

# Evaluation of job satisfaction of forensic medicine specialists and comparison with job satisfaction of some medical specialists in Tehran

Azadeh Memarian<sup>1</sup>, Kamran Aghakhani<sup>1</sup>, Seyed Hossein Moosavi Nezhad Baboli<sup>1</sup>,  
Seyed Abdolhadi Daneshi<sup>2</sup>, Siamak Soltani<sup>1</sup>

Departments of <sup>1</sup>Forensic Medicine, <sup>2</sup>Neurosurgery, Iran University of Medical Science, Tehran, Iran

## ABSTRACT

**Introduction:** Job satisfaction is a main factor to increase efficiency, productivity, and individual satisfaction in the organization. The purpose of this study is to determine the forensic expertise amount of job satisfaction and to compare them with other specialists in different. **Materials and Methods:** In this cross-sectional study, 150 individuals were included in three groups of specialists including forensic, internal medicine, and pediatric. Data were collected by Brayfield and Rothe Job Satisfaction Questionnaire. SPSS software version 23 was used for statistical analysis. **Results:** High levels of job satisfaction among forensic professionals were higher than low job satisfaction, but the same was true for the other two groups. In this study, job satisfaction status in the three groups of specialists was not significantly correlated with their type of expertise ( $P = 0.19$ ). There was no significant relationship between job satisfaction and gender ( $P = 0.19$ ). In addition, the mean age of the specialists with low and high job satisfaction was not significantly different ( $P = 0.99$ ). In this study, although the mean of work experience in professionals with high job satisfaction was higher than those with low job satisfaction, this difference was not significant ( $P = 0.23$ ). **Conclusion:** The results of this study showed that job satisfaction was high among forensic medical professionals and was not significantly different from other specialist groups including pediatric and internal medicine. In addition, job satisfaction was not significantly different in terms of age, gender, and work experience.

**Keywords:** Forensic medicine, job satisfaction, Tehran

## Introduction

Job satisfaction is defined as emotional responses to the different aspects of job as well as concepts, interpretations, feelings, and positive attitudes about their jobs.<sup>[1,2]</sup> Job satisfaction is considered as a complicated and multi-dimensional concept which can be interpreted differently by people. It is generally related to the motivation but is not defined as motivation, rather an attitude. For

instance, the internal mode accompanies with personal feelings of qualitative or quantitative enhancement.<sup>[3]</sup> This positive feeling mode can contribute to the mental and physical health of staff and is considered as one of the factors on efficiency of each organizational system. The high level of job satisfaction reflects the optimal atmosphere in the organization leading to attracting the employees. Those who are a little satisfied with their jobs mostly leave their workplace and resign.<sup>[4]</sup>

One of the most important factors in career achievement is raising the efficiency, feeling the personal satisfaction, and positive attitude to their functionality. The job satisfaction directly

**Address for correspondence:** Dr. Siamak Soltani,  
Iran University of Medical Science, Tehran, Iran.  
E-mail: soltani.s@iums.ac.ir

Received: 17-12-2019  
Accepted: 25-02-2020

Revised: 25-12-2019  
Published: 30-06-2020

### Access this article online

#### Quick Response Code:



Website:  
www.jfmpc.com

DOI:  
10.4103/jfmpc.jfmpc\_1167\_19

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow\_reprints@wolterskluwer.com

**How to cite this article:** Memarian A, Aghakhani K, Moosavi Nezhad Baboli SH, Daneshi SA, Soltani S. Evaluation of job satisfaction of forensic medicine specialists and comparison with job satisfaction of some medical specialists in Tehran. *J Family Med Prim Care* 2020;9:2710-3.

affects the quality of services and highly efficient employees are less vulnerable to stress and workload and they can overcome them all.<sup>[2]</sup>

Various factors affect the job satisfaction including 1) the internal factors such as attractiveness, meaningfulness, entertainingness, job variation, the personal skills, and the appropriateness of physical status<sup>[2,5,6]</sup> and 2) the external factors such as occupation security, income, welfare facilities in workplace, structure of organization, the management skills, occupational vagueness, the relationship between staffs, and the physical status of job,<sup>[3,5,7]</sup> and the individual properties such as gender, age, talent.<sup>[8]</sup>

