

Emergency medicine in Iran: a qualitative study

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Abstract:

Study objective: Although the emergency medicine was established 10 years ago in Iran, no study has been conducted on this specialty as a career yet. This made us evaluate the viewpoints of the Iranian emergency medicine specialists about their career in a qualitative study. **Method:** Data were compiled using a qualitative methodology (grounded theory), face-to-face interviews and open questions. Interviewees were selected based on academic or nonacademic activities (employment) and genders; they had at least 2 years' experience in their career. Interviews continued until we reached data saturation when there was not any new idea in our interviews. Then the verbatim transcriptions were coded with thematic analyses to extract themes by two independent reviewers, and after an agreement, these themes were classified in 3 main categories. **Results:** Categories include: 1. Career nature 2. The positive points (aspects) of the profession 3. Weak points (The negative aspects of the career) About the first category, Iranian emergency medicine specialists mentioned that they have an effective and important role as the first line physicians in the diagnosis and treatment of emergency patients and the appropriate management of the emergency ward. In the second category, the main positive aspect was the spiritual values and the sense of fulfillment caused by saving lives of critical patients. Other themes, such as schedule flexibility and job opportunity were also important in this category. About the negative aspects, the main concern was about not being recognized as a specialty by society after 10 years. Besides, there were also concerns about stress and burnout. The main difference between the perspective of academic emergency medicine specialists and nonacademic counterparts was the feeling of more job security in the first group. There was not any difference in the perspective of male and female emergency medicine specialists about their career. **Conclusion:** Based on this study, we achieved a hypothesis about the viewpoints of Iranian emergency medicine specialists about their career. This hypothesis can be a basis for more detailed quantitative studies in this issue. It seems that Iranian emergency medicine specialists have a positive perspective on their career and their role in the health care system in that the future of this new specialty will be very encouraging, although there are concerns about burnout and lack of support from Iranian emergency medicine society among specialists.

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Introduction:

In 1999, emergency medicine as a specialty was approved by the Iranian Council Of Graduate Medical Education and then the former Iran University Of Medical Science took authority to train the first emergency medicine residents in 2000. In early 2005, the Iranian society of emergency medicine (ISEM) was established and every year the number of graduates in this field is increasing.¹

10 years after establishing emergency medicine in Iran, this field is developing nationwide. In the future, along with the development of expertise in emergency medicine, one should expect fundamental changes in the quality and the level of emergency cares as well as disaster management.¹

Since the recognition of emergency medicine in 1979 in the United States, questions about longevity,

career satisfaction, and burnout of emergency physicians have been raised.²

The practice of emergency medicine involves dealing with multiple sources of uncertainty, combined with a very stressful environment, a combination of circumstances that appear to be frequently associated with burnout.² High volumes, high acuity, and high complexity of diseases are integrated and result in the need for rapid decision-making in a highly ambiguous environment.²

Most data indicate that career satisfaction and dissatisfaction vary across specialties, as well as age, income, region, and the site of practice. The collected data within emergency medicine are also discordant. Some investigators report low levels of stress and high levels of job satisfaction and others report high levels of stress and job dissatisfaction.³

In a study by Korte and Cydluka³ about job satisfaction among emergency physicians in 1994, 1999 and 2004, the majority of participants (77.4% in 1994, 80.6% in 1999, and 77.4% in 2004) stated that emergency medicine has met or exceeded their career expectations. Despite the overall high level of career satisfaction, one third of respondents reported that burnout was a significant problem. In this study, physicians who were involved with academic clinical education were twice as likely to report high levels of career satisfaction as their peers and career satisfaction was similar among men and women.

Goldberg and colleagues⁴ conducted a cross-sectional survey using Maslach burnout inventory as well as 79-item questionnaires, to evaluate burnout and its correlates in emergency physicians who were registered at the annual scientific assemblies of American College Of Emergency Physicians from 1992 to 1995. Of 1272 participants taking the inventory, 60% were registered in a moderate to high level of burnout. Age and years of practice were not significant predictors of burnout in this study.⁴

The number of women entering emergency medicine is increasing. Clem and associates⁵ investigated career satisfaction among female emergency physicians; they emailed questionnaires for ACEP women and 1380 physicians responded (The response rate was 56%).

