ORIGINAL ARTICLE

BEDSIDE TEACHING-MAKING IT AN EFFECTIVE INSTRUCTIONAL TOOL

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Background: Bedside teaching is defined as any teaching in the presence of patient and is the core teaching strategy during the clinical years of a medical student. Although it is considered the most effective method to teach clinical and communication skills but its quality is deteriorating with the passage of time. The objective of this study is to explore faculty's perceptions about bedside teaching. **Methods:** This study was conducted in clinical disciplines of Ayub Medical College and hospital Abbottabad, Pakistan from January 2012 to July 2012. Pragmatic paradigm was selected to gather both quantitative and qualitative information. Data was collected sequentially to validate findings. Perceptions of all professors of clinical subjects about bed side teaching were recorded on a close-ended structured questionnaire. Then in-depth interviews were taken from 5 professors using an open ended questionnaire. Quantitative data was analysed using SPSS-16. Qualitative research data was analysed through content analysis. **Results:** Out of 20 professors of clinical departments 18 agreed to respond to the questionnaire assessing their perceptions about bed side teaching. Non-existence of bedside teaching curriculum, lack of discipline in students and faculty, lack of accountability, poor job satisfaction and low salary were identified as major factors responsible for decline in quality of bedside teaching. Most of them advocated that curriculum development, planning bedside teaching, implementation of discipline and accountability, improved job satisfaction and performance based promotions will improve quality of clinical teaching. **Conclusions:** Curriculum development for bedside teaching, institutional discipline, application of best planning strategies, performance based appraisal of faculty and good job satisfaction can make bedside teaching an effective instructional tool.

Keywords: Bedside teaching, instructional tool, clinical curriculum, clinical teaching planning

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INTRODUCTION

Bedside teaching is a specialized form of small group teaching that takes place in the presence of the patient.[1] Although it is known to enhance a student's learning experience and improves patient care, the use of this type of teaching is unfortunately in steady decline over the past 20 years[2] due to multiple responsibilities of faculty members and emerging learning instructions like seminars and conferences. Bedside teaching can improve students' history taking, examination skills, and knowledge of clinical ethics, can teach them professionalism, foster good communication and allow the students to develop empathy with the patients as they proceed through different clinical units. Bedside teaching is undoubtedly an essential component of clinical training. However, nowadays unfortunately, bed side teaching has been neglected and rendered haphazard, mediocre and lacking in intellectual excitement, to a level that the clinical examination skills of young doctors have been seriously compromised.[2]

Therefore, it is desirable to organize bed side teaching to avoid unnecessary repetition and to cover important clinical skills. The objective of this study was to explore faculty's perceptions about bedside teaching.

MATERIAL AND METHODS

The study was conducted in clinical disciplines of Ayub Medical College, Abbottabad, Pakistan from January 2012 to July 2012. Pragmatic paradigm was selected to gather both quantitative and qualitative information. Data was collected sequentially to validate findings. This approach is a key element in the improvement of education research as it can lead to less waste of potentially useful information and often has greater impact.[3]

Perceptions of all professors of clinical subjects about bed side teaching were recorded on a close-ended structured questionnaire. They were asked to rate each of the 12 statements on a scale of 1–5, with 1 meaning 'strongly disagree' and 5 'strongly agree'. Five professors, selected through non-probability purposive sampling technique were interview e din-depth on an open ended questionnaire to get clearer and in-depth picture of the issue under study. Their experience as a member of curricular committees was the main reason of their selection for collection of qualitative data of this study. Their search topic was introduced and written consent was taken from those willing to participate in the study. Confidentiality of their identity was assured. Topic of research was approved by institutional ethics

committee. Data collected through close ended questionnaire was analysed through SPSS-16. Such data was described as frequencies and percentages. Qualitative research data was analysed by content analysis.[4]

