Factors Associated with Nurses' Intention to Leave from Different Critical Care Units

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ABSTRACT

Context: Nurses' likelihood of leaving the intensive care unit is substantially high. The high turnover intention among nurses significantly contributes to nursing shortages, although several other factors also play a role.
Aim: This study sought to identify the factors associated with nurses' intention to leave from different critical care units.
Methods: A quantitative cross-sectional analytical study was conducted at Dammam Medical Complex on 291 critical care nurses. Data were gathered through a self-administered questionnaire that included demographic and employment information, the Nurses' Intention to Leave Scale, and the Job Content and Work Factors Assessment tool.
Results: 55.3% of nurses are uncertain about their intent to leave, 32.6% have high intent to leave, and 12.1% have low intent to leave. The age group below 30 is significantly associated with intent to leave work in critical care units (p<0.05). Also, decreased job-skill discretion for nurses in the critical care units contributed significantly to their intent to leave the ICU (p<0.05).
Conclusion: One-third of the studied nurses are highly intent on leaving the ICU because of their young age and job-skill discretion. The hospital manager must promote continuing education and training to motivate new nurses to decrease their intention to leave the ICU. Nursing management should consider implementing a competency-based evaluation system alongside compensation adjustments that reflect clinical experience to address nurse turnover. Ensuring competitive compensation aligned with skill levels can improve retention rates among skilled nurses. Furthermore, maintaining adequate staffing levels is essential to uphold quality care, emphasizing the need for strategic hiring practices in nursing departments.

Keywords: Nurses, intention, leave, factors, critical care units

1. Introduction

Nurses comprise the greatest proportion of the labor force in most healthcare systems *(Sharif Nia et al., 2021)*. Compared to nurses in other wards, ICU nurses face higher job dissatisfaction, work-related stress, and burnout *(Awajeh et al., 2018)*, contributing to higher turnover rates in critical care settings *(Daouda et al., 2021)*.

According to the findings of *Naboureh et al. (2021)*, the likelihood of nurses wanting to leave the intensive care unit is substantially greater. Because of their lengthy experience and high level of expertise, critical care unit nurses are notoriously difficult and expensive to replace *(Xu et al., 2023)*.

A systematic review and meta-analysis found that nurse turnover rates in ICUs varied widely, ranging from 3.0% to 75.0%, with an overall prevalence of intent to leave reported at 27.7% *(Xu et al., 2023)*.

It is widely believed that a strong intention to leave among nurses is a key factor contributing to nursing shortages *(Sokhanvar et al., 2018)*. This concern creates a loss of experienced and trained nurses, which in turn leads to a scarcity of health providers and lowers the overall quality of the provided care *(Kaddourah et al., 2018)*, and a variety of negative consequences, including medication errors, falls, and pressure injuries *(Perry et al., 2018)*. The challenges of recruitment, financing, and training brought on by a high turnover rate among nurses contribute further to the dysfunction inside the organization *(Alilu et al., 2017)*.

Khan et al. (2019) reported that the factors contributing to nurses leaving their positions in critical care units include the

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nature of workplace relationships, the quality of the work environment, and traumatic or stressful events during the turnover. Personal and demographic elements, in addition to the business environment, are influential determinants *(Sawatzky & Enns, 2012)*. Four variables were identified by *Albougami et al. (2020)* as significant predictors of nurse turnover in critical care departments. Key predictors of nurse turnover included emotional exhaustion, a sense of personal achievement, physical health, and mental well-being.

A systematic mixed-method review examined the factors affecting nurses' intentions to leave adult ICUs, identifying three core themes: The quality of the work environment, the dynamics of professional relationships, and challenging or traumatic events within the workplace *(Khan et al., 2019)*.

