An analysis of the challenges in recruiting clinical teachers in Iranian medical universities: A qualitative analysis

Akram Sadeghian, Shahram Tofighi, Nikoo Yamani, Tahereh Changiz

Abstract:

BACKGROUND: Employing appropriate and deserving staff is goal of human resource management (HRM). A group of staff at medical science universities are clinical teachers. Considering the position and importance of these peoples, this study addresses the challenges of recruiting clinical teachers.

MATERIALS AND METHODS: This is a qualitative study of the conventional content analysis done in Isfahan medical university in 2018. The participants were selected through intensity sampling of purposive sampling method, and data were obtained through semi-structured interviews conducted to survey 23 experts and clinical faculty members concerning the challenges involved in employing clinical teachers. Data were analyzed using conventional content analysis method and OneNote 2013.

RESULTS: Two main categories and ten subcategories were classified as follows: HRM inadequacy in educational departments with six subscales such as indefiniteness of the workforce status for HR managers, reluctance of educational departments to increase human resources, nonproportionality of the teacher–student ratio, recruitment of faculty based on the needs in the treatment sector, weakness of the infrastructure to use nonfaculty teachers, and reduced public interest in employment as a faculty and weakness of the selection process with four subscales based on data analysis such as undesirable manner of selection, recruitment based on the score given by the national board of medical examiners, purpose-based calls to recruit predefined individuals, and personal and emotional issues, rather than managerial standards, governing cooperation with teachers.

CONCLUSION: Recruitment process is part of HRM tasks. Employment system in a medical sciences university must be considered to improve the clinical faculty recruitment. HRM inadequacy in educational departments and weakness of the selection process are challenges that affect the employment system. According to these findings, it is necessary to review the regulations and tasks of HRM in medical sciences universities.

Keywords: Human resource, medical faculty, staffing

Background

Recruitment of skilled, committed, and motivated employees is the aim of human resource management (HRM).[1,2] Lack of a long-term and strategic attitude toward HRM in organizations can have negative effects on system. Efficient, expert, and motivated HR plays a highly important role in reaching predefined goals.[3]

