

Research Article

The Effect of Emergency Nurses' Job Satisfaction and Intent to Leave on Patient Safety Culture: A Cross-Sectional Study

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The current nursing shortage jeopardizes the quality and safety of patient care globally. In Saudi Arabia, there are insufficient numbers of Saudi nurses to support the healthcare system, and Saudi hospitals rely heavily on expatriate nurses to meet staffing demands. The purpose of this study was to examine the effect of job satisfaction and intent to leave on the patient safety culture. The present study was carried out using a cross-sectional design. Convenience sampling method was applied, and 214 nurses participated in the study. Study was conducted in three hospitals operated by Saudi Ministry of Health in Madinah city. Three instruments were used to measure the study variables. Data were analysed using SPSS. The findings of the current research showed that the suitable work environment for the participant nurses in the current research. The findings of this study showed that nurse's job satisfaction has a positive and significant influence on patient safety culture ($\beta = 0.28, p = 0.003$). Furthermore, the results from the parsimonious regression model indicated that intentions to leave had a negative and significant effect on patient safety culture ($\beta = -0.34, p < 0.01$). Based on the study findings, patient safety should be considered as a strategic priority for the senior nurses' managers of the health system. To enhance patient safety, the current study emphasizes that nurse managers should pay attentions to factors such as job satisfaction and intent to leave to evaluating safety culture in organizations that deliver health service, especially hospitals.

1. Introduction

Competition is growing in the field of healthcare around the world, and hospitals seek to provide high-quality, at the same time, it controls healthcare costs, enhance patients' safety, and increase accessibility of healthcare. Nurses are required to do more patient care and work in fast-paced situations where patients need more complex treatment and there is an insufficient staffing, workload, and turnover increased. Each of these factors has an adverse effect on all work environments of nurses, nurses' performance, and patient outcomes. The absent of essential elements of the work environment impedes the ability to provide high-quality and safe care, and does not provide nurses the time or resources required to provide the needed care for their patients [1].

The present nurse shortage also puts the quality and safety of patient care at jeopardy all around the world. In Saudi Arabia, hospitals rely largely on expatriate nurses to satisfy staffing demands since there are inadequate numbers of Saudi nurses to run the healthcare system [2]. One of the major problems related generally to the medical staff and specifically to nurses is the turnover problem. Turnover is commonly thought of as the departure of employees from a company [3]. Turnover among staff is critical because it has a negative influence on operations and has a significant impact on organizational success. Turnover is costly to many businesses and has a substantial financial impact [4]. Higher turnover is linked to a higher rate of hospitalization and higher average health expenses [5].

Job satisfaction is another essential element in any workplace that could be positive to the work environment.

Employment satisfaction is an affective and emotional reaction to many aspects of their jobs [6]. If employees are satisfied with their opportunities for self-improvement, their overall work satisfaction improves [7].

Patient safety has emerged as one of the most pressing issues confronting the healthcare system. Almost every week, newspaper stories, radio and television programs, and medical journal articles bring patient safety problems to the forefront [8]. In the United States, medical mistakes constitute the eighth largest cause of mortality [9]. Researchers, healthcare practitioners, and news and media sources have all observed insufficient patient safety [8]. Because nurses are such a vital part of the healthcare team, they must be aware of everything that has to do with the patient's safety. Safety against any injury, including falls, incidents, prescription mistakes, infection, and communication problems that might jeopardize patient safety [10].

Safety is the activities used by the working staff as administrators, managers, and caregivers. The aim of safety is to reduce medical mistakes on a regular basis and improve the provided care. The issue of patient safety means to avoid causing any damage or injury to the patients while providing healthcare, which has become more observed by health policymakers over the last few decades [3]. Adverse events and medical errors are among challenges that health systems in all countries are faced with, and they attempt to minimize them and reduce the damages caused by them [11].

In nursing, it was found that nurses' job satisfaction and intention to leave their job could have influences on patient safety culture [12, 13]. Thus, this study aimed to explore the relationships between job satisfaction, intent to leave, and the patient safety culture among emergency nurses staff in Saudi Arabia. The questions of this study are as follows:

- (1) Is there a relationship between job satisfaction and patient safety culture?
- (2) Is there a relationship between intent to leave and patient safety culture?

2. Materials and Methods

2.1. Design. To achieve the research goals, a cross-sectional survey design was applied.

2.2. Setting. The study was conducted in emergency departments in three Saudi Ministry of Health hospitals in Madinah City.