A cross-sectional study conducted at an institution in Ethiopia found that critical care nurses' intention to resign was influenced by a lack of recognition and dissatisfaction with their work *(Ayalew & Workineh, 2020)*. Moreover, *Alilu et al. (2017)* showed that the feeling of worthlessness is a significant factor in nurse turnover. Moreover, the results obtained from the study of *Falatah and Salem (2018)* showed that the factors that contributed to the nurses' turnover in Saudi Arabia include demographic factors, issues related to their satisfaction, status of management and leadership, and factors related to their position. The associated feeling of uselessness is another factor that plays a role. Other factors, such as workplace violence, lead to nurse turnover *(Bordignon & Monteiro, 2019)*.

2. Significance of the study

According to recent Saudi Ministry of Health statistics, 61.7% of the total nurses are expatriates in Saudi Arabia, and the healthcare system's dependency on expatriate nurses significantly affects the quality of healthcare and overall costs *(Aboshaiqah, 2016)*. Although nurse turnover is a significant obstacle to developing Saudi Arabia's healthcare system, only a few studies have explored this issue.

Although many studies have investigated the factors influencing nurses' turnover intentions, little is known about this problem in critical care units, particularly in the Kingdom of Saudi Arabia. There is limited information regarding the prevalence and factors that influence nurses' intentions to leave their positions in critical care units, practically in the Dammam Medical Complex. This study came about to bridge this knowledge gap and explore more about these factors. The study findings can inform nurse managers and policymakers at the Ministry of Health to build managerial strategies to solve this problem and enhance nursing care quality at critical care units in Saudi Arabia. The primary goal of this study is to examine the factors that influence nurses' intention to leave their positions in the critical care departments of Dammam Medical Complex in Saudi Arabia.

3. Aim of the study

It was to identify the factors associated with nurses' intention to leave different critical care units through:
- Recognizing the percentage of nurses' intention to leave work in critical care units in Dammam Medical Complex.

- Investigating the work-related factors influencing nurses' intention to leave work in critical care units in Dammam Medical Complex.
- Exploring demographic factors influencing nurses' intention to leave work in critical care units in Dammam Medical Complex.

3.1. Research questions

- What is the percentage of nurses intending to leave critical care units in Dammam Medical Complex?
- What are the work-related factors that influence nurses' intention to leave critical care units in Dammam Medical Complex?
- What are the demographic factors that influence nurses' intention to leave critical care units in Dammam Medical Complex?

3.2. Operational definition

Intention to leave is the process of nurses leaving their positions or professions for various reasons, called nurse turnover.

4. Subjects & Methods

4.1. Research design

The study utilized a quantitative cross-sectional analytical design, which involves gathering data at one specific time, capturing all relevant factors during a single data collection period. This design is particularly effective for examining the current state of phenomena or the relationships between them at a particular moment *(Polit & Beck, 2018)*.

4.2. Study setting

This study was conducted at Dammam Medical Complex (Intensive Care Unit, Burn Unit, Emergency Department) in Saudi Arabia. This hospital serves many patients in different regions of Saudi Arabia and provides secondary and tertiary care for people.

4.3. Subjects

A purposive sample of 300 nurses employed in Intensive Care Units (ICU), the Burn Unit, and the Emergency Department at Dammam Medical Complex in Saudi Arabia was selected for the study. Due to their limited number, all congruent with the inclusion criteria were invited to participate; among 300, 291 were agreed to participate. Yamane's equation was utilized to calculate the sample size:
$$n = N/(1+N(e)2).$$
The variables in this formula are:
n = the required sample size
N = the study population
e = the margin error *(Iddon & Boyd, 2023)*
Inclusion criteria
The study included male and female nurses with a minimum of one year of experience working in the critical care units at Dammam Medical Complex.
Exclusion criteria
The study excluded newly hired or in-training nurses and those who chose not to participate.

4.4. Tools of data collection

4.4.1. Self-Administered Questionnaire

The researcher developed the questionnaire, which encompassed two sections. The first section involved demographic features of the studied nurses, such as age, gender, marital status, and nationality. The second part concerned with work-related data, such as education, experience, income, and department.