HRM is important in medical universities and must be located in the top management of these health-care centers.[4] Some of human resource specialists agreed that the relationship between health-care and human resource management is extremely intricate.
They indicated that human resource management can and must play a substantial role in health-care sector reform.\textsuperscript{9,10} Medical universities are responsible to respond to the health needs of the society and improve their educational polices accordingly.\textsuperscript{7} These universities employ clinical faculty to train students at the university and care centers. A clinical faculty has different roles\textsuperscript{6} that, according to nature of their appointment, have notable patient care and teaching accountability and spend a percentage of their effort to research.\textsuperscript{9,10} Clinical faculties’ appointments are diverse in many disciplines. For example, calendar-year appointments are the norm in some of the disciplines in many countries. Furthermore, they can recruit in the form of tenure stream and tenured, practitioner-educators, adjunct practitioner-educators, mentorship, etc.\textsuperscript{11,12} Teaching in medical centers includes various tasks\textsuperscript{10} that are complex, overwhelming, and sometimes frustrating.\textsuperscript{13,14} The performance of clinical faculties as a teacher and as a care provider would be of special importance. They must be familiar with principles of education, teaching and learning strategies, and evaluation in clinical settings. Furthermore, because they provide health care to patients, they must be familiar with patient care principles such as interaction with patients, students, and colleagues. Therefore, a comprehensive evaluation of the performance of a clinical teacher for employment is necessary.\textsuperscript{14} Notwithstanding the significance and complexity associated with education, in many cases, the physicians and specialists enter the learning environment without sufficient preparation and knowledge.\textsuperscript{10} Studies show that the shortage of qualified teachers and the recruitment of individuals who lack the required capabilities in the clinic will cause many clinical problems.\textsuperscript{19} As the teachers are the practical models of students, it is also important for the candidates of teaching positions in the university not only to be motivated but also they have to have acceptable professional behaviors. According to Duane (2006), when students observe a teacher’s nonprofessional behavior, such as induction of unnecessary stress, threat, and humiliation, this may affect the students’ learning and they may present similar behaviors in the future.\textsuperscript{16} Due to the important position of clinical teachers in medical universities, clinical faculty recruitment and skill evaluation must be considered.\textsuperscript{5} Faculty shortage in some clinical departments has become increasingly in recent years.\textsuperscript{11} Frontline managers face challenges around hybrid “clinical-managerial roles.”\textsuperscript{14} Some of the clinical specialists would like to teaching but do not like to get involved in rules such as the geographical full time.\textsuperscript{17} Lack of organizational support and balancing priorities, complex responsibilities, role conflict and work pressures, lost clinical income, and the loss of intellectual capital decrease job satisfaction and motivation.\textsuperscript{18} As per Sadeghian et al., weakness of the infrastructure to use nonfaculty teachers, noncompliance of rules with clinical work conditions, and the difference in revenue between the private and public sectors are key challenges in clinical educators’ recruitment.\textsuperscript{17} Some literature reviews showed that teaching is the highest motivator, but another study observed little value on teaching for academic promotion as compared to research. Lack of rewards, lack of teaching skills, expectation of clinical service, and research at the same time are factors that cause clinical teachers’ reluctance to teach.\textsuperscript{19} Lowenstein et al. believed that there is an extreme pressure on clinical faculty to generate revenue from clinical service or grants. Furthermore, because of these reasons, there is a declining interest among medical students and residents to choose academic careers\textsuperscript{19} provide appropriate conditions for high-quality teaching increase teacher motivation. Appropriate work conditions increase clinical teachers’ motivation.\textsuperscript{10} Attention to all of the recruitment aspects is necessary. In some cases, dissatisfaction leads to leaving a job. Girod et al. explain that faculty attrition and turnover may be especially problematic among clinical faculty. They believed that inconformity in institutional expectations for clinical faculty roles and for their career success, inflexibility, lack of institutional support, work–life and personal/family balance, and low income were cited as reasons for leaving the health-care center.\textsuperscript{18} In another study, the intent of 532 faculties to leave the medical centers was measured. Results showed that around half of them were seriously considering leaving academic careers. To retain faculty, medical universities should refocus on recruitment challenges and motivational factors.\textsuperscript{19} Since the financial and problem impacts of turnover among faculty in clinical departments are very high, relevant managers in medical universities should pay attention to the employment challenges. Identifying the challenges of recruitment system can improve this process and prevent the turnover.\textsuperscript{20} This study aimed at clarifying the challenges of clinical faculties’ recruitment in Iranian medical universities to make HRM and policymakers deeply understand the challenges.

Materials and Methods

This is a qualitative study of the conventional content analysis type. Data were obtained through semi-structured interviews conducted to survey experts concerning the challenges involved in providing clinical teachers.
Participants
Intensity sampling of purposive sampling based on the recommendations of Gall et al.\textsuperscript{[21]} allows us to choose a desired case because it illustrates some features or processes in which we are interested.\textsuperscript{[21,22]} In this study, we chose\textsuperscript{[23]} cases that could help us. The head of the faculty recruitment board in the Ministry of Health Care and Medical Education and those who were in management positions and involved in the process of recruiting university lecturers were selected. In addition, faculty members also could help us. We interviewed with 13 faculties of Isfahan, Shahid Beheshti, Tehran, Zahedan, and Gonabad universities of medical sciences. Interviews continued until the data were saturated. The characteristics of interviewees are presented in Table 1.

Data collection
Initially, attempts were made, on the telephone or in-person, to coordinate an interview. Interviews were conducted in a suitable environment and were agreed upon by the participants in terms of location and time. We asked participants, in your opinion, what are the challenges related to the recruitment of clinical teachers in medical universities? Please criticism this situation. What is your suggestion to resolve these challenges?

In order to observe ethical considerations, explanations were given to the participants regarding the nature of the research and the confidentiality of information (codes used instead of participants’ names). Thus, they provided informed consent for participation. The interviews were semi-structured. The interviews were either recorded or noted down on paper with the consent of the participants. Each interview received a code and lasted for 30–45 min on average, depending on the knowledge and experience of the participant.

