

Graduates' perceptions regarding their final year training

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Introduction

Educational experiences of graduates' as primary consumers reflect the effectiveness of the educational environment. The final year of the Faculty of Medicine, Colombo, Sri Lanka consists of clinical rotations in Medicine, Surgery, Paediatrics, Obstetrics and Gynaecology and Psychiatry. The Final examination consists of a clinical component (short and long cases) and a theory component.

Objective

To assess the perception of recent graduates regarding the final year educational environment – teaching/ learning methods and content, student evaluation methods, interpersonal and social interactions.

Method

The study population consisted of 180 new graduates. Focus Group Discussions (FGD) were held to gather data and formulate a questionnaire on their learning environment. Sampling was representative of: ethnicity, gender, academic achievement. The two FGDs attended by 18 and 12 participants respectively were conducted by a trained moderator. The data was recorded verbatim, collated and analyzed. A self-administered questionnaire was developed on the educational environment where key questions were based on several themes emerging from the FGDs. The questionnaire was pre tested and mailed to all graduates and the response rate was 33.33%.

Results

Majority of graduates found most teaching learning activities in all subjects to be useful for future practice as a competent house officer; specially practicing ward procedures (97.5%). However 56.7% disagreed that monitoring of very ill patients by final year students was useful. The following situations were highly stressful: consultants' behaviour towards students (30%), monitoring of patients (60%) and limited facilities for students in wards (21.7%). The behaviour of the consultant teachers towards the students was highly stressful as some ridiculed students in front of patients, were abusive towards students and not appreciative. Majority of graduates thought student-doctor and student-patient relationships were helpful towards learning in all disciplines. The benefit of the student-nursing staff relationship towards learning was rated comparatively low, some reasons being nurses being rude towards students and uncooperative. Time was inadequate for recreation, relationships and other interests during the final year (85%, 83.3% and 83.3% respectively). Reasons being: inadequate rest between clinical appointments, tight schedule, work load, pressure of exams and long hours at the ward. Graduates thought that they were fairly assessed most of the time in all disciplines yet a proportion of graduates stated that they were 'bullied' by examiners during the final cases.

Conclusion and recommendations

The learning environment of the final year teaching programme prepared a graduate for future practice with effective learning methods, fair assessment and healthy interactions. However the learning environment needs improvement as some aspects contribute to increased levels of stress and do not promote healthy life styles. Teaching sessions and assessments should be conducted based on adult learning principles.

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Introduction

Educational experiences of graduates' as primary consumers reflect the effectiveness of the educational environment. According to the Australian expert in education G.M.Genn, "the educational environment of the medical school derives from and is a manifestation of the curriculum." He further mentions that "the environment is an important determinant of behaviour of students and it is related to their achievements, satisfaction and success" (Genn, 2001)

The UK Standing Committee on Postgraduate Medical Education (SCOPEME, 1991) highlighted the importance of educational environment in their statement that "A working environment that is conducive to learning is critically important for successful training". Roff and McAleer (2001) summarises the importance of measuring educational environment along following lines, "If we can identify the elements operating in the educational environment or climate of a given institution or course, and evaluate how they are perceived by students and teachers, we have the basis for modifying them to enhance the learning experience in relation to our teaching goals".

Studying about educational environment is of specific relevance to the Faculty of Medicine, Colombo, which has recently adopted a more system-based and student-centered curriculum. A study done among first year students using the validated Dundee Ready Educational Environment Measure (DREEM) questionnaire revealed a positive environment with a mean DREEM score of 144 (72%) (Seneviratne *et al.*, 2002). However Moor-west (1989) point out that the students' perceptions of learning environment may change differently across time. Clarke *et al.* (1984) were also in the same opinion and suggest that while students' high expectations might be met initially, it may be difficult to meet them over the entire curriculum. Therefore it is pertinent to evaluate student perceptions of the final year learning environment.

