ABSTRACT NUMBER: P01

Learning Medical Ethics: Beyond Classroom Teaching

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Introduction

Medical ethics is an integral part of good clinical practice ultimately leading to better patient care[1,2]. The UK General Medical Council and other professional bodies worldwide have now recognized that professionalism and medical ethics need to be taught and not remain a "hidden" subject in medical education[3]. The principles of medical ethics can be taught through didactic lectures but applying such principles and appreciating ethical issues in the clinical scenario require an effective delivery system. Using real clinical scenarios in the clinic setting and mandating students to identify ethical issues permits the teaching and learning of ethics to be more effective[4,5].

Objective

The aim of this survey is to evaluate the appreciation of the basic principles of medical ethics by the 1st year clinical students posted to the family medicine rotation posting in a community clinic run by medical officers through reflective learning.

Material and method

This is a descriptive study. A cohort of seventy students who were attached to the medical officer running the community outpatient clinic were required to identify one ethical issue during their one week posting as part of their case write-up. They were then asked to discuss the principles of ethics involved and to discuss ways to handle this issue.

Results

All students identified one case where an ethical issue was encountered in the outpatient clinic. These are categorized under one of 7 characteristics. Issue of medical sick leave (honesty), doctor's decision in ordering investigation and treatment (physician's autonomy), appropriate prescription of treatment (beneficence and justice) and discussing patient's condition in the presence of third party (confidentiality) were commonly encountered.

Attitudes of healthcare workers towards patients such as shouting at patients and ignoring patient's request and poor communication (because of language and social strata) were also identified by students as issues of concern. The issue of *informed consent* was minimally addressed.

Medical sick leave was granted in 18 patients, with 4/18 (22.2%) of this were viewed as appropriate and 6/18 (33.3%) as inappropriate in breaching honesty. Inappropriate prescription (such as antibiotics) was reported in 14/78 (18%). Confidentiality was breeched (13%) as more than two doctors were seeing patients in the same consultation room because of lack of space.

Discussion

Elements of medical ethics learnt in preclinical years appear to be appreciated by medical students when directed to identify such issue in real case scenario. They are able to discuss the ethical issues and suggest suitable methods to resolve them.

Conclusion

The case write-up on identification and discussion of ethical issues appear to be effective in inducing a deeper cognitive understanding in clinical practice. This exercise appears to cultivate a value system in junior medical students and should continue throughout their medical education.

Key words: Ethics, medical, learning, out-patient, clinic.

Table 1: Common ethical issues identified by students in an out patient clinic.

Ethical issue	Number (n)	Percentage (%)
Honesty (Issue of medical sick leave)	18	23.1
Doctor's autonomy (Doctor's decision in ordering investigation and treatment)	16	20.5
Beneficience (giving treatment)	14	17.9
Problems related to Communication skills	10	12.8
Confidentiality	10	12.8
Attitude of healthcare worker	8	10.3
Informed consent	2	2.6
Total	78	100

Table 2: Ethics of prescribing MC;- the students' opinion and judgment.

	MC Issued	Number (n)	Percentage (%)	Reasons quoted
Agree with the doctor	Yes	4	22.2	Patient is genuinely ill
	No	6	33.3	Patient is not ill. Doctor should not prescribe MC to the patient's spouse
Disagree with the doctor	Yes	6	33.3	Doctor is pressured by patient. Patient is not ill. Doctor should not issue back dated MC
	No	2	11.2	Patient is ill and infectious
Total		18	100.0	

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ABSTRACT NUMBER: P02

Teaching Communication Skills To Medical Students (Department Of Medicine)

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Introduction

Good communication skills are mandatory for all physicians, but such skills are rarely taught formally in our medical colleges. We describe a simple communication skills learning module involving role plays, video-film viewing, and group discussions, developed by the department of medicine. The module is stretched across the various medicine postings during the clinical years.

Method

A 3 hour module (2 sessions of 90 minutes each) is scheduled in each of the five medicine postings. The batch size is 20 students. In session one, a brief lecture is followed by viewing of a video, and role play activity involving all students. In the second session, other faculty joins the students. Students discuss the dynamics of communication experienced by them, and the faculty share real-life challenges of communicating with patients. The topics are basic and advanced interview skills, conflict resolution, patient education, and breaking bad news.

Student assessment was done by including a communication station in end-of-posting OCSE.

Evaluation of the module was done by questionnaire feedback from students and faculty.

Faculty were trained to conduct the sessions by including role plays, group dynamics and debriefing sessions in teaching/learning workshop of one and half days duration. Additionally, hands-on training was done by inviting them to participate when actual sessions with students were conducted. So far 80 faculties have been trained through in-house workshops in the last 4 years.

ABSTRACT NUMBER: P03

Undergraduate Pharmacology – Students View: A Questionnaire Study

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Introduction

Pharmacology is a subject which has got scientific obligation. Pharmacology is at cross roads. Its place and status in the medical curriculum is hazy. Students decry the way it is taught, its usefulness when they practice.

Objectives

To get a general feedback from the students about the subject with respect to its current teaching methods and usefulness in clinics.

Materials and Method

Self-made questionnaire with ten questions were distributed to second year MBBS students (5th semester). Questionnaire was designed based on the internationally accepted 'Liekert Scale' (SA-strongly agree (5), A-agree (4), NS-not sure (3), D-disagree (2), SD-strongly disagree (1)). Subjects were asked to tick only one of the options .The questions covered distribution of handouts before the lecture class, discussion of physiology before pharmacology, need for power-point lectures, importance of problem based learning and prescriptions, seminars for students, giving stress on clinical pharmacology, importance of pharmacology before going to clinics and the issue of absentism if handout is given before lectures.

Results

Analysis is based on the median score and percentage wise distribution of the various parameters used in the questionnaire. Median score was 5 for questions related to handouts (52%), pharmacology before going to clinics (53.57%), 4 for physiology before pharmacology (42.98%), powerpoint lectures (27.82%), clinical pharmacology (42%), problem based learning (38.93%), 3 for seminars (34%) and 2 for absentism (28.94%).

