

Medical Students and Patients Perspectives on Bedside Teaching

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ABSTRACT

Objective: To evaluate perspectives of medical students and patients on bedside teaching.

Study Design: Cross-section survey

Place and Duration of Study: Department of General Surgery/Pediatric Surgery Unit-II, DHQ Teaching Hospital, Dera Ghazi Khan from 1st April 2019 to 30th June 2019.

Methods: Two hundred students from 4th year and final year MBBS class were included and 100 patients from general surgery and general medical wards who stayed for at least 48 hours and had at least 2 case presentations and 2 consecutive morning rounds were enrolled in the study. Their perspectives about bedside teaching were assessed with two separate questionnaires.

Results: The mean age of medical students was 23 years (20-26) and 35% were male and 65% were female. The mean age calculated for patients was 55.5 years (18-75). Fifty two percent were females and 48% were males. Fifty eight percent of medical students stated that the time of bedside teaching is not enough and it should be increased. Majority of patients were satisfied with the bedside teaching techniques and 82% of patients believed that through bedside teaching. No significant difference of responses among students and patients was observed.

Conclusion: Teaching on the bedside provides unique opportunities to incorporate the learning skills for direct benefit of the patients. It provides a unique learning triad consisting of patients, students, and teachers and creates clinical simulation as a learning tool.

Key words: Bedside teaching, undergraduate, medical students.

INTRODUCTION

Bed side teaching is the basic and vital teaching Strategy during the clinical years of a medical student. It is defined as any teaching on patient's bed side. The significance of this method of teaching for medical students was emphasized by the pioneer of medicine. To study the phenomenon of disease without book is to sail an uncharted sea, while study book without patient is not to go to see at all. "Medicine is learnt by the bedside and not in the class room. Students start with the patient, continue with the patient and end their studies with the patient, using books and lectures as tools and means to an end.¹ Bedside teaching is considered as an essential element of undergraduate as well as postgraduate training in medical schools and colleges worldwide. The teachers in the same environment differ widely on the objectives of teaching and the ultimate standards to be achieved.² Malu, a renowned medical teacher stated that bedside teaching remains a primary method of imparting clinical methods and skills in medical institutions of Nigeria; In the absence of clinical skills centers, it is really the only means by which we can transmit clinical skills.³ Reichsman et al⁴ stated that about 75% of the teaching was at the bedside but by 2009, it was estimated that only 17% was carried out at the bed side. Concerns about patients` privacy is considered to be the main reason for this change.⁵

Developed countries have started concept of clinical skill laboratories to overcome the inadequacies of bedside teaching. However, Ahmed⁶ stated that clinical skills laboratories are good option and may be used but as an extra tool for improving clinical skills but it is never a replacement of bedside teaching.

Local data are not available to draw any conclusion about bedside teaching but almost all medical teachers will agree that proper emphasis is not being laid on bedside teaching as compared with amount of time spent in classrooms for lectures, seminars and tutorials. Our study aimed to demonstrate the importance of bedside teaching and to evaluate perception of medical students as well as patients about bedside teaching.

MATERIALS AND METHODS

This cross-sectional survey was conducted at Department of General Surgery/Pediatric Surgery Unit-II, DHQ Teaching Hospital, Dera Ghazi Khan from 1st April 2019 to 30th June 2019. Two hundred medical students of fourth year and final year MBBS were included in this study and one hundred patients admitted in general surgery and general medical wards were included. The hospitalized patients for at least 48 hours and examined for two consecutive morning rounds, presented as case presentations twice were included. Cognitively impaired patients and patients below the age of 18 years were excluded.

Generally, in our hospital bedside teaching is under practice in general wards and patient's rooms. Usually a consultant, 2 or 3 post graduate trainees, many interns and medical students participate. Medical students document the patient's history, results of physical examination and laboratory data. Than one resident examines the patient and the attending consultant supervise the details of clinical skills; emphasizing on clinical decisions making and problems solving techniques. We used two separate self-structured questionnaires for data collection and one for students and other for patients. In each questionnaire;

students were recorded on a Likerts Scales as (a) strongly agreed/agreed (b) no comments and (c) disagree. In patients questionnaire; we required yes or no type of answers for analysis these scores were converted to a binary score (1- positive perspective, 3 - negative perspective). Collected data was analyzed through SPSS-13.