Clinical teaching in the Faculty is initiated from the first year itself. During the final year, Professorial appointments in the

university teaching units are done in the major specialities of Medicine, Surgery, Gynaecology and Obstetrics, Paediatrics and Psychosocial Medicine (Faculty of Medicine, 2000).

Teaching/learning activities in the professorial appointments include clerking of patients, teaching ward rounds and classes, tutorials, monitoring of very ill patients, practicing ward procedures and student presentations. In addition to the above a clerkship based 'Assistant House Officer Scheme' in Medicine and delivery room activities in Gynaecology and Obstetrics are practiced (Faculty of Medicine, 2004a,b). Students are assessed in the final year through multiple choice questions, essay questions, long and short cases, OSCEs and viva voce examinations in the above specialities (Faculty of Medicine, 2004c).

The objective of our study was to assess the perception of recent graduates regarding the final year educational environment, with regards to its teaching/ learning methods and content, student evaluation methods, interpersonal and social interactions.

Method

The study population consisted of 180 new graduates. Focus Group Discussions (FGD) were held to explore perceptions of the final year learning environment. Sampling was representative of: ethnicity, gender, academic achievement. The two FGDs attended by 18 and 12 participants respectively were conducted by a trained moderator. The data was recorded verbatim, collated and analyzed. As a follow up, a self administered questionnaire was developed on the educational environment where key questions were based on several themes emerging from the FGDs. The questionnaire consisted of eight structured items each with 2-9 questions on a likert scale, plus 4 open items and was designed to provide information on teaching/ learning, perceived 'stressful' situations, effect on personal life, interpersonal relationships and assessments. The questionnaire was pre tested and mailed to all graduates, and the response rate was 33.33%.

Results

The results are a cumulative analysis of both qualitative and quantitative data.

Teaching /Learning methods

The majority of graduates found most teaching learning activities in all subjects to be useful for future practice as a competent house officer; specially practicing ward procedures (97.5%). However the some participants of the FGD were of the view that “teaching was vague and individuality of students was not entertained”.

Many graduates thought that monitoring of very ill patients by final year students was not useful (56.7%). Some reasons stated for this opinion were “waste of time”, “it served no educational purpose”, “was detrimental towards group dynamics” and “it is a task which is designated to ward nursing staff”.

Contrary to the FGD where several expressed descent on the AHO scheme in Medicine, 88.3% of questionnaire respondents agreed that the scheme was useful though a few comments were made that it was merely doing the House Officers’ “Dirty Work”.

Interpersonal Relationships

Majority of graduates thought student-doctor and student-patient relationships were helpful towards learning in all disciplines. However some negative comments stated on the student consultant teacher relationship were: “We were not treated as adults”, “our individuality was not entertained”, “Some consultants were irritable and we were scolded for not knowing minor details”, “different people giving the same answer are treated differently”. This behaviour of the consultant affected the student-patient relationship detrimentally. According to comments of some graduates “patients don’t trust the student after the consultant scolds the student”.

The benefit of the student-nursing staff relationship towards learning was rated comparatively low, some reasons being nurses being rude towards students and uncooperative.

Social atmosphere

Time was inadequate for recreation, relationships and other interests during the final year (85%, 83.3% and 83.3% respectively), the reasons being; inadequate rest between clinical appointments, tight schedule, work load, pressure of exams and long hours at the ward.

Assessments

Graduates thought that they were fairly assessed most of the time in long and short cases of all disciplines yet a significant proportion of graduates (20%) stated that they were ‘bullied’ by examiners during the final cases. Few graduates stated that “sometimes a student is evaluated by a preformed attitude of that student” and “questioning in cases was inconsistent”. Further 73.3% of graduates thought that MCQs tested facts and figures rather than problem solving and application of knowledge.

Stress

A stressful environment not conducive for learning emerged as a prominent theme in both the FGD and the questionnaire analysis. The following situations were highly stressful: consultants’ behaviour towards students (30%), monitoring of patients (60%), assessment of student attitudes during the Paediatrics appointment (25%) and limited facilities for students in wards (21.7%).

