Job Satisfaction and Turnover Intention Among Anesthesiologists: An Iranian Study

Seyed-Mojtaba Mousavi¹, Hamid Asayesh¹, *, Fatemeh Sharififard¹ and Mostafa Qorbani²

¹Qom University of Medical Sciences, Qom, Iran
²Alborz University of Medical Sciences, Karaj, Iran
*
Corresponding author: Qom University of Medical Sciences, Qom, Iran. Email: hasayesh@gmail.com

Received 2018 September 02; Revised 2019 March 10; Accepted 2019 March 23.

Abstract

Job satisfaction is shown to be the strongest predictor of turnover intention and actual leaving among healthcare personnel. The aim of this study was to identify job satisfaction and turnover intention among anesthesiologists in Iran. This cross-sectional survey was conducted among 177 anesthesiologists. A set of self-administered questionnaires were applied to evaluate job satisfaction and intention to quit anesthesiology. It was found 39.5% of the participants reported that they wanted to quit the anesthesiology profession in the next year. Multivariate logistic regression analysis revealed that job satisfaction was a significant predictor of intention to leave after controlling for other independent variables. A significant association was found between job satisfaction and anesthesiologists’ intention to leave their current employment. Therefore, increasing anesthesiologists’ job satisfaction can lead to a higher propensity to retention in the healthcare system.

Keywords: Intention to Quit, Job Satisfaction, Anesthesiology, Iran

1. Background

The intention to leave refers to the probability of leaving a job by a person at a given time. According to some studies, the intention to leave is the most important predictor of individuals’ behavior regarding the actual career abandonment (1). The high rate of intention to leave the job among physicians in different countries is considered a serious problem (2, 3). The intention to leave a job or occupation is often affected by various variables such as job stress, burnout, job satisfaction, income, and organizational commitment, among which job satisfaction is one of the most important variables (4). Among medical specialties, anesthesiologists have severe and stressful conditions because they are responsible for patient safety in critical situations (5). The degree of burnout has shown to be high among these specialists (6).

2. Objectives

This study was performed to examine the degree of intention to leave anesthesiology and job satisfaction among anesthesiologists and examine the relationship between these two variables.

3. Methods

In this cross-sectional study, the population consisted of all anesthesiologists working at Iran hospitals. This study was conducted from May to November 2016. An electronic questionnaire was designed and placed on the website of the Paramedical Faculty. To invite subjects to complete the questionnaire, all anesthesiologists were informed via announcements, texts, and telegram groups. Finally, 177 questionnaires were completed by the respondents. The gathered data included the following:

3.1. Demographical Data

The data included basic information regarding age, gender, marital status, working experience, hours of work in a week, type of employment, and residence status.

3.2. Job Satisfaction Scale

The 10-item job satisfaction scale was adopted in this study to measure the participant’s degree of satisfaction with their job. All of the items are listed in Table 1. A seven-point Likert-type scale ranging from 1 = “very dissatisfied” to 7 = “very satisfied” was used for each item. Ultimately, overall job satisfaction was measured (7). Cronbach’s alpha in our recruited sample was excellent (0.97).
Table 1. Descriptive Statistics of the Items of the Job Satisfaction Scale

| Statements                                           | Mean ± SD | Max | Min |
|------------------------------------------------------|-----------|-----|-----|
| 1. Physical working conditions                       | 4.45 ± 1.72 | 1   | 7   |
| 2. Freedom to choose your own method of working      | 4.91 ± 1.59 | 1   | 7   |
| 3. Colleagues and fellow workers                     | 4.33 ± 1.59 | 1   | 7   |
| 4. Recognition you get for good work                 | 2.93 ± 1.83 | 1   | 7   |
| 5. Amount of responsibility you are given            | 3.92 ± 1.76 | 1   | 7   |
| 6. Your remuneration, i.e. income                    | 3.22 ± 3.22 | 1   | 7   |
| 7. Opportunity to use your abilities                 | 3.66 ± 1.72 | 1   | 7   |
| 8. Your hours of work                                | 3.36 ± 1.74 | 1   | 7   |
| 9. Amount of variety in your job                     | 3.28 ± 1.73 | 1   | 7   |
| 10. Taking everything into consideration, how do you feel about your job? | 4.27 ± 1.79 | 1   | 7   |
| Overall score of job satisfaction                    | 38.36 ± 12.80 | 10  | 70  |

3.3. Intention to Leave

A single question was asked to measure the intention to leave among anesthesiologists. Participants were asked whether they plan to quit the anesthesiology profession in the coming year. The answer to the question was “Yes” or “No” (7).

3.4. Ethical Considerations

The current study was approved ethically by the Ethics Committees of Qom University of Medical Sciences. Participation in the study was voluntary and oral assent and written informed consent were obtained from all participants.

