

Leila Safabakhsh, Alireza Atashpanjehr, Peyman Bekran Behesht, Saeedeh Sarhadi, Mojhgan Jahantigh 1. Department of Medical Education, Zahedan University of Medical Sciences, Zahedan, Iran 2. Department of English Language, Clinical Immunology Research Center, School of Medicine, Zahedan University of Medical Sciences, Zahedan, Iran

 General Practitioner, Zahedan University of Medical Sciences, Zahedan, Iran
 Department of Community Medicine, School of Medicine, Zahedan University of Medical Sciences, Zahedan, Iran
 Department of Nursing, Nursing and Midwifery School, Zahedan University of Medical Sciences, Zahedan, Iran

\* Clinical Immunology Research Center, Daneshgah St. Zahedan, 9816743463 Iran

Tel: +98 9151414450 Email: a\_atashpanjeh@yahoo.com

# ORIGINAL ARTICLE

#### مطبات التعليم السريري للطب العام: ما الذي يعتبره المتدربون والمتدربون من تحديات الدورات التدريبية؟

**الخلفية:** إن التحقيق في المناهج وأنشطة التدريس والتفاعل في بيئات التعليم أمر ضروري لتحسين الفعالية التعليمية. هناك بعض الأدلة في الأدبيات على أن خريجي الطب العام لا يقومون بتقييم مهاراتهم وقدراتهم بشكل كاف لأداء المسؤوليات المهنية. هدفت هذه الدراسة إلى التحقيق في تحديات التعليم السريري في جامعة زاهدان للعلوم الطبية (ZAUMS) من وجهة نظر الطلاب.

**الطرق:** في هذه الدراسة التحليلية المقطعية ، تم التحقيق في وجهات نظر ٢٧٣ ( n = 153 ،stagers ، والمتدربين ، n = 120 ) من طلاب ZAUMS باستخدام استبيان من إعداد الباحث يتكون من ٢٨ عنصر Likert-٥ في أربعة مجالات من أ) التعليم ، ب) المعدات ، ج) الأساتذة / المساعدون / الموظفون ، د) طريقة التقييم. تم اختيارهم بناءً على طريقة أخذ العينات المتاحة.

النتائج: كانت التحديات التي تم فحصها بين المتدربين (٨٧,٩٦ ± ١٧,٧٠) أقل من المتدربين (١٥,٨٠ ± ١٠٦,٨٠). وقد لوحظ أن هذا الاختلاف ذو دلالة إحصائية (١٥٥٥هـ٧). كانت أعلى الدرجات المتعلقة بتحديات التعليم السريري مرتبطة بالبند ١٧ (توافر وسائل الراحة المناسبة في جناح المستشفى ، بما في ذلك الغرف المناسبة والوصول إلى الإنترنت). كانت أدنى درجة تتعلق بالبند ١ (زيادة تحفيز الطالب واهتمامه من خلال بدء المستشفى والتعليم السريري في بداية التدريب).

**الخلاصة**: إن الاتجاه التصاعدي في اكتساب الخبرات والتعرف على المريض فعال في مواقف الطلاب. نظراً لأن أحد العوامل الحاسمة في التعليم هو الشغف بالتعلم ، فقد تشير هذه النتائج إلى أن تطبيق التدريس النظري يمكن أن يكون أكثر فائدة في التأثير على تعلم الطلاب من مجرد التدريس النظري.

الكلمات المفتاحية: التحديات ، التربية الإكلينيكية ، طلاب الطب

#### جنرل میڈیسن کلینیکل ایجوکیشن کے نقصانات: اسٹیجرز اور انٹرنز ان کے کورسز کے چیلنجز کے طور پر کیا بیان کرتے ہیں؟

پس منظر: تعلیمی اثر کو بہتر بنانے کے لیے نصاب، تدریسی سرگرمیوں، اور تعلیمی ترتیبات میں تعامل کی چھان بین ضروری ہے۔ ادب میں کچھ ایسے شواہد موجود ہیں کہ عام میڈیکل گریجویٹس پیشہ ورانہ ذمہ داریاں نبھانے کے لیے اپنی صلاحیتوں اور صلاحیتوں کا مناسب اندازہ نہیں لگاتے۔ اس مطالعے کا مقصد زاہدان یونیورسٹی آف میڈیکل سائنسز (ZAUMS) میں کلینیکل ایجوکیشن کے چیلنجز کی طالب علموں کے نقطہ نظر سے تحقیقات کرنا تھا۔