Data analysis
To analyze the collected data, we used the content analysis method with an inductive approach.\textsuperscript{[23,24]} Inductive codes come from the data itself: analytical insights that emerge during immersion in the data and during what is called “preliminary coding.”\textsuperscript{[24]} In this study, the data analysis was performed from the first interview based on the recommendations of Hsieh and Shannon.\textsuperscript{[23]} One of the researchers was interviewed with participants and recorded the voices of them. She transcribed these audio recordings. The texts of the interviews were studied by researchers to get a general idea of the participants’ statements. Each interview was recorded and transcribed word by word by one of the researchers. They continued until data saturation. The data saturation was confirmed when no new insights, themes, or patterns are being generated.\textsuperscript{[24]}

The most meaningful parts of the data were extracted and organized, and codes were assigned to each coding assignment by two researchers. For coding, Microsoft OneNote software (version 2013) was used. In the third step, after the codes were obtained, through the process of reduction of data, categories and subcategories were developed from the codes.\textsuperscript{[24]}

Results
A total of 23 interviews were conducted. The interviewees comprised individuals with management positions at the ministry, university, and faculty levels or were faculty members. After the data were integrated and

### Table 1: Characteristics of interviewees

| Organizational position          | Number | Organization of service delivery | City of employment                                      |
|----------------------------------|--------|----------------------------------|--------------------------------------------------------|
| Head of the recruitment board    | 1      | Ministry                         | Tehran                                                 |
| University chancellor            | 1      | University                       | Isfahan                                                |
| Dean of the faculty              | 3      | University                       | Isfahan                                                |
| Vice-chancellor of education     | 5      | University                       | Isfahan, Tehran, Fasa, Shahrekord, and Birjand universities of medical sciences |
| Faculty member                   | 13     | Medical school and teaching hospitals | Isfahan, Shahid Beheshti, Tehran, Zahedan, and Gonabad universities of medical sciences |
categorized, 338 codes, 10 subcategories, and 2 main categories were obtained. The categories included the HRM inadequacy in educational departments and the weakness of the selection process [Table 2].

**Human resource management inadequacy in departments**

Competent HRM in universities is a key element in organizing the workforce, while any shortcoming in it can be associated with major challenges. The results of this study showed that weakness in HRM could cause problems such as indefiniteness of the workforce status for HR managers, reluctance of educational departments to increase human resources, nonproportionality of the teacher–student ratio, recruitment of faculty based on the needs in the treatment sector, weakness of the infrastructure to use nonfaculty teachers, and reduced public interest in employment as a faculty.

**Indefiniteness of the workforce status for HR managers**

The existence of HR information system and planning is the task of HRM in organizations.[14] With this system, human resource management will be well informed about the composition of the departments and will have a more detailed planning of recruitment.

Currently, in most cases, medical universities do not know how to combine their workforce, including age, retirement history, retirement age, and the actual needs of departments. Therefore, the requirements have been raised only on request and, in some cases, the insistence of the departments; as a result, the lack of transparency of human resources leads to injustice.

| Subcategories                                                                 | Categories                                             |
|-------------------------------------------------------------------------------|--------------------------------------------------------|
| Indefiniteness of the workforce status for HR managers                       | HRM inadequacy in educational departments               |
| Reluctance of educational departments to increase human resources            |                                                        |
| Nonproportionality of the teacher–student ratio                             |                                                        |
| Recruitment of faculty based on the needs in the treatment sector            |                                                        |
| Weakness of the infrastructure to use nonfaculty teachers                    |                                                        |
| Reduced public interest in employment as a faculty                           |                                                        |
| Undesirable manner of selection                                              |                                                        |
| Recruitment based on the score given by the national board of medical examiners |                                                        |
| Purpose-based calls to recruit predefined individuals                        |                                                        |
| Personal and emotional issues, rather than managerial standards, governing cooperation with teachers |                                                        |
|                                                                  | Weakness of the selection process                      |

“Each department should have plans to recruit faculty according to needs and age range of the individuals. We had a year when two faculties were recruited and then 5 years without any recruitment. While the HR manager is unaware of the composition of the departments” (Faculty 9).

“The headquarter is sitting there receiving a series of (recruitment) requests, and merely reordering them, to reply yes or no. They do not have a basis for comparison between the requests nor a basis to show the needs that have not been expressed. Maybe the school that is bargaining to receive two faculty members is in a critical need, but the need has not been transferred (to the headquarter)” (Faculty 19).

