



## **Intention to leave among Intensive Care Units Nurses in Iraq: A Descriptive Study**

**Islam Majid jasem\*** 

**Mohammed Baqer Al-Jubouri** 

\*Ministry of Health, karbala Health Directorate, karbala- Iraq. Email:

[islam.majid2302m@conursing.uobaghdad.edu.iq](mailto:islam.majid2302m@conursing.uobaghdad.edu.iq)

<https://orcid.org/0009-0000-4870-4968>

\*\* Associated Professor. College of Nursing / University of Baghdad. Email:

[maaljubouri@conursing.uobaghdad.edu.iq](mailto:maaljubouri@conursing.uobaghdad.edu.iq)

<https://orcid.org/0000-0002-8073-9555>



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#### Abstract

**Background:** The intensive care unit is one of the most specialized hospital units that need nurses with a high level of skill and experience. The leave of experienced nurses from this unit reduces the quality of nursing care and imposes heavy costs on the health care system.

**Purpose:** To assess the Intention to leave among Intensive Care Units Nurses and found the relation between Intention to leave and demographics.

**Method:** A cross-sectional study was conducted to collect data from 105 nurses from five hospitals in Karbala, Iraq to assess the Intention to leave among Intensive Care Units Nurses from 1 December to 30- 2024 were selected by used convenience sampling method. Data were collected using a self-administered questionnaire comprising two sections (demographics, Anticipated Turnover Scale ATS). Data were analyzed using descriptive and inferential statistics using SPSS version 27.

**Result:** The study found 42% (n = 44) of the participants expressed an intention to leave their current jobs. No significant correlations were found between the intention to leave and demographic factors, including age, sex, years of experience, educational level, type of shift, and marital status.

**Conclusion:** The results underscore the need for healthcare organizations to address systemic and organizational factors that contribute to job dissatisfaction and turnover intentions among ICU nurses. Interventions such as improving work conditions, enhancing financial income, and offering career development opportunities

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may help mitigate the desire to leave. By focusing on these areas, healthcare institutions can enhance nurse retention, and ultimately ensure better patient outcomes.

**Keywords: Intention to leave, Intensive Care Units Nurses**

**الخلفية:** تعتبر وحدة العناية المركزة من أكثر الوحدات العلاجية المتخصصة التي تحتاج إلى ممرضين على مستوى عالي من المهارة والخبرة. إن إجازة الممرضات ذوات الخبرة من هذه الوحدة تقلل من جودة الرعاية التمريضية وتقرض تكاليف باهظة على نظام الرعاية الصحية.

**الهدف:** تقييم نية المغادرة بين ممرضات وحدات العناية المركزة وإيجاد العلاقة بين نية المغادرة والتركيبية السكانية.

**الطريقة:** تم إجراء دراسة مقطعية لجمع البيانات من ١٠٥ ممرضة من خمسة مستشفيات في كربلاء، العراق لتقييم نية المغادرة بين وحدات العناية المركزة. تم اختيار الممرضات في الفترة من ١ ديسمبر إلى ٣٠-٢٤-٢٠٢٤ باستخدام طريقة أخذ العينات المريحة. تم جمع البيانات باستخدام استبيان ذاتي الإدارة يتكون من قسمين (التركيبية السكانية، مقياس الدوران المتوقع ATS). تم تحليل البيانات باستخدام الإحصاء الوصفي والاستنتاجي باستخدام برنامج SPSS الإصدار ٢٧.

**النتيجة:** وجدت الدراسة أن ٤٢٪ (ن = ٤٤) من المشاركين عبروا عن نيتهم لترك وظائفهم الحالية. ولم يتم العثور على ارتباطات ذات دلالة إحصائية بين نية المغادرة والعوامل الديموغرافية، بما في ذلك العمر والجنس وسنوات الخبرة والمستوى التعليمي ونوع التحول والحالة الاجتماعية.

**الاستنتاج:** تؤكد النتائج على حاجة مؤسسات الرعاية الصحية لمعالجة العوامل النظامية والتنظيمية التي تساهم في عدم الرضا الوظيفي ونوايا الدوران بين ممرضات وحدة العناية المركزة. قد تساعد التدخلات مثل تحسين ظروف العمل وتعزيز الدخل المالي وتقديم فرص التطوير الوظيفي في تخفيف الرغبة في المغادرة. ومن خلال التركيز على هذه

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المجالات، يمكن لمؤسسات الرعاية الصحية تعزيز الاحتفاظ بالمرضات، وضمان نتائج أفضل للمرضى في نهاية المطاف.

الكلمات المفتاحية: نية المغادرة، ممرضات وحدات العناية المركزة

Corresponding Author: Islam Majid jasem  
[islam.majid2302m@conursing.uobaghdad.edu.iq](mailto:islam.majid2302m@conursing.uobaghdad.edu.iq)

### Introduction

Nursing represents the biggest occupational group within the healthcare sector, according to the World Health Organization, covering over 59% of health professions, approximately 19.3 million nurses make up part of the overall 43.5 million healthcare professionals globally (1). An intensive care unit (ICU) nurse is a skilled healthcare professional employed in a hospital's intensive care unit, responsible for the treatment of critical patients needing continuous monitoring and intervention to maintain vital functions.

Intention to leave ITL can be defined according to Weisberg the expected probability of a person quitting from their present employer or workplace and actively looking for employment elsewhere in the foreseeable future (2)

ITL was recognized as the most accurate and strong predictor for actual turnover (3). Globally, critical care units are recognized as one of the main areas of work that are negatively influenced by the nurses seeking to leave the profession (4).

This leaving can lead to deficit of the nurses in jobs, this deficit called nursing shortage results in the attrition of skilled and competent nurses (5), The World Health