Most women were satisfied with their career as an emergency physician (35.5% very satisfied, 44% satisfied). Significant factors for career satisfaction included the amount of recognition at work, career advancement, schedule flexibility, and the fairness of financial compensation and academic practice setting.⁵

Goldberg and Thomas⁶ evaluated the issues of concern to emergency physicians in pre-retirement years by conducting a survey among 1000 ACEP members over the age of 55 years. A substantial

percentage acknowledged at least some degree of cognitive or physical decline. The practice modifications most commonly reported to impact career longevity were the reduction or elimination of night shifts and the number of hours per shift.⁶

A number of studies in recent years have suggested that various aspects of the practice of emergency medicine are unhealthful.⁴ Specific areas of concern include shift work, factors such as high patient volume and limited resources that create work time pressure, clinical decision-making based on incomplete information, repeated exposure to traumatic events, litigation concerns, and provider-patient as well as provider-provider dissonance.⁴ Besides, the emergency department is more prone to aggressive behavior than other wards, including threatening behavior and speech and physical attacks.⁹ Burnout in turn, has been linked to numerous aspects of personal dysfunction, including physical exhaustion, insomnia, substance abuse, marital discord, and job attrition.⁴

Many emergency medicine practitioners at all grades report that their fellow hospital practitioners have negative opinions about emergency medicine as a specialty.⁸ one study in Royal Berkshire hospital in England by Smith⁸ revealed that this negative attitude really exists.

Study objectives:

To hypothesize how Iranian emergency medicine specialists think about their career and does gender or academic or nonacademic employment affects their perspective. These hypotheses will be a basis for more detailed quantitative studies in this issue. Also this study provides guidance for the Iranian medical students who are interested to the emergency medicine as their future career.

Method:

Because there has not been any study about emergency medicine as a career in our country and regarding the main cultural differences between our nation and other communities and also more importantly the fact that there have not been any basic data about this issue in Iran, we used a qualitative methodology (Grounded theory), and gathered our data with face-to-face interviews and open questions. Regarding the small number of emergency medicine specialists in Iran, we used the Iranian Society Of Emergency Medicine (ISEM)'s data base to find interviewees. All emergency medicine specialists with at least 2 years of experience were included in our study.

We contacted them by phone and set appointment to interview. Interviews were continued until we reached data saturation when there was not any new idea in interviews.

Before the beginning of the interview, an informed consent was obtained from each participant.

We used these open questions:

1. What's your comment on emergency medicine as a career?
2. From your perspective, what are the strengths of this profession?
3. What are the negative points of the career?

The interview was recorded by a voice recorder, and then the verbatim transcript was provided, effective factors were summarized; this approach was used for all interviews until we reached data saturation and then important factors were classified as results.

Data analysis:

By a simple questionnaire, some information about age, sex, and academic or non-academic activity was collected completed by interviewees. This form also contained an informed consent for participating in the interview.

After recording and transcribing interviews, the content analysis was conducted in three stages:

1. Open coding: Read the text line by line, naming the concepts in the text.
2. Axial coding: Classification of concepts.
3. Selective coding: Extracting the main idea from overall concepts.

The texts were read separately by two executors of the study; themes were coded and after agreement classified in 3 categories: 1. Career nature 2. The positive points (aspects) of the profession 3. Weak points (The negative aspects of the career)

Results:

15 face-to-face interviews were carried out with emergency medicine specialists in 3 educational hospitals and 1 private hospital in Tehran. Demographic data of interviewees are found in table 1.

3 main categories were extracted from interviews that will be reviewed separately.

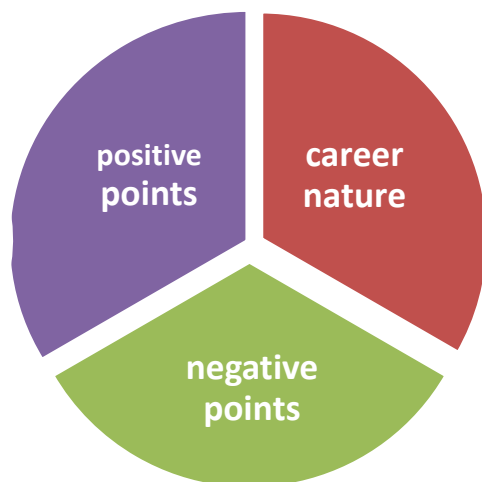


Figure 1: categories

Table 1: demographic data of the interviewees:

Years of practice as a general practitioner	Years of practice as an EM specialist	single	married	Nonacademic activity specialist	Academic activity specialist	woman	man	Interviewee No.
2	3		+	+			+	1
2	3		+	+			+	2
0	3		+	+			+	3
0	3	+		+		+		4

0	4		+	+			+	5
0	4		+	+			+	6
2	6		+		+		+	7
6	8		+		+		+	8
0	5		+		+		+	9
0	6		+		+		+	10
2	2	+			+	+		11
3	3		+	+			+	12
0	5		+		+		+	13
3	3		+	+			+	14
3	4		+	+			+	15
		2	13	9	6	2	13	total

1. Career nature:

Themes of this category are found in table number 2:

Table 2

Career Nature
<ul style="list-style-type: none"> ✓ Attraction and excitement ✓ To be the first line of diagnosis and treatment ✓ Scientific management of emergency ward ✓ Early detection of hazardous clinical problems ✓ Critical patient care ✓ Saving time and cost for patients ✓ 24-hour monitoring of patients' clinical status ✓ Performing vital and useful procedures ✓ Comprehensive clinical evaluation ✓ Team work

