

## Brief Communication

# The Viewpoint of the Medical Students on the Outpatient Clinical Training in Imam Reza Hospital, Kermanshah University of Medical Sciences in 2010

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## Abstract

Clinical training provides the possibility of learning a wide range of important diseases that doctors may encounter in their future career. The present study was conducted to analyze the viewpoint of the students on the outpatient clinical training. This descriptive study was carried out on 109 medical students during internship using convenience sampling. Data were collected by a questionnaire designed to gather the medical students' viewpoints about outpatient clinical training. Data were analyzed by SPSS software using chi-square test. From 109 students, 57.1% of them were female and 30.6% evaluated the outpatient clinical training status as highly appropriate, 32.2% as inappropriate and 29.4% considered the physical conditions of the clinic as inappropriate. The major challenges for the students were physical conditions, lack of access to scientific resources and independent activity of the students. However, the strength was the role of subspecialist in education.

**Keywords:** Outpatient clinics, Medical students, Training

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## Introduction

Medical training is a fundamental part of the health system in the society and it has been seriously taken into account during the recent years. According to previous studies, new approaches and attitudes have been proposed to ensure better training of the students with expected abilities (1). In the traditional approach of medical education, the dominant clinical training was in inpatient wards and major educational programs were planned and performed there. What the general practitioners face in the future are clinical

outpatients that differ from inpatient wards not only in terms of disease but also in terms of the short time they have to obtain information, to visit and to review differential diagnoses as well as outpatient therapy (2). Thus, outpatient clinic as an innovative environment provides the learners with the possibility to learn about a wide range of diseases (3) and how to diagnose and treat a lot of important diseases they will face in the future (4). Favorable educational environment is a determining factor in the quality of outpatient clinical training that

includes three physical, economical and human components (3). Given the fact that clinical and outpatient training is taken into account in the assessment regulations for general medicine education (5), and since no study has been conducted in this university in this regard, the present study was aimed to analyze the viewpoint of medical students about the outpatient clinical training status in Imam Reza hospital, Kerman-shah University of Medical Sciences in 2010.

## Methods

This descriptive cross-sectional study was carried out on 109 medical interns that had passed gynecology, pediatrics, infection, internal, surgery, urology, and neurology courses of outpatient clinical training were selected by convenience sampling. The instrument for data collection was the self-administered questionnaire for gathering of the students' viewpoint on the outpatient clinical training that comprised of 3 questions about gender, age and department, 2 questions about the physical conditions of the clinic and access to scientific resources, 3 questions about the number of patients, apprentices and interns, and 15 questions about the educational status in the clinic. The reliability reported for the questionnaire was 0.85 that was determined through test-retest method (2). Data were analyzed by SPSS-20 using descriptive statistical tests and chi-square test to compare the students' viewpoints in both genders.  $P < 0.05$  was considered as significant level.

## Results

Among the 109 respondents to questionnaire, 57.1% were women. The mean age of the interns was  $23.62 \pm 2.7$  years. Half of the respondents had positive attitude about the number of apprentices, interns and patients in the clinic. Taking into account the cumulative frequency of few and very few options as inappropriate condition and much and very much options as highly appropriate condition, 30.6%, 37.2% and 32.2% of the students considered outpatient clinical educational status as highly inappropriate, appropriate and inappropriate, respectively (Table 1). There was no significant difference between gender and students' viewpoint in term of outpatient clinical training status ( $P = 0.613$ ,  $\lambda^2 = 0.965$ ). 34.9% of the students reported the physical conditions of clinic as normal and 29.4% as inappropriate. 16% of the students had access to scientific resources like books in the clinic, but 9.4% had access to internet and 5.7% had access to journals.

## Discussion

In the present study, about half of the students reported appropriate status for outpatient clinical training, which is

in line with the results of study by Shaygah and Ahmadi (6-7). However, the findings of this study are in contrast to the results of Khorasani's study (2) in which negative view (88.3%) was reported for the quality of outpatient clinical training and the study of Davoodi (8) in which university hospitals were inadequate for training students from the viewpoint of 86.3% of the doctors.