The occupational concerns of physicians especially those related to the job satisfaction are increasing.<sup>[9]</sup> The majority of studies have discussed the job satisfaction from different aspects,<sup>[10]</sup> factors affecting them, and the relationship between the occupational burnouts,<sup>[11]</sup> stress,<sup>[12]</sup> mental health,<sup>[13]</sup> and job satisfaction among physicians, nurses, and medical staff in different regions and countries. Many studies in different countries suggested that the income-workload balance is related to the job satisfaction.<sup>[14-16]</sup> A study in America suggested that the workload, relational needs, patience, and risk-taking attitudes are related to the job satisfaction.<sup>[17]</sup> In Britain, the physicians' ability in implementing their trainings is reported to be a major factor affecting their job satisfaction.<sup>[18]</sup> In Germany, the humanitarian relationships and social status are related to the physicians' job satisfaction.<sup>[19]</sup>

Only few studies have been performed on the job satisfaction of forensic specialists due to the insufficiency of specialists in this field. On the other hand, the aim of forensic medicine is assessable and there is not a relationship between the patients and physicians or a long-term relationship, which is seen in patients with chronic diseases. Variety of patients (children and adults) and communities including victims, criminals, prisoners, etc. and Medical typology including psychological, emotional, sexual, and physical assaults, and segregated bodies and corpses all need a strong personality and handful abilities for struggling with the work load stresses.

Job satisfaction is regarded as a main factor to increase the efficacy and individual satisfaction with organization.<sup>[20]</sup> Thus, the present study aimed to determine the amount of job satisfaction of forensic specialists and compare them with that of other specialists.

## Materials and Methods

The present study is cross sectional. The participants included were Iranian forensic specialists, internists, and pediatricians. Because of wide range of samples in this study, Cochran sampling method was used to determine the volume. Accordingly, three groups of fifty from the specialists were included in the present study. The present study was approved by the Ethical Committee of medical sciences. The aims of this study were explained to the

participants and ensured that their information is confidential. They paid nothing for their participations.

In this practical and methodological study, library studying such as scanning national and international journals, surveying the databases, using the researchers' experiences, and findings of questionnaires were used to provide theoretical principles.

Finally, the results from these questionnaires were collected and analyzed by descriptive and inferential statistics. Data were collected by Brayfield and Rothe Job Satisfaction Questionnaire.<sup>[21]</sup> The participants were asked to rate their attitudes and feelings about their jobs through the 5-item scale from 1 to 5 indicating really disagree, disagree, not certain, agree, and really agree. The validity of test was estimated to be 92% by calculating the correlation of scores using Hoppock's Job satisfaction test.

## Statistical analysis

The descriptive and inferential statistics were used for data analysis by SPSS 23. The results for the quantitative data and classified qualitative data were interpreted as Mean  $\pm$  SD and percentage, respectively. T test and Chi-square test were used to compare the quantitative and qualitative variables, respectively. To determine the changes of indexes for pre and post interventional tests, paired t-test was used. The *P* value was considered significant at 0.05.

## Results

In the present study, 150 participants including forensic specialists, internists, and pediatricians were included. Their mean age and occupational experience were  $93/5 \pm 42/49$  and  $16/7 \pm 12/15$  years, respectively. Totally, 65 participants (42.8%) were male and 87 (57.2%) were female. Fifty-eight participants (38.4%) worked in private sectors, 34 (22.5%) in state sectors, and 59 (39.1%) of them worked in both sectors.

The mean age of forensic specialists, internists, and pediatricians was  $12/5 \pm 94/46$ ,  $9/7 \pm 42/49$ , and  $21/4 \pm 04/52$  years, respectively, which shows a significant difference between the mean age of specialists in these groups ( $P = 0.00$ ).

The mean of experience for forensic specialists, internists, and pediatricians was  $59/7 \pm 39/11$ ,  $59/6 \pm 84/15$ , and  $32/5 \pm 31/18$  years, respectively, which shows a significant difference between the mean experience of specialists in these groups ( $P = 0.00$ ).

The mean age of male and female specialists was  $52/5 \pm 24/51$  and  $89/5 \pm 06/48$  years, respectively. In this regard, the mean age of male specialists was higher than that of females ( $P = 0.00$ ).

In the present study, there was not a significant relationship between the job satisfaction of specialists and their specialties [Table 1].

## Discussion and Conclusion

Considering the role of job satisfaction in increasing the efficiency,<sup>[22]</sup> the job satisfaction among forensic specialists and other groups including internists and pediatricians was investigated and compared. Further, the relationship between variables including age, gender, and experiences and job satisfaction was assessed.

Based on the results, the significant difference between these three groups in terms of job satisfaction was not found. The majority of forensic specialists were highly satisfied with their jobs. In two other groups, the high job satisfaction was more than low job satisfaction. In the present study, job satisfaction was not significantly related to their gender. There was not a significant difference between the age of three groups (Forensic, Pediatrics, Internal medicine) and high and low satisfactions. Although the experience of specialists with high job satisfaction was a little more, this difference was not significant.