Conclusion

Most of the students favour changes in most of the parameters used in the questionnaire. Students strongly feel the need of handouts before the lecture class, brief discussion of physiology before pharmacology, all lectures to be delivered in powerpoint, problem based teaching but not in favour of giving seminars and also disagree that absentism results if handouts are given before the lecture class. Overall, students feel that pharmacology is an important subject before going to clinics.

ABSTRACT NUMBER: P04

Do You Want To Be A Good And Competent DOCTOR?

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The whole structure of medical education is built on two major foundation stones:

1. Knowledge base i.e. facts and figures; concepts and principles; and skills.

2. Use of knowledge base by reasoning and decision making to solve new problems.

Rapid and ongoing development in the field of medical education is continously posing a challenge to medical educators as well as students especially in terms of achieving competency. Increasing number of law suits against health care providers and inclusion of 'medical errors' as 6th leading cause of death in 'Center of Disease Control' (CDC) classification clearly indicates that some thing is wrong some where.

A long list of teaching methods and educational strategies are already in practice in different combinations and blends to cope with problem of information load and competency. Students are exposed to various types of learning methods in different institutions and they may feel confused and reluctant in choosing from these various strategies imposed on them by institutional policies. Teachers may use a method of their convenience and experience but that may not match with students requirements all the time.

Every student has a right to develop his knowledge base and professioalism without any interruption by using some uniform mode of learning despite the exposure to an amalgam of them. The Kolb's experiential learning model has given a solution to deal with this problem and can be expressed in a single word by 'Reflection'.

This poster suggests to maintain a reflective diary and explains different phases of reflection i.e.

1. To identify and re-think on an experience of importance

2. To identify the gaps in knowledge, skill or attitude related with that experience

3. To identify the possible solutions or remedies and

4. To plan the required actions in order to overcome that particular deficiency.

This simple exercise provides a valuable tool to improve one's deficits and it is compatible with every learning strategy. Maintaining this reflective diary may result in filling gaps in one's knowledge in order to be a good and competent doctor with continuous professional development and life long learning habit.

ABSTRACT NUMBER: P05

The Effect Of Gender On Physicians' Career Intentions: A Report From South Africa

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Background
The increasing migration of physicians to more developed countries places strain on health systems in less developed countries. It is therefore important for planning to determine how and where graduates intend to practice medicine.

Methods
Collaborative research conducted at four medical schools, examined the factors affecting graduates' career intentions. Data was collected on career intentions (pursuit of postgraduate training, choice of clinical discipline, study location, career type), and demographics (age, gender).

Results
More than half the students in the survey were female. Similar percentages of men and women intended pursuing further medical training. Slightly more women (38%) than men

(32%) reported being undecided about their desired specialty. When specifying a clinical discipline, a higher percentage of males reported an interest in Surgery (33%) than women (15%). Similar percentages of both genders specified intentions to specialize in Internal Medicine (15% male, 16% female) and Psychiatry (10% male vs. 9% female).

Women were more likely to indicate interest in Pediatrics and Obstetrics/Gynecology. There were no statistically significant differences between groups in specification of desired training location, although slightly higher percentages of female students reported an intention to study in either their country of birth (42% vs. 37%) or country of medical training (17% vs. 13%) than male students. There was an association between gender and career type ($X^2_{5, 570}$=14.0, p=0.015), with a slightly higher percentage of male students reporting that they intended to pursue academic/university careers (15% vs. 9%) while a higher percentage of female students reported being unsure (25% vs. 20%).

Conclusions
Despite predominance of females in medicine, rigid inequalities within medicine might still preserve male dominance in certain specialties. While female students were likely to pursue further studies in their country of birth, males seemed more inclined to pursue academic careers.

ABSTRACT NUMBER: P06

Learning Style Preferences Among Medical And Midwifery Students

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Introduction
Students have individual learning style preferences including visual (V; learning from graphs, charts, and flow diagrams), auditory (A; learning from speech), read-write (R; learning from reading and writing), and kinesthetic (K; learning from touch, hearing, smell, taste, and sight). These preferences can be assessed using the VARK questionnaire.

Method
This study was conducted to describe learning styles of 214 Medical and Midwifery students in Mashhad University of medical sciences. By using the English version of the (VARK) questionnaire, we measured the difference in learning styles of medical students and midwifery students and compared with 57336 global general students who completed the test in VARK website during Aug-Sep 2007.

Results
The dominant learning preference of our students was Aural preference (30.8%) followed by Read/Write (20.6%), while (7.5%) were in Kinesthetic and (5.6%) were Visual learners; still most of the students (35.5%) represented a multimodal learning preference. No significant difference was found between males and females. The general pattern between medical student and Midwifery students are the same. There was a significant relation between Internship

Entrance Exam score and the learning styles of medical student and those who preferred Read/Write got higher scores.

Conclusion

Knowing that our students have different preferred learning modes will help medical instructors in our faculty develop appropriate learning approaches and explore opportunities so that they will be able to make the educational experience more productive.

Keywords: Visual, auditory, read-write, kinesthetic; VARK; medical education; midwifery students; learning modes

ABSTRACT NUMBER: P07

Results And Prospectives Of Integrated System Of Education Implementation

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To realize higher medical education reform in 2001 Kyrgyz State Medical Academy (KSMA) implemented integrated system of education (ISE) at the "General Medicine" faculty (1-6-years) and "Pediatrics" faculty (4-6-years). The first graduation of ISE students took place in 2006.

Objective

The main goal of the work is systematization and analysis of results of experimental implementation of ISE in KSMA. 446 students of "General Medicine" faculty (3-6-year) and teachers passed through written questionnaire to study attitudes to ISE, efficiency of material mastering, module teaching quality, improvement of educational process.

Method

Results of the questionnaire showed what subjects are considered to be the most complicated for students, quality of module teaching, efficiency of mastering of training material, individual growth. Opinions regarding ISE differ greatly: 76 % students and only 41 % teachers support it.

Cut of knowledge to check "knowledge survival" according to different complexity level tests with multiple-choice answers developed in all ISE disciplines had been assessed. Tests number depended on ratio of training program. Students answered 100 questions of computer-based testing. The following scale of grades was used in the questionnaire: 0-57 – unsatisfactory, 58-75 – satisfactory, 76-85 – good, 86-100 – excellent. There were no «unsatisfactory» grades in results.