3.5. Statistical Analysis

The chi-square test and logistic regression analysis were performed to assess the association between independent variables and intention to leave the job as the outcome variable. Data were analyzed using SPSS (Statistical Package for the Social Sciences; version 22; Chicago, IL, USA). The P values of < 0.05 were considered statistically significant.

4. Results

The results showed that 67% of the anesthesiologists participated in the study were male. The age range of the respondents was 31 - 76 years (mean 43.16 ± 7.27). The mean work experience in medical practice was 14.42 years (± 8.17) and the mean work experience as an anesthesiologist was 8.14 years (± 7.77). Other characteristics of the participants are shown in Table 2.

It was also found that 60.5% of the participants had the intention to stay in their current job whereas 39.5% reported that they want to leave the anesthesiology profession in the next year.

Table 1 shows the means and standard deviations of the scores attained on the questions of job satisfaction questionnaire. The mean score (± SD) of total job satisfaction was 38.36 (± 12.80) in the range of 10 - 70.

The mean score of satisfaction on “the freedom to choose own method of working” was the highest, followed by physical working conditions. The lowest satisfaction score was reported for “recognition you get for good work”, followed by “your remuneration, i.e. income” (Table 1).

The male gender was significantly associated with turnover intention. Other demographic and job-related factors were not in a significant association with the intention to leave (Table 3). The overall job satisfaction score was higher among anesthesiologists without the intention to leave than among those who were intended to leave the job (t = 6.86, P < 0.001).

In the final model of multivariable logistic regression (Table 4), only was overall job satisfaction associated significantly with the intention to leave (OR = 0.90, 95% CI: 0.87 - 0.93).

5. Discussion

In the current study, the intention to leave the job among anesthesia experts was estimated at 39.5%. In a recent systematic review, the intention to leave the job among different groups of physicians varied from 3.2% to 53.7% (8). Two studies were conducted in Germany in 2010 (9) and 2012 (10), showing that the intention to leave the job among physicians was 20.7% and 52.3%, respectively. A
Table 2. Participants’ Sociodemographic and Work Characteristics (N = 177)

| Participant’s Characteristics                        | No. (%) |
|-----------------------------------------------------|---------|
| Age, y                                              |         |
| ≤ 40                                                | 77 (43.5) |
| > 40                                                | 100 (56.5) |
| Gender                                              |         |
| Male                                                | 118 (66.7) |
| Female                                              | 56 (33.3) |
| Marital status                                      |         |
| Single                                              | 28 (15.8) |
| Married                                             | 149 (84.2) |
| Faculty member                                      |         |
| Yes                                                 | 39 (22) |
| No                                                  | 138 (78) |
| Work experience in medicine, y                       |         |
| ≤ 10                                                | 61 (34.5) |
| > 10                                                | 116 (65.5) |
| Work experience as an anesthesiologist, y            |         |
| ≤ 10                                                | 123 (69.5) |
| > 10                                                | 54 (30.5) |
| Hours of work/week, h                               |         |
| ≤ 40                                                | 27 (15.3) |
| > 40                                                | 150 (84.7) |
| Residency                                           |         |
| Pension                                             | 19 (10.7) |
| Personal home                                       | 117 (66.1) |
| With the family                                     | 41 (23.2) |
| Type of occupational activity                       |         |
| Governmental only                                   | 112 (63.3) |
| Private only                                        | 20 (11.3) |
| Governmental and private                            | 45 (25.4) |
| Type of employment                                  |         |
| Official                                            | 58 (32.8) |
| Contractual                                        | 22 (12.4) |
| Conventional                                       | 45 (25.4) |
| Projective                                          | 32 (18.3) |
| other                                               | 20 (11.3) |

Our study findings showed that being a man significantly increased the intention to leave the job among the participants, which is consistent with the findings of the above-mentioned studies (7, 10, 15). There was no significant relationship between age and the intention to leave the job in our study although other studies have reported heterogeneous findings concerning the relationship between these two variables. Some studies, like our study, found no relationship between age and the intention to leave the job (10). Some other studies, however, noted that many young people were not intended to be unemployed but had a tendency to leave the job at the age of 33-35-years-old; also, they showed reduced tendency among physicians over the age of 50 (13, 16). Long working hours have been identified as one of the variables associated with the intention to leave a job in many studies (7, 15, 17); however, in the current study, there was no relationship between working hours and the intention to leave. In our study, job satisfaction was one of the most important predictors of the intention to leave the job. In other words, high job satisfaction significantly reduced this intention. Several studies showed a relationship between the physicians’ job satisfaction and the intention to leave the job; among various variables that were related to this intention, job satisfaction, in most cases, has been one of the most important ones (7, 14, 16). Job satisfaction can be a mediator between job stress and the intention to leave the job; that is, high stress can reduce job satisfaction and ultimately increase the intention to quit (15). However, in the current study, the mediating role of satisfaction in the relationship between stress and the intention to leave the job was not addressed, but given the fact that, compared to other medical specialties, anesthesiology is associated with a significant level of stress, paying attention to the relationship between job stress and the intention to leave the job can help better identify this problem among these medical experts.