**Reluctance of departments to increase human resources**

Other tasks of HRM are job design based on job analysis, human resource planning, and recruitment,[14] in the process of needs assessment, which is part of the task of human resource planning, the following are determined: knowledge, skills, personality traits and professional requirements, number of workforce or required full-time equivalent, organizational and geographic requirements, start time, need period, and type of employment relationship required. At present, the HRM system of universities is not scientifically required to measure and plan, but after receiving the license to announce the need, and communicating it to the colleges, the departments acted individually and they will announce their jobs. In some cases, despite the high need for power, they refuse to take new troops because of financial problems.

“Clinicians do not like to have new members added because their income would be affected” (Vice-chancellor 6).

“We have a department that we believe strongly needs new faculties, whereas they say that they do not need new members. We have demanded that recruitment requests be in accordance with a needs assessment” (Vice-chancellor 6).

**Recruitment of faculty based on the needs in the treatment sector**

One of the challenges encountered by clinical departments is that the faculty members have to play both a teaching role and a role in treatment. In numerous cases, this is the reason why educational departments request for new members to compensate for deficiencies in the health-care sector, in spite of the adequacy of their current workforce to satisfy their educational needs.

“Maybe you can go along with the educational requirements with one or two faculties... But you notice that, no! The burden to deliver services...
Weakness of the infrastructure to use nonfaculty teachers
Past regulations have allowed the presence of people with different abilities and conditions in medical universities. These abilities and conditions are including part-time teaching. Concluding a contract with retirees and nonfaculty members with academic qualifications and etc.

According to the Regulations on Temporary Teaching, enacted in 1998, universities can, if necessary, “provide for the shortage of human resources from among working or retired faculty members or nonfaculty members with academic qualifications or to employ those who fail to have an academic degree but have qualifications, skills, or experience in specialized fields for theoretical or practical educational activities (laboratory, clinical, workshop, etc.) via credit-based teaching.” Nevertheless, importantly enough, this regulation has faced challenges or has remained unimplemented because of the unprepared mechanism and the relevant by-laws, including unclear percentage of commitment on the part of each of the two parties (university and teacher), lack of rules and regulations for the implementation of training in settings other than the conventional training environments, and insufficient and delayed payment.

“We do not incorporate by-contract instructors; they have no commitment and are prone to leave in case they find a better job tomorrow” (Dean 2).

Weakness on the selection process
Undesirable manner of selection
In the process of recruiting teachers, one key step is to conduct interviews and to review the candidates’ past experience. It is necessary to have standardized conditions for conducting an interview and to use methods which can discern the qualified person. However, the research participants believed that the selection methods are not able to accurately identify individuals with qualities of a good teacher.

“The biggest drawback of the process is that the teaching ability of a faculty candidate is overlooked. Importantly, the 20 scores given to the applicant’s teaching is a matter of form. The qualities that need be assessed concerning a candidate’s teaching ability are not considered. Even if s/he scores below standard in terms of such qualities, the scores given for other educational criteria compensate for the deficiency. It seems to me that if someone is recruited as an educational faculty, s/he needs to have the power of expression and teaching competence; it’s no longer important that the candidate has.” (Faculty; 19)

Recruitment based on the score given by the national board of medical examiners
One criterion to select a teacher at a university is the score obtained by the candidate on the national examination given by the board of medical examiners. Nevertheless, the board simply examines an individual’s knowledge and fails to assess the teaching competence or the personality of the candidate. This is despite the fact that many interviewees believed that this score could not be a suitable criterion for selecting individuals to act as university teachers.

“The person who has an educational personality is not to be found simply based upon one criterion, for example, that he can take tests well. It is important whether s/he is a top student, whether s/he has published articles, but the ability and interest in educational work is something else. Many used to be top students but have not been good teachers” (Faculty 10).

Purpose-based calls to recruit predefined individuals
One of the challenges posed in the process of providing teachers and recruiting faculty is that the educational departments specify certain qualifications in the recruitment announcement so that only their predefined individuals can apply for the position. This will waste the time and energy of other candidates.

