**Brief Report**

The Relationship of Ethical Climate and Nurses’ Job Satisfaction in the Operating Room: A Cross-sectional Study

**Zahra Etebari Asl, Farahnaz Abdollahzadeh, Mojgan Lotfi, Ahmad Mirza Aghazadeh Attari, Elnaz Asghari**

Department of Operating Room, Faculty of Nursing and Midwifery, Ardabil University of Medical Sciences, 1Department of Medical-Surgical Nursing and Operating Room, Faculty of Nursing and Midwifery, Tabriz University of Medical Sciences, 2Department of Basic Science, Paramedical Faculty, Tabriz University of Medical Sciences, 3Student Research Committee, Department of Medical-Surgical Nursing and Operating Room, Faculty of Nursing and Midwifery, Tabriz University of Medical Sciences, Tabriz, Iran

**ABSTRACT**

**Background:** The ethical climate of hospitals and job satisfaction are two main factors behind nurses’ productivity. Yet, there is limited information about ethical climate and nurses’ job satisfaction in the operating room (OR).

**Objective:** This study aimed to investigate the relationship of ethical climate with nurses’ job satisfaction in the OR.

**Methods:** This cross-sectional study was done on 197 OR nurses. The Olson Hospital Ethical Climate Survey and the Minnesota Job Satisfaction Questionnaire were used for data collection. Data were analyzed by doing Spearman’s rank correlation.

**Results:** About half of the participants had a moderate job satisfaction and negative perceptions about the ethical climate of the OR. Ethical climate was significantly correlated with nurses’ job satisfaction ($r = 0.93$, $P < 0.001$).

**Conclusion:** There are some defects in the ethical climate of the ORs. Health policymakers need to devise strategies to improve both ethical climate and nurses’ job satisfaction in the ORs.

**KEYWORDS:** Ethical climate, Iran, Job satisfaction, Nurse, Operating room

**INTRODUCTION**

The climate of the operating room (OR) is different from other hospital wards and healthcare settings. OR nurses often work in stressful conditions and with colleagues who may suffer from high levels of stress. Many OR nurses face ethical dilemmas due to their willingness to protect patient rights and their reluctance to oppose other OR staffs, particularly surgeons. Ethical dilemmas and occupational stress are associated with negative outcomes such as low job satisfaction. Job satisfaction, in turn, can affect nurses’ professional success and care quality.

To facilitate nursing professionalization and improve care quality, different studies have recently focused on ethical issues and occupational outcomes of nursing practice. The findings can help healthcare professionals manage and improve care quality and work conditions. However, there is limited information about ethical climate and nurses’ job satisfaction in OR.

**Objectives**

This study aimed to investigate the relationship of ethical climate with nurses’ job satisfaction in the OR.

**METHODS**

This cross-sectional study was conducted in 2015. Study population consisted of all 197 OR nurses who worked in nine teaching hospitals located in an urban area of Iran. Due to the small size of the study population, all eligible nurses were recruited to the study through the census method. Eligibility criteria were an OR work experience of 6 months or more and membership in the surgical team as a scrub or a circulating nurse. Among 197 eligible OR nurses in the study setting, eleven were excluded due to their unwillingness to participate in the study.

Study data were gathered using the Olson Hospital Ethical Climate Survey (HECS) and their Minnesota Job Satisfaction Questionnaire (MSQ). As a 26-item survey, HECS measures professional relationships.

**Address for correspondence:** Dr. Zahra Etebari Asl, Faculty of Nursing and Midwifery, Shariati Jonubi Avenue, Tabriz, Iran. E-mail: asghariel@tbzmed.ac.ir

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in healthcare settings. It is subdivided into five main dimensions, namely, nurses’ relationships with colleagues (four items), patients (four items), managers (six items), physicians (six items), and hospital (six items). Each item is scored on a five-point Likert scale, where 1 and 5 stand for “Almost never” and “Almost always”, respectively. Total HECS scores can range from 1 to 5, and scores >3.5 indicate a positive (or good) ethical climate.[5] HECS was translated into Persian in 2008 and was found to have a Cronbach’s alpha of 0.92.[6]

The 22 short-form MSQ consists of three subscales of intrinsic (items 1–12), extrinsic (items 13–18), and general (items 19-20) job satisfaction. MSQ items are scored using a five-point Likert scale from 1 (very dissatisfied) to 5 (very satisfied). The total score of MSQ is 20–100. Percentile scores were used to categorize and interpret MSQ scores. Consequently, scores greater than the 75th percentile and lower than the 25th percentile were interpreted as high and low job satisfaction, respectively. We found that the Persian MSQ had a high internal consistency (Cronbach’s alpha = 0.70) and an acceptable test-retest stability (intraclass correlation coefficient = 0.80).

