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## Research Article

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# Medical students' satisfaction from the clinical education processes in Yazd

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#### **Abstract**

Clinical education plays a key role in the medical profession, and students must make the best use of the professors' experiences and skills while attending the department. Therefore, identifying the factors affecting the quality of clinical education in medical internships is essential. In this study, we aimed to examine the level of satisfaction of medical stagers about the clinical education process. This study was as descriptive and cross-sectional that was conducted in Yazd University of Medical Sciences in 2021. The data collection tool in this study was a two-part questionnaire. Finally, the collected data were entered into SPSS version 22 and by statistical tests were analyzed. No statistically significant difference was found between stagers' satisfaction with the overall clinical education process in terms of gender, age and indigenousness. The results of the study also showed that the highest level of satisfaction was related to the pediatric ward and the lowest level of satisfaction was associated with the psychiatric ward. The level of stagers' satisfaction from the clinical education process was moderate.

Keywords: Clinical education, Stager, Satisfaction.

# INTRODUCTION

Medical science needs practice to acquire skills <sup>[1]</sup>. If this training does not provide the learning conditions properly, it is not possible to develop clinical skills <sup>[2]</sup>. Among the continuous stages of medical education, the internship can be called the most important stage in which the student feels in the role of the future doctor <sup>[3, 4]</sup>. In other words, clinical education is one of the critical stages of medical education in which medical students gradually acquire skills by attending the patient's bedside. In this type of education, the student, in interaction with the instructor and the environment, applies the learned concepts in practice <sup>[1, 5]</sup>.

Clinical training in the internship provides the student with the opportunity to translate theoretical knowledge into the various psychomotor skills needed to care for the patient <sup>[6, 7]</sup>. In fact, clinical education can be considered as a learning facilitation activity in a clinical environment in which the clinical instructor and the student are equally involved <sup>[8]</sup>. Various studies have shown that several problems have prevented this goal from being achieved <sup>[9]</sup>. These problems include the lack of specific job descriptions for students and educators, the inadequacy of the number of students in the wards, the inadequate communication of physicians, students and nurses with the patient, and the inadequacy of clinical conditions for standard procedures <sup>[7, 10]</sup>. Researches show that medical students who enter the internship phase with more scientific and practical preparation will be able to better perform their assigned tasks in diagnosing and treating patients <sup>[11, 12]</sup>. Obviously, the compatibility of theoretical courses with practical skills in the internship and also the employment of professors interested in clinical education are among the factors affecting the effectiveness of the training program <sup>[13]</sup>.

Considering the mentioned cases and also since clinical education plays a key role in the medical profession and students should make the best use of the experiences and skills of professors while attending the department, the present study examines the level of satisfaction of medical stagers about the clinical education process in Yazd.

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#### **MATERIALS AND METHODS**

The present study was a descriptive cross-sectional study and all medical students (internship stage) of Yazd University of Medical Sciences in 2021 participated in it. The sampling method was census. This study was conducted after the approval of the ethics committee of Shahid Sadoughi University of Medical Sciences in Yazd and receiving the ethics code of IR.SSU.MEDICINE.REC.1400.105. Students who did not agree to participate in the study and completed the questionnaires incompletely were excluded from the study.

The data collection tool in this study was a two-part questionnaire, the first part of which included students 'demographic information such as gender, age and indigenous status, and the second part of the questionnaire included students' satisfaction rate from the clinical education process. This questionnaire consisted of 13 questions with 3 options (low, medium and high). The scoring of the questionnaire was as follows: the low option (1 score), the medium (2 score) and the high (3 score). Then, the total score of 13 questions was added together and the final score was mentioned between 13 to 39. Also, the total satisfaction of students was divided into 13 to 22 points: low satisfaction, 23 to 31 points: average satisfaction and 32 to 39 points: high satisfaction. Departments included major (internal medicine, pediatrics, gynecology, obstetrics and surgery) and minor (neurology, psychiatry, infectious diseases, ENT, radiology, dermatology and ophthalmology).

Finally, the data were entered into SPSS software version 22 and analyzed. Chi-Square and T-test were used for analysis. In all cases, P <0.05 was considered as a significant level.

#### **RESULTS**

In this study, the satisfaction of 161 medical students was evaluated. The demographic characteristics of students are listed in Table 1:

**Table 1:** The demographic characteristics of students

Variable		Frequency	Percent (%)
Being a native	Citizen of Yazd	71	43.5
	Non-Yazd citizen	91	56.5
Gender	Male	97	60.2
	Female	64	39.8
	21	57	35.4
Age (year)	22	57	35.4
23		21	13
	24 ≤	26	16.1

The score mean of medical students' satisfaction from the general process of clinical education was  $26.51\pm6.7$ .

Most students reported moderate satisfaction from education (38.5%).