“The truth is the question of how the university gets to know what faculty members it needs; it asks the departments who will put this crown on the head of some certain individuals... For example, in Department A, you are the head and have someone in your department who is finalizing his/her committed project. You do not want to miss him/her. Therefore, you make your recruitment sourcing accordingly” (Faculty member 11).

“We know whom we want to attract. Ten people participate (in the recruitment process) who, unfortunately, do not know what is behind the process. They really have hope, but they do not know that the vacancy is already filled. I really suffer from this in the society, from this procedure, this model” (Faculty 19).

Personal and emotional issues, rather than managerial standards, governing cooperation with teachers
According to the latest edition of the Administrative Employment Regulation, the recruitment of faculty members is under contractual terms at the beginning of their entry. The duration of the contract is 1–3 years...
and can be renewed according to the institution’s discretion. In case the faculty’s rank is upgraded to a higher level, and in consideration of the relevant rules and regulations, the faculty’s employment status changes into a tentative-official one. After 3 years and upon fulfilling the required annual bases, the employment status changes into a definitive-official one. As stipulated in the law, a person enters into higher ranks of the contract if s/he receives the required scores. However, the interviewees believed that the presence of cultural issues and reprimand from frank speech, as well as the absence of evidence and objective assessment methods, prevented the termination of cooperation with disqualified individuals.

“If someone enters, s/he will be here up to the end. We stand on ceremony. There would be no executive power. I have not seen anyone whose contract has been canceled unless s/he has not wished to continue. We have cases and we know that the person is not suitable, but we cannot expel him/her. The law is good, which says if someone fails to work well over the past 3 years, you should not renew the contract. But we stand on ceremony; we have a lot of compassion, and; when the person turns into a contractual employment status, it is done forever” (Dean 2).

Discussion

The results of this study showed that a part of challenges of recruiting clinical teachers is attributable to the HRM inadequacy in educational departments and weakness of selection process. Indefiniteness of the workforce status for HR managers, reluctance of educational departments to increase human resources, nonproportionality of the teacher–student ratio, recruitment of faculty based on the needs in the treatment sector, weakness of the infrastructure to use nonfaculty teachers, reduced public interest in employment as a faculty lead to HRM inadequacy in educational departments and undesirable manner of selection, recruitment based on the score given by the national board of medical examiners, purpose-based calls to recruit predefined individuals, and personal and emotional issues, rather than managerial standards, governing cooperation with teachers lead to weakness of the selection process.

The HRM process involves the needs assessment, planning, recruitment, training and development, application, appointment, and maintenance of human resources in pursuit of organizational goals. Based on this definition, the first task of HRM is job analysis. In fact, the universities ’s HRM should analyze the various occupations associated with different educational groups so that they can recognize the needs well. Afterward, it is determined by the information obtained that, in each part, how much force is needed to carry out what type and volume of work are required. As a result, it seeks to design the necessary jobs for colleges. And then, the contracts are concluded with the employee, based on the logical needs. However, unfortunately, at the universities of medical sciences, the needs assessment is carried out in the form of questions from the departments and the HRM will recruit on request from the education departments without having a careful look at the status quo. The results of this study showed that lack of a HRM system in universities leads to indefiniteness and vagueness concerning the current HR situation, which, in many cases, will be associated with challenges such as the reluctance of educational departments to increase human resources, nonproportionality of the teacher–student ratio, etc.

Participants stated that the recruitment of clinical faculty is based on treatment ward needs. In addition, the weakness of infrastructure to use nonfaculty teachers are another challenge that leads to HRM inadequacy. In a health center, the clinical faculties have patient care and teaching responsibility and spend a percentage of their effort to research. Due to the high volume of care activities, their teaching role is overshadowed by their care-provider role.

In many cases the medical sciences universities, employ full-time faculties to meet the needs of medical departments. In addition, intense activities may disrupt the exemplary role of these faculty members, so that students may wrongly consider as normal the occasionally unprofessional behaviors of faculties involved hectically in the treatment. Our finding is consistent with Fazio et al., who expressed that workload, stress, and inadequate faculty development were the challenges of teaching ambulatory internal medicine.

Participants suggested that clinical track be separated and all of its aspect responsibility be defined. Some study confirms that clinician-educator most be defined. This innovation makes the efforts of educators more transparent.

