

## ORIGINAL ARTICLE

## TEACHERS' PERCEPTIONS ABOUT BEDSIDE TEACHING IN PUBLIC SECTOR MEDICAL COLLEGES OF LAHORE

Sajid Hussain, Sadia Zaheer\*

Department of Surgery, Allama Iqbal Memorial Teaching Hospital, Sialkot,

\*Department of Medical Education, Khawaja Muhammad Safdar Medical College, Sialkot, Pakistan

**Background:** The need for bedside teaching is very much documented in the literature providing extraordinary opportunity for modelling of professionalism. Objectives of this study were to explore the teachers' perceptions and issues, and recommend solutions to promote bedside teaching. **Methods:** The descriptive cross-sectional study was carried out in four public sector medical colleges located in the city of Lahore Pakistan from March to September 2018. The study included 116 teachers, 29 from each institution. **Results:** Average age of participants was 47.5 years, with male preponderance. Strong agreement on cordial relationship, motivation, professional behaviour, communication barriers because of time constraint, lack of awareness, and disagreement on noisy environment were found. **Conclusion:** Bedside teaching is a unique valuable, traditional, clinical instructional tool with remarkable benefits, yet being underutilised due to certain challenges which need to be addressed in order to revive this lost and dying art.

**Keywords:** Bedside Teaching, Professionalism, Medical Education, Medical Student, Training

Pak J Physiol 2020;16(2):45-7

## INTRODUCTION

Bedside teaching (BST) is the fundamental and instrumental force in the present world of medicine. BST is considered to be a crucial component for learning of clinical and communication skills in medical education.<sup>1,2</sup> Medicine is learnt more at the bedside than by sitting and learning in the classroom.<sup>3</sup>

When the patients and students interact with each other, exchange of views and opinions may occur simultaneously during BST which improves the clinical reasoning, empathy and communication skills.<sup>4-6</sup> Learners usually believe and consider that BST always helps them to be skilled clinically in various disciplines. Therefore, they highly appreciate it and value BST more as compared to other forms of training.<sup>6</sup> The BST is an excellent opportunity for active learning and modelling of professional behaviour in real context and opportunity to learn more from the experienced learner.<sup>7,8</sup> The BST is in danger of decline as a lost art. With the progress of science, a swift decrease in humanistic aspects of professionals has become more evident which tremendously affects the relationship between the doctor and patient.<sup>9</sup> The same is stressed upon by Hegde in 1999, who warned that there was a downfall and dying of this art of BST under present circumstances of medical education where teaching is increasingly dependent on the use of advanced technology.<sup>10</sup> Nowadays, teachers do not put emphasis on learning the true art of medicine at bedside. The need of the hour is to realize the importance of BST and perception of medical teachers' in our local context so as to propose various strategies for introducing this high yield modality of clinical teaching in medical schools, institutes and universities. Aims and objectives of the study were:

1. To explore the teachers' perceptions about the value of bedside teaching.
2. To identify the current state of bedside teaching in public sector medical colleges in Lahore.
3. To recommend solutions to promote bedside teaching in the medical colleges of Pakistan.

## SUBJECTS AND METHODS

This descriptive cross-sectional study was carried out in the renowned public sector medical colleges of Lahore with long history of bedside teaching and very expert teaching faculty serving for many years. These colleges included King Edward Medical University (KEMU), Fatima Jinnah Medical University (FJMU), Allama Iqbal Medical College (AIMC), and Services Institute of Medical Sciences (SIMS), Lahore. The study was conducted from March to September, 2017.

Study population was calculated through a formula used for descriptive studies (Prevalence, standard error, standard deviation). Minimum number of teachers was 114. This was made 116 for equal division among all the four institutions mentioned including 29 teaching faculty members from each hospital.

Standardized questionnaire was developed after careful literature review, interviews and focus group discussions, construct formation, item construction, which was validated by conducting pilot study on 20 teachers, five from each above mentioned institutions. Questionnaire was prepared in the light of AMEE guide No. 87. The reliability of the questionnaire was also determined by Cronbach's alpha which came out to be 0.702. Cronbach's alpha based on the standardized items was 0.694.

The responses from the medical teachers

were measured through a 5-item Likert scales ranging from strongly agree, agree, neutral, to disagree and strongly disagree for the assessment of each item of the questionnaire. The responses on the 12-item questionnaire were quantitatively analysed through SPSS-20. For demographic analysis count, percentage, mean, and standard deviation were calculated, while for response analysis *p* was calculated to find out the test significance for differences among the responders.

**RESULTS**

Average age of the teachers included in the study was 47.5 years. Majority of the teachers were male as compared to female (F:M=85:31).

There was an agreement (SA/A) on cordial relationship with the students, motivation, communication, professional behaviour, rush of patient, time constraint as barrier, lack of awareness, use of technology as compared to disagreement (SD/D). Statistically significant difference was found regarding noisy environment, chance to answer the question, inconvenient time, priority of exam preparation, rush of patient, time constraints, lack of awareness, technology preference than real patients among the faculties of various public sector medical institutes of Lahore.