KSMA administration understands difficulties of medical education system reorganization and searches for the ways to answer the question: whether to continue ISE training or not? Without understanding of this system and its transparency for teachers and students, we cannot reach main results that are expected from us. We understand that the innovations implementation will not soon bring satisfaction to teachers but we have to give generation of young doctors strong basis that can help them to enter the world community on equal terms.

ABSTRACT NUMBER: P08

Role Of Medical Museum In Imparting Pathology Knowledge Among Medical Students In Basic Medical Sciences

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Introduction

Compared to didactic lectures, teaching the skill of pathology through other forms of instruction is often lacking in medical education. Other innovative forms of imparting pathology education, such as learning through medical museum sessions, is necessary in the advancing trend of the medical curriculum.

Objectives

To organize better educative sessions for students in learning pathology, in addition to the usual didactic lectures. To encourage the students to utilize the medical museum facility. To enhance small group interactive sessions in the form of case discussions. The ultimate goal of the study was to provide options for students and teachers to use fixed learning modules corresponding to key topics in pathology, which would encourage the students to use the medical museum.

Design

Through a medical museum rotation module, we developed a compulsory rotation posting for medical students in semesters 3 and 4. The module consisted of discussing fixed learning modules, and practical oriented case discussions during their rotations sessions. Some sessions involved facilitation by lecturers. To evaluate the course's effect on the students skills, we performed a qualitative evaluation of the students during their rotations.

Method

During the year 2007, a total of four rotation postings consisting of 720 students were done. The students were invited to take part in an evaluation exercise consisting of basic survey questions. Question areas included the most memorable experience, the course's influence on the student-student and teacher-student relationship, usefulness during phase 1 years of medical school, and skills which would help them in phase 2. The anonymous data was analyzed qualitatively.

Results

A significant number of students responded positively for three important themes: (1) the medical museum positively influenced more enthusiasm in learning pathology (84%), (2) both museum exercises and a clinico-pathological discussion in the form of case study were necessary to achieve those skills (76%), and (3) the pathology rotation sessions led to a sense of personal development as a student (71%). Other parameters, such as the course's influence on the student-student and teacher-student relationship, usefulness during phase 1 years of medical school, and skills which would help them in phase 2, were all rated above 80%. In addition, students responded that the training in observation and description skills they learned were unique.

Conclusion

An interactive discussion with the students revealed that they were interested and quite enthusiastic to gain knowledge by this module, which depicted the picture, gross and microscopic with some salient text notes, and they felt that this would also be useful for them in tackling the examinations, and in future, during their clinical exposure.

This collaboration between the Department of Pathology and the Medical Museum is important to impart a structured module that facilitates observational skills used in successful self-guided learning, and better understanding of pathology.

ABSTRACT NUMBER: P09

The Reliability And Predictive Validity Of A Structured Oral Examination

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Introduction

The viva (oral examination) has long been a traditional method of assessment in health professions education. Critics of oral examinations claim that it may have low reliability and validity. Suggestions to improve the reliability and validity of oral examinations include structuring of the oral examinations on clinical scenarios, also known as the Structured Oral Examination (SOE) or "OSCE-viva". The objective of this study was to evaluate the internal consistency and predictive validity of a semi-structured oral examination.

Method

The sample population (n=14) comprised students undergoing a certificate course in Disaster Management and Mitigation at the Faculty of Medicine, Colombo. Students faced an end-of-course semi-structured oral examination where each student was assessed by 4 panels of examiners. The marks were analysed for intrinsic reliability and were correlated with average marks from previous written assignments, which are considered a more traditional assessment tool.

Results

Internal consistency reliability (Cronbach's co-efficient alpha) between the examination panels was 0.676. Pearson's correlation (R) between the aggregates of the assignment marks and final assessment marks was 0.51. Thus the Coefficient of Determination (R^2) is 0.25.

Conclusion

The intrinsic reliability between the assessment panels was satisfactory. This confirms that structuring an oral examination improves the reliability. The weak correlation (R^2=0.25) with a written assignment demonstrates the capacity of structured oral examination to measure competencies not assessed by written assessment tools.

ABSTRACT NUMBER: P10

Knowledge And Attitude Toward Evidence – Based Medicine In Iranian Physicians

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Introduction

Evidence-Based Medicine (EBM) means integrating the best evidence with clinical expertise and patient values. Studies showed different results on awareness and view of physicians toward EBM and little is known about it in the Iranian physicians. We conducted a survey to determine their knowledge and attitude towards Evidence-Based Medicine, and identify barriers in this way.

Method and Materials

In this cross-sectional study on 72 general practitioners, specialists, sub specialists and also residents in different medical specialties practicing in Isfahan, Iran, a self-administered questionnaires consisting of 52 questions on demographic characteristics, attitude towards EBM, barriers to practicing EBM, awareness of technical terms and relevant information resources were distributed at their offices. Data was analyzed by descriptive statistics using SPSS 13. Survey is ongoing.

Results

Response rate was 87.35% (62/71). The questionnaires distributed among 21 general practitioners, 26 specialists, and 15 residents; 45.2% of participants never heard of the term "Evidence-Based Medicine" before. The majority of participants reported high use of traditional sources: 82.3% clinical experiences and 90.3% textbooks; 45.2% reported using review and original articles. The major perceived barrier to practicing Evidence- Based Medicine was lack of EBM training course (64.5%), followed by lack of personal time (48.4%) and lack of research skills (48.4%).Awareness of relevant databases were 62.9% for Pubmed and 21% for Cochrane and Embase; 19.4% used Pubmed in their clinical decision making. Awareness of technical terms like Meta-analysis, Randomized clinical trial, Number need to treat and Sensitivity & specificity was 40.3%, 53.2%, 22.6% and 71% respectively.

Conclusion

Only half of the participants heard about EBM and most of them did not use new evidence in relevant databases. Their Awareness of technical terms and research methodology was little too. Conducting EBM training course can promote their knowledge and attitude to practice Evidence-Based Medicine.