Reduced public interest in employment as a faculty is another challenge expressed by participants. Many of the clinical faculties were dissatisfaction from lack of balances in responsibilities and some regulations such as geographical full time. Many of them stated that they are interested to teach, but infrastructure to use nonfaculty teachers is inefficient. It is consistent with some qualitative researches that participants like to provide patient care and teaching but do not like to employ medical sciences universities. One of the common ways is to employ individuals as part-time
or contract-based workforce. Applying clinical staff as clinical education assistants was also proposed to meet educational needs. Studies have shown that the idea of using clinical education assistants has been highly welcomed by students, trainees, and faculty. What is important, however, is the need for a clear and well-defined framework and set of rules as well as an accountable evaluation system. The use of hospital staff as clinical educators can alleviate the shortage of educational workforce; nevertheless, their knowledge and ability must be carefully assessed since educators often lack the required commitment and scientific knowledge. As stipulated in the law, different procedures are available to supply workforce, which can be used to prevent these challenges. This kind of contract will create flexibility in conducting educational activities at different educational centers. Bartle and Thistlethwaite believed that formal opportunities for junior doctors to learn from senior medical educators, has positive outcomes on medical educators ability.

Recruitment of faculty based on the needs in the treatment sector was stated by interviewees. They explained that crowded wards affect education and students’ behaviors. Some researches confirm that teaching tasks may be underestimated between competing obligations which might lead to dissatisfaction. Larger time (75%–80%) of this faculty is spent in clinical care and very little time is given to teaching. The results of Ahmadian survey showed that the teacher–student interaction is below average (2.63), while the teacher–patient interaction was above average (3.29), which inadvertently lead to inappropriate training.

Participants believed that professional performance of the candidates does not evaluated properly. This finding is consistent with previous studies. DaRosa et al. confirmed that access to teaching support is an environmental barrier that underestimated teaching task. Posthuma et al. confirmed that job interviews in different countries are diverse. Marital status and children of candidates and their family, applicants’ salary expectations and wage, values, opinions, and beliefs are investigated.

In addition to the weaknesses associated with the selection questions, there is no accurate monitoring and evaluation system that can be used for extending contracts and that can properly protect the rights of the system and individuals. Contracts are reconciled influenced by cultural factors, not values or qualifications. Hosseini et al. believed that the current criteria and indicators of faculty evaluation failed to depict the faculties’ quality of work and performance. They explained that little weight was allocated to education, and publishing articles and books was given a great importance.

Conclusion

Recruitment process is part of HRM tasks. In this process, challenges are inevitable. Clarifying the challenges helps managers and policymakers to improve the conditions. HRM inadequacy in educational departments and weakness of the selection process are challenges that affect the employment system. According to these findings, it is necessary to review the regulations and tasks of HRM in medical sciences universities.

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Conflicts of interest

There are no conflicts of interest.

References

1. Talebi S. Investigating the relationship between faculty members’ demographic features and learning and education quality in fars payame noor university and shiraz university of medical sciences. Iran J Med Educ 2015;14:843-52.
2. Vali L, Shokoohi M, Beizgadeh A. Characteristics of a capable university teacher the viewpoints of faculty members of health services management department in iranian medical universities. Iran J Med Educ 2014;14:90-100.
3. Salarvand S, Yamani N, Kashani F, Salarvand M, Ataei M, Hashemi Fesharaki M. Nursing students’ perception of ethical and professional characteristics of an ideal faculty member: A qualitative study. Iran J Med Educ 2015;15:481-94.
4. Sinha G, Ojha V. The Role of HR in Hospital Administration and Employee Satisfaction. Vol. 4.2016.
5. Kabene SM, Orchard C, Howard JM, Soriano MA, Leduc R. The importance of human resources management in health care: A global context. Hum Resour Health 2006 Jul 27;4:20.
6. Pillai M, Senthilraj O. Role of human resources management in healthcare organizations: A review. Int J Health Sci Res 2019;9:228.
7. Tootoonchi M, Yamani N, Changiz T, Yousefey A. Research priorities in medical education: A national study. J Res Med Sci 2012;17:83-91.
8. Yamani N, Moosavi SA, Alizadeh M, Khorvash F, Ghiasi M. A 360-degree performance evaluation of emergency medicine ward in alzahra hospital. J Pak Med Assoc 2012;62:513-7.
9. Bunton S. Medical Faculty Job Satisfaction: Thematic Overviews from ten Focus Groups; 2006.
10. van den Berg BA, Bakker AB, Ten Cate TJ. Key factors in work engagement and job motivation of teaching faculty at a university medical centre. Perspect Med Educ 2013;2:264-75.
11. Draugalis JR, DiPiro JT, Zaolla MM, Schwinghammer TL. A career in academic pharmacy: Opportunities, challenges, and rewards. Am J Pharm Educ 2006;70:17.