**طریقے:** اس کراس سیکشنل تجزیاتی مطالعہ میں، ZAUMS کے ۲۷۳ (اسٹیجرز، 153ء، اور انٹرنز، 1=10 طلباء کے نقطہ نظر کی تحقیق محقق کے بنائے ہوئے سوالنامے کے ذریعے کی گئی جس میں چار شعبوں میں ۲۸ ه-Liker آئٹمنز شامل تھے۔ (a) تعلیم، b) سامان، c) پروفیسرز/اسسٹنٹ/عملہ، اور b) تشخیص کا طریقہ۔ ان کا انتخاب دستیابی کے نمونے لینے کے طریقہ کار کی بنیاد پر کیا گیا تھا۔

نتائیج: اسٹیجرز کے درمیان تفتیشی چیلنجز (۲۹/۹۲ ± ۱۰۷/۳) انٹرنز (۲۰۱۹، ± ۱۰۸۹۱) سے کم تھے۔ اس فرق کو شماریاتی لحاظ سے اہم (۲۰۵۱–۲۰) دیکھا گیا۔ کلینکل ایجوکیشن چیلنجز کے حوالے سے سب سے زیادہ اسکور آئٹم ۱۷ سے متعلق تھے (ہسپتال کے پویلین میں مناسب سہولیات کی دستیابی، بشمول مناسب کمرے اور انٹرنیٹ تک رسائی)۔ سب سے کم سکور آئٹم ۱ سے متعلق تھا (انٹرن شپ کے آغاز میں ہسپتال اور طبی تعلیم شروع کر کے طالب علم کی حوصلہ افزائی اور دلچسیبی کو بڑھانا)۔

اور عیمی تعییم شروع تر نے صاب علم نی موضعہ افرامی اور نیچسپی تو برمان کے ر **نتیجہ:** تجربات حاصل کرنے اور مریض کی نمائش میں اضافے کا رجحان طلباء کے رویوں میں موثر ہے ۔ چونکہ تعلیم کے اہم عوامل میں سے ایک سیکھنے کا جذبہ ہے، اس لیے یہ نتائج اس بات کی نشاندہی کر سکتے ہیں کہ نظریاتی تدریس کو لاگو کرنا محض نظریاتی تدریس کے بجائے طلبہ کے سیکھنے کو متاثر کرنے میں زیادہ مددگار ثابت ہو سکتا ہے ۔ **کلیدی الفاظ:** چیلنجز، طبی تعلیم، طبی طلباء

#### General Medicine Clinical Education Pitfalls: What Do Stagers and Interns State as Their Courses' Challenges?

**Background:** Investigating the curricula, teaching activities, and interaction in education settings is essential to improve educational effectiveness. There is some evidence in the literature that general medical graduates do not adequately assess their skills and abilities to perform professional responsibilities. This study aimed to investigate the clinical education challenges at Zahedan University of Medical Sciences (ZAUMS) from the students' perspectives. **Methods:** In this cross-sectional analytic study, the viewpoints of 273 (stagers, n=153, and interns, n=120) students of ZAUMS were investigated using a researcher-made questionnaire consisting of 28 5-Likert items in four areas of a) education, b) equipment, c) professors/assistants/the staff, and d) evaluation method. They were selected based on the availability sampling method.