4.4.2. Nurses' Intention to Leave Scale

This scale was adopted from *Hand (2015)* to assess the nurses' intention to leave. It consists of seven statements: "All things considered, I would like to find a comparable job in a different organization; likely, I will actively look for an organization to work for next year; at present, I am actively planning to return to school."

Scoring system

The scale items were rated on a 5-point Likert scale, with one representing "strongly disagree" and five representing "strongly agree," with higher scores reflecting a greater intention to leave. The scores were then divided into three categories: Low intent to leave (7 to 15), uncertain intent to leave (16 to 25), and high intent to leave (26 to 35),

4.4.3. Job Content and Work Factors Questionnaire

The third questionnaire involves assessing job content and work factors. It was developed by *Karasek et al. (1998)* and adopted to achieve the aim of this study. This tool involves sex dimensions: Job-skill discretion (6 items), such as the job requiring learning new things, repetitive work, and creativity.

Decision authority scale (3 items): The job requires me to make many individual decisions, I have very little freedom to decide, and I have a lot to say about the job. Psychological demands scale (9 items): The job requires working very fast, very hard, and not to do much work.

Coworker social support (4 items) such as asking about coworkers' competency, personal interest, and friendly to me. Job insecurity (3 items) such as job security, career development and promotions, and five years skills. Finally, Supervisor social support (5 items), such as "My supervisor cares about the well-being of those under their leadership, listens to what I have to say, and is supportive in encouraging teamwork.

Scoring system

The participants were asked to respond using a 4-point Likert scale, with 4 representing "strongly agree," 3 for "agree," 2 for "disagree," and 1 for "strongly disagree." The score was presented as a mean and SD for each statement and the total.

4.5. Procedures

Ethical and administrative considerations: The researcher was committed to all ethical considerations in conducting this study. Ethical approval was obtained from Hail University's ethical committee with ethical code (H-2023-051) and from the IRB of the study setting. The study was anonymous, and the participants were provided explanation of the research process. Participating in this study posed no personal risk to individuals. The researcher stored the questionnaire securely in a locked location to maintain the confidentiality of the data.

The reliability of the research tool refers to its ability to consistently measure the specific attribute it is intended to assess. According to the study by *Ayalew and Workineh (2020)*, the intention to leave questionnaire is reliable. The reliability coefficient for the job content questionnaire is 0.74 based on the original author *(Karasek et al., 1998)*.

The data collection process includes procedures for ethical approval from authorized persons and research directors, visits to the selected hospital, recruiting the participants after their voluntary consent, assuring the participants' anonymity, and administering questionnaires to them by electronic link.

4.6. Strengths and limitations

This study presented an important topic considering important work factors (job content factors). These factors were not considered previously in studies related to the same topic in Saudi Arabia. Moreover, most studies in Saudi Arabia were done in areas other than critical care units, the issue that was considered in the present study.

Conversely, this study did not include a comparison between two groups: Those with an intention to leave and those without it. Comparisons provide more accurate results in data analysis. Since the participants in the current study were registered nurses working in the intensive care unit, the findings may not apply to nurses in other hospital departments.

4.7. Data analysis

The researcher employed the Statistical Package for the Social Sciences (SPSS Version 26) for data analysis to accomplish the study's objectives. Demographic data were categorized as either categorical or numerical variables. Numerical codes were used for data entry of demographic variables in the questionnaire. Inferential statistics were applied to address the research questions, including independent sample t-tests and one-way ANOVA.

5. Results

Table 1 shows the frequency and percentage distribution of study participants' sociodemographic features. The table shows that 54.0% of the participants are 30-39 years old, 39.2% are below 30, and 5.5% are between 40-49 years old. Besides, 79.0% of the participants were females, while 21.0% were males.

