the basis of specialty. Concerning practical credits, the majority of the students, because of several reasons including inappropriateness of clinical training to educational objectives, improper planning in wards, using lecturers with little experience, and shortage of facilities and equipments in wards, were not satisfied with the trend. The most important solutions offered were, unifying theoretical and clinical classes, contracting basic sciences, using modern methods for teaching, presenting material applicably, equipping centers for students, and evaluating students in terms of performance and not on the basis of assignment at the end of training. Half the students were not satisfied with physical surroundings because of unprincipled building and ventilation problems. The majority of students referred to improper usage of training material and its shortage. On the issue of information provision, the majority of the students were not satisfied with libraries and internet and they stated that the number of reference books in libraries was low and access to internet for upto-date information was not possible for most of the students. Most of the students believed that a student could play an important role concerning training, but officials did not like being criticized, that's why students were not permitted to be involved.

**Conclusion.** Considering the existing problems in theoretical and practical training, it seems that, in order to promote the level of training, it is necessary for officials to cooperate with students and compile training programs which will be capable of meeting trainee's need in practical field.

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**Methods.** The subjects were 412 grade 1 to 3 students in medical, dentistry and pharmaceutics fields, in Mashad University of Medical Sciences, in 1999, which were randomly selected. Foreign students were excluded. Students' learning and study strategies were assessed by a self – report questionnaire, LASSI, developed by Weinstein et al (1987), prepared in Farsi –version for use in this study. The students' personal characteristics were collected from their educational dossiers, and information about semester scores was obtained from final report cards. The students learning and study strategies were also compared with the resulting profile to those of American college students.

**Results.** There were not any significant differences in mean of learning and study strategies scores based upon students year of study, field of study and marital status. Females obtained higher scores on Attitude (p=. 000) and males on Selecting Main Idea (p=. 025). Students with history of at least one semester drop out obtained lower scores on Anxiety (p=. 000), Information Processing (p=. 005), Selecting Main Idea (p=. 033), Self-Testing (p=. 034) and Test Strategies (p=. 000). Students' performance on Test Strategies, Concentration and control of Anxiety was excellent and on Selecting Main Idea was poor.

**Conclusion.** Correction of students' learning and study strategies is necessary, especially for students with history of drop out. In order to use LASSI as an instrument for detecting the college students learning problems, normalization of it for Iranian students is recommended.

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# Relation between students' use of learning and study strategies and their academic and personal characteristics in Mashad University of Medical Sciences, 1999

# Khadivzadeh T, Drakhshan A, Saif AA, Valae N

**Introduction.** As, the importance of learning and study strategies in fostering academic achievement, which has generated a demand for assessing these behavior and because of the lack of information about the strategies use among college students, this study was determined to explore the learning and study strategies of medical, dentistry and pharmaceutics college students of Mashad University of Medical Sciences, and determine its relating factors.

# The survey on information of medical students (Interns) about infectious diseases (Tuberclosis, Brucella, Meningitis, Dysentry)

## Khodabakhshi B, Golalipour MJ, Vaghari Gh

**Introduction.** Evaluation of medical students and preparing them for suitable diagnosis and treatment of diseases are the target of medical education with regard to importance of adjustment of educational contents with community needs and high prevalence of infectious disease. Therefore we decided to measure information of medical student (Intern) in 5th Azar hospital about diagnosis, treatment and prevention of four prevalent infectiouse diseases (Tuberculosis, Brucellosis, Meningitis, Dysentry).

Methods. It was a discripitive study with using a

multiple-choice questionair. It meausured knowaledge about diagnosis, treatment, prevention of four prevalent infectious disease, on 44 medical students (Interns).

**Findings.** In this study, the percentage of right answers of medical students to questions of four infectiouse diseases were 41% and for brucellosis, dysentry, tuberculosis and meningitis it was 63%, 44%, 63% and 27% respectively. There wasn't any corleation between knowledge and numbers of visited patients.

**Conclusion.** Medical students' (Interns) knowledge about four prevalent diseases isn't in an acceptable level, and it is necessary to reevaluate education of infectious diseases.

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## **Clinical Skills Centers Standards**

#### Khorgami Zh, Danaie G, Damari B

**Introduction.** Setting up "Clinical Skills Labs" has been started in some Iranian medical universities since five years ago. In an educational workshop for Clinical Skills Labs managers in January 2001, many managers stated that if there were standards for these centers it would help them define the necessities of the center. These standards would also make the basis for internal and external evaluation of these centers.

Methods. In designing these standards the frame of the "international basic standards of medical schools" which was developed by World Federation for Medical Education has been used. The main areas of these standards were divided into six topics: Planning, Management, Students, Educational program, Evaluation of the program and Educational resources. The subtopics of each of these were determined too. Then the first edition of the standards was prepared by using the available educational and administrative resources and also the experiences of the experts of the "Deputy Ministry of education and university affairs". The first edition was revised in three steps. The revised edition was sent to 12 medical universities to gather their opinion. These were chosen according to the evaluations of the Deputy Ministry of education and university affairs of Ministry of health and medical education. The edition was finalized by these universities' opinions. The standards were divided into two levels: the essential and quality standards. The essential standards are the ones that should be necessarily observed in each step of establishment and development .The quality standards may be met during later developments of the center.

**Results.** The results of this project were 30 essential standards and 21 quality standards for clinical skills centers, which were divided in 6 topics and 27 subtopics.

**Conclusion.** Approved standards may be used in: developing precise plans for establishment and development of CSCs.internal evaluation of the CSCs external evaluation and accreditation

## Comparison between medical physiopathology and stager students' education competency in practical social medicine course.

### Kholdi N, Jouhary Z, Pirasteh A

**Introduction.** The changes trend from traditional to community oriented medical education necessitates that the social medicine courses be more effective and presented at an appropriate time. The object of this study is the comparison between medical physiopathology and stager students' competency in practical social medicine course.

**Methods.** All the medical students who entered the health apprenticeship course were given pretest at the beginning and post-test at the end of course. The curriculum and evaluation methods were similar for all groups of students.. T-test, paired t-test, analysis of variance and correlation tests were used to determine the relationship between sex, passing the pediatrics and gynecology courses, educational stage with pre-test, post-test and final evaluation marks.

Results. From 239 students, 37.2% were from physiopathology stage and 62.8% were stager. Females consisted half of the sample (n=117). The mean of the pre-, post-test and final evaluation grades were higher for the stagers than for the physiopathology students, with the significant difference between the first two tests (P=0.0001 for each). The mean of post-test marks were different between the stagers who hadn't passed the pediatrics and gynecology courses and the physiopathology students (P=0.004, P=0.0001), but no difference was found in final health apprenticeship exam. The mean of grades for girls were higher than those of boys, except for the health apprenticeship final exam and pre-test grade. There was no correlation between passing the pediatrics and gynecology courses and pre-test and final exam marks in stager group.

**Conclusion.** The results showed that in spite of the stagers' more participation and efforts, the competence for two groups were similar.

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