**Results:** The investigated challenges among stagers (87.96  $\pm$  17.03) were lower than interns (106.90  $\pm$ 15.80). This difference was observed to be statistically significant (P<0.001). The highest scores regarding clinical education challenges were related to item 17 (availability of appropriate amenities in the hospital pavilion, including suitable rooms and internet access). The lowest score was related to item 1 (increasing the student's motivation and interest by commencing the hospital and clinical education at the beginning of the internship).

**Conclusion:** The upward trend in gaining experiences and patient exposure is effective in students' attitudes. Since one of the crucial factors in education is a passion for learning, these results may indicate that applying theoretical teaching can be more helpful in influencing students' learning than mere theoretical teaching. **Keywords:** Challenges, Clinical Education, Medical Students

# چالش های آموزش بالینی پزشکی عمومی: چه مواردی را کارآموزان و کارورزان به عنوان چالشهای دورههای خود اظهار می کنند؟

**زمینه و هدف:** بررسی برنامه های درسی، فعالیت های آموزشی و تعامل در محیط های آموزشی برای بهبود اثربخشی آموزشی ضروری است. مطالعات نشان می دهد که فارغ التحصیلان پزشکی عمومی مهارت های خود را برای انجام مسئولیت های حرفه ای کافی ارزیابی نمی کنند. این مطالعه با هدف بررسی چالش های آموزش بالینی در دانشگاه علوم پزشکی زاهدان از دیدگاه دانشجویان انجام شد.

روش : در این مطالعه مقطعی-تحلیلی، دیدگاه ۲۷۳ نفر (۱۵۳ کارآموز و ۱۲۰ کارورز) از دانشجویان دانشگاه علوم پزشکی زاهدان با استفاده از پرسشنامه محقق ساخته بررسی شد. این پرسشنامه مشتمل بر ۲۸ گویه ۵-لیکرتی در چهار حوزه آموزشی، تجهیزات، اساتید/دستیاران/کارکنان و شیوه ارزشیابی بود. شرکت کنندگان بر اساس روش نمونه گیری در دسترس و با در نظر گرفتن معیارهای ورود و خروج انتخاب شدند.

**یافتهها:** چالشهای مورد بررسی در بین کارآموزان (۱۷۰۰ ± ۸۷.۹۶) کمتر از کارورزان (۱۵.۸۰ ± ۱۵.۹۰) بود (۲۰۵.۵۰۹). بالاترین امتیاز در چالشهای آموزش بالینی مربوط به گویه ۱۷ (در دسترس بودن امکانات رفاهی مناسب در پاویون بیمارستان شامل اتاقرهای مناسب و دسترسی به اینترنت) و کمترین چالش مربوط به گویه ۱ (افزایش انگیزه و علاقه دانشجویان با شروع دوره آموزشی بالینی در ابتدای دوره کارورزی) بود. **نتیجه گیری:** روند صعودی در کسب تجربیات و مواجهه با بیمار در نگرش دانشجویان مؤثر است. از آنجایی که یکی از عوامل حیاتی در آموزش، میل به یادگیری است، این تایج نشان می دهد که استفاده از آموزش نظری همراه با آموزش بالینی میتواند در تأثیرگذاری بر یادگیری دانشجویان نسبت به آموزش نظری صرف، مفیدتر باشد.

#### **INTRODUCTION**

Medicine is one of the sacred disciplines that is essential for any society. It is why educational planners always consider the issue of medical education and the training of efficient human resources (1).

Medical education is a dynamic, complex, and stressful process (2). Clinical education is one of the fundamental parts of medical courses, and training efficient and qualified graduates have its challenges (3-8). In the clinical environment, the focus is on fundamental issues in professional work. It is the only environment in which the skills of taking history, physical examinations, clinical reasoning, decision-making, empathy, and professional commitment are learned in an integrated way. Many variables affect clinical education, including the teacher, the learner, and the educational settings (9). To achieve maximum achievements, educators should try standardizing all three variables simultaneously.