Majority of teachers believed that they can develop cordial relationship with students through BST (*p*=0.12). Regarding the noisy environments during BST, majority of teachers disagreed to this (*p*=0.045). As many as 71.5% of the responses included that students are motivated through BST and they get good chances to answer the questions (*p*=0.046). Many (72%) agree that the time settings for BST are usually inconvenient for students (*p*=0.032). Around 90% of the students give more priority to exam preparations rather than attending BST sessions was also a recorded notion from the respondents (*p*=0.045).

Learning communication with patients in the real scenarios was agreed by 94.8% of the teachers (*p*=0.548). Developing professionalism through bedside teaching was also agreed upon by majority (*p*=0.122). Rush of the patients and time constraints because of patient overload were regarded as the barriers to BST by 65.5% (*p*=0.05) and 63% (*p*=0.33) of the respondents respectively.

Majority of the teachers believed that students are not much aware of the significance of BST in curriculum (*p*=0.032) and 69% of them said that students probably prefer using technologies over real time patients for their learning (*p*=0.024). The results are tabulated in Table-1.

**Table-1: Collective responses of the faculty of various institutions to questionnaire [n (%)]**

Variable	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	<i>p</i>
Cordial relationship	1 (0.9)	0 (0.0)	3 (2.6)	55 (47.4)	57 (49.1)	0.122
Noisy environment	11 (9.5)	56 (48.3)	7 (6)	31 (26.7)	11 (9.5)	0.045*
Motivation	1 (0.9)	2 (1.7)	2 (1.7)	66 (56.9)	45 (38.8)	0.324
Chance to answer question	15 (12.9)	12 (10.3)	6 (5.2)	47 (40.5)	36 (31.1)	0.046*
Inconvenient time	14 (12.1)	14 (12.1)	5 (4.3)	49 (42.2)	34 (29.3)	0.032*
Exam preparation priority	16 (13.8)	13 (11.2)	5 (4.3)	44 (37.9)	38 (32.8)	0.045*
Communication learning	0 (0.0)	3 (2.6)	3 (2.6)	54 (46.6)	56 (48.3)	0.548
Professional behaviour	1 (0.9)	2 (1.7)	3 (2.6)	67 (57.8)	43 (37.1)	0.122
Rush of patients	17 (14.6)	9 (7.8)	14 (12.1)	46 (39.6)	30 (25.9)	0.05*
Time constraints	14 (12.1)	21 (18.1)	17 (14.7)	59 (50.9)	14 (12.1)	0.33
Lack of awareness	15 (12.9)	12 (10.3)	11 (9.6)	45 (38.8)	33 (28.4)	0.032*
Preference of technology	12 (10.3)	11 (9.6)	13 (11.2)	49 (42.2)	31 (26.7)	0.024*

\*Significant

**DISCUSSION**

The quality of relationships has significant effect on students' activity on learning various contexts of clinical education like BST.<sup>11</sup> In a study by Komarraju *et al*, various factors were explored with regards to student learning and they found that most important factors were care, respect and connectedness which form basis of positive teacher student relation.<sup>12</sup> Our study results are consistent with Komarraju *et al*. Clinical teaching is not just sharing of information, knowledge and experience with learners, but it is aimed to achieve environmental or/and contextual learning at the same time.<sup>13</sup>

Learning environment has significant effects on students' approach to learning and their success in academics.<sup>14</sup> The quality of comfort for learner and patient during bedside has confirmed the results of study by Dehghami *et al*<sup>15</sup> which is consistent with our study. Motivation is a psychological notion referring to willingness and readiness of a person to accomplish his educational goals. Self-directed, independent and active learning takes place at bedside only if students are willing to invest the energy required to meet their needs of BST.<sup>16</sup> Remarkable academic performance both in basic and clinical years has been shown by the students with higher level of intrinsic motivation.<sup>17</sup> In our study majority of the respondents believed that students are

encouraged to answer the questions as was suggested by Ramani, who favoured free and safe environment for interactive discussions.<sup>18</sup> Our study is consistent with the above mentioned results. Similarly, many studies indicate that 2/3<sup>rd</sup> of the opinions remained focused on the issue of lack of time.<sup>19</sup> Our study is also consistent with the previous studies which show that majority of the teachers are in agreement regarding the learning of the students about the communication skills and they also emphasize that they should utilize these skills not only in their student life but also in their clerkship and whole future life. Our study shows that the 65.52% of teachers agree on the rush of patient and shortened hospital stay are a practical hindrance in BST. The results of our study are comparable with the focus group study of Ramani *et al*, carried out on clinical teachers that they spent 15–25% of their time for this art of teaching.<sup>18</sup>

