



## Research Article

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# Satisfaction with the clinical education in intern course among medical students at Yazd University of Medical Sciences (2021)

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## Abstract

Clinical learning plays a main role in the medical occupation. Therefore, identifying the factors affecting the quality of clinical education in medical internships is crucial. In this study, we aimed to assay the level of satisfaction of medical interns with the clinical education process in Yazd. This study was descriptive and cross-sectional. The contributors were medical interns. The collecting data was done by a two-part questionnaire. Finally, the collected data were entered into SPSS version 22, using statistical tests were analyzed. No statistically significant difference was found between interns' satisfaction with the overall clinical education process in terms of gender and age. The results of the study also showed that the highest level of satisfaction was related to the emergency ward. According to the results of this study, it can be concluded that in general, the level of intern's satisfaction with the clinical education process is moderate.

**Keywords:** Satisfaction, Medical Interns, Clinical Education, Yazd.

## INTRODUCTION

Clinical education is the process by which medical students steadily develop their abilities by visiting patients on a regular basis [1-4]. This training is one of the most sensitive stages of medical education and plays a very important role in the development of students' professional capabilities [5-7]. Students in the clinical stage need to have sufficient knowledge and skills and to be able to actually utilize these abilities. Evaluating and continuing clinical education is essential to reaching the desired outcomes in clinical education. One of the basic ways to evaluate clinical education is to benefit from student attitude [8-10].

Thus, we designed this study for assaying the level of satisfaction of medical interns with the clinical education process in Yazd.

## MATERIALS AND METHODS

The present study was a cross-sectional and descriptive research, in which all students (medical interns) from the Yazd Medical Science University participated in 2021. The sampling method was census. This study was lead after the approval of the ethics committee of Shahid Sadoughi University of Medical Sciences in Yazd and obtaining the ethics code. Students who did not agree to contribute in the study and did not complete the questionnaire were excluded from the research.

The data gathering tool in this study was a questionnaire including two-part, the first section of which included students' demographic data such as sex, age and indigenous status, and the second section of the questionnaire included students' satisfaction level from the clinical education procedure. This survey consisted of 13 questions, including three 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 full 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 minor (neurology, psychiatry, infectious diseases and ENT) and major (internal medicine, pediatrics, gynecology, obstetrics and surgery).

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

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## RESULTS

In the present study, 118 medical students (interns) were examined. The frequency distribution of individuals based on indigenesness, age, and sex is shown in (Table 1). The average score of interns' satisfaction with the process of clinical education was (26.36±6.67), which was in the average range according to the division of satisfaction (mentioned in the method section).

Most interns (41.5%), were moderately satisfied with the overall clinical education process (27.1%), had high satisfaction and 31.4% had low satisfaction. The highest level of satisfaction of medical interns was with the training on how to insert NG-tube (46.6%), (Table 2).

**Table 1:** Demographic characteristics of studen

Variable		Frequency	Percentage
Indigenesness	Yazd	47	39.8
	No-Yazd	71	60.2
Sex	Male	72	61
	Female	46	39
Age (year)	23	8	6.8
	24	50	42.4
	25	53	44.9
	26≤	7	5.9

**Table 2:** Frequency distribution of interns' satisfaction with the general process of clinical education based on questionnaire items

Items		Answers		
		Low	Moderate	High
How satisfied are you with the clinical training of the intern course?	Frequency	29	39	50
	Percentage	24.6	33.1	42.4
How satisfied are you with the characterization toward interns in the clinical setting?	Frequency	29	40	49
	Percentage	24.6	33.9	41.5
How satisfied are you with the intern's participation in clinical activities?	Frequency	30	36	53
	Percentage	25.4	30.5	44.1
ECG training and interpretation	Frequency	29	36	53
	Percentage	24.6	30.5	44.9
How satisfied are you with the clarity of the intern's job description in the clinical course?	Frequency	31	34	53
	Percentage	26.3	28.8	44.9
How satisfied are you with the use of educational innovations in students' clinical education?	Frequency	33	35	50
	Percentage	28	29.7	42.4
Urinary catheter insertion training	Frequency	30	41	47
	Percentage	25.4	34.7	39.8
How satisfied are you with the regular implementation of training programs in the form of morning reports, journal clubs, conferences, common rounds, etc?	Frequency	29	39	50
	Percentage	24.6	33.1	42.4
Arterial blood sampling (ABG) training	Frequency	38	40	40
	Percentage	32.2	33.9	33.9
Training in resuscitation procedures and intubation in the trachea	Frequency	32	36	50
	Percentage	27.1	30.5	42.4
Childbirth management training	Frequency	28	40	50
	Percentage	23.7	33.9	42.4
Training and performing various injections (intramuscular, intradermal, subcutaneous)	Frequency	38	35	45
	Percentage	29.6	32.3	38.2
NG-Tube insertion	Frequency	28	35	55
	Percentage	23.7	29.7	46.6

**Table 3:** Interns' satisfaction rate with the clinical education process based on sex

Sex		Satisfaction rate			Total
		Low	Moderate	High	
Male	Frequency	20	30	22	72
	Percentage	54.1	61.2	68.8	61
Female	Frequency	17	19	10	46
	Percentage	45.9	38.8	31.2	39
Total	Frequency	37	49	32	118
	Percentage	100	100	100	100
P-value		0.459			

**Table 4:** Average score of satisfaction with the education process in terms of sex, age and indigenusness of individuals

Variable		Mean	Standard deviation	P-value
Age	23	31.37	6.02	0.094
	24	26.60	6.98	
	25	25.77	6.20	
	26≤	23.42	6.80	
Sex	Male	26.77	6.84	0.402
	Female	25.71	6.40	
Indigenusness	Yazd	25.42	6.84	0.215

There was no statistically significant difference between the interns' satisfaction with the education process between the two sexes ( $p=0.459$ ), (Table 3). Also, there was no statistically significant difference between interns' satisfaction with the education process in terms of Indigenusness status ( $p=0.204$ ), and the age ( $p=0.859$ ), of individuals.

There was no statistically significant difference between the mean score of satisfaction with the clinical education process in terms of any of the variables (Table 4). In this study, the highest and the lowest levels of satisfaction were related to the emergency and the internal medicine wards, respectively.

## DISCUSSION

At present study, the most interns were moderately satisfied with the overall clinical education process. There was no statistically significant difference between the interns' satisfaction with the education process based on sex, indigenusness status and the age. Also, the highest level of satisfaction was related to the emergency ward.

A study in Shahrekord, Iran showed that the level of students' satisfaction with the ENT ward was higher than other wards. Also, there was no significant relationship between satisfaction rate with clinical education and age, sex parameters [11].

The results of the next study conducted on medical students of Shahed University, Tehran showed that in general, these students were moderately satisfied with the performance of their supervisor [12]. The results of this study were consistent with the present study.

The results of another study that examined the satisfaction of nursing and midwifery students with the situation of clinical education in Zahedan teaching hospitals showed that students' satisfaction was low [13].

## CONCLUSION

In general, the level of interns' satisfaction with the clinical education process was moderate and the highest level of interns' satisfaction was related to the emergency ward. Therefore, more attention to the quality of clinical education about medical interns is recommended.

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## Conflict of Interest

None declared.

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