With the increase in the student's admission capacity to medical universities, the shortage of general practitioners is decreasing in Iran. Improving medical education quality has been necessary (10). There has been rapid growth in medical education in the last two decades, but public expectations from physicians have increased due to increasing public awareness. These points have led the country's medical education officials to address the issue of improving the quality of general medical education (11). Quality improvement requires the establishment of an appropriate evaluation mechanism. For this reason, in the Fourth Development Plan in the Higher Education Section, Article 49 provides for the continuous evaluation of universities and higher education institutions and the review of academic disciplines (ibid).

One of the ways to maintain and improve the quality of education in line with global growth will be the continuous evaluation of the education system and its related pillars. This method helps researchers find its strengths and weaknesses, and the next step is to convey these findings' feedback to the educational system officials. Since students are the primary benefactors of education, it seems that they are the most important source for achieving the strengths and weaknesses of the educational systems in each society (12). Although there are ambivalent opinions among medical education experts, many have relative satisfaction with how students are taught. Others raise different problems in the teaching processes and believe that medical graduates do not evaluate their readiness in terms of skills and abilities (13).

In the study of Nasri et al., 91% of students stated that not providing job descriptions and lesson plans was their primary challenge, and 76% stated that exams do not assess their literacy.<sup>[4]</sup> In a study by Remmen et al., it was found that medical schools could not rely solely on clinical experience in internships to learn basic skills (14). In the study of Amirasmaili et al., it was observed that the effectiveness of general medical education throughout the country is facing severe challenges due to many issues (1).

Therefore, considering the role of clinical education and its complexities and the students as the primary source of

information, the present study aimed to determine the challenges of clinical education in the general medicine course of one of the medical sciences universities from the students' perspectives.

# METHODS

It was a cross-sectional descriptive-analytic study in which 273 (stagers, n=153, and interns, n=120) students of Zahedan University of Medical Sciences were selected based on convenient sampling. They were investigated using a researcher-made questionnaire regarding the inclusion criteria, such as completing at least six months of their courses, and exclusion criteria, such as guest/transfer students from other universities or dissatisfaction with participating in the study.

The initial version was a 5-Likert scale questionnaire (strongly agree, agree, no comment, disagree, strongly disagree) consisting of 31 items in four areas: education, equipment, professors/ assistants/ staff, and evaluation method (Persian Version). Two methods were used to obtain a standard questionnaire for face validity: qualitative and quantitative. The obtained content validity ratio (CVR) index was 0.78, and the content validity index (CVI) was 0.88. To do so, eight medical education and medicine colleagues meticulously sifted through the items. They evaluated the items in terms of the necessity of items to preserve essential phrases in the final form and remove inappropriate phrases, the necessity of each phrase to ensure that the most important and correct content is selected, and their relevance to the subject and purpose to ensure that the form expressions measure the objectives in the best way. Finally, the expressions' simplicity, fluency, and clarity were evaluated. Afterward, three items were removed. The final number of items that remained was 28 items. The items were designed so that the lowest score, i.e., 1 out of 5, indicated the best situation and the least challenging area. The highest score, i.e., 5 out of 5, indicated the worst case and the most challenging area. Afterward, by conducting a pilot study on 20 students, the reliability index was estimated as  $\alpha = 0.73$ . The minimum and maximum scores for education were between 12-60, for equipment between 5-25, for professors, assistants, and the staff were between 8-40, and finally for evaluation were between 3 and 15. The questions were designed so that the maximum score indicated more challenges and the minimum score indicated fewer challenges in that area. The average score in each field has been calculated based on 20 to facilitate and homogenize the scores of each field due to the difference in the number of questions in different fields (Table 1).

Eventually, the final version of the questionnaire was distributed, and the data were collected and analyzed using SPSS software, version 20 (IBM, NY, USA). Mean, standard deviation, frequency, and percentage were calculated as descriptive statistics, and an Independent Sample t-test and two Man-Whitney U tests were used to compare the mean scores. The significance level was considered as p < 0.05.

#### RESULTS

The present study was a cross-sectional study aimed at determining and comparing the challenges of clinical

education in general medicine from medical students' perspectives at Zahedan University of Medical Sciences. The number of the stagers participating in the study was slightly higher (55.8%) than the interns (43.8%).