12. Classification of Ranks and Titles Faculty Handbook Boston University. Available from: https://www.bu.edu/handbook/appointments-and-promotions/classification-of-ranks-and-titles/. [Last accessed on 2020 Sep 20].

13. Rahimi AA. The obstacles and improving strategies of clinical education from the viewpoints of clinical instructors in Tehran’s nursing schools. Iran J Med Educ 2005;5:73-80.

14. Rezaei B. Quality of Clinical Education (A Case Study in the Viewpoints of Nursing and Midwifery Students in Islamic Azad University, Falavarjan Branch). Vol. 9. 2016.

15. Alizadeh Aghdam MB, Abbaszadeh M, Shishavan AT. Evaluation of adherence to scientific ethics among faculty members; The case of tabriz university. Quarterly J Sci Technol 2011;3:57-69.

16. Ahmadian M. Howness of teacher’s interaction in the clinical educational environments from the viewpoints of the medical students. Med Ethics J 2015;8:11-39.

17. Sadeghian A, Tofighi S, Yamani N, Changiz T. Clinical instructors’ recruitment challenges: Interpretive Structural Modeling approach. J Educ Health Promot 2020;9:152.

18. Girod SC, Fassiotto M, Menorca R, Etzkowitz H, Wren SM. Reasons for faculty departures from an academic medical center: A survey and comparison across faculty lines. BMC Med Educ 2017;17:8.

19. Tarig M, Ali SA. Motivation of clinical faculty towards teaching and learning. J Coll Physicians Surg Pak 2014;24:785-6.

20. Schloss EP, Flanagan DM, Culler CL, Wright AL. Some hidden costs of faculty turnover in clinical departments in one academic medical center. Acad Med 2009;84:32-6.

21. Gall MD, Borg WR, Gall JP. Educational Research an Introduction. New York: David McKay Company; 2017.

22. Silverman D. Doing Qualitative Research. second. (Seal C, ed.). London: SAGE; 2005.

23. Shannon HF. Three approachescontentanalysis. Qualitat Health Res 2005;15:1277-88.

24. Graneheim UH, Lundman B. Qualitative content analysis in nursing research. Nurse Educ Today 2004;24:105-12.

25. Hariri DN. Principles and Methods of Qualitative Research. TEHRAN: Islamic Azad University-Science and Research Branch; 2011.

26. Hashemi S, Pouraminzadeh S. Challenges to human resource development and solutions. Work Soc 2012;136:4-21.

27. Fazio SB, Chheda S, Hingle S, Lo MC, Meade L, Blanchard M, et al. The challenges of teaching ambulatory internal medicine: Faculty recruitment, retention, and development: An AAIM/SGIM position paper. Am J Med 2017;130:105-10.

28. Bartle E, Thistlethwaite J. Becoming a medical educator: Motivation, socialisation and navigation. BMC Med Educ 2014;14:110.

29. Gandomkar R, Salsali M, Mirzazadeh A. Factors influencing medical education in clinical environment: Experiences of clinical faculty members. Iran J Med Educ 2011;11:279-90.

30. Posthuma RA, Levashina J, Lievens F, Schollaert E, Tsai W, Fernanda Wagstaff, Campion M, et al. Comparing employment interviews in Latin America with other countries. J Business Res 2014;67:943-51.

31. Karimi Moonaghi H, Zhianifard A, Jafarzadeh H, Behnam H, Tavakol Afshari J. A survey on obstacles and problems of promotion procedure: An untold story of faculty members. J Med Edu Dev 2015;18:73-86.