RESULTS

Most of the students acknowledged that the bedside teaching is basic pillar for clinical skills. Medical students included in the study were 20 to 26 years of age; 130 (65%) of them were female and 70 (35%) were male patients were between 18 to 75 years of age; 52 (52%) of them were female and 48(48%) of them male. Patient average stay in the hospital was 4 days (Table 1).

Student perspective on bed side teaching was very clear they strongly agreed to all the questions asked. Ninety-five percent feel that bed side teaching (BST) is a useful method for learning medical skills; 90%feel that bedside teaching is very affective in learning of history taking;. 92% reported that it is effective in learning correct physical examination; 97% reported that it increase students communication skills; 77% students feels that BST apply basic science knowledge to medical practice; 74% reported that they learnt time management through BST; 86% reported that bedside teaching helps in making better diagnosis and treatment;. 73% Students found BST as suitable method for teaching problem based learning. 75% student found this method suitable for evidence based medicine and 58% students feel that the time allocated for BST is not enough (Table 2).

Table 1: Baseline characteristics of participants

Variable	Medical students (n=200)	Patients (n=100)
Age (years)	20-26	18-75
Gender		
Female	130(65%)	52 (52%)
Male	70 (35%)	48 (48%)
Patients stay in hospital (days)	3	4

Table-2: Perspective of Medical students on BST (N=200)

S. #	Variables	A	B	C
1	BST is useful method for learning medical skills	190	6	4
2	BST is effective in learning principles of history taking	180	12	8
3	BST is effective in learning correct physical examination	184	10	6
4	BST is effective in increasing students communication skills	194	4	2
5	BST is effective in practical application of basic science knowledge	154	28	18
6	BST is effective for learning time management	148	32	20
7	BST is effective for making better diagnosis and treatment	172	16	12
8	BST is suitable method for teaching the problem based learning	146	32	22
9	BST is suitable method for teaching evidence based medicine	150	30	20
10	The time allocated for BST is not enough for learning medical skills	116	52	32

A = Agreed B = No comments C = Disagreed

Describe perspective of patients on bed side teaching 70% of patients felt that they were comfortable with the bed side teaching (BST); 78% of the patients reported that BST increases their knowledge about the diseases; 64% reported that they receive appropriate answers to their question during BST; 84% thought that BST is helpful in making good patient and doctor communication; 98% of patients thought doctors should take permission before BST; 64% accepted their disease informed of them; 64% of them reported the medical terms used in BST did not increase their concern; 82% of patients thought, that BST was a way of delivering more information to their; 72% of them thought that BST was suitable way of closely visiting the physician; 52% of patients reported that BST helps them not to be alone (Table 3).

DISCUSSION

In our survey, majority of students (95%) agreed about the effectiveness of bedside teaching and 74% of the students want to increase the time for BST (Table 2). Kianmehr et al⁷ found the same results. Beigzadeh et al⁸ also reported that students wanted to increases the time for the bedside teaching. The time for clinical rounds would also be increased. They were equally beneficial for teachers, students, and patients. We found that 90% of the students favored the process of history taking; 92% of them found that BST is helpful in learning the process of physical examination (Table 2). Bosse et al⁹ also suggested that clinical teaching at bedside for learning principals of taking history; doing proper physical examination was necessary.

Table-3: Patient perspective about bedside teaching (N=100)

S. #	Variable	No. of patients	
		Yes	No
1.	Do you feel comfortable with bed side teaching?	70	30
2.	Does BST increase your awareness about your disease?	78	22
3.	Do you receive appropriate answers to your questions during BST?	64	36
4.	Do you think BST helps in making good patient-doctor communication?	84	16
5.	Do you think doctors should take permission (Consent) from you for BST?	98	2
6.	Do you accept discussing about your disease in front of you?	64	36
7.	Do medical terms used in BST increase your concerns?	36	64
8.	Do you think BST is a way of delivering more information to your physician?	82	18
9.	Do you think BST is a suitable way of closely visiting the physician?	72	28
10.	Do you think BST help you not to be alone?	52	48

Seventy seven percent of the students wanted to implement practical application of basic science knowledge as well as the use of Para-clinical findings (Table 2). Wenrich et al¹⁰ administered specific physical examination to examine musculoskeletal, cardiac, neurological and other systems and reported the same findings. He also used para-clinical findings and found it helpful. In our study 97% of the students found it useful in raising student-patient communication skills (Table 2). Arabshahi et al¹¹ investigated among obstetrics and gynecology, pediatrics, and surgery departments of Isfahan University of Medical Sciences and found the same results.