Gauthier *et al.* investigated the job satisfaction among the forensic specialists in Germany and Switzerland. Generally, participants were quite satisfied with their jobs and the results of their studies are consistent with those of this study. Based on the objective criteria, males were more successful than women. The occupational support was lower than the standard level. For most of the respondents, working in forensic medicine organization was more or equally enjoyable during the last 5 years.<sup>[23]</sup>

Chiarelli-Helminiak investigated the job satisfaction and burnout among the interviewers of forensic medicine organization in the northeast of United States of America in National Children's Alliance. Eighty eight percent of interviewers were satisfied with their jobs and this was consistent with the results of this study. When the interviewers of forensic medicine organization were supported by the organization to care for their emotional needs, they would experience higher satisfaction. There was a considerably high job satisfaction among the interviewers of forensic medicine organization because they could take some days off in case of being impressed by the result of an interview.

Interviewers of forensic medicine organization who gained higher score in social works were more satisfied with their jobs because they had committed to this profession and understood the complexity of child abuse and children's welfare policies as a result of their education. Interviewers of forensic medicine organization who interviewed in that organization were more satisfied with their jobs. Doing the in-the-place interview,

they knew all the requirements and equipment and could control their environments. Those who were supported by the multidisciplinary team were more satisfied with their jobs because abused children could benefit from all the skills.<sup>[24]</sup>

In the study of Iorga *et al.* in Romania, the job satisfaction among the forensic specialists was moderate, whereas in the present study, it was high. In an investigation of job satisfaction, income and promotion gained higher scores, while communication and organizational skills gained lower scores which showed their non-satisfaction with the organizing of their duties.<sup>[25]</sup>

Holt *et al.* assessed the job satisfaction and work stress among the specialists, those who were more satisfied were single and highly educated and had positive attitude to their occupations, were supported by the manager, and had less difficulties related to their role. Specialists with more workload stress were females who worked overtime, had a poor relationship with the prosecutors and lawyers, were poorly supported by manager, and confused by their roles which cause difficulties doing their jobs. In contrast, there was not a difference between the gender and job satisfaction<sup>[26]</sup> in the present study.

Iorga *et al.* evaluated the burnout among the forensic specialists in Romania. Based on the results of their study, forensic specialists were impressed by examining the children who are victims of sexual assault, sexually-invaded women, segregated bodies, and suicide among the prisoners. Generally, those events which the forensic specialists face every day changed their attitude to life. Forensic specialists are prone to sleeping disorders and depression. More than 10% of participants have taken anti-stress pills. Further, there was a high satisfaction with the payment, promotion, organizational factors and communications, management, and interpersonal relationships as well. Moreover, the emotional burnout had a negative relationship with the satisfaction factors. The personal development was proved to be affected by the job satisfaction factors.<sup>[27]</sup>

In the study of Sharifian *et al.* (2005) on the occupational tension and the affecting factors in forensic specialists in Tehran, the highest mean score for anxiety belonged to the vagueness of role and responsibility. The anxiety level was high in elderly people. Further, the individuals with more experiences were more anxious than those with fewer experiences. Men could tolerate more tension and anxiety.<sup>[28]</sup>

The results of the present study showed that forensic specialists are highly satisfied with their jobs and there was not a significant difference between forensic specialists and other groups. Further, the significant difference between job satisfaction and age, gender, and experience was not found.

## Ethics considerations

The present study received the Ethics code from the Ethics Committee of Iranian University of medical sciences (IR.IUMS).

**Table 1: The frequency distribution of job satisfaction among the studied specialists based on their specialty**

Specialty	High job satisfaction (%)	Low job satisfaction (%)	P
Forensic specialist	2 (3/14)	51 (0/37)	0.19
Internists	5 (7/35)	44 (9/31)	
Pediatricians	7 (0/50)	43 (2/31)	
Total	14 (100)	138 (100)	

FMD.REC.1397.011). The aims and processes of this research were explained to participants and they were assured that their personal information is accessible to just the performer. Also, they paid nothing.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