One of the limitations of our study is the convenience sampling method that could increase the probability of bias. Difficult access to anesthesiologists was a reason for choosing this method of sampling.

5.1. Conclusions

The intention to leave the job among Iranian anesthesiologists is relatively high. According to difficulties in providing qualified physicians in this field, paying attention to this issue is of importance. Job satisfaction is one of the most important predictors of intention to leave anesthesiology.
Table 3. Bivariate Analysis of Predictors of Turnover Intention (N = 177)

| Variables                  | With Intention, 70 (39.5) | Without Intention, 107 (60.5) | Chi-Square | P Value |
|----------------------------|---------------------------|-------------------------------|------------|---------|
| Age, y                     |                           |                               | 0.78       | 0.49    |
| ≤ 40                       | 31 (40.3)                 | 46 (59.7)                     |            |         |
| > 40                       | 39 (39)                   | 61 (61)                       |            |         |
| Gender                     |                           |                               | 4.72       | 0.02    |
| Male                       | 40 (33.9)                 | 78 (66.1)                     |            |         |
| Female                     | 30 (50.8)                 | 29 (49.2)                     |            |         |
| Marital status             |                           |                               | 0.01       | 0.57    |
| Single                     | 11 (39.3)                 | 17 (60.7)                     |            |         |
| Married                    | 59 (39.6)                 | 90 (60.4)                     |            |         |
| Faculty member             |                           |                               | 1.75       | 0.12    |
| Yes                        | 19 (48.7)                 | 20 (51.3)                     |            |         |
| No                         | 51 (37.8)                 | 87 (62.0)                     |            |         |
| Work experience in medicine, y |                       |                               | 0.86       | 0.22    |
| ≤ 10                       | 27 (44.5)                 | 34 (55.7)                     |            |         |
| > 10                       | 43 (37.1)                 | 71 (62.9)                     |            |         |
| Work experience as an anesthesiologist, y |   |                               | 0.77       | 0.23    |
| ≤ 10                       | 46 (37.4)                 | 77 (62.6)                     |            |         |
| > 10                       | 43 (44.4)                 | 71 (55.6)                     |            |         |
| Hours of work/week, h      |                           |                               | 0.31       | 0.35    |
| ≤ 40                       | 12 (44.4)                 | 15 (55.6)                     |            |         |
| > 40                       | 58 (38.7)                 | 92 (61.3)                     |            |         |
| Residency                  |                           |                               | 2.18       | 0.33    |
| Pension                    | 5 (26.3)                  | 14 (73.7)                     |            |         |
| Personal home              | 46 (39.3)                 | 71 (60.7)                     |            |         |
| With the family            | 19 (46.3)                 | 22 (53.7)                     |            |         |
| Type of occupational activity |                       |                               | 1.01       | 0.60    |
| Governmental only          | 47 (42.0)                 | 65 (58.0)                     |            |         |
| Private only               | 8 (40.0)                  | 12 (60.0)                     |            |         |
| Governmental and private   | 15 (33.3)                 | 30 (66.7)                     |            |         |
| Type of employment         |                           |                               | 2.25       | 0.68    |
| Official                   | 23 (39.7)                 | 35 (60.3)                     |            |         |
| Contractual                | 9 (40.9)                  | 13 (59.1)                     |            |         |
| Conventional               | 20 (44.4)                 | 25 (55.6)                     |            |         |
| Projective                 | 13 (40.6)                 | 19 (59.4)                     |            |         |
| other                      | 5 (25.0)                  | 15 (75.0)                     |            |         |
| Job satisfaction           | 45.46 ± 10.81             | 33.60 ± 11.76                 | 6.86       | < 0.001 |

Table 4. Factors Associated with Turnover Intention in Multiple Logistic Regression

| Variables                  | OR          | 95% CI      | P Value |
|----------------------------|-------------|-------------|---------|
| Gender, male/female        | 3.44        | 1.57 - 7.52 | 0.002   |
| Faculty member             | 0.57        | 0.24 - 1.32 | 0.30    |
| Job satisfaction           | 0.90        | 0.87 - 0.93 | < 0.001 |

Acknowledgments

We appreciate all anesthesiologists participating in the study.

Footnotes

Conflict of Interests: It was not declared by the authors.

Ethical Approval: The current study was approved ethically by the Ethics Committees of Qom University of Medical Sciences.
**Funding/Support:** It was not declared by the authors.

**Patient Consent:** Participation in the study was voluntary and oral assent and written informed consent were obtained from all participants.