In addition, 84.5% of the studied nurses were Saudis, while 15.5% were non-Saudis. Also, 48.1% of participants were married, 47.8% were singles, while 4.1% are divorced. Regarding participants' income, 52.2% have an income of 10,000 SAR or more, 32.0% have an income of 5000-<10,000 SAR, and 15.8% have an income below 5,000 SAR.

Figure 1 shows that 69.4% of participants have bachelor's degrees, 17.2% have diplomas, and 13.4% have master's degrees or higher.

Figure 2 shows that 41.6% of participants have experience of 5-10 years, 34.7% have experience below five years, and 23.7% have experience of more than ten years.

Table 2 shows each item's mean score and SD in intention to leave domain. The highest mean score of 3.47±1.16 was observed in the item "All things considered, I would like to find a comparable job in a different organization," followed by the item "I will probably look for a new job in the near future" with a mean score of 3.39±1.30. On the other Hand, the lowest mean score of 2.96±1.40 was observed in the item "At present, I am actively planning to return to school." The total mean score of intention to leave of participants is 22.65 out of 35.

Figure 3 shows that 55.3% of nurses were uncertain about their intent to leave, 32.6% had high intent to leave, and 12.1% had low intent to leave.

Table 3 shows participants' responses about job-skill discretion. The highest mean score for each item is 4, while the lowest score is 1. The highest mean score was 3.21±0.75 was observed in the item "My job requires a high level of skill," followed by "My job requires that I learn new things," with a mean score of 3.16±0.68. Also, a factor such as "My job requires me to be creative had a mean score of 3.04±0.76." On the other hand, the lowest mean score of 2.04±0.63 was observed for the item "My job requires much repetitive work." The total mean score indicates 17.96±2.50 out of 24.

Table 4 shows participants' responses about decision authority. The highest mean score of 2.96±0.75 was observed in the item "I have a lot to say about what happens on my job," followed by My job allows me to make many decisions on my own," with a mean score of 2.86±0.82. On the other hand, the lowest mean score of 2.07±0.79 was observed for the item " On my job, I have very little freedom to decide how I do my work." The total mean score of decision authority of 7.91±1.23 out of 12.

Table 5 shows participants' responses to psychological demands. The highest mean score of 3.24±0.67 was observed in the item "My job requires working very hard", followed by "My job requires working very fast," with a mean score of 3.15±0.79, followed by "My job is very hectic" with a mean score of 3.02±0.75. On the other hand, the lowest mean score of 1.86±0.76 was observed for the item "Waiting on work from other people or departments often slows me down on my job," with a total mean score of 23.68±2.29 out of 36.

Table 6 shows participants' responses about coworker social support. The highest mean score of 3.0±0.77 was observed in the items "People I work with are friendly," and "People I work with are helpful in getting the job done." On the other hand, the lowest mean score of 2.87±0.75 was observed for the item "People I work with take a personal interest in me," with a total mean score of 11.78±2.33 out of 16.

Table 7 shows participants' responses about job insecurity. The highest mean score of 3.06±0.77 was observed in the item "In five years, my skills will still be valuable." On the other hand, the lowest mean score, 2.83±0.75, was observed for the item "My prospects for career development and promotions are good," with a total score of 8.79±2.03 out of 12.

Table 8 shows participants' responses to social support. The highest mean score of 2.99±0.77 was observed in the item "I am exposed to hostility or conflict from my supervisor." On the other hand, the lowest mean score, 2.75±0.82, was observed for the item "My supervisor pays attention to what I am saying," with a total mean score of 13.49±3.43 out of 20.

Table 9 shows each subdomain's total mean score and SD in job content (work factors). The highest mean percentage of 74.83% was observed in the subdomain "Job-skill discretion," followed by "Coworker social support," with a mean percentage of 73.63%. On the other hand, the lowest mean percentage of 65.78% was observed in the subdomain "Psychological demands."