In our study majority of teachers agreed regarding the time constraints. Our study results are quite similar to the study results of a questionnaire-based survey carried in a large teaching hospital of South Coast of England where BST gives rise to a great opportunity for learning skills and attitudes to while dealing with the patients.<sup>19</sup> Our study is not consistent with the study of Peters and Cate in that most of respondents in our study prefer technology over real patients.<sup>20</sup> Our study is also consistent with the study of Norcini, which favoured the need to introduce new approaches and modalities through BST.<sup>21</sup>

## CONCLUSION

Bedside teaching may be the most useful strategy for learning clinical reasoning, communication and professional behaviour to think at higher cognitive level. Bedside Teaching maintains an interactive conducive positive environment for learners and patients increasing motivation and improving communication skills. Participation helps in the process of self-regulation and standard setting as well as effective use of questioning in bedside sessions. Attention to time constraints through integration, selectivity, flexibility and group dynamics, choosing right time of teaching and incorporating technology in BST may improve efficacy.

## Address for Correspondence:

**Dr. Sadia Zaheer**, Assistant Professor, Department of Medical Education, Khawaja Muhammad Safdar Medical College, Sialkot, Pakistan. Cell: +92-321-3588000

Email: dr.sadiazaher@gmail.com

Received: 9 Jun 2020

Reviewed: 23 Jun 2020

Accepted: 24 Jun 2020

## Contribution of Authors:

**SH:** Concept, study design, data analysis

**SZ:** Draft writing, revision

**Funding source:** None

**Conflict of interest:** None

## REFERENCES

1. Janicik RW, Fletcher KE. Teaching at the bedside; a new model. *Med Teach* 2003;25(2):127–30.
2. Chipp E, Stoneley S, Cooper K. Clinical placements for medical students: factors affecting patients' involvement in medical education. *Med Teach* 2004;26(2):114–9.
3. Nair BR, Coughlan JL, Hensley MJ. Student and patient perspective on bedside teaching. *Med Educ* 1997;31:341–6.
4. Williams KN, Ramani S, Fraser B, Orlander JD. Improving bedside teaching: findings from a focus group study of learners. *Acad Med* 2008;83(3):257–64.
5. Dent JA, Harden RM, Hallock JA. A practical guide for medical teachers. 3<sup>rd</sup>ed. Edinburgh; New York: Churchill Livingstone/Elsevier; 2010.
6. Nair BR, Coughlan JL, Hensley MJ. Impediments to bed-side teaching. *Med Educ* 1998;32(2):159–62.
7. Stewart MA. Effective physician-patient communication and health outcomes: a review. *CMAJ* 1995;152:1423–33.
8. Doshi M, Brown N. Why and how of patient based teaching. *Adv Psychiatr Treat* 2005;11(3):223–31.
9. Bohigian GM. The art of medicine. *Mo Med* 2014;111(6):472–3.
10. Hedge BM. Science and art of medicine. *J Indian Acad Clin Med* 1999;4:1–3. Available at: [www.indegene.com/main/issues/indlsses11.asp](http://www.indegene.com/main/issues/indlsses11.asp) (Access on: 18 February 2006)
11. Bergin CA, Bergin DA. Attachment in the classroom. *Educ Psychol Rev* 2009;21(2):141–70.
12. Komaraju M, Musulkin S, Bhattacharya G. Role of Student-Faculty Interactions in Developing College Students' Academic Self-Concept, Motivation, and Achievement. *J Coll Stud Dev* 2010;51(3):332–42.
13. Genn JM. AMEE Medical Education Guide No. 23 (Part 2): Curriculum, environment, climate, quality and change in medical education —a unifying perspective. *Med Teach* 2001;23(5):445–54.
14. Till H. Identifying the perceived weakness of new curriculum by means of Dundee Ready Education Environment Measure (DREEM) Inventory. *Med Teach* 2004;26(1):39–45.
15. Dehghami-Mobarakeh, M, Maghsoudi A, Malekpour-Tehrani A, Rehim-Madiseh M. The viewpoints of members of medical team about patients' privacy. *J Clin Nurs Midwifery* 2013;2(1):9–17.
16. Wininger SR, Redifer JL, Norman AD, Ryle MK. Prevalence of learning styles in educational psychology and introduction to education textbooks: A Content Analysis. *Psychol Learn Teach* 2019;18(3):221–43.
17. Sobral DT. What kind of motivation derives student learning quest? *Med Educ* 2004;38:950–7.
18. Ramani S. Twelve tips to improve bedside teaching. *Med Teach* 2003;25(2):112–5.
19. Claridge A. What is the educational value of ward rounds? A Learner and teacher perspective. *Clin Med (Lond)* 2011;11:558–62.
20. Peters M, Ten Cate O. Bedside teaching in medical education: a literature review. *Perspect Med Educ* 2014;3(2):76–88.
21. Norcini JJ. Workplace-based assessment in clinical training. In: Swanwick T. (Ed). *Understanding Medical Education series*. Edinburgh: Association for the study of Medical Education; 2007.p. 195–6.