According to the findings (Table 1, 2), the highest degree of students' challenges in clinical education from the first challenging area, i.e., education, was related to item 12 (continuing attention of clinical departments to the quality of educational programs and students' opinions) ( $3.96 \pm 1.02$ ). The least challenging area in education was related to item 1 (increasing the student's motivation and interest by commencing the hospital and clinical education at the beginning of the internship) ( $2.13 \pm 1.10$ ).

(availability of appropriate amenities in the hospital pavilion, including suitable rooms and internet access)  $(3.97\pm0.99)$ . Item 16 was evaluated as the least challenging area (Resources introduced by the professors are available in college libraries or clinical education settings)  $(2.85\pm1.05)$ . The third challenging area was related to professors, assistants, and the staff in which item 24 (In the training and treatment settings, the staff is trained to deal with and interact with learners.)  $(3.84 \pm 1.04)$  obtained the highest degree of challenges and item 21 (The professors have sufficient scientific knowledge and mastery of clinical topics.)  $(2.80 \pm 1.06)$  received the lowest degree of challenges.

In the equipment section, as the second challenging area, item 17 was evaluated as the most challenging area

Finally, in the assessment area, item 26 (in clinical settings, sufficient importance is given to the standard assessment of learners.)  $(3.66 \pm 1.14)$  had the highest degree of challenges,

| Table 1. The Mean and SD scores of educational challenges based on the participants' perspectives |                                |   |                 |  |  |  |  |
|---|--------------------------------|---|-----------------|--|--|--|--|
|   | Challenging<br>Areas           | Items   | Mean ± SD       |  |  |  |  |
| 1   |                                | Attending the hospital and receiving clinical training at the beginning of the stager level increased my motivation and interest in medicine.     | $2.13 \pm 1.10$ |  |  |  |  |
| 2   |                                | Clinical medicine training prepares me well for my future work environment.   | $2.93 \pm 1.27$ |  |  |  |  |
| 3   |                                | At the beginning of each educational section, the lesson plan is presented by the professors/departments.   | $3.54 \pm 1.14$ |  |  |  |  |
| 4   |                                | I am given a specific job description at the beginning of each period.  | $3.49 \pm 1.17$ |  |  |  |  |
| 5   |                                | I will be taught relevant clinical skills before starting any course.   | $3.93 \pm 1.05$ |  |  |  |  |
| 6   | Education                      | The quality of education in training rounds in the hospital is appropriate.   | $3.36 \pm 1.18$ |  |  |  |  |
| 7   | Luutuut                        | Morning reports were tailored to my educational needs.  | $3.49 \pm 1.20$ |  |  |  |  |
| 8   |                                | Theory classes held in clinical training courses have proper planning and timing.   | $3.61 \pm 1.12$ |  |  |  |  |
| 9   |                                | There are suitable programs for interns and interns in hospital clinics.  | $3.23 \pm 1.14$ |  |  |  |  |
| 10  |                                | Clinics have a positive role in the clinical education of students.   | $2.24 \pm 1.04$ |  |  |  |  |
| 11  |                                | Exam programs of theory courses are well coordinated with clinical wards.   | $3.89 \pm 1.16$ |  |  |  |  |
| 12  |                                | Clinical departments periodically conduct student surveys on the quality of educational programs and review students' opinions.                   | $3.96 \pm 1.02$ |  |  |  |  |
| 13  |                                | There are enough adequate teaching aids and equipment in the hospital.  | $3.64 \pm 1.07$ |  |  |  |  |
| 14  |                                | Suitable educational facilities and equipment are available to students in the hospital.  | $3.77 \pm 1.05$ |  |  |  |  |
| 15  | Fauinmont                      | The library and study hall space is suitable for clinical education   | $3.11 \pm 1.14$ |  |  |  |  |
| 16  | Equipment                      | Resources introduced by the professors are available in college libraries or clinical education settings.   | $2.85 \pm 1.05$ |  |  |  |  |
| 17  |                                | There are convenient amenities in the hospital pavilion, including suitable rooms and internet access.  | $3.97\pm0.99$   |  |  |  |  |
| 18  |                                | Instructors devote sufficient time and energy to teaching learners.   | $3.75 \pm 1.13$ |  |  |  |  |
| 19  |                                | The professors, specialist assistants, and department staff treat me well.  | $3.41 \pm 1.28$ |  |  |  |  |
| 20  |                                | According to a specific program, the professors and senior assistants actively participate in student education.                                  | $3.71 \pm 1.09$ |  |  |  |  |
| 21  | Professors,<br>assistants, and | The professors have sufficient scientific knowledge and mastery of clinical topics.   | $2.80 \pm 1.06$ |  |  |  |  |
| 22  | the staff                      | The professors use new techniques to teach scientific topics and clinical skills.   | $3.71 \pm 1.08$ |  |  |  |  |
| 23  | ine starr                      | Specialized assistants and staff of wards and hospitals cooperate reasonably in educating learners.   | $3.57 \pm 1.12$ |  |  |  |  |
| 24  |                                | The staff is trained to deal with and interact with learners in the training and treatment settings.  | $3.84 \pm 1.04$ |  |  |  |  |
| 25  |                                | I have specific job descriptions in the hospital wards so that the framework of these tasks is clear to specialist assistants and hospital staff. | $3.78 \pm 1.13$ |  |  |  |  |
| 26  |                                | In clinical settings, sufficient importance is given to the standard assessment of learners.  | $3.66 \pm 1.14$ |  |  |  |  |
| 27  | Assessment                     | The exams at the end of the course correspond to the training during the course and the lesson plan.  | $3.53 \pm 1.08$ |  |  |  |  |
| 28  |                                | Written and OSCE exams assess my knowledge and skills well.   | $3.37 \pm 1.11$ |  |  |  |  |