Ethical considerations
This study was approved by a local committee of Medical Research Ethics at Tabriz University of Medical Sciences (approval code EC130.5.4.12445.12.30). Participants were provided with detailed information about the aim and the methods of the study, confidential management of the data, and the voluntariness of participation in and withdrawal from the study.

Data analysis
The Kolmogorov–Smirnov test was performed to test normality. Descriptive statistics (i.e., absolute and relative frequencies, mean, and standard deviation) and Spearman’s rank correlation were used to analyze the data through the SPSS software version 13 (SPSS Inc., Chicago, IL, USA).

RESULTS
Participants aged 22–56 years with a mean of 33.45 ± 6.98 years. They were mostly female (78%) and married (73%) and had passed some professional ethics educational courses previously (59.7%). Table 1 shows their characteristics.

Most participants rated the ethical climate related to OR colleagues, managers, and patients as positive (77.4%, 67.7%, and 52.2%, respectively) and the ethical climate related to OR physicians and hospital as negative (69.9% and 71.0%, respectively). As presented in Table 2, they mostly had a moderate job satisfaction. OR ethical climate was significantly correlated with nurses’ job satisfaction \( (r = 0.93, P < 0.001) \).

DISCUSSION
The majority of participating nurses reported that they were moderately satisfied with their job. An earlier study showed that OR nurses had relatively higher job satisfaction compared with those who worked in other hospital wards.[7] Job satisfaction is a complex concept and is influenced by different work-related factors.

Study findings revealed that in the nurses’ eyes, the ethical climate of OR in the dimensions of colleagues, managers, and patients was positive, while in the dimensions of hospital and physicians, it was negative. These findings denote that there were effective cooperation and collaboration among OR staffs in the study setting. Cooperation and collaboration are vital prerequisites to sound practice in OR.[8]

Findings also showed that OR ethical climate was significantly correlated to nurses’ job satisfaction. According to the underpinnings of Herzberg’s motivation-hygiene theory,[9] ethical climate can be considered as a hygiene factor. Accordingly, its absence can dissatisfy employees while its presence is a motivator.

Managers usually rely on financial incentives to improve their employees’ work-related attitudes, productivity, and job satisfaction.[10] However, the results of this study

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### Table 1: Operating room nurses’ characteristics

| Characteristics       | Frequency (%) |
|-----------------------|---------------|
| Educational status    |               |
| Associate degree      | 71 (38.1)     |
| Bachelor’s degree     | 108 (58.1)    |
| Master’s degree       | 7 (3.8)       |
| Employment status     |               |
| Permanent formal      | 65 (34.9)     |
| Conditional formal    | 95 (51.1)     |
| Contractual           | 7 (3.8)       |
| Postgraduate service  |               |
| Work experience, years|               |
| 1-10                  | 103 (55.4)    |
| 11-20                 | 64 (34.4)     |
| 21-30                 | 19 (10.2)     |

### Table 2: The dimensions of job satisfaction

| Job satisfaction | Low    | Moderate | High   |
|------------------|--------|----------|--------|
| General          | 48 (25.8) | 90 (48.4) | 48 (25.8) |
| Intrinsic        | 54 (29.0) | 88 (47.3) | 44 (23.7) |
| Extrinsic        | 46 (24.7) | 98 (52.7) | 42 (22.6) |

*Data are presented as n (%)*
showed that job satisfaction is also affected by hospital ethical climate. Moreover, the results illustrated that the most negative aspect of OR ethical climate was hospital dimension. Thus, modifications in the organization of hospitals are recommended to improve OR ethical climate and nurses’ job satisfaction. This study highlights the necessity of improving the ethical climate of hospitals and the job satisfaction of nurses.

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Conflicts of interest
There are no conflicts of interest.

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