RESULTS

There were total 20 professors in clinical disciplines. One professor refused to take part in this study and one could not be contacted due to his busy schedule therefore, the rest of them, i.e., eighteen professors were included in the study. Three of them were females. Twelve out of eighteen (66.7%) had disagreement with the statement that there was any written curriculum about bed side teaching or any such curriculum was communicated to them as shown in table-1. Eleven (61.1%) professor agreed with the fact that there is a specific list of topics for bedside teaching to cover from 3rd year to final year MBBS and nine (50%) professors confirmed that topics of bed side teaching are distributed among faculty members but eight (44.4%) of them stated that that they are not aware of the topics taught in other units of their specialty as depicted in table-2. Nine (50%) professors were satisfied with the time allocation for bed side teaching , eight (44.4%) of them thought that allotted time for bed side teaching is not utilized properly and nine (50%) professors observed that students do not spend adequate time with patients as shown in table-3. Twelve (66.7%) professor were of opinion that current number of student (15–20) per batch is too much for effective bed side teaching while 5 (27.8%) were satisfied with the number of students in each batch and one (5.6%) remained neutral. Ten (55.5%) professors stated that they do their homework for bed side teaching, one (5.6) remained neutral and 7 (38.9%) professor felt that they do not any need of homework for clinical teaching. Nine (50%) professors said that only faculty members were involved in bed side teaching to the students while 7 (38.9%) disclosed that in addition to faculty members residents also took part in clinical teachings but 2 professors did not respond to this question.

In-depth Interviews In response to question-1 as what are the factors which led to deterioration of bedside teaching 2 out of 5 professors thought that lack of interest on part of students is the main cause while 2 other labelled lack of accountability as contributing factor. Two commented that lack of discipline by the institution among faculty and students was one of the causes of deterioration of bedside teaching. One professor stated that lack of job satisfaction and inadequate salary was responsible for this deterioration because these financial setbacks compel them to give more time to their private practice which itself was a causative factor of poor teaching. One of the responses was about lack of planning of clinical teaching. One commented that even faculty is discouraged to impart bedside teaching. These all factors are summarized in table-4.

In response to question no 2 that how much time students should spend at bed side, 4 out of 5 professors were of the opinion that it should be from 2to 4 hours daily while one professor stated that it should be in accordance with Pakistan Medical and Dental Council (PM&DC) rules.

In response to question no 3 that how much students should be in a batch for effective bed side teaching, 4 out of 5 replied that it should be from 10–15 while one professor recommended only 6 students per batch for effective clinical teaching.

In response to question no 4 that how bed side teaching can be made more effective, all professors advised different remedies. Two were in favour of improvement of discipline in the institution. One of them even suggested that students with poor attendance in clinical rounds should not be allowed to sit in annual examination. One professor recommended curriculum development for bed side teaching and one stated that clinical teaching should be integrated from preclinical to clinical years of teaching. One professor advised that teaching environment should be made friendlier and annual confidential report of faculty members should be based on performance. One professor suggested that salary should be enhanced, job satisfaction should be assured and private clinical practice for faculty members should be banned so that they could concentrate on their professional responsibilities. These suggestions are summarized in table-5.

In response to question no 5 that how faculty members should plan bed side teaching, 3 out of 5 recommended that bed side teaching should be structured and tasks should be communicated to all units of the same specialty to avoid unnecessary repetition. One of these three was in favour of body system based distribution of clinical tasks among the different units of the same specialty. One individual did not respond to this question. One of them suggested that there should be academic meeting on daily basis in the morning in each unit to plan that who would what. He further added that when one teacher teaches a topic on bed side to a group of students, another faculty member of the same unit should assess students in order to evaluate teaching of his colleague and vice versa. He named it cross evaluation.

Table-1: Curriculum of bedside teaching

	Written curriculum available	Curriculum communicated
Response	**No. (%)**	**No. (%)**
Strongly disagree	1 (5.6)	1 (5.6)
Disagree	12 (66.7)	12 (66.7)
Neutral	1 (5.6)	1 (5.5)
Agree	3 (16.7)	3 (16.7)
Strongly agree	1 (5.6)	1 (5.6)
Total	18 (100)	18 (100)

Table-2: Structure of bed side teaching

	Specified clinical topics from 3rd year to 5th year	Systematic distribution of topics in the faculty	Awareness of faculty of topics covered in different units
Response	**No. (%)**	**No. (%)**	**No. (%)**
Strongly disagree	1 (5.6)	1 (5.6)	0 (0)
Disagree	5 (27.8)	6 (33.3)	8 (44)
Neutral	1 (5.6)	2 (11.1)	4 (22.2)
Agree	8 (44.4)	6 (33.3)	3 (16.7)
Strongly agree	3 (16.7)	3 (16.7)	3 (16.7)
Total	**18 (100)**	**18 (100)**	**18 (100)**