| Table 2. The total score of the challenges in four areas from the point of view of stagers and interns |                  |                           |            |                                    |                                 |  |  |  |
|--|------------------|---------------------------|------------|------------------------------------|---------------------------------|--|--|--|
| Areas  | No. of Questions | test of<br>normality(k-s) | Mean ±SD   | Mean Score of<br>Items based on 20 | Median ±<br>interquartile range |  |  |  |
| Education  | 12               | 0.088                     | 8.38±39.82 | 66.36                              | 40±11                           |  |  |  |
| Equipment  | 5                | 0.005                     | 3.73±17.33 | 69.32                              | 17±5                            |  |  |  |
| Professors, assistants and staff   | 8                | 0.001                     | 6.64±28.57 | 71.42                              | 29±10                           |  |  |  |
| Assessment   | 3                | 0.001>                    | 2.27±10.52 | 70.13                              | 11±5                            |  |  |  |

and items 28 (Written and OSCE exams assess my knowledge and skills well.)  $(3.37 \pm 1.11)$  obtained a low score, indicating the lowest degree of challenges in the assessment area.

The findings indicated that the total mean score of educational challenges based on the participants' perspectives among stagers  $(87.96 \pm 17.03)$  was lower than that of interns  $(106.90 \pm 15.80)$ , which is statistically significant (P<0.001), indicating a higher degree of educational challenges for interns (Table 3).

| Table 3. Independent Sample t-test to compare the mean<br>scores among stagers and interns regarding educational<br>challenges |                   |                 |       |  |  |  |  |
|--|-------------------|-----------------|-------|--|--|--|--|
| Participants   | Mean ±SD          | ean ±SD P-Value |       |  |  |  |  |
| Stagers  | $87.96 \pm 17.03$ | 0.001<*         | 262.4 |  |  |  |  |
| Interns  | $106.90\pm15.80$  | 0.001           | 203.4 |  |  |  |  |
| *p<0.05  |                   |                 |       |  |  |  |  |

