

EDUCATION

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**BESIDE LEARNING IN CLINICAL TRAINING;
LEARNERS' PREFERENCES****DR. KHALID FAROOQ DANISH**
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ABSTRACT... kfdanish@hotmail.com. **Objectives:** To find out the learning preferences of clinical students for bedside learning. **Design:** cross-sectional, descriptive. **Methods:** The study was done on medical students of the clinical classes in different Medical Colleges in Rawalpindi, Pakistan. Both male and female students were included in the study. All students were given a questionnaire consisting of 5 questions regarding their preferences for bedside learning. Open-ended comments were also invited. **Results:** A total of 227 students of clinical classes participated in the study. Most preferred location for bedside learning was the ward (70%, N=158). Most preferred group size was 5 (62%, N=140). For duration of bedside learning session most learners preferred 2 hours (59%, N=134). The opinion regarding the mode of case presentation was divided indecisively. However most responders favored single presenter (28.6%, N=65). The preferred frequency of bedside learning sessions was 'daily' (49.7%, N=106). **Conclusions:** Learners in clinical classes prefer bedside teaching as a daily event. Their preferences indicate that the bedside learning possesses a clinical relevance and offers contextual learning opportunity. Much remains to be learnt about the learners' preferences regarding instruction method in bedside learning.

Key words: Medical education, Bedside learning, learning preferences.

INTRODUCTION

Bedside teaching is one of the traditional teaching strategies for training the clinical students. It was a widely employed instructional strategy till 70's but has declined due to invasion by computer technology and increasing administrative and research obligation of senior doctors¹. The relative time allotted for bedside teaching as a component of medical training was 75% of total teaching time in 1970² and declined to 16% in 1978³. The bedside teaching, however, remains a very effective instrument for teaching of clinical skills, interviewing skills and bedside manners. The venue of teaching is usually the

ward, the outpatient department or even the operating room. The group of learners usually has a variable strength from 4-15 learners. All the students gather round the patient. One of the students presents the history and examination findings while others are supposed to be active listeners. The teacher plays the role of a moderator, facilitator, and occasionally performer. All students are supposed to actively participate in the process of learning. This, so called Oslerian style of teaching, is strongly supported by the medical profession⁴. Since the clinical practice is related to the patients and their problems it seems that the best way to

learn the clinical practice is on real patients. It appears to be cost effective, convenient, and informative. Bedside teaching also provides an opportunity to study the patients' problems in a real life scenario closest to the professional scenario of medical practitioners. However, there are problems inherent to the bedside teaching regarding availability and cooperation of the patients, nature of the illness of the patients, time constraints and language barriers etc. The present study is aimed at studying the learner's version of the bedside teaching as one of the traditional ways of clinical training.

METHODS

Students of clinical classes of different medical colleges in Rawalpindi participated in the study. Both male and female students were a part of the study. Each student was given a questionnaire consisting of 5 questions exploring different aspects of learning preferences regarding bedside teaching. Opinions were invited regarding most preferred location of bedside learning sessions, size of group, duration of a single learning session, mode of case presentation and the frequency of bedside learning session per week. Open comments were also invited.

RESULTS

A total of 227 students of clinical classes participated in the study. Most preferred location for bedside learning was 'the ward' (70%, N=158). Most preferred group size was 5 (62%, N=140). For duration of bedside learning session most learners preferred 2 hours (59%, N=134). The opinion regarding the mode of case presentation was divided indecisively. However most responders favored single presenter (28.6%, N=65) followed by 'whole group of learners' (27.3%, N=62) while 26.9% (N=61) preferred two presenters. The preferred frequency of bedside learning sessions was 'daily' (49.7%, N=106).

DISCUSSION

Bedside learning is a time-tested way of learning the clinical methods, examination skills, and discussion of clinical managements⁵. It has long been practiced as a way of teaching the clinical trainees, both under and postgraduate medical students, and residents. Bedside

teaching has distinct advantages in learning the clinical skills. It is very cost effective because it does not require use of technology. It is conducive to contextual learning because it is carried out in the real life environment with a real patient with a genuine clinical problem⁶. In clinical medicine, 56% of patient problems can be correctly diagnosed at the end of a comprehensive history; this rises to 73% by the end of physical examination⁷. Due to small group of trainees in the presence of a patient active learning is more convenient. It is reassuring and pleasing to the patients⁸. Many patients seem to enjoy teaching rounds and may even learn from them⁹. The patients also favor bedside teaching when done with respect and regard¹⁰. Some patients even prefer to have an active role in bedside teaching¹¹.

The residents also favour clinicians who conduct teaching and discuss the psychological problems of patients at the bedside¹². Studies show that residents conduct more teaching at the bedside than other teaching venues¹³. Bedside teaching adds to the knowledge and skills of the residents as well¹⁴.

However there are inherent problems with the bedside teaching¹⁵. The wards are noisy and patients may not be found in bed all the time¹⁶. Patients are sometimes away due to genuine reasons like visiting relatives or investigations^{17, 18, 19}. Non cooperation of ward staff, serious or painful disease condition of patients, non cooperation of patients, and unrewarding nature of bedside teaching²⁰ may be other difficulties encountered in effective bedside teaching. It is appropriate to undertake measures to improve bedside teaching to obtain best advantage of patients both in terms of clinical training of learners as well as patient care²¹. In this respect it is important to know the preferences of learners regarding bedside teaching.

LOCATION OF BEDSIDE TEACHING

Majority of learners preferred a bedside learning session in the ward. This is contrary to the finding by Nair and associates⁶ in which most learners (53%) preferred conference room as the venue of bedside learning, and only 3% chose bed or ward as the preferred venue. It can

be argued that the actual context of bedside learning is the ward and the preference of ward as the venue for bedside learning preserves the advantages of contextual learning in clinical training.

GROUP SIZE

The most preferred group size by majority of responders was '5'. In our institution, the group of learners for bedside learning consists of 10-15 learners. An appropriate group size should permit for active involvement of all learners in clinical examination and other clinical skills. A more interactive learning is possible if the groups size is cut short to '5' instead of 10 or more.

DURATION

One hour was the most preferred duration of the bedside learning session. It can be argued that the duration of a bedside learning session should depend more on the nature and complexity of the case under discussion rather than an absolute value of time. Even in the open comments no responders suggested that the time allotted for a bedside learning session should correspond to the case, and not a specific period.

MODE OF PRESENTATION

Opinions were indecisively diverse on the issue of mode of presentation in bedside learning. Whereas majority preferred single presenter for each bedside learning session, a comparable number preferred two presenters, or the whole group. Much remains to be explored regarding the most preferred or the most appropriate mode of case presentation.

FREQUENCY

Most responders suggested that the bedside learning session should be a daily event. Learners preferring alternate days' bedside learning were in a noticeable minority. It appears that bedside learning possesses a significant role in clinical instruction strategies and will remain to be so in future.

CONCLUSIONS

Bedside learning constitutes an important aspect of clinical learning and remains a recognized and time-tested instructional strategy for delivery of clinical


competences to learners. Learners prefer bedside learning sessions as a daily event and prefer to devote time for these learning sessions. Diverse opinions about instruction method, however, bring to light the fact that more needs to be learnt about the best way to carry out the clinical discussions during bedside learning sessions.

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