2.3. Sample Size and Selection Approach. The total number of nurses in the three hospitals working in emergency departments was 250 nurses. A total of 214 nurses participated in the study and completed the surveys. Only nurses working in the emergency units in the selected hospitals and were able to voluntarily complete the surveys were included. Nurses working in other departments and were in leadership positions were excluded.

2.4. Instrumentation. The data were collected using questionnaires. The questionnaire consists of four sections. The first section gathered demographic and job-related information, such as gender, age, education, length of time working in the current hospital, and level of education.

Part II consists of 36 questions related to the job satisfaction distributed between eight dimensions: pay, promotion, supervision, finding benefits, contingent rewards, operating conditions, co-workers, nature of work, and communication [14]. Items of the scale are rated on five Likert scale: 1: very dissatisfied, 2: dissatisfied, 3: neither satisfied nor dissatisfied, 4: satisfied, and 5: very satisfied.

Part III includes four questions related to the intention to leave [15]. Items of the scale are rated on six Likert scale knowing that the statement applies for you means: 1: strongly disagree, 2: disagree, 3: slightly disagree, 4: slightly agree, 5: agree, and 6: strongly agree.

Furthermore, the last part is related to the patient safety culture with 42 questions distributed between seven dimensions which are as follows: teamwork within units, supervisor's or manager's expectations and actions promoting patient safety, organizational learning and continuous improvement, management support for patient safety, overall perceptions of patient safety, feedback and communication about error, and communication openness [16].

2.5. Data Collection Procedures. Before gathering information, a brief explanation of the nature of the research and its purpose for respondents was provided to nurses in the selected hospitals. Respondents were notified that the information they would provide would be treated with the utmost confidentiality. The researcher personally distributed the questionnaire to participants. This enabled the researcher to explain the contents of the tool and clarify any ambiguities raised by the participants. Finally, questionnaires were collected back and analysed. Data were collected between August and November 2022.

2.6. Data Analysis. Quantitative data collected were examined for completeness and clarity, and edited, coded, and tabulated according to study objectives in order to facilitate analysis. Encrypted responses were entered into computer programs and analysed using SPSS version 25. Results analysed using frequencies, means, standard deviations and percentages, Cronbach's Alpha, and regressions.

2.7. Ethical Considerations. The researchers ensured the confidentiality and security of all participants through the use of anonymous questionnaires. Participation in the study was on a voluntary basis after obtaining informed consent. The ethical approval was obtained from General Directorate of Health Affairs in Madinah (IPR No. 22-088) in Date 10/12/2022.

3. Results

3.1. Demographic Data. In this section, background information about respondents who participated in this study is provided. This information was in terms of gender, age and years of the current occupation, experience, and hospital name (as illustrated in Table 1).

According to the results of the study of the 214 participants, 23% were male, while 77% were female. According to the results, 20% of the participants aged between 20 and 30 years old, while 42% were ranged between 31 and 35 years and they are the majority in this study, and 28% were ranged between 36 and 40 years, while the least number of participants were more than 40 years with a percentage of (10%). About the length of time working in the current hospital (years), 31% were working for a period ranged from 1 to 5 year, 36% were working for a period ranged from 6 to 10 year, 20% were working for a period ranged from 11 to 15 year, and finally, 13% were working for more than 15 year. About the working place, 42% of the participants were working on King Fahad Hospital, 39% were working on Ohud hospitals, and the rest of the participants which are 19% were from Almeeqat Hospital. Regarding educational level, 57.5% of the participant have Bachelors, 35.5% have diploma, 5.6% have master's degree, while the participants have PhD or equivalent were 1.4%.

3.2. Results of the Scales. For finding the answers for the research questions, data analysis for the subitems of each questionnaire dimensions has been applied.

As illustrated in Table 2, the highest mean in job satisfaction (3.54) was for the "promotion" which may be attributed to the fact that the hospital management is fair enough to promote their employees' according to clear criteria. While, the minimum value (2.69) was for the "Nature of work."

As illustrated in Table 3, most of the participants have answered the questions for intention to leave with "slightly agree" expect the first question was "slightly disagree."

Regarding patient safety culture, Table 4 summarizes the mean and standard deviation for the dimensions of the patient safety culture. The highest mean was (3.78) for the "Feedback and communication about error" which means the nurses are actively doing things to improve patient safety, followed by "Supervisor's or Manager's Expectations and Actions Promoting Patient Safety" with mean (3.28). When a lot of work needs to be carried out quickly, the nurses work together as a team to get the work carried out.

