be achieved by several methods such as explaining to them the benefits of bedside teaching as it is important part as the textbook learning, realizing the importance of the triple relationship between doctor, patient and student by including them in an open conversation, patient-student relationship [4].

Patients are generally satisfied about bedside teaching with little reluctance to students. According to a study by Rima M Sayed-Hassan and her colleagues at Damascus University teaching hospital, 67.8% approved the presence of medical students during the medical consultation, and 58.2% expressed comfort with the presence of medical students [5].

Another study by Yousef Marwan showed that 80% would permit medical students to take their history with the presence of a supervising doctor; but 51.2% refused without the presence of a supervising doctor. 62.2% refused medical students to examine them without a supervising doctor, the majority of the patients 57.4% would allow students to be present while the doctor is examining them and 54% to examine them with the presence of a supervising [6].

Method:-

The is a cross-sectional study, data were collected during the month of March 2015, from patients at several hospitals in the holy city of Makkah, KSA (Al-Noor Specialist Hospital, Hera General Hospital, King Abdulaziz General Hospital, and King Faisal General Hospital). The data were collected using a self-administered modified questionnaire developed by *Yousef Marwan* in his research [10]. The questionnaire has 23 questions divided into two main sections: section one was about the sociodemographic of the patients, while section two was about patients' perception of medical students and bedside teaching.

The analysis was done using the Statistical Package for Social Sciences (SPSS) with two-tailed P-value < 5% to be considered significant. Descriptive statistics for every variable were computed, as well as cross-tabulation between section one and two.

Results:-**Sociodemographic Characteristic:-**

Our total sample is 300 patients from different hospitals, genders, occupations, age, and education. Of them 100 patients were from Al-Noor Specialist Hospital, 100 from King Faisal General Hospital, 50 from King Abdulaziz General Hospital, and 50 from Hera General Hospital. The samples were taken from both internal medicine and general surgery departments. There are 149 males (49.7%) and 151 females (50.3%). 243 of the sample were Saudi Arabian (81%) whereas 57 were non-Saudi (19%).

Of the sample, there were 191 married (63.7%), 77 single (25.7%), and 32 (10.7%) divorced or widowed. The education level distribution is as follows: Less than intermediate (88,29.3%), Intermediate (56,18.7%), High school (79,26.3%), Diploma (27, 9%), University or higher (50,16.7%) the mean age of the participants was 40.02 years old (Table1).

Reaction Toward Students:-

90.3 % (271) of the patients allow both male and female medical students to view their medical file, 90 % (270) patients allowed both genders to take their medical history and personal data in the presence of a doctor, and 81.7 % (245) allowed both genders to do so even in the absence of a doctor. The majority of patients allowed both male and female medical students to be present during rounds (266; 88.7 %), in OPDs (260; 86.7 %), and in the operation room if they were having surgery (196; 65.3 %). Regarding physical examination, 77 % (231) allowed both genders to be present while a doctor is examining them, 67.3 % (202) allowed both genders to examine them in the presence of a supervising doctor, and 56 % (168) allowed themselves to be examined by both genders even in the absence of a supervising doctor. When patients were asked about their acceptance regarding diagnostic and other procedures, 77.7 % permit male and female medical students to be only present, while 54.7 % (164) permit them to perform such procedures (Table 2). Data analysis with two-tailed P-value < 0.05 to be considered significant showed that different sociodemographic are statistically associated with the overall acceptance of medical students. Male students were more accepted by male patients, while female students were more accepted by female patients. Analysis also showed that patients who were biased by gender had low level of education and low monthly income.

Table 1:- Sociodemographic of participants.

Characteristics	Subgroups	
	N	%
Hospital		
Al-Noor Specialist Hospital	100	33.3
King Faisal General Hospital	100	33.3
King Abdulaziz Hospital	50	16.7
Hera General Hospital	50	16.7
Department		
Medicine	133	44.3
Surgery	167	55.7
Gender		
Male	149	49.7
Female	151	50.3
Nationality		
Saudi	243	81.0
Non-Saudi	57	19.0
Marital Status		
Single	77	25.7
Married	191	63.7
Divorced / Widowed	32	10.7
Education level		
Less than intermediate	88	29.3
Intermediate	56	18.7
High school	79	26.3
Diploma	27	9.0
University or higher	50	16.7
Occupation		
Student	28	9.3
Policeman / Army	10	3.3
Fireman	51	17.0
Clerical worker	7	2.3
Professional	155	51.7
Administrator	49	16.3
Unemployed	0	0
Other	0	0
Monthly family income		
Less the 10000 S.R ^a	247	82.3
10000 - 20000 S.R	46	15.3
20000 - 30000 S.R	7	2.3

S.R, Saudi Riyal.