In order to compare the mean scores of four categories regarding the educational challenges between stagers and interns, one Independent Sample t-test and two Mann Whitney u tests were run (Table 4). There were significant differences between stagers and interns regarding education, equipment, professors, assistants, and the staff. In these variables, interns reported more challenges in clinical medical education. On the other hand, there were no statistically significant differences between stagers and interns regarding assessment.

| Table 4. Comparison of the four categories' mean scores<br>among stagers and interns regarding educational<br>challenges |         |                  |                |  |  |  |  |
|--|---------|------------------|----------------|--|--|--|--|
| Challenging Areas  | Level   | Mean ±SD         | <b>P-Value</b> |  |  |  |  |
| Education  | Stagers | $7.47 \pm 36.48$ | 0.0001~*       |  |  |  |  |
| Education  | Interns | 7.51±44.08       | 0.0001         |  |  |  |  |
| Eminment   | Stagers | 16.56±3.53       | 0 0001 <**     |  |  |  |  |
| Equipment  | Interns | 18.32±3.78       | 0.0001<        |  |  |  |  |
| Professors,  | Stagers | 25.35±5.99       | 0.0001<**      |  |  |  |  |
| staff  | Interns | 32.67±4.98       | 0.0001         |  |  |  |  |
|  | Stagers | 9.56±2.76        | 0.12**         |  |  |  |  |
| Assessment   | Interns | 11.82±2.28       | 0.13           |  |  |  |  |
| *Independent sample t-test, p< 0.05<br>** Mann Whitney U test, p< 0.05   |         |                  |                |  |  |  |  |

### DISCUSSION

The present study aimed to determine and compare the challenges of clinical education in general medicine. According to the present study's findings, the highest score regarding clinical education challenges was the availability of appropriate amenities in the hospital pavilion, including suitable rooms and internet access, and the lowest score was increasing the student's motivation and interest by commencing the hospital and clinical education at the beginning of the internship. Since the students are the primary education benefactors and are directly related to the education system, they seem to be the most important source for achieving the strengths and weaknesses of the education system (12).

Students' most critical medical education problem was the lack of proper management, planning, order, and coordination in education, which clarified the need to correct direction through scientific methods (15). In addition, most students believed that giving more importance to students and relying on clinical education would be one of the best ways to improve the quality of education. The country's macro planners should pay more attention to this critical issue and revise the current plan (ibid). Heydari et al. (8) stated that the participants believed that in some categories, there was a sort of incompatibility of educational content with the routines of clinical, educational groups, the content offered in classes, and other procedures with the general medical training program or the educational curriculum (stagers and interns). They continued that the overall goals and content selected to achieve them have been neglected and sometimes overlooked. In the current study, item 12 showed that our participants also challenged the quality of educational programs. They believed that their viewpoints had no room for ongoing programs.

Another stated challenge of clinical education in this study was the lack of skills training in each course before entering the ward. A survey conducted in Karachi assessed the satisfaction of medical students in the final year of teaching clinical and public health departments. The rate of student satisfaction in the investigated topics was estimated between 38.5-28% (15). In a study conducted by Riemann et al., it was also found that medical schools could not rely solely on clinical experience in internships to learn basic skills. A lack of familiarity with clinical skills was reported by 40% of the students before entering the ward (14). Therefore, educational planners should optimize available resources to provide conditions for students to acquire the necessary knowledge and skills for their future careers (5).

Other cases in this area were the lack of lesson plans and clear job descriptions for stagers and interns in different wards, which led to confusion and lack of a clear educational goal in the courses and a decline in learning. In the study of Alizadeh and Saiyah Melli (3), 80% of the interns were little aware of the description of their educational duties and objectives in the clinical wards. In this study, students also acknowledged that the quality of training rounds was not evaluated well and that morning reports did not meet their educational needs. Daryazadeh et al.(16) showed that assistants and physicians reported good clinical rounds. However, interns were not satisfied with clinical rounds.

The existence of a suitable program for stagers and interns in hospital clinics and the positive role of clinics in students' clinical education also had a low and desirable score in this study. These findings were incongruent with studies that reported a general view of clinical round training as dissatisfactory and low attendance of students and clinical faculty members (17,18).