Table 10 shows a statistically significant difference in the mean score of participants' intent to leave regarding age (p<0.05). Post hic Tukey test reveals that the difference between those below 30 and 50 years or older favors those below 30. Nurses' who are below 30 years have higher intent to leave work. Also, no statistically significant difference exists in the intent to leave mean score and their experience, marital status, income, or education (p>0.05).

Table 11 shows no significant difference in the mean score of participants' intent to leave about their gender or nationality (p>0.05).

Table 12 demonstrates a non-statistically significant correlation (p>0.05) between the participants' intent to leave their work and work factors (decision authority, psychological demands, coworker social support, job insecurity, and supervisor social support). Conversely, there is a significant negative correlation between the participants' intent to leave their work and the work factor (job-skill discretion), with decreased job-skill discretion for nurses in the critical care units, their intent to leave work in the critical care units increases (p< 0.05).

Table (1): Frequency and percentage distribution of the sociodemographic variables of the studied nurses (n=291).

Variables	Number	%
Age groups		
Below 30 years	114	39.2
30-39 years	157	54.0
40-49 years	16	5.5
50 years and more	4	1.4
Gender		
Male	61	21.0
Female	230	79.0
Nationality		
Saudi	246	84.5
Non-Saudi	45	15.5
Marital status		
Single	139	47.8
Married	140	48.1
Divorced	12	4.1
Income		
Below 5,000 SAR	46	15.8
5000- <10,000	93	32.0
10,000 or more	152	52.2
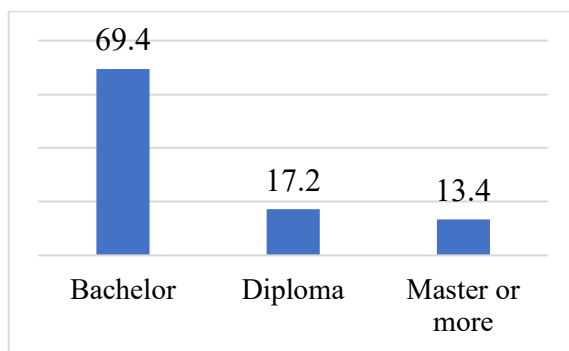
Figure (1): Percentage distribution of participants' education (n=291).

■ 5-10 Years   ■ Below 5years   ■ More than10 years
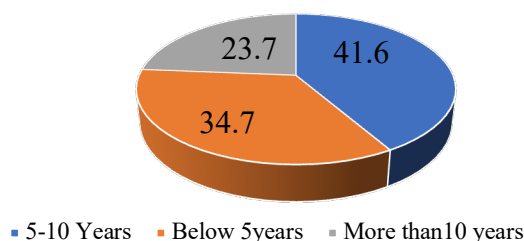
Figure (2): Percentage distribution of Participants' Experience (n=291).

Table (2): Mean score of nurses' intention to leave ICU (n=291).

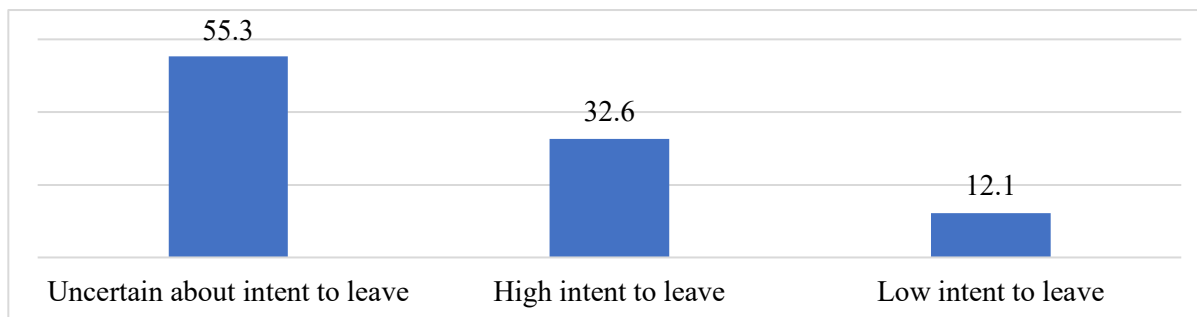| Items	Mean±SD
All things considered, I would like to find a comparable job in a different organization	3.47±1.16
Likely, I will actively look for a different organization to work for in the next year	3.36±1.23
At present, I am actively planning to return to school	2.96±1.40
The results of my search for a new job are encouraging	3.31±1.23
I will probably look for a new job in the near future	3.39±1.30
At present, I am actively searching for a job in another organization	3.15±1.31
I intend to quit	2.99±1.29
Total	22.65±6.24