Table 2:- Reaction of patients regarding the presence of medical students in the hospitals.

Questions	Answers			
	Only Males	Only Females	Both Males and Females	Neither Males nor Females
	n (%)	n (%)	n (%)	n (%)
Would you permit medical students to read your medical file?	8 (2.7)	5 (1.7)	271 (90.3)	16 (5.3)
Would you permit medical students to be present in the outpatient clinic if you were having a consultation with your doctor?	16 (5.3)	13 (4.3)	260 (86.7)	11 (3.7)
Would you permit medical students to be present in the ward rounds if you were admitted in the same ward?	19 (6.3)	12 (4.0)	266 (88.7)	3 (1.0)
Would you permit medical students to be present in the operation room if you were having a surgery?	12 (4.0)	37 (12.3)	196 (65.3)	55 (18.3)
Would you permit medical students to take your medical history and personal details from you with the presence of a doctor?	12 (4.0)	9 (3.0)	270 (90)	9 (3.0)
Would you permit medical students to take your medical history and personal details from you without the presence of a doctor?	5 (1.7)	19 (6.3)	245 (81.7)	31 (10.3)
Would you permit medical students to be present while your doctor examining you?	12 (4.0)	40 (13.3)	231 (77.0)	17 (5.7)
Would you permit medical students to examine you with the presence of a doctor?	26 (8.7)	47 (15.7)	202 (67.3)	25 (8.3)
Would you permit medical students to examine you without the presence of a doctor?	28 (9.3)	43 (14.3)	168 (56.0)	61 (20.3)
Would you permit medical students to be present while you're having diagnostic/other procedures (e.g. x-ray, drawing blood, inserting catheter, endoscopy...etc)?	22 (7.3)	18 (6.0)	233 (77.7)	27 (9.0)
Would you permit medical students to perform diagnostic/other procedures on you (e.g. x-ray, drawing blood, inserting catheter, endoscopy...etc)?	11 (3.7)	13 (4.3)	164 (54.7)	112 (37.3)

Discussion and Conclusion:-

The acceptance of medical students in hospitals was variable based on multiple aspects. Overall medical students were allowed to view the medical file, be available during rounds and in OPD. This high acceptance may be attributed to the indirect contact between the medical student and patient, as well as the small role the medical students play in the medical care provided. These results are similar to what have been founds in other studies [7,8,9].

Only a small number of patients did not allow medical students from taking their medical history with and without the presence of a supervising doctor. This refusal maybe because these patients have a low confidence in the skills of the medical students in obtaining a sufficient history that will help guiding the treating doctor in reaching the final diagnosis, also some patients may view this as a time wasting process, since they already gave their history to the treating physician. Previous studies demonstrated another possible reason, which is that patients don't feel comfortable discussing their sexual history and issues with medical students [11, 12, 13].

Regarding physical examination, the majority of patients permitted medical students to not only observe, but also to examine them in the presence and absence of a supervising doctor. These results are similar to the findings of Monnickendam et al in his research [8], where a small number of patients refused to be examined by medical student in the presence of a doctor and alone (7.2 % and 33.6 % respectively).

Less than one quarter of our patients refused the presence of medical students in the operation room when they are being surgically treated. Which is less than what was found by Yousef Marwan[10].Where the refusal was 26.7 %.

A possible explanation for this refusal is that patients may feel uncomfortable exposing their bodies to medical students, or maybe they believe that medical students may participate in the operation causing complications and unwanted outcomes.

When it came to allowing medical students to attend and/or perform diagnostic and other procedures, most of our patients had a high level of acceptance. Opposite results were observed by Yousef Marwan[10], Chipp et al. [14], and Passaperuma et al. [15].