In this study, the educational objectives in outpatient clinic were definite, while in Khorasani's study these objectives were not clear for the students (2). In the study by Haghani, in only 9.1% of the clinics, the responsibilities of apprentices and interns were clearly stated (3). Thus, in case of lack of educational objectives, this deficiency can be resolved by determining outpatient educational objectives and providing it to students in the form of a logbook. In this study in most of the outpatient clinics, the teachers enthusiastically answered the students' questions. Usatine et al. reported that, with the presence of students, the teachers spent 12.4 minutes more time with the patients (9).

Further, the structured review of the students' treatment trend was carried out in most cases. In the study conducted by Haghani, only 15.2% of the outpatient clinics had a separate place for discussion (3). Dent and Brown believed that outpatient clinics should have separate sections for students' meeting and group discussions (10-11).

In this study, the role of subspecialist's presence in improving education was reported as very good in half of the students. Several studies have considered lack of motivation of teachers as an important obstacle in promoting the quality of education. To solve this problem, it has been suggested to pay attention to financial issues, regular assessment of the teacher's educational performance, and employing enthusiastic and capable non-faculty members (2).

In our study, approximately half of the students evaluated physical conditions from normal to good and referred to some resources like books and journals. In the study by Khorasani, as in the present study, the physical condition of the outpatient clinic was normal and 80% of the students reported lack of scientific resources in clinic (2). In the study of Haghani, access to educational resources, space and light in clinics was reported poor to average (3). This is while the studies carried out have focused on the effect of classroom conditions on the students' motivation (12). Thus, given the importance of physical conditions in the learning-teaching process, it is necessary to take the present shortcomings into account. The results of previous studies have indicated that education in outpatient clinics has been more useful compared to inpatient wards (13, 14).

Table 1: The viewpoint of students about clinical training status

Variable	Very much	Much	Average	Few	Very few
The number of apprentices in each clinic	16.7	25.9	46.3	9.3	0.9
The number of interns in each clinic	4.6	25.9	49.1	16.7	3.7
The number of patients visiting the clinic	12.1	31.8	45.8	9.3	0
		Highly appropriate		Appropriate	Inappropriate
Variation of patients visiting the clinic		29.6		50	20.4
Possibility of independent visit and history taking for students		27.8		40.7	31.5
Possibility of independent prescription writing and treatment for students		14.8		27.8	57.4
Possibility of patient follow-up in clinic for students		15		32.7	52.3
Possibility of observing the teacher during visit and treatment of patient for students		28.7		50	21.3
Teaching clinic management to students		23.1		38.9	38
Teaching prescribing skill to students		19.4		33.3	47.3
Sense of usefulness of clinic for students		37		36.1	26.9
Interest in clinical training		55.5		34.3	10.2
Presenting differential diagnosis of diseases in clinics		30.8		41.2	28
The role of subspecialist in improving education		49.1		24.5	26.4
		Yes		No	
Definite educational objectives of the clinic		76.1		23.9	
Teachers' enthusiastic reply to students		79.8		20.2	
Structured and consistent discussion of teachers about subject		72.5		27.5	
Review and revise of history taking and treatment trend of students by the teacher		71.6		28.4	

In the present study, teaching student how to independently prescribe medication was reported as appropriate in one third of the cases. In the study by Khorasani, teaching prescription writing skill was inadequate and possibility of independent activity of students in terms of visit and diagnosis was low or very low (2). Therefore, using active teaching methods, teachers' interest in teaching and using educational facilities are influential factors in enhancing the academic motivation and self- efficiency of students (15).

## Conclusion

The major challenges in this study based on the viewpoint of students were improper physical conditions, lack of access to scientific resources, lack of independent activity of students in prescribing drugs and patient follow-ups in outpatient clinics. However, the strengths of this study were the role of the specialist' presence and interest in the outpatient clinical training. Further studies with larger

population and comparison of different parts with each other are recommended.

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