3.3. Reliability of Scales. As illustrated in Table 5, the Cronbach's Alpha for the three scales used in this study was ranged between 0.805 and 0.852. These results indicated that the used questionnaire has a high reliability value, and so it is suitable for achieving the research goals.

TABLE 1: The distribution of demographic details of the respondents.

Variables	Frequency	Percentage (%)
Gender of the respondents		
Males	50	23
Females	164	77
Total	214	100
Age of the respondents		
From 20 to 30 years	43	20
From 31 to 35 years	89	42
From 36 to 40 years	60	28
More than 40	22	10
Total	214	100
Length of time working in the current hospital (years)		
1-5	66	31
6-10	77	36
11-15	43	20
More than 15	28	13
Total	214	100
Working place		
Hospital 1	90	42
Hospital 2	84	39
Hospital 3	40	19
Total	214	100
Level of education		
Diploma	76	35.5
Bachelors	123	57.5
Masters (postgraduate)	12	5.6
PhD or equivalent	3	1.4
Total	214	100

TABLE 2: Mean and standard deviation for the job satisfaction.

Job satisfaction	Mean	St. dev.
Pay	3.03	0.2057
Promotion	3.54	0.1380
Supervision	3.19	0.2038
Fringe benefits	3.26	0.2876
Contingent rewards	2.77	0.1763
Operating conditions	3.48	0.1482
Coworkers	3.40	0.2918
Nature of work	2.69	0.2324
Communication	3.28	0.2630
Total	3.08	0.2163

3.4. Study Results. As illustrated in Table 6, it was found that job satisfaction had a positive effect on patient safety culture. There is a direct (positive) correlation and statistically significant relationship ($\beta = 0.28$, $p = 0.003$).

The second question was "Is there a relationship between intent to leave and patient safety culture?"

The result showed indicated that intentions to leave had a negative and significance relationship with patient safety culture ($\beta = -0.34$, $p < 0.01$) (see Table 7).

4. Discussion

The goal of this study was to find out the relationship between job satisfaction, intention to leave, and patient safety culture among emergency nurses in MOH hospitals in Madinah, Saudi Arabia. The results of this study showed that

TABLE 3: Frequencies of participant respond for the intention to leave questions.

No	Items	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
1	I am thinking about leaving this organization	38	24	74	42	40	0
2	I am planning to look for a new job	38	31	35	58	45	0
3	I intended to ask people about new job opportunities	9	45	58	69	37	0
4	I do not plan to be in this organization much longer	10	37	45	86	40	0
	Mean	11	16	24	29	19	0
	St. dev.	0.241	0.138	0.213	0.237	0.187	0

TABLE 4: Mean and standard deviation for the patient safety culture.

Patient safety culture	Mean	St. dev.
Teamwork within unit	3.28	0.2825
Supervisors or managers expectations and actions promoting patient safety	2.37	0.1465
Organizational learning-continuous improvement	2.53	0.1426
Overall perceptions of patient safety	3.43	0.2936
Feedback and communication about error	3.78	0.2765
Total	3.08	0.2284

TABLE 5: Reliability statistics for each section from the questionnaire.

Dimension	No of items	Cronbachs alpha
II Job satisfaction	36	0.812
III Intention to leave	4	0.852
V Patient safety culture	42	0.805

TABLE 6: Regression model for the relationship between job satisfaction and patient safety culture.

Variable	Job satisfaction			95% CI	
	Standardized coefficient beta	Coefficient st. error	<i>p</i> value	Lower bound	Upper bound
Patient safety culture	0.28	0.157	0.003**	0.02	0.19

Note: ** $p < 0.01$.

TABLE 7: Regression model for the relationship between intention to leave and patient safety culture.