### References

- Smith P, Kendall L, Hulin C. *The Measurement of Satisfaction in Work and Retirement*. Chicago: Rand McNally; 1969.
- Armstrong M. *A Handbook of Human Resource Management Practice*. Kogan Page Publishers; 2006.
- Mullins LJ. *Management and Organisational Behaviour*. Pearson Education; 2007.
- Weiss HM. Deconstructing job satisfaction: Separating evaluations, beliefs and affective experiences. *Hum Res Manage Rev* 2002;12:173-94.
- Locke EA. What is job satisfaction? *Organ Behav Hum Perform* 1969;4:309-36.
- Cherington DJ. *Organizational Behavior: The Management of Individual and Organizational Performance*. Allyn & Bacon; 1994.
- Greenberg J, Baron RA, Grover RA. *Behavior in organizations: Understanding and managing the human side of work*. 2000.
- Saleh Bolourdi A, Pasha Sharifi H. Relationship between self awareness in professional setting with job satisfaction amongst sales managers of Iran's institute of industrial management. *J Indus Organ Psychol* 2010;1:21-6.
- Cox KB. The effects of intrapersonal, intragroup, and intergroup conflict on team performance effectiveness and work satisfaction. *Nurs Adm Q* 2003;27:153-63.
- Tarcan M, Hikmet N, Schooley B, Top M, Tarcan GY. An analysis of the relationship between burnout, socio-demographic and workplace factors and job satisfaction among emergency department health professionals. *Appl Nurs Res* 2017;34:40-7.
- Krueger P, White D, Meaney C, Kwong J, Antao V, Kim F. Predictors of job satisfaction among academic family medicine faculty: Findings from a faculty work-life and leadership survey. *Can Fam Physician* 2017;63:e177-85.
- Zhou X, Pu J, Zhong X, Zhu D, Yin D, Yang L, *et al.* Burnout, psychological morbidity, job stress, and job satisfaction in Chinese neurologists. *Neurology* 2017;88:1727-35.
- Mache S, Baresi L, Bernburg M, Vitzthum K, Groneberg D. Being prepared to work in Gynecology Medicine: Evaluation of an intervention to promote junior gynecologists professionalism, mental health and job satisfaction. *Arch Gynecol Obstet* 2016;295:153-62.
- Wada K, Arimatsu M, Higashi T, Yoshikawa T, Oda S, Taniguchi H, *et al.* Physician job satisfaction and working conditions in Japan. *J Occup Health* 2009;51:261-6.
- Ghazali SS, Shah IA, Zaidi SAA, Tahir M. Job satisfaction among doctors working at teaching hospital of Bahawalpur, Pakistan. *J Ayub Med Coll Abbottabad* 2007;19:42-5.
- Madaan N. Job satisfaction among doctors in a tertiary care teaching hospital. *JK Sci* 2008;10:81-3.
- Domagała A, Bała M, Peña-Sánchez JN, Storman D, Świerz M, Kaczmarczyk M, *et al.* Satisfaction of physicians working in hospitals within the European Union—State of the evidence based on systematic review. *Eur J Public Health* 2019;29:232-41.
- Ritsema TS, Roberts KA. Job satisfaction among British physician associates. *Clin Med* 2016;16:511-3.
- Pantenburg B, Kitze K, Lupp M, König HH, Riedel-Heller SG. Job satisfaction of foreign-national physicians working in patient care: A cross-sectional study in Saxony, Germany. *J Occup Med Toxicol* 2016;11:41.
- Rezaeian A, Ghasemi M. Investigating the relationship between diversity management and human resource productivity. *J Public Adm Persp* 2009;1:9-22.
- Brayfield AH, Rothe HF. An index of job satisfaction. *J Appl Psychol* 1951;35:307.
- Ab Rahman N, Husin M, Dahian K, Mohamad Noh K, Atun R, Sivasampu S, *et al.* Job satisfaction of public and private primary care physicians in Malaysia: Analysis of findings from QUALICO-PC. *Hum Resour Health* 2019;17:82.
- Gauthier S, Buddeberg-Fischer B, Bucher M, Thali M, Bartsch C. Pilot study on doctors working in departments of forensic medicine in German-speaking areas. *J Forensic Leg Med* 2013;20:1069-74.
- Chiarelli-Helminiak CM. *Job satisfaction and burnout among forensic interviewers (doctoral dissertation)*. University of Connecticut, Hartford. Retrieved from ProQuest Dissertations and Theses database. 2014.
- Magdalena IORGA, Corina DONDAS, Beatrice-Gabriela IOAN, Elena TOADER. Job satisfaction among forensic physicians in romania. *Rev Cercet Inter Soc* 2017;56:5-18.
- Holt TJ, Blevins KR, Smith RW. Examining the impact of organizational and individual characteristics on forensic scientists' job stress and satisfaction. *J Crim Justice* 2017;40:34-49.
- Iorga M, Soponaru C, Ioan B. The burnout syndrome of forensic pathologists. The influences of personality traits, job satisfaction and environmental factors. *Rom J Leg Med* 2016;24:325-32.
- Sharifian S, Aminian O, Kiyani M, Barouni S, Amiri F. The evaluation of the degree of occupational stress and factors influencing it in forensic physicians working in legal medicine organization in Tehran-autumn of 2005. *Iran J Forensic Med* 2006;12:144-50.