Figure (3): Percentage distribution of the studied nurses' intention to leave (n=291).

Table (3): Mean score of job-skill discretion dimension of job content and work-related factors (n=291).

Items	Mean±SD
My job requires that I learn new things	3.16±0.68
My job requires much repetitive work	2.04±0.63
My job requires me to be creative	3.04±0.76
My job requires a high level of skill	3.21±0.75
I get to do a variety of different things on my job	3.15±0.77
I have the opportunity to develop my special abilities.	3.07±0.74
Total	17.96±2.50

Table 4: Mean score of decision authority dimension of job content and work-related factors (n=291).

Items	Mean±SD
My job allows me to make many decisions on my own	2.86±0.82
On my job, I have very little freedom to decide how I do my work.	2.07±0.79
I have a lot to say about what happens on my job	2.96±0.75
Total	**7.91±1.23**

Table (5): Mean score of psychological demands dimension of job content and work-related factors (n=291).

Items	Mean±SD
My job requires working very fast	3.15±0.79
My job requires working very hard	3.24±0.67
I am not asked to do much work.	2.74±0.88
I have enough time to get the job done	2.71±0.82
The demands that other people make of the often conflict	1.98±0.70
My job requires long periods of intense concentration on the task	2.96±0.78
My job is very hectic	3.02±0.75
Waiting on work from other people or departments often slows me down in my job	1.86±0.76
My tasks are often interrupted before I can finish them, so I have to go back to them later	2.0±0.73
Total	**23.68±2.29**

Table (6): Mean score of coworker social support dimension of job content and work-related factors (n=291).

Items	Mean±SD
People I work with are competent in doing their jobs	2.92±0.80
People I work with take a personal interest in me	2.87±0.75
The people I work with are friendly	3.00±0.77
The people I work with help get the job done	3.00±0.77
Total	**11.78±2.33**

Table (7): Mean score of job insecurity dimension of job content and work-related factors (n=291).

Items	Mean±SD
My job security is good	2.89±0.88
My prospects for career development and promotions are good	2.83±0.75
In five years, my skills will still be valuable	3.06±0.77
Total	**8.79±2.03**

Table (8): Mean score of supervisor social support dimension of job content and work-related factors (n=291).

Items	Mean±SD
My supervisor is concerned about the welfare of those under him/her	2.84±0.82
My supervisor pays attention to what I am saying	2.75±0.82
My supervisor helps get the job done	2.82±0.85
My supervisor is successful in getting people to work together.	2.83±0.83
I am exposed to hostility or conflict from my supervisor	2.99±0.77
Total	**13.49±3.43**

Table (9): The total mean score of factors influencing nurses' intention to leave critical care units (n=291).

Items	Min.	Max.	Mean±SD	Mean%
Job-skill discretion	6	24	17.96±2.50	74.83
Coworker social support	4	16	11.78±2.33	73.63
Job Insecurity	3	12	8.79±2.03	73.25
Supervisor social support	5	20	13.49±3.43	67.45
Decision authority	3	12	7.91±1.23	65.92
Psychological demands	9	36	23.68±2.29	65.78

6. Discussion

Many nurses are considering quitting their positions in critical care units, particularly in Saudi Arabia. Because of recent developments in medical technology, the healthcare industry demands professionals to possess a high level of training and expertise to provide effective patient care *(Almalki et al., 2012)*. In intensive care units, the problem of potential nurse turnover is more difficult to solve *(Vermeir et al., 2018)*. The study's main aim is to identify the factors associated with nurses' intention to leave from different critical care units.