Positive points:

Themes in this category are listed in table number 3

Table 3

Positive points
<ul style="list-style-type: none"> ✓ The spiritual value of profession ✓ The Lack of financial incentives in dealing with patients ✓ Saving the lives of patients ✓ The bright future of the career ✓ The feeling of satisfaction ✓ Not being on call ✓ Flexible schedule ✓ Job opportunity ✓ Patient satisfaction ✓ Not being in direct financial contact with patients ✓ Ability to manage a variety of diseases ✓ Having time for vacation

2. negative points:

Themes in this category are listed in table number 4:

Table 4

Negative points
<ul style="list-style-type: none"> ✓ Not being identified as a specialty ✓ Lack of support ✓ Undefined financial system ✓ Overcrowding during clinical shifts ✓ Night shifts ✓ Stress at work ✓ Burnout ✓ Exposure to infections ✓ The vast majority of patients are critically ill ✓ Lack of cooperation by other hospital practitioners

Discussion:

The main theme in the category of career nature is that emergency medicine is a highly attractive and exiting profession and creates the feeling of satisfaction in interviewees. Although other researchers used questionnaires in their studies, the final results resemble and most participants have reported a high satisfaction rate.

In a study by Korte and Cydluka³ on job satisfaction among emergency physicians in 1994, 1999 and 2004, the majority of participants (77.4% in 1994, 80.6% in 1999, and 77.4% in 2004) stated that emergency medicine has met or exceeded their career expectations.³

All interviewees had the same prospective about their careers, regardless of academic or non-academic

activities. Likewise, gender did not affect this prospective and emergency medicine has always been an appealing and exciting profession in their opinion.

In the study by Clem and associates, most women were satisfied with their careers as an emergency physician (35.5% very satisfied, 44% satisfied).⁵

Based on our study, it seems that emergency medicine in Iran is an attractive specialty. From the perspective of Iranian emergency medicine specialists they have very different and effective abilities which let them manage the emergency department correctly, as well as the timely and exact diagnosis of life-threatening clinical conditions.

In this category, it is assumed that Iranian emergency medicine specialists believe that their career is very important and effective in the health care system of Iran. There was not any difference between male and female emergency medicine specialists in the prospect of the career. Thus, it is supposed that gender cannot be a significant factor in job satisfaction among Iranian emergency medicine specialists.

In positive point's category regarding the emphasis of all interviewees on spiritual values in their practice, we can assume that according from the Iranian emergency physicians' perspective, the main positive point of their career is spiritual and philanthropic values. Other factors like schedule flexibility and work shifts were also important factors for job satisfaction. Interviewees had an optimistic sense about the future of their career. Due to the demand for emergency medicine specialty, it is currently developing nationwide. There was not any concern about job opportunities among our interviews. Iranian emergency physicians were confident enough in managing a wide spectrum of diseases and consequently it is believed that emergency medicine residency program in Iran is very effective.

The first obvious weakness in our interviews was dissatisfaction with not being properly recognized as a specialty after 10 years of establishing emergency medicine in Iran. Also there were concerns about high patient volume, overcrowding and burnout among our subjects. These concerns were more prominent in the group of non-academic emergency physicians, leading us to the hypothesis that instructional and academic activities result in job security and satisfaction among Iranian emergency medicine physicians.

In a study by Goldberg and Thomas⁶ on concerns of emergency physicians in pre-retirement years, 74% of participants reported less ability to recover from night shifts, 40% reported less ability to manage the heavy patient volume, 36% reported less ability to

handle stress of emergency medicine, 28% reported health limitations on ability to practice, 42% reported concerns about adequate financial preparations and 44% reported concerns regarding loss of identity upon retirement.⁶

In another study conducted by Kuhn and Goldberg² to assess the role of uncertainty in predicting career burnout in emergency physicians, 32.1 % of participants exhibited emotional exhaustion; this exhaustion was not related to age or type of practice.² Despite exhibiting emotional exhaustion, the majority of respondents were satisfied with the career of emergency medicine.²

In our study there were also concerns about the exposure to infections and aggressive behavior and stigmatization of other hospital practitioners. These concerns were more prominent in teaching hospitals. Despite these concerns, all interviewees predicted a bright future ahead of emergency medicine as a new and independent specialty in Iran.

Conclusion:

This was a qualitative study and meanwhile we cannot evaluate how much these positive and negative points affect emergency medicine career in Iran. To achieve this important goal and to evaluate the effect of each factor, we need to design a new questionnaire based on the hypothesis in this study and other questionnaires that exist about this issue in the world. It, however, seems with the gradual removal of problems and obstacles on the way, mainly through coordinate union activities, satisfaction among physicians in this specialty will increase and emergency medicine will be one of the most attractive specialties in Iran.

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