Table-3: Time management of bedside teaching

	Time allocated to bedside teaching	Utilization of time for teaching	Students-patients interaction duration
Response	**No. (%)**	**No. (%)**	**N. (%)**
Strongly disagree	3 (16.7)	0 (0)	0 (0)
Disagree	4 (22.2)	8 (44.4)	9 (50)
Neutral	2 (11.1)	2 (11.1)	1 (5.6)
Agree	6 (33.3)	5 (27.8)	7 (38.9)
Strongly agree	3 (16.7)	3 (16.7)	1 (5.6)
Total	18 (100)	18 (100)	18

Table-4: Factors contributing to deterioration of bedside teaching

- Indiscipline students
- Indiscipline faculty
- Lack of accountability
- Lack of interest of students
- Lack of job satisfaction
- Inadequate salary

Table-5: Major steps to improve bedside teaching

- Improvement of discipline
- Improvement of job satisfaction
- Adequate salary
- Performance based promotion
- Curriculum development

DISCUSSION

Clinical teachers usually do not have any formal briefing on the clinical curriculum to be taught.[5] Expert educators on bedside teaching have recommended that for effective bedside teaching the teachers needed to familiarize themselves with the clinical curriculum.[6–8] Most of our participants (72.3%) confirmed the fact that there is no written curriculum for bed side teaching but surprisingly 4 (22.3%) thought that there is written curriculum available in the institution. College was contacted for the copy of curriculum but there was no written curriculum for bed side teaching. It raises the question that what our faculty members understand by the word curriculum. Eleven (61.1%) professors reported that topics are structured for clinical teaching and six (33.4%) professors said opposite to this statement. Although such document was not available but students clinical log books show some distribution of clinical tasks for different years. Nine (50%) professor confirmed that they had some mechanism in their units for bed side teaching and had distributed topics among their faculty members; while 7 (38.9%) had accepted that they had an unorganized system for clinical teaching in their units. This shows that each unit has its own strategy and there is no uniformity as a whole for clinical teaching. In our study current numbers of students in each batch (15–20) were considered too much for effective teaching and in depth interview 6–15 students in a batch were recommended to make clinical teaching effective. These recommendations are consistent with what is happening in an international university where about 10 students are allocated for a particular clinical discipline at atime.[8] Half of the professors (44.5%) were satisfied with the time student spent with patients but this observation is in contradiction to what is perceived globally.[8] El-Bagir and Ahmed[9] report a decline from '75% of teaching time 30 years ago to just 16% by 1978' and note that it is much lower now. Ramani[10] also observed that the estimate of actual time students spend with the patient is not more than 25%. Ten (55.5%) professors realized the importance of homework and planning for clinical teaching and 7 (38.9%) professor did not feel any need of homework for this clinical encounters. Effective planning of teaching sessions is important, and this is often a weakness of many bedside teachers.[11] Clinical teachers need to plan what they intend to do, and how they will do it.[12] Planning provides structure and context for teacher and students, as well as a framework for reflection and evaluation. Preparation is recognized by students as evidence of a good clinical teacher.[7,13] Therefore teachers should have some basic planning for teaching to be effective and fruitful for the students.

Results of our study showed that in only 9 (50%) units' faculty members facilitate clinical teaching but in 7 (38.9%) units' residents also take part in clinical teaching. Facilitation by residents under supervision of faculty may be acceptable but question arises that, can a resident as a teacher replace the experience of a faculty member, needs further research.

In our study lack of interest on part of students and faculty, lack of accountability, poor job

satisfaction, lack of curriculum for clinical teaching and failure to plan were the major factors considered responsible for the decline of clinical teaching. These findings are consistent with the results of Regina[14] who reported resistance on part of both teachers and learners towards clinical teaching. Ramani and Green-Thompson also concluded that the teaching is not highly valued.[6,10] Our faculty thought that Institutional discipline, performance based promotions, improved job satisfaction and curriculum development will improve clinical teachings. Structured and synchronized teaching and academic ward meetings were the planning strategies advised by our faculty to improve clinical teaching. These recommendations are inconsistence with many international studies.[5,15,16] Despite these challenges we should strive to uphold the saying of the renowned clinician and teacher sir William Osler(1849–1920) that "no teaching without a patient for a text, and the best is that taught by the patient himself."[12]

Limitations: This study has some limitations. Sample size of the study was small that may give the impression of over representation of data. It was a single centre study and emerging themes may look monotonous. Therefore multicentre studies are required for generalizability of the results and for broader perspective of the issue.

Conclusion: Curriculum development for bedside teaching, institutional discipline, application of best planning strategies, performance based appraisal of faculty and implementations of measures that enhance job satisfaction are can improve bedside teaching.

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