The current study results show that more than fifty percent of nurses are uncertain about their intent to leave; nearly one-third have high intent to leave, while only more than one-tenth have low intention to leave.

Table (10): Demographic factors affecting studied nurses' intention to leave critical care units (n=291).

Variables	No.	Mean±SD	F statistics	p-value
Age groups				
Below 30 years	114	23.20±5.90		
30-39	157	22.73±6.45	3.031	0.031[a]
40-49	16	19.75±5.27	(3, 287)	
50 and more	4	16.00±5.77		
Experience				
Below five years	101	22.53±5.62	1.087	
5-10 years	121	23.22±6.80	(2, 288)	0.339 [a]
More than 10 years	69	21.85±6.06		
Marital status				
Single	139	22.17±5.83	2.399	
Married	140	22.84±6.69	(2, 288)	0.093 [a]
Divorced	12	26.16±4.15		
Income				
<5,000 SAR	46	22.17±6.52	0.201	
5000- <10,000	93	22.61±6.80	(2, 288)	0.818 [a]
10,000 or more	152	22.83±5.81		
Education				
Diploma	50	21.54±6.85	1.166	
Bachelor	202	22.78±6.27	(2, 288)	0.313 [a]
Master or more	39	23.46±5.13		

Table (11): Factors associated with the participants' intention to leave about their gender and nationality (n=291).

Variables	No.	Mean±SD	t statistics	p-value
Gender				
Male	61	23.60±5.23	1.334	0.183 [b]
Female	230	22.40±6.47	(289)	
Nationality				
Saudi	246	22.58±6.30	-0.449	0.654[b]
Non-Saudi	45	23.04±5.95	(289)	

Table (12): Correlation between participants' intention to leave and work-related factors.

Variables	Work factors	
	r	**p value**
Job-skill discretion	-0.133	0.023
Decision authority	0.099	0.093
Psychological demands	0.061	0.299
Coworker social support	0.092	0.116
Job insecurity	-0.012	0.833
Supervisor social support	0.081	0.171
Total	0.102	0.083

The high intention to leave among one-third of the study nurses and the uncertainty among half of them might be due to the nature of work in the ICUs, as more than two-fifths of the sample had between 5 and 10 years of experience and more than one-third had more than ten years of experience.

The present study results also indicate a high mean score of some factors that might overwhelm nurses in the current study, as the job consistently requires the nurse to learn new things, be creative, have a high skill level, and make many decisions independently. Besides, they give a high mean score to such factors as their job requires them to work very fast and hard, which may be hectic. Simultaneously, the participant nurses reported high mean scores for their perception of hostility from their supervisors. All these factors might affect the nurse's intention to leave.

This result is higher than that found in a study by *Xu et al. (2023)*, which showed that the worldwide prevalence of turnover intention among critical care nurses was 27.7%.

The present result is different from a study in Egypt, which showed that 4.8 percent of nurses at the hospital were certain that they had no intention of leaving *(Said & El-Shafei 2021)*.

The present finding is also higher than those demonstrated by *Daouda et al.*'s study *(2021)* in France, which reported that the turnover rate was 19.0%. Contradictory results were also found in *Ayalew and Workineh's (2020)* research, which found that the nurses' overall intent to leave their jobs was 64.9%.

The current findings indicate a strong association between being under 30 years old and the intent to leave intensive care units. In this study, younger participants were likelier to leave their critical care positions. This finding may be due to younger nurses' desire for a workplace that aligns with their career aspirations and provides greater motivation. Moreover, young nurses have good energy for work and significant motivation toward better jobs in other organizations. In addition, a limited level of job-skill

discretion will lead to more intent to leave, and this could be explained by the fact that if the workplace recognizes nurses' skills through motivation, this will lead to nurses' retention and vice versa.