ABSTRACT NUMBER: P11

Investigating Medical Students' Perceptions of Health and Illness Using the Draw-A-Person Test

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Background
Traditionally, health is equated to the absence of disease. Such a narrow scope on health and disease limited our understanding of wellbeing. With the increasing need to emphasise on health promotion and disease prevention, healthcare professionals are beginning to incorporate a holistic view of health in sound medical application. While much effort is placed in preparing medical students for this comprehensive understanding of health and illness, little is known about students' perception of health and illness. Thus, a study was designed with the aim to address the aforementioned.

Materials and Method
A drawing task based on Chambers[2] was designed, in which 182 first year preclinical students were requested to draw a healthy and a sick person on papers provided in-class. A checklist was developed and reviewed by experts. Pilot study was conducted, and inter-rater reliability was established.

Results
The drawings were analysed with the overt features scored on a frequency count basis. In 84% of the healthy person drawings, physical health was emphasized (e.g. free from illness, fit or muscular, hygienic) followed by psychological well-being, e.g. happy (80%), stress free (79%). Few have included properties on social well-being, e.g. active lifestyle (31%), friendship (7%). In the sick person drawings, the person was depicted as diseased (56%), bed-ridden (34%), disabled (10%) or hospitalized (20%). With regards to the psychological and social properties, the person was depicted as sad (79%), lives an unhealthy lifestyle (20%) or being isolated in an indoor setting (48%). Even when the person was drawn in an outdoor setting, the weather was gloomy.

Conclusion
The finding suggested that medical students were able to view health and illness from the physical (e.g. fit, strong), psychological (e.g. worried, happy) and social (e.g. isolated, outgoing) dimensions although stronger emphasis was placed on the physical condition. More importantly, this task affords students an opportunity to investigate their own understanding of the concepts of health and illness.

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ABSTRACT NUMBER: P12

Assessment Of Different Aspects Of Teachers Who Are Teaching In Clinical Skills Department : Medical Students, Perspective In 2006

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Background
Clinical pedagogy is an intricate process which can be influenced by various variables, and the teacher's role is an essential element. The purpose of this study is to assess different aspects of teachers who are teaching in clinical skills department regarding from medical students' perspective.

Material and Method
The design of this research is descriptive. A questionnaire was used to gather data, with 10 questions, and Likert scale. The statistical analysis was done through descriptive statistical methods.

Results
This findings showed it was 92.10 ± 12.99, in the case of the teachers' on time presence in class, and spending time, was 87.02 ± 18.33, in the case of 'ideal class management and teaching sessions was 87.75 ± 15.85, in the case of maintaining appropriate relationships with participants, was 88.92 ± 15.51, in the case of' effective use of methods and pedagogical which match their aims and learning scope, was 87.68 ± 16.25, in the case of making a correlation between theory and practice in pedagogical issues', was 87.64 ± 15.69, in the case of' giving a summary at the end of the work in workshop,' was 84.93 ± 58.23, in the case of' their ability and academic dominance in their specific field of study, was 89.36 ± 15.39, their fluency was 87.74 ± 17.31, and finally their average, from student's perspectives, was 18.66 ± 1.51 out of 20.

Discussion
Using students' opinion in pedagogical planning, providing facilities, and using realia in teaching clinical skills are issues that can be affection in improving the quality of clinical pedagogy.

ABSTRACT NUMBER: P13

Assessment Clinical Skills Department Regarding Different Aspects From Medical Student's Perspective In 2006

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Background
The necessity of the foundation of the Clinical Skills Department provides pedagogical environment for medical students to acquire professional issues in medicine. The aim of this study is assessment clinical skills department regarding different aspects from medical students' perspective in 2006.

Material and Method

The design of this study was descriptive cross-sectional, and a questionnaire which had 16 questions regarding different aspects of medical students' satisfaction and Likert scale. The statistical analysis was done through descriptive statistical methods.

Results

The results of the study show that the students' satisfaction of teachers' observance of disciplinary actions, and their attitudes towards students were 80 ± 14.46. In the case of importance of holding theoretical class rooms and their being proportionate to practical activities, it was 77.61 ± 17.99. Their satisfaction from pedagogical experts was 82.20 ± 15.83, class times was 67.59 ± 17.11, and in the case of facilities, it was 75.23 ± 18.22.

Discussion

The results of this study show student's satisfaction of clinical skills department Tabriz in Iran. This can be assigned to the practicality of the pedagogies of this Department, and the perceived benefits of these pedagogies to the students. The lowness of students' satisfaction from class times was 67.5 ± 17.11. It was basically related to students' opinions about the holding of classes in the afternoon, and in the case of a facility which was 75.23 ± 18.22, in comparison to other examined cases.

ABSTRACT NUMBER: P14

Is AIR Good For Learners' Inspiration? : Fresh, Focused Feedback On Online Assigned Independent Reading topic 'Cigarette Smoking And Cardiovascular Disease'

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Background

'Cigarette Smoking and Cardiovascular Disease' was the topic for Assigned Independent Reading (AIR) module in the Cardiovascular System Course for M2/07 medical students of IMU. *Introduction:* Could eating in a smoky restaurant precipitate an acute myocardial infarction in a non-smoker? There is considerable amount of epidemiological literature and laboratory data on the mechanisms by which relatively small exposures to toxins in tobacco smoke seem to cause unexpectedly large increases in the risk of acute cardiovascular disease. *Scenario:* A retired physician still smokes 5 cigarettes a day despite having a coronary artery disease. His wife, a diabetic, is now starting to experience chest pains. The couple live in a small apartment. *Question:* Discuss the impact of cigarette smoking and secondhand smoke on the cardiovascular health of the couple. *References:* Four (one online and three journal articles) were given.

Method

On report submission, the students were to answer online the 3 part-questionnaire for AIR evaluation. The responses were copied and pasted onto a word file while grading online the individual reports.

Results

Of 197 students, 91 responded. Noteworthy responses:

a. Most liked about AIR: none (1/91); learn more about smoking hazards (32/91); a chance to read materials outside curriculum/lectures (11/91) and instillation of interest in reading journals (2/91); being online (2/91); need to understand the articles in depth for extracting important points, and the chance to express/write an essay/summary (3/91).

b. Least liked about AIR: none (22/91); the 300-word limit (34/91); topic too broad (6/91); no proper guidelines (5/91).

c. What to improve on AIR: none (25/91), it is already good the way it is (3/91); allow more words (30/91); give: more references (10/91), guidance (9/91), feedback (3/91), more specific question (3/91), choice of topics (2/91), and more books/journals in the library as references (2/91).