Another objective of our research was to obtain the perspective of patient on bedside teaching (Table 3). However, some recent studies have demonstrated that most of the patients feel comfortable with bedside teaching and felt that they understood their problems better than before.¹²

Esguerra et al¹³ also explored how opportunities for patients are negotiated within bedside teaching encounters. Three hundred and seventy two patients answered the questionnaire and most of them were satisfied and comfortable with it. In our study 78% agreed that BST increases patient awareness (Table 3). A study was undertaken by Jeffs et al¹⁴ reported the same finding.

We found that 84% of the patients reported that bedside teaching results in better patient doctor communication (Table 3). Marwan et al¹⁵ reported the same findings.

CONCLUSION

Bedside teaching provides a unique learning triad consisting of patients, students and teachers. It provides a unique opportunity to incorporate learning skills for direct benefits of the patients student found the Bedside teaching is useful means of learning clinical skills. Patients found it comfortable and useful to develop good patient doctor communication.

REFERENCES

1. Osler W. On the need of a radical reform in our teaching methods: Senior students. *Med News* 1903;82:49-53.
2. Asani M. Bedside teaching : An indispensable model of patient-centered teaching in undergraduate medical education. *Niger J Basic Clin Sci* 2014; 11 :57-61
3. Malu AO. Universities and medical education in Nigeria. *Niger Med J* 2010;51:84-8.
4. Reichman F, Browning FE, Hinshaw JR. Observations of undergraduate clinical teaching in action. *J Med Educ* 1964;39:147-63.
5. Rogers HD, Carline JD, Paauw DS. Examination room presentations in general internal medicine clinic: patients' and students' perceptions. *Acad Med* 2003; 78: 945-949.
6. Ahmed AM. Role of clinical skills centres in maintaining and promoting clinical teaching. *Sud J Public Health* 2009;4:349-53.
7. Kianmehr N, Mofidi M, Yazdanpanah R, Ahmadi MA. Medical student and patient perspectives on bedside teaching. *Saudi medical journal*. 2010;31(5):565-8.
8. Beigzadeh A, Adibi P, Bahaadinbeigy K, Yamani N. Strategies for teaching in clinical rounds: A systematic review of the literature. *Journal of research in medical sciences: the official journal of Isfahan University of Medical Sciences*. 2019;24.
9. Bosse HM, Nickel M, Huwendiek S, Jünger J, Schultz JH, Nikendei C. Peer role-play and standardised patients in communication training: a comparative study on the student perspective on acceptability, realism, and perceived effect. *BMC Medical Education*. 2010;10(1):27.
10. Wenrich MD, Jackson MB, Ajam KS, Wolfhagen IH, Ramsey PG, Scherpbier AJ. Teachers as learners: The effect of bedside teaching on the clinical skills of clinician-teachers. *Academic Medicine*. 2011;86(7):846-52.
11. Arabshahi KS, Haghani F, Bigdeli S, Omid A, Adibi P. Challenges of the ward round teaching based on the experiences of medical clinical teachers. *Journal of research in medical sciences: the official journal of Isfahan University of Medical Sciences*. 2015;(3):273.
12. Chauke HL, Pattinson RC. Ward rounds: Bedside or conference room? *S Afr Med J* 2006; 96: 398-400.
13. Esguerra R, Toro J, Ospina JM, Porras A, Díaz C, Reyes S. The transition to a teaching hospital: Patient satisfaction before and after the introduction of medical students. *Medical teacher*. 2014;36(8):710-4.
14. Jeffs L, Beswick S, Acott A, Simpson E, Cardoso R, Campbell H, Irwin T. Patients' views on bedside nursing handover: creating a space to connect. *Journal of nursing care quality*. 2014;29(2):149-54.
15. Marwan Y, Al-Saddique M, Hassan A, Karim J, Al-Saleh M. Are medical students accepted by patients in teaching hospitals?. *Medical education online*. 2012;17(1):17172.