Variable	Intention to leave			95% CI	
	Standardized coefficient beta	Coefficient st. error	<i>p</i> value	Lower bound	Upper bound
Patient safety culture	-0.34	0.15	0.00**	0.03	0.27

Note: ** $p < 0.01$.

the overall level of job satisfaction among nurses was moderate ($M = 3.08$, $SD = 0.21$). Nature of work was the minimum compared with other components of job satisfaction which may be due to some unsatisfactory issues, or a points of objections need to be modified to increase the employees' job satisfaction this result is agreed with the results obtained by [17]. According to Teshome [18], the work environment and hence the job satisfaction should drive people to perform at their best and demonstrate dedication to the organization, therefore improving work circumstances to support the organization's objective and influencing job satisfaction. Furthermore, the job

satisfaction in which healthcare workers execute work can have just as much of an impact on their performance, comfort, and safety as the activity itself as mentioned by [14, 19]. Nurses in this study reported slightly agree to intend to leave their job. This result which supported a previous study found that the highest intent to stay scores was reported by nurses from public hospitals [20].

Nurses also reported that communication about errors in their department and teamwork was the highest rated. Nurses were also asked to evaluate the role of supervisors or managers who say good words when he or she sees a job carried out according to established patient safety

procedures and reported it as a moderate. This study's findings are in line with those of studies conducted in primary care settings in Turkey [21] and a hospital in Saudi Arabia [2].

There were two questions in this study. The first question was "Is there a relationship between job satisfaction and patient safety culture?" It was found that job satisfaction had a positive and significant relationship with patient safety culture ($\beta = 0.28$, $p = 0.003$). The finding of this study suggests that nurse's job satisfaction could improve patient care quality by creating work environments that enable nurses to feel empowered to provide optimal care. Consistent with other studies, nurse's behaviors have been linked to better patient outcomes and fewer complications. For instance, in a study conducted by the authors [13] showed that job burnout ($r = -0.51$, $p < 0.001$) has a significant negative relationship with patient safety culture, and job satisfaction ($r = 0.45$, $p < 0.001$) has a statistically significant positive relationship with patient safety culture. Furthermore, the authors in [21] found that in their study conducted in Rasht city hospitals there was a significant direct relationship between nurses' job satisfaction and patient safety culture ($r = 0.643$, $p < 0.001$). The result of this study also is aligned with another study conducted by the authors in [23] as it was found that strong positive influence of leadership on workplace empowerment, which in turn increased nurses' job satisfaction and minimize the adverse patient outcomes. On the other hand, the current results are against these obtained by the authors in [24] as it was found that less job satisfaction, lower patient safety, and more adverse events.

The second question was "Is there a relationship between intent to leave and patient safety culture?" The result showed indicated that intentions to leave had a negative and significance relationship with patient safety culture ($\beta = -0.34$, $p < 0.01$). The obtained results supported a previous study found that job stress directly influenced intent to leave, and intent to leave directly influenced nurse-assessed patient safety [12]. Nurses who intent to leave their current job affects negatively the safety of their patients in healthcare organizations

In Saudi Arabia, patient safety was found as an essential element in all hospitals and is considered as a priority in Saudi healthcare system [25]. It also can be used as a way for enhancement of services and the healthcare system in Saudi Arabia [25]. Nurses satisfaction and intention to leave the job are two important factors that were measured in this study and highlighted their essential effects on patient safety culture that have been discovered in the previous studies in Saudi Arabia. This indicates that nurses' outcomes have a very critical role in improving the culture of patient safety in Saudi hospitals.

5. Implications to Practice and Recommendations

Arising from the empirical analysis of results, the following recommendations are made for the MOH emergency nurses in Madinah, Saudi Arabia. Nurse leaders/managers should provide prospects for progression inside the hospitals.

Providing possibilities for professional progression may assist nurses in becoming more competent and enjoying their work even more. Also, in the department, the working environment should be beneficial to employee health and safety. Finally, it is critical to provide a hazard-free and safe working environment that also improves efficiency and production to inspire nurses.

Future studies in Saudi Arabia should focus on exploring factors that could contribute either positively or negatively to patient safety culture in healthcare settings. Also, more studies are needed in different cities in Saudi Arabia and various departments. Organization outcomes and their influences on patient safety culture should be the priority of future studies in Saudi Arabia.

6. Conclusions

The results from the regression model indicated that intentions to leave had effect in patient safety culture. Nurse's job satisfaction is also critical for providing high-quality treatment. Given the critical role that nurses play in deciding the efficacy, efficiency, and long-term viability of healthcare systems, it is critical to understand what drives them and how well contextual factors and the organization meet their needs. The findings of this study suggest that nurse's job satisfaction could enhance patient care quality by creating work environments that enable nurses to feel empowered to provide optimal care.

Data Availability

Data used to support the findings of this study are restricted due to ethical concerns and privacy of participant's information.

Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

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