This finding may be explained by the heavy ICU workload, job dissatisfaction, and low salaries for young nurses. Some nurses were expatriates or divorced, which might affect their intention to leave, seeking a better work environment and salaries. Also, decreasing job-skill discretion for nurses in the intensive care units will contribute significantly to their intent to leave work. Other factors showed no significant association with intent to leave work in critical care units. This finding emphasizes the importance of job skill autonomy, as ICU nurses may experience dissatisfaction due to the stress of heavy workloads, the demanding ICU work environment, and a perceived lack of respect and recognition for their contributions.

This result matched *Tao et al.'s* study *(2015)* in China; the study explored ICU nurses' job satisfaction and their intentions to leave, revealing two main factors influencing job satisfaction: Recognition for their work and opportunities for professional development and relationships with colleagues. The influence of job satisfaction or dissatisfaction on nurses' intentions to leave was varied, with three distinct categories identified.

Different factors were found in research done by *Daouda et al. (2021)* in France, which reported that key predictors included the number of beds, the availability of intermediate care beds in the ICU, and the patient-to-staff ratio. Moreover, the present findings contradict results in Iran, which showed that factors associated with nurses' intent to leave involve moral anguish *(Naboureh et al., 2021)*. Research done by *Albougami et al. (2020)* in Saudi Arabia revealed different findings, indicating that factors influencing nurses' intent to leave included emotional exhaustion, a sense of personal accomplishment, physical health, and mental well-being.

Contradictory findings were observed in research done by *Khan et al. (2019)*, which identified the quality of the work environment, workplace relationships, and stressful or traumatic experiences as predictors of intention to leave among the studied nurses. The current results also differ from a study in Ethiopia, where critical care nurses' intentions to leave were linked to a lack of recognition and dissatisfaction with work *(Ayalew & Workineh, 2020)*. A study in Saudi Arabia also highlighted other factors influencing nurse turnover, such as job satisfaction, management practices, and leadership quality *(Falatah & Salem, 2018)*.

On the other hand, other factors lead to turnover among nurses, such as workplace violence, while better satisfaction with the current job and better workability decreases the probability of greater turnover *(Bordignon & Monteiro, 2019)*.

Furthermore, the present results are inconsistent with *Nashwan et al.'s (2021)* results in Qatar, which showed that nurses' stress levels were considered a main factor in their intention to leave. In contrast, a study in Egypt found that the type of hospital and the related workload were the most important predictors of all the outcomes examined *(Said & El-Shafei et al., 2021)*. Differences in the factors affecting nurses' intentions to leave critical care units between this study and earlier research could be due to variations in work environments, sample sizes, sampling techniques, and job characteristics.

7. Conclusion

Nurses have intent to leave in the present study, in which one third of nurses in critical care units have high intent to leave. Significant factors contributing to the intent to leave work in critical care units involve the age group below 30 years and a decrease in job-skill discretion.

8. Recommendations

It is essential to evaluate competencies and establish a compensation system that reflects clinical experience to mitigate turnover among skilled nurses. Maintaining an adequate number of nurses is crucial for delivering high-quality nursing care. It is important to reevaluate current nursing workforce management, and new policies should be implemented to regulate the nurse-to-bed ratio in hospitals.

In addition, strategies such as increasing staff strength, ensuring an equitable distribution of nurses in the critical care units, and providing the needed resources are needed.

Moreover, management should recognize nurses' skills and motivate them as much as possible to lower the percentage of intent to leave. Hospital management should consider young nurses and motivate them through different methods, such as salary and enhancing the work environment.

Future research can consider other work-related factors and other hospital factors. Comparative research studies should be utilized to compare two groups (high intent and low intent).

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