The highest level of satisfaction was related to how information was provided about e-learning and classes. The lowest level of satisfaction was related to the level of satisfaction from clinical education (Table 2).

Table 2: Frequency distribution of medical students' satisfaction from the general process of clinical education based on questionnaire items

Question	Responses		
	Low	Moderate	High
	N (%)	N (%)	N (%)
How satisfied are you from the available clinical training?	56 (34.8)	68 (42.2)	37 (23)
How satisfied are you from giving personality to the student in clinical settings?	53 (32.9)	69 (42.9)	39 (24.2)
How satisfied are you from the students' participation in clinical activities?	48 (29.8)	73 (45.3)	40 (24.8)
How satisfied are you from the students' individual differences in clinical education?	51 (31.7)	71 (44.1)	39 (24.2)
How satisfied are you from the clarity of the student's task description in the clinical course?	50 (31.1)	69 (42.9)	42 (26.1)
How satisfied are you from the use of educational innovations in students' clinical education?	49 (30.4)	69 (42.9)	43 (26.7)
How satisfied are you from the regular implementation of training programs in the form of morning reports, clubs, conferences, joint rounds, etc?	55 (34.2)	68 (42.2)	38 (23.6)
How satisfied are you from the educational spaces (classroom, conference hall, etc)?	53 (32.9)	69 (42.9)	39 (24.2)
How satisfied are you from Informing about e-learning and classes?	49 (30.4)	67 (41.6)	45 (28)
How satisfied are you from the learning way and its impact on the education process and the resources introduced by teachers?	52 (32.3)	66 (41)	43 (26.7)
How satisfied are you from holding the classes as online?	54 (33.5)	69 (42.9)	38 (23.6)
Is it possible to have two-way communication with professors in online education?	49 (30.4)	72 (44.7)	40 (24.8)
Has online education made it possible for students to interact and communicate in class?	47 (29.2)	70 (43.5)	44 (27.3)

N= Number

There was no statistically significant difference between medical students' satisfaction rate from the education general process based on gender (p = 0.394) (Table 3).

**Table 3:** Students' satisfaction rate from the education general process based on gender

Gender	Satisfaction rate N (%)			Total
	Low	Moderate	High	
Male	33 (57.9)	35 (56.5)	29 (69)	97 (60.2)
Female	24 (42.1)	27 (43.5)	13 (31)	64 (39.8)
Total	57 (100)	62 (100)	42 (100)	161 (100)
P-value	0.394			

N= Number

Also, there was no statistically significant difference between students' satisfaction rate from the general education process in terms of their resident status (p = 0.521) (Table 4).

**Table 4:** Students' satisfaction rate from the education general process based on their resident status

Being a	Students' satisfaction rate N (%)			Total
native	Low	Moderate	High	
Yazd	25 (43.9)	24 (38.7)	21 (50)	70 (43.5)
Non-Yazd	32 (56.1)	38 (61.3)	21 (50)	91 (56.5)
Total	57 (100)	62 (100)	42 (100)	161 (100)
P-value	0.521			

N= Number

There was no statistically significant difference between students' satisfaction rate from the education process based on age (p = 0.736).

#### **DISCUSSION**

The results of the present study showed that the score mean of satisfaction was 26.51. About 40% of students were moderately satisfied from the clinical education process.

The results of the survey of nursing and midwifery students' satisfaction from the situation of clinical education in Zahedan teaching hospitals also showed that 76.8% in the field of educational environment, 70.2% in the field of satisfaction from the performance of the instructor and finally 43% of students in the field of monitoring and evaluation of the current situation were not satisfied from current situation [14]. Given the differences in clinical education between medicine and nursing, the differences in the results of the two studies can be justified.

Another study examined the satisfaction of medical students with the implementation of a patient-centered educational method in the pediatric ward of Ahvaz Golestan Hospital. The results of the study showed that 91.8% of students were satisfied with the implementation of the new educational method in the pediatric ward. Overall, the results of this study showed that by inventing newer clinical teaching methods and applying it, we can help increase students' satisfaction and ultimately increase their learning [15].

The next study evaluated students' satisfaction from education in Shiraz Dental School. The findings of this study showed that despite the differences in some of the criteria asked about different departments such as professors 'academic mastery, equipment and facilities of the department and professors' treatment with students, in general, the satisfaction of students in the target group fluctuated almost slightly [16].

In the present study, no statistically significant difference was found between students' satisfaction with the clinical education process in terms of gender, age and indigenousness. In a study in Shahrekord, the

level of satisfaction with clinical education was not significantly related to age, sex and educational level of students  $^{[17]}$  which was consistent with the results of the present study.

#### CONCLUSION

In general, the level of trainees' satisfaction from the clinical education process was moderate, so more attention to the quality of clinical education in medical trainees is recommended.

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#### Conflict of Interest

We declare that we have no conflict of interest.

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