The behaviour of the consultant teachers towards the students was highly stressful as some ridiculed students in front of patients, were abusive towards students and not appreciative. Graduates considered the attitude assessment of paediatrics to be subjective and some were of the view that “the content assessed was irrelevant”.

Though identified as a stressful situation in the FGD, labour room work was found to be enjoyable to a significant proportion of graduates (28.3%).

Discussion

Several studies worldwide have evaluated the perceptions on the final year learning

environment. Our results are discussed in the light of these studies.

The majority of graduates agreed that most teaching/ learning activities were useful in gaining knowledge and skills necessary to practice as a house officer. A study of Students' perspectives on the educational environment at the Faculty of Medical Sciences, Trinidad; where the DREEM questionnaire administered to final-year medical students and first-year medical interns, the overall student perceptions were positive with a mean DREEM score of 109.9 (Bassaw *et al.*, 2003).

Traditionally, apprenticeship learning has been relevant for the medical profession (Vleuten *et al.*, 2000), and still the apprentice system of clinical clerkship remains the cornerstone of clinical instruction (Harth *et al.*, 1992). This view is reflected by most graduates who found the clerkship based AHO scheme in Medicine to be useful. Yet a study at the University of Antwerp, Belgium concluded that Clinical clerkships do not automatically provide an ideal learning environment for medical students (Remmen *et al.*, 2000).

Some teaching/ learning activities such as labour room activities were found to be enjoyable by many graduates and this view is reflected in the above study where delivery room activities were reported most favourably with regard to instructive value. The attitude of the consultants was viewed as prejudiced and temperamental by some graduates. This view is reiterated in many studies by comments such as: tutors displayed favouritism, anger, a patronizing attitude, and even victimized and ridiculed students (Harth *et al.*, 1992). Incidents of humiliation by senior medical staff occurred when the students were repeatedly unable to answer the same questions or when they were criticised for an inadequate clinical examination (Lempp & Seale, 2004). Their individuality was not recognised in that neither their existing skills nor the experience were acknowledged by doctors (Seabrook, 2004).

This behaviour of consultants was rated as being highly stressful by many graduates. Even in other studies relationships with consultants aroused strong feelings, with students describing stressful situations

such as being humiliated in front of their peers (Radcliffe & Lester, 2003). Similar aspects of the teacher-student relationship have been reported as stressful, such as being expected to have medical knowledge which they had not been taught and incidents when they were shouted at or felt humiliated (Lempp & Seale, 2004). This highly negative aspect of stress in teaching through humiliation is a recurring theme.

The low ratings for student-nurse relationship in the study are reflected in other studies and several reasons postulated. In one study, "several incidents where nurses and midwives treated medical students disrespectfully are reported, and such behaviour may indicate a degree of professional rivalry" (Lempp & Seale, 2004). Another states that "students' relationships with nurses could also be difficult, reflecting some of the tensions between the two professions, and the lack of a formal role for nurses in medical education" (Lempp & Seale, 2004).

With regards to assessing final year clinical training, some graduates perceived examiners of long/ short cases to be prejudiced and inconsistent. According to Ponnamparuma *et al.*, (2003) these traditional forms of assessment have been excluded from current assessment systems of many institutions. Reiterating our findings they further state that these methods lack standardisation and objectivity, and suggest variants such as OSCEs and alternatives such as Portfolio assessments as better methods.

The MCQ type currently used at the final year assessments are true/ false questions, which graduates found to test facts. Swanson (Harth *et al.*, 1992) highlights this deficiency by stating that "in true/ false questions we are pushed towards assessing recall of an isolated fact", and suggests that "application of knowledge, integration, synthesis and judgement questions can better be assessed by one-best-answer questions. As a result, the NBME has completely stopped using true/ false formats on its examinations"

Conclusion and recommendations

The learning environment of the final year teaching programme prepared a graduate for future practice with effective learning methods. However the learning environment needs improvement as some aspects contribute to increased levels of stress and do not promote healthy life styles. Teaching sessions and assessments should be conducted based on adult learning principles.

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