Data analysis showed that in all aspects of patients' perspective toward medical students, female expressed a higher level of acceptance toward female medical students compared to male patients. These results were supported by similar findings from other studies [7, 14, 12]. An easy explanation for such behavior, is the embarrassment a female patient would feel being exposed, particularly to a male medical student, especially here in Saudi Arabia where the majority of the population is Muslim and raised in a conservative way. Another observed association was between the low level of education and low monthly income, and the attitude toward medical students, these patients showed a lower level of acceptance toward both male and female medical students, with the latter having a higher level of acceptance, probably due to the fact that the majority of patients with low level of education and low monthly income were females.

68.7 % (206) of the patients believed that the presence of medical students in hospitals had no effect on the quality of health care, while 27.3 % (82) believed that their presence improves the quality, and only 4 % (12) believed that it decreases the quality. Those patients with the positive believes probably thought that since medical students spend a lot of time in history taking, physical examination, reviewing their medical file, and discussing the case with their clinical tutors, they may discover some missing details that will aid in reaching the final diagnosis. However, those with the negative believes probably think that the supervising doctor will spend more time teaching the medical students than caring for his/her patients.

81.7 % (245) of our patients knew that they had the right to refuse medical students from history taking, physical examination, reading their medical file, and other aspects involving their health care, while only 18.3 % (55) did know that they had such right.

In conclusion, the study showed an overall positive attitude toward medical students regarding bedside teaching and education. This attitude however was influenced by different sociodemographic aspects, especially gender, level of education and monthly income. The majority of patients knew that they had the right to refuse medical students.

Acknowledgments:-

The authors would like to thank Asma Alhazmi, and Ma'ather AlHajaji for their facilitation in data collection.

Conflict of interest:-

The authors have no conflict of interest to declare.

References:-

1. General Medical Council UK: Tomorrows Doctors, outcomes and standards for undergraduate medical education. 2009 [http://www.gmcuk.org/TomorrowsDoctors_2009.pdf_39260971.pdf].
2. Spencer, J., et al. (2000). "Patient-oriented learning: a review of the role of the patient in the education of medical students." *Med Educ* 34(10): 851-857.
3. Nair, B. R., et al. (1997). "Student and patient perspectives on bedside teaching." *Med Educ* 31(5): 341-346.
4. Hudson, J. N., et al. (2012). "Patient perceptions of innovative longitudinal integrated clerkships based in regional, rural and remote primary care: a qualitative study." *BMC Fam Pract* 13: 72.
5. Sayed-Hassan, R. M., et al. (2012). "Patient attitudes towards medical students at Damascus University teaching hospitals." *BMC Med Educ* 12: 13.
6. Marwan, Y., et al. (2012). "Are medical students accepted by patients in teaching hospitals?" *Med Educ* 17: 17172.
7. Cooke F, Galasko G, Ramrakha V, Richards D, Rose A, Watkins J. Medical students in general practice: how do patients feel? *Br J Gen Pract* 1996; 46: 361-2.

8. Monnickendam SM, Vinker S, Zalewski S, Cohen O, Kitai E. Patients' attitudes towards the presence of medical students in family practice consultations. *Isr Med Assoc J* 2001; 3: 903-6.
9. Salisbury K, Farmer EA, Vnuk A. Patients' views on the training of medical students in Australian general practice settings. *Aust Fam Physician* 2004; 33: 281-3.
10. Marwan, Y., Al-Saddique, M., Hassan, A., Karim, J., & Al-Saleh, M. (2012). Are medical students accepted by patients in teaching hospitals? *Medical Education Online*, 17, 17172. <http://doi.org/10.3402/meo.v17i0.17172>.
11. O'Flynn N, Spencer J, Jones R. Consent and confidentiality in teaching in general practice: survey of patients' views on presence of students. *Br Med J* 1997; 315: 1142.
12. O'Flynn N, Spencer J, Jones R. Does teaching during a general practice consultation affect patient care? *Br J Gen Pract* 1999; 49: 7-9.
13. Wright HJ. Patients' attitudes to medical students in general practice. *Br Med J* 1974; 1: 372-6.
14. Chipp E, Stoneley S, Cooper K. Clinical placements for medical students: factors affecting patients' involvement in medical education. *Med Teach* 2004; 26: 114-9.
15. Passaperuma K, Higgins J, Power S, Taylor T. Do patients' comfort levels and attitudes regarding medical student involvement vary across specialties? *Med Teach* 2008; 30: 48-54.