Concerning motivation and interest, the lowest score of students from the clinical education challenges questionnaire belonged to item 1, i.e., increasing student motivation and interest in medicine by entering the hospital and clinical education at the beginning of the internship, indicating a lower level of educational challenges that supports the findings of other studies. In the study of Nasri et al. (4) study, most students were vague about future careers, but despite this, they did not lose interest in the medical profession and learning. In general, students' attitude towards the category of motivation was positive. In another study by Yaghoobi and Saleme (5), only 30% of students have expressed a lack of interest in the medical profession. Alizadeh and Saiyah Melli<sup>[3]</sup> mentioned that 63% of the interns stated a lack of motivation to learn in clinical education. Since one of the essential factors in teaching is the desire and interest to learn, focusing on this issue should be at the top of the planning priorities of medical education centers.

Regarding equipment, the participants were not satisfied with the amenities of the library hall, educational equipment, pavilion, suitable room, and access to the internet. These findings confirmed those of study of Nasri et al. (4). The adequate teaching aids, inadequate conference hall space, insufficient variety of teaching aids, unsuitable library space, lack of books in the library, the lack of laboratory facilities, and the inadequacy of the classroom were enumerated as challenging.

Heydari et al. (8) asserted that systems such as logbooks are designed to receive the views of stagers and interns about the quality of rotations in different wards, their learning rate, and the quality of professors' teaching. However, from the perspective of stagers and interns, these data are not used to improve the content and quality of teaching, choose professors selectively, and praise top professors. Therefore, receiving these data is considered mandatory and worthless. Other findings indicated that the interns are not optimistic about applying the quality of rotations training in different wards and consider it a forced and useless task because it has not had tangible results, such as dismissing weak professors and replacing them with more skillful ones (8). In the present study, item 24, referring to the staff skills to deal with and interact with the learners, was graded as the most challenging one and was in line with the Heydari et al. findings, indicating a degree of dissatisfaction among the participants.

In the field of professors, it received a high degree of challenge, and the students believed that the professors did not leave enough time and energy for the students and were also dissatisfied with the teachers' inappropriate treatment (item 19). In the study of Heydari et al. (8) study, it is stated that there is a lack of moral dignity and reciprocal relations with respect for stagers and interns in some wards, which will significantly impact their behavior in the future of their medical profession. In Nasri et al. (4) 40.9% of the subjects expressed insufficient mastery of the professors, and 39.4% expressed the respectful behavior of the professors with the students.

Respecting assessment, students believed that standard evaluation was not performed in clinical courses. They stated that the evaluation process and its implementation in almost all levels and wards, especially in clinical wards and the internship period, has some problems and should be re-evaluated. Phrases such as "lack of criteria for evaluation, injustice in grading, illegality in evaluation, evaluation without books and accounts, and not enough time allocation for evaluation process, especially in clinical courses (7). Alizadeh and Saiyah Melli (3) reported that 93.3% of participants considered the lack of matching between the summative and formative evaluation creates educational problems.

Since one of the crucial factors in education is having the motivation and desire to learn, these results may imply that pure theoretical education may effectively decrease interest in students. It can be inferred that many problems and failures that are probably common in other educational centers could be solved with proper planning and attention of the university, college, and educational centers and the cooperation of professors.

Paying attention to the status of education in medical science is very important and emphasized. Appropriate treatment of professors and assistants with students, the use of modern teaching methods to teach clinical skills, and adequate mastery of professors on clinical topics are some of the expectations of students that increase mastery in learning clinical skills. Developing educational facilities, the educational contents of the rounds, and using more effective teaching methods will increase educational effectiveness. Defining specific tasks in hospital wards so that the framework of these tasks is clear to assistants and staff is another expectation of students that increases their accuracy and focus on the assigned job description.

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This study was approved by the Medical Ethics Committee of Zahedan University of Medical Sciences with No:

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