**References**

1. Misra-Hebert AD, Kay R, Stoller JK. A review of physician turnover: Rates, causes, and consequences. Am J Med Qual. 2004;19(2):56–66. doi: 10.1177/106286060401900203. [PubMed: 15115276].

2. Chao MC, Jou RC, Liao CC, Kuo CW. Workplace stress, job satisfaction, job performance, and turnover intention of health care workers in rural Taiwan. Asia Pac J Public Health. 2015;27(2):NP1827–36. doi: 10.1177/1010539513506604. [PubMed: 24174390].

3. Joo B. Organizational commitment for knowledge workers: The roles of perceived organizational learning culture, leader-member exchange quality, and turnover intention. Hum Resour Dev Q. 2010;21(1):69–85. doi: 10.1002/hrdq.20031.

4. Waldman JD, Kelly F, Arora S, Smith HL. The shocking cost of turnover in health care. Health Care Manage Rev. 2004;29(1):2–7. [PubMed: 14992479].

5. Nyssen AS, Hansez I, Baele P, Lamy M, De Keyser V. Occupational stress and burnout in anaesthesia. Br J Anaesth. 2003;90(3):333–7. [PubMed: 12594147].

6. Warr P, Cook J, Wall T. Scales for the measurement of some work attitudes and aspects of psychological well-being. J Occ Psychol. 1979;54(1):129–48. doi: 10.1111/j.0022-3995.1979.tb00448.x.

7. Ali Jadoo SA, Aljunid SM, Dastan I, Tawfeeq RS, Mustafa MA, Ganasegeran K, et al. Job satisfaction and turnover intention among Iraqi doctors: A descriptive cross-sectional multicentre study. Hum Resour Health. 2015;23:21. doi: 10.1186/s12960-015-0014-6. [PubMed Central: PMC4563836].

8. Degen C, Li J, Angerer P. Physicians’ intention to leave direct patient care: An integrative review. Hum Resour Health. 2015;13:74. doi: 10.1186/s12960-015-0068-5. [PubMed: 26350545]. [PubMed Central: PMC4563836].

9. von dem Knesebeck O, Klein J, Grosse Frie K, Blum K, Siegrist J. Psychosocial stress among hospital doctors in surgical fields: Results of a nationwide survey in Germany. Dtsch Arztebl Int. 2010;107(14):248–53. doi: 10.3238/arztebl.2010.0248. [PubMed: 20436777]. [PubMed Central: PMC2867677].

10. Ochsmann EB. Thinking about giving up clinical practice? A gender-stratified approach to understanding junior doctors’ choices. Acad Med. 2012;87(1):59–7. doi: 10.1097/ACM.0b013e318232ab93. [PubMed: 22104056].

11. Hann M, Reeves D, Sibbald B. Relationships between job satisfaction, intentions to leave family practice and actually leaving among family physicians in England. Eur J Public Health. 2011;21(4):499–503. doi: 10.1093/eurpub/cqk005. [PubMed: 21024002].

12. Estryn- Behar M, Doppia MA, Guetarni K, Fry C, Machet G, Pelloux P, et al. Emergency physicians accumulate more stress factors than other physicians-results from the French SESMAT study. Emerg Med J. 2011;28(5):397–40. doi: 10.1136/emed.2009.082594. [PubMed: 2123828].

13. Estryn-Behar M, Fry C, Guetarni K, Aune I, Machet G, Doppia MA, et al. Work week duration, work-family balance and difficulties encountered by male and female physicians: Results from the French SESMAT study. Work. 2011;40 Suppl 1:S83–100. doi: 10.3233/WOR-2011-1270. [PubMed: 2212665].

14. Sibbald B, Bojke C, Gravelle H. National survey of job satisfaction and retirement intentions among general practitioners in England. BMJ. 2003;326(7379):22. [PubMed: 12504557]. [PubMed Central: PMC19500].

15. Lu Y, Hu XM, Huang XL, Zhuang XD, Guo P, Feng LF, et al. The relationship between job satisfaction, work stress, work-family conflict, and turnover intention among physicians in Guangdong, China: A cross-sectional study. BMJ Open. 2017;7(5). e014894. doi: 10.1136/bmjopen-2016-004894. [PubMed: 28508183]. [PubMed Central: PMC5666636].

16. Scott A, Gravelle H, Simoens S, Bojke C, Sibbald B. Job satisfaction and quitting intentions: A structural model of british general practitioners. Brit J Ind Relat. 2006;44(3):519–40. doi: 10.1111/j.1467-8543.2006.00511.x.

17. Moss PJ, Lambert TW, Goldacre MJ, Lee P. Reasons for considering leaving UK medicine: Questionnaire study of junior doctors’ comments. BMJ. 2004;329(7477):3263. doi: 10.1136/bmj.38247.594769.AE. [PubMed: 15469947]. [PubMed Central: PMC344439].