Conclusions

The AIR was well received by at least 90/197 of students, and there always will be a room for improvement.

ABSTRACT NUMBER: P15

Interviewer, Observer And Tutor Assessment Of Simulated Patient Performance And Correlation With Self Assessment

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Introduction

Universally reviewing and monitoring of all teaching and learning (T/L) activities is required for improvement of educational programmes. Regular training and review of performance of simulated patients used in clinical skills training programmes is essential to ensure effective student learning. It was thought important to consider the perceptions of simulated patients (SPs) with regard to their own performance, in addition to those of tutors and students, because self assessment process in itself is recognized as an important component in education.

Objective

The objective of this study was to compare self-assessment ratings of SPs with regard to role play and provision of feedback with those of tutors and students in selected clinical skills training programmes, with a view to understanding the relationship between diverse perceptions.

Method

The video recordings of 9 SPs during their role play in haematology and gastrointestinal module learning sessions were used for the study. They were assessed by interviewer students, observer students and tutors, with regard to authenticity of role play and quality of feedback to students using a validated instrument designed by the Maastricht University (MaSP). In addition the SPs made a self assessment of their individual performance using the same instrument.

Results

The participants comprised of 63 student interviewers (I), 762 peers (P),54 tutors (T) and 9 SPs. The mean scores and standard deviations for the four groups on the authenticity were: I – 3.09 (0.50); P – 3.07 (0.42); T – 3.33 (0.48); SP – 2.86 (0.30). The ratings of the tutors were significantly higher than the remaining three groups. In terms of consistency in scoring, all participant were fairly consistent, and the coefficient of variation ranged between 10.18 -15.12. As for the provision of feed back, the highest rating was given by the simulated patients 3.15 (0.56) followed by tutor 3.02 (0.33), student interviewer 3.01 (0.33), and peer 2.98 (0.30). However the differences were not significant. The scorings on provision of feedback were also fairly consistent (coefficient of variation range was 10.87 to 16.17).

Conclusion

There is a good correlation between students, tutors and self assessments with regard to authenticity of role play and provision of feedback. However it is important to take note of the tendency for SPs to underrate their authenticity at role play and overrate their student feedback procedure which should be addressed during SP training.

ABSTRACT NUMBER: P16

The Education Environment: From DREEM To DREAM

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Medical Educators are becoming increasingly aware of the importance of the education environment as a significant contributor towards successful learning outcomes. The DREEM (Dundee Ready Education Environment Measure)[1] has been tested worldwide[2,3,4,5,] with results indicating that Asian students gave lower scores compared with those in the developed world. The IMU-REEM is a slightly modified version of the DREEM ('Semester' in place of 'Year') and has been used since 2005 for Medical[4,6], Pharmacy and Nursing students. Medical students if the clinical school appear to be more satisfied compared with the preclinical students, although scores are still lower than those for UK/Ireland schools. A striking observation is that students the world over give the lowest score to the 'Social self-perception' component just making it to 'Not too bad'. IMU surveys (2005-2007) have also shown that Semester 2 scores have been the lowest of the five semesters for the last two surveys[4, 6]. 'Academic self-perception' scores for both preclinical and clinical medical students are also just making it above 50%[6]. These findings are a bit worrying.

Table 1: IMU-REEM scores (mean + SD) for students' perceptions for the five domains

	Medical (preclinical) (3 surveys; 15 cohorts)	Medical (clinical) (2007)[7]	Pharmacy (2 surveys; 12 cohorts)	Nursing (2 surveys; 3 cohorts)
..of Learning (max=200)	28.89 ± 1.25 (60%)	62%	28.78 ± 1.16 (60%)	30.29 ± 2.03 (63%)
..of Teachers (max= 48)	27.06 + 1.3 (61.2%)	62.7%	26.73 ± 0.91 (60.8%)	27.99 + 1.45 (63.6%)
Academic self-perception (max= 32)	18.12 ± 1.81 (**58.6%**)	**59.5%**	17.49 ± 1.28 (**54.7%**)	18.72 ± 1.48 (**58.5%**)
..of Atmosphere (max= 48)	28.12 ± 1.61 (58.6%)	61.5%	27.68 ± 1.68 (57.7%)	28.16 ± 2.67 (58.7%)
Social self-perception	16.85 ± 0.79 (60.1%)	**58.4%**	15.00 ± 1.11 (**56.8%**)	15.63 + 0.95 (**55.8%**)
TOTAL	119.05 ± 5.14 (59.5%)	61.2%	116.57 ± 4.83 (53.3%)	120.79 ± 6.5 (60.4%)

Do we stop at DREEM? Are we not probing further to identify the causes of the lower scores in certain areas / semesters? A follow-up of a cohort of students (M2/03) has identified that they were satisfied with the physical environment, but the late lecture hours in Semester 5 and (sometimes) odd sequencing (due to staff availability), were their major concerns. Other studies have identified aspects like information overload, shortage of time, inadequate feedback regarding performance and poor quality of interpersonal relationships[7]. It is high time that an instrument to dissect the causes of dissatisfaction with the learning environment, addressing these concerns be developed. It can be called the DREAM (Defining Requirements of Environment and Active Monitoring).

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Major IMU Student's Concern And Fear During Transferring From Preclinical To Clinical Phase

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Introduction

The International Medical University (IMU) medical program comprises 2 phases. After completing 2 $1/2$ years of Phase 1 pre-clinical training (semesters 1-5) the students proceed to Phase 2, the clinical training phase (semesters 6-10). IMU Seremban Campus is a relatively new environment for the students transferring from the Kuala Lumpur Bukit Jalil Campus. Transition from phase 1 to 2 is a very critical period especially during the first posting in semester 6 where they have to adjust to a new environment, meeting new people and applying new approaches in their learning. Failure to adapt to this new environment may affect their academic performance. So far there is no data to indicate any serious concerns among students during the transition period (after semester 5) and beginning of the semester 6 posting.

Aim

The objective of this study is to identify the major concerns from the students' own perception and their major fear during the transition period from phase 1 to 2.

Material and method

A cross-sectional survey was conducted in June 2007 for a duration of one month. All semester 6 students were recruited into this survey. Self reported questionnaire was used to collect data from the subjects. The student's concern was categorized into 3 major domains which are: academic, social and psychological fears. The questionnaire was distributed to all the semester 6 students and they were given 4 weeks to complete the questionnaire.

Results

A total of 83 subjects took part in this survey. Table 1 shows the students' own perception of their academic domains. Feeling incompetent (81.9%), perceived clinical phase being difficult (88.0%) and unable to manage time well (90.4%) are common complaints among the majority of them. These findings are statistically significant (p<0.05). Table 2 shows the perception of their social life. The majority of them feel that they have good social support from friends and having good accommodation. A minority has financial difficulties and transport problems however statistically this is not significant. Five major fears that the students encountered are illustrated in Diagram 1. The major fears are: Fear of handling patient and fear of harming patient (Score 5), followed by fear of making mistakes, fright during case presentation, inadequate physical strength and contracting infectious disease (Score 4), and lastly, fear of own safety (score 3).

Conclusion

This survey demonstrated that students transferring from Phase 1 to Phase 2 do have major concerns and psychological fear. Clinical incompetence, lack of time management skill and perceiving clinical learning is difficult are their major concerns which further lead to psychological distress (?stress) such as fear of handling patients, fear of making mistakes and harming patients. However most of them feel that the social support is good. These issues need to be addressed in the future. Among the recommendations are having an early orientation in phase 1, strengthen tutor-tutee system and active involvement by student's representative council in disseminating accurate information to them before they come to phase 2.

Table 1: Student's own perception on their academic domain.

Academic domain	Yes	No	P value
Feels knowledgeable	40 (48.2%)	43 (51.8%)	0.85
Feels confident	38 (45.8%)	45 (54.2%)	0.45
Competent in clinical skills	15 (18.1%)	68 (81.9%)	0.041
Feels that the clinical examination is tough	74 (88.0%)	9 (10.8%)	0.025
Feels that they can cope with all learning activities	40 (48.2%)	43 (51.8%)	0.34
Feels they are able to manage time well	8 (9.6%)	75 (90.4%)	0.018

Table 2: Student's own perception on their social domain

Social Aspect	Yes	No	P value
Having financial difficulties	19 (22.9%)	64 (77.1%)	0.65
Having good social support from friends	74 (89.2%)	9 (10.8%)	0.025
Having own transport	67 (80.7%)	16 (19.3%)	0.73
Having good accommodation	75 (90.4%)	8 (9.6%)	0.019
Happy about the food in Seremban	45 (54.2%)	38 (45.8%)	0.86
Worried about the safety and security	25 (30.1%)	58 (69.9%)	0.57

Diagram 1: Cobweb plots showing the score for psychological fear.
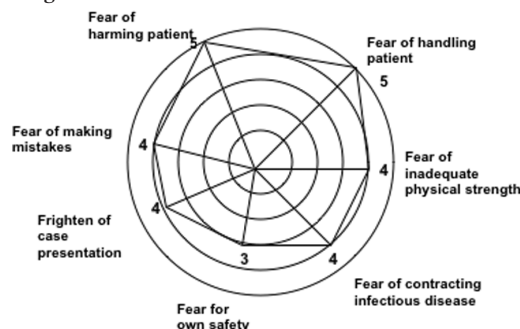
Objective Structured Clinical Examinations: A Tool To Assess Surface Anatomy

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Introduction

Surface anatomy (SA) is an important component in anatomy as it will form the basis of appreciation of physical signs in

clinical examinations. Objective Structured Clinical Examinations (OSCE) is a performance based examination which is used to assess the clinical skills and competence. As written forms of assessments may not test the skills in SA adequately, OSCEs could be used as a tool of assessing these skills. Assessing skills in SA at OSCE promotes the application of basic science knowledge in clinical examinations.

Objective

The objective of this study was to evaluate the degree of emphasis and the weightage given to SA in OSCEs at the International Medical University (IMU).

Method

Eighty four OSCEs on physical examination of the end of semester assessments of two student cohorts were analyzed. The degree of emphasis was measured by the presence of a SA component expressed as a percentage in OSCE questions. Weightage was assessed by the score allocated to the SA component on a 0 to 10 marking scale.

Results

Among the 84 OSCE questions analysed, in 66 (78%) SA skills have been assessed. In Cardiovascular system (CVS) where the representation is most (25), emphasis was 88%. The average weightage given to the SA component was 1.6. Weightage in CVS was highest (2.3) A brief comparison between the emphasis on SA and weightage shows that there is a moderate positive correlation ($r = 0.497$) between them.

Discussion

The results show that the extent to which the IMU uses OSCE as a testing tool of skills in SA is more than 75%. Comparison is not possible as similar studies have not been reported in the literature. The degree of emphasis is more in some system courses than in the others. This should be expected as the skills required in SA vary with the system course. Results also show that the weightage given has some positive correlation with the degree of emphasis.

A Comparative Study Of Nursing Staff And Student's Views about Effective Factors In Their Interaction And Its Impact On The Affiliated Hospital Of Isfahan University Of Medical Sciences

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Introduction

Clinical education is a major component of the undergraduate nursing curriculum. Nursing staff, is a factor that affects nursing students' perception of their clinical learning environment. Relationship between student and staff is the most important factor in learning the practical skills.

This study was done to determine and compare nursing staff and student's views about effective factors in interrelationship.

Method

This study is a descriptive – analytic study in which the views of nursing staff and students in the hospitals affiliated to Isfahan university of medical sciences were investigated.

Results

The findings of the study revealed that from the point of view of the quality, head nurses' management has the biggest effect on interaction between the nursing staff and the students. The staff view job satisfaction as the most effective. The mutual respect and the staff's reply to students' questions ranked next and third from the perspective of both the students and the staff. As for the impact of this relationship, students belief that feeling comfortable in asking questions from the staff ranked first. The staff believed that students' learning ranked first.

Discussion

The results of this study show that a proper environment for practical nursing skills and a head nurse manager who to sets a proper educational environment supporting the students should receive priority. Clinical staff are expected to act as role models. Whenever staff get the students involved as members of the team, the students' sense of competence increases. A good relationship between nursing staff and students can cause the students to feel relaxed and this plays an important role in their clinical education. Finally this study concluded that a supportive relationship based on cooperation between the staff and the students is essential in better learning by the students.

Analysis Of The Course Evaluation Report Of The Nursing Students: A Pilot Study

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Background

The student rating of the course modules is crucially important for any student-centered institution, as students are the principal group of stakeholders in health sciences. However, the rating in general and the student rating in particular has vast potential sources of errors. Two research questions, thus, arise: (i) how was the construct validity of questionnaire items? and (ii) if required, how can the student evaluation questionnaire be improved? Therefore, a study was conducted with the twofold objectives: (i) to investigate construct validity of the student ratings; and (ii) to suggest improvements to the questionnaire.

Method

A documentary study was performed using the aggregate data tabled at a faculty meeting. The aggregated data was extracted from a 24-item questionnaire designed for self-completion

using a 6-point scale (1 = strongly disagree to 6 = strongly agree). Respondents were nursing students, the N1/06 cohort, for the five consecutive modules of semester-3 at the International Medical University.

"Exploratory Factor analysis" was performed and the factor scores were estimated. For the factor loads, a *"principal component analysis"* with *"oblimin rotation"* was attempted.

Results

The expected number was 115 questionnaires spread over 5 consecutive courses. The response rate, on average, was 95.65%. Multicollinearity was obvious among the items. The results of the *Factor analysis with oblimin rotation* showed four factors with *Eigen* values > 1. The Scree Plot supported this finding. The first factor explained 59% of the variability and reflected the learning resources of the course. The second factor explained 25% of the variability and related to the outcome of the course. The third factor consisted of the structure of the course and explained 9% of the variability. The fourth factor reflected feedback to the assessment of course and explained 7% of the variability.

Conclusion

The present study indicates the redundant items. The items in the questionnaire are suggested to be regrouped in relation to the resultant four factor components. Further research in this area is recommended.

ABSTRACT NUMBER: P21

Outcome Based Assessment Of Semester Exams- An Ongoing Process In The International Medical University

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Background

IMU has an eight-outcome-based curriculum which is assessed in both formative and summative forms. Various learning activities like Problem based learning (PBL) and Task based learning (TBL) assess the eight outcomes in a formative manner. The summative assessment of outcomes for both semester 3 and semester 5 exams was initiated in Dec 2006 and has become a regular ongoing process. The first part of outcomes assessed was presented in the IMEC 2007.

Objectives

To further evaluate and analyze the outcomes addressed in Semester 3 and Semester 5 exams in 2007 and 2008 and to diagnose any improvement or persistent deficiencies in addressing the outcomes.

Material and Method

Semester 3 and Semester 5 exams conducted for 6 cohorts of students were analyzed. There were 3 cohorts each for Semester 3 and Semester 5. Each cohort comprised an average strength of 180 students. The various assessment methods that were employed for the end of semester exams

like short answer questions (SAQ), objectively structured practical examination (OSPE), objectively structured clinical examination (OSCE) and problem cases (old format) and one best answer (OBA), extended matching questions (EMQ), modified essay questions (MEQ), OSPE and OSCE (new format) were individually analyzed to learn about the eight IMU outcomes addressed. SPSS package was used for analysis of each individual question. Data was analysed and conclusions were drawn.

Results

In the later half of basic medical sciences programme, 4 out of the 8 outcomes are addressed or reflected in a range of 50% to 90% in theory questions. Higher outcomes like critical thinking, self directed learning, professional and personal development (PPD) are seen reflected in less than 30%. OSCE is a better platform that addresses most of the outcomes including PPD.

Conclusion

There has been a considerable improvement in the recent cohort examinations when compared to 2006 examinations. Further remedial measures are required in near future.

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ABSTRACT NUMBER: P22

Inter Evaluator Variability in Standard Setting For IMU's Basic Medical Sciences Examinations – A Comparison Of Two Standard Setting Methods

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Background

Various standard setting methods are available for different formats of examination. In 2007, the IMU adopted a new system of examination assessment, comprising of one best answer (OBA), short answer questions (SAQ) and objective structured practical examination (OSPE) for Semester 2 exams, In Semester 3, extended matching questions (EMQ) and OSCE (a stand alone procedure) were added and SAQ's were replaced with modified essay questions (MEQ). With such varied assessment tools, an acceptable, robust standard setting was a necessity. The Nedelsky and modified Angoff methods were chosen.

Objectives

To evaluate the Nedelsky and modified Angoff standard setting applied to the end of Semester exams and observe inter evaluator variability among judges in order to evolve an acceptable standard.

Material and method

A panel of judges consisting of experienced content experts from various disciplines was formed for the standard setting exercise for both the Semester 2 and Semester 3 exams. The panel carried out the deliberations for standard setting Nedelsky method for OBA and EMQ format of exams and modified Angoff method for SAQ, MEQ and OSPE. The final mark for each of the items was by consensus and was reached after deliberations of acceptable standard among content experts. The inter variability for the different questions set were tabulated. SSP package was used for analysis and inference of results.

Results

The standard setting inter variability was within acceptable limits for the majority of questions (> 80 %), a standard deviation of not more than 1. Certain questions in both OBA and OSPE had more inter evaluator variability than the rest.

Conclusion

The results of the Semester 2 exams have reflected on the standard setting methods and corrective measures to be taken in future. The results of Semester 3 exams in near future may draw our attention for similar remedial measures. In-depth analysis of more cohorts in 2008 and 2009 would help us make the standard setting a more accurate and meaningful exercise.

ABSTRACT NUMBER: P23

'Standardised Patients' Global Ratings Of Student Competence In Medication Counseling: How Do They Compare With Academic Assessment?

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Introduction

Teaching and assessment using standardized patients (SP') at preclinical level is commonplace in IMU. To date, the SP has simply been "vehicles" for summative objective structured clinical examination (or OSCE). In a selective in pharmacotherapy with a focus on patient safety we hypothesized that SP' may be appropriate to assess counseling patients on their disease and medication.

Objective

To determine whether global ratings by SP' are valid to be used within a summative assessment of medical students.

Methodology

Forty five medical students beginning their third year who opted to follow a selective on pharmacotherapy were included in the study. The simulated scenario was stable angina and the drug was glyceryltrinitrate. SP was given basic information on GTN and sufficient time to read understands and clear their doubts from the academic staff prior to the OCSE. Five academics assigned a score out of 20 on a pre-structured assessment form. Five SP' made a global assessment of communicative skills and perceived ability to promote compliance and assigned a score out of 20. A retrospective feedback of criteria used by SP was undertaken.

Main outcome measures

Agreement between the academic' assessments and SP assessment was determined using Pearson Correlation coefficient and the Student t test.

Results

There was a weak but significant correlation between examiners' (r = 0.34, P <0.025) and SP' scores. The coefficient of variance of academics was 14.87% and that of SP was 15.30%. However there was a significant (P <0.002) difference between the mean score of examiners' (15.6 ± 2.32) and SP' (14.4 ± 2.20). The SP' ratings tended to be lower. From the retrospective feedback it seemed that the SP had higher expectation for students to perform as doctors rather than third year medical students. The SP' valued their role as assessors.

Conclusions

SP' assessment seems to be a valid measure of multisource evaluation but the two groups of assessors could not be used interchangeably.

ABSTRACT NUMBER: P24

Evidence Based Medicine; Implementation In Preclinical Years

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Background

Evidence based medicines (EBM) practices in pharmacotherapy are essential for aspiring doctors. Phase I students at International Medical University Malaysia thus far have not had formal training on this. The effectiveness of incorporating EBM was tested as a pilot project in four week selective in pharmacotherapy offered to third year medical students This paper describes the development of the educational curriculum and evaluates its success.

Method

The objectives of the selective were namely to develop relevant skills in question framing using PICO, database searching, critically appraising the validity and effectiveness of research findings as well as applying the results to specific needs of the patient. Over the first two weeks students were given lectures and hands on training on EBM and the "P – drug concept. Each group was given one of five clinical scenarios and three weeks to apply the new knowledge acquired. In the fourth week the expected outcome was assessed by two content experts in a group presentation and by MCQ (OBA). The students were asked to provide anonymous feedback.

Results

The course evaluation, based on completed responses to a questionnaire survey, showed that of the participants felt that EBM was essential in their training. Almost all participants who took the selective (100%) felt that the course gave them skills that were useful in clinical practice and gained the confidence to find and appraise literature. The students did

well in the EBM presentation with marks ranging between 70 – 90%. The feedback ratings for all components were around 8.

Conclusion

It is important to provide a tailor-made learning experience suitable for the target audience when delivering EBM teaching. By using the educational strategies described in this paper, EBM teaching can be effectively incorporated as a learning experience that is enjoyable and accepted by third year medical students.

ABSTRACT NUMBER: P25

E-Resources For Self-Directed Learning In A PBL Curriculum

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Background

Online Learning Environment (OLE) is extremely effective for learning as it enables access to a wide and diverse range of learning and communication facilities. IMU provides traditional and e-resources to enhance SDL, and include, among others, AIR, SILOS, and OLIS. As more institutions of higher learning encompass e-resources to complement traditional learning for SDL, it becomes increasingly important to determine learners' perception with respect to this. This study aims to assess students' perception of e-learning in relation to their pre-university education, appreciation of SDL and IMU resources, and gender.

Materials and /Method

Study population

Semester	Student Participation	
	No.	Rate
1	181	92%
2	162	93%
3	144	96%
4	122	80%
5	99	83%
Total	708	

Questionnaire Addressed student particulars, SDL traits, and IMU learning resources.

Data analysis included comparison studies for appreciation of SDL and IMU resources, and ANOVA for statistically significant differences ($p < 0.05$).

Results

Preference for IMU resources

Overall preference, in descending order was printed materials, library, clinical skills, communication with peers and subject matter experts, museum, laboratory, PBL, SILOS, OLIS, and AIR.

Appreciation of PBL, SDL, and IMU resources

Correlations between e-resources and appreciation of PBL were positive and significant at 0.01 level.

Correlations between e-resources and appreciation of SDL were positive and significant at 0.01 level.

Correlations between e-resources and appreciation of IMU resources were positive and significant at 0.01 level.

E-resources, pre-university education and gender

Appreciation was greatest for SILOS, followed by OLIS, and AIR, irrespective of pre-university education (A-levels, STPM, SAM, and others). ANOVA showed no significant differences.

Female respondents scored higher than males for e-resources, with significant differences.

Conclusion

Provision of different learning resources at IMU is to enhance development of SDL, to encompass different attributes of learners, and to ensure achievement of their educational needs. Although e-resources were perceived as less beneficial for SDL compared to traditional resources, learners highly appreciating PBL, SDL and IMU resources exhibited a greater appreciation of e-resources with a positive and significant correlation. This indicates the importance of planning e-resources in relation to learners' maturity, self-direction, and IT skills. Female respondents scoring higher than males for e-resources needs further analysis.

ABSTRACT NUMBER: P26

Effect Of "Educational Games" On Learning Process

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Background

To be successful in higher education one must "learn to learn". Understanding the subject, critical thinking, analyzing the issues and communication skills form the essential components of any ideal learning process. Curriculum packed with lectures and 'rote learning' hinder the student from acquiring these skills. However making the student as active participant rather than passive listener (in lectures) can convert a student into a life long learner. Hence a prospective study was undertaken to assess the effect of active learning by incorporating "educational games" during tutorials in physiology for a group of pharmacy students.

Subjects and Method

Fifty Four students (18-23 years of age) of Year 1, Semester I of the College of Pharmacy, AIMST University are the subjects of this study. All the 54 students were taught various systems in physiology by power point presentations during lecture hours.

For tutorials they were divided into two groups (A and B) of 27 in each. Group A was subjected to the traditional tutorials

of having question / answer session and clarifying student doubts. Group B was exposed to "Educational Games" like puzzles, scrambles, rearrangement of facts etc. At the end of the semester all the students were subjected to an examination (same paper) having 20 multiple choice questions of graded difficulty.

Result

Analysis of results indicated that the scores obtained by Group B (who were subjected to 'educational games') students were significantly higher (P<0.05).

Conclusion

Our data suggests that exposing the students to 'Educational Games' during tutorial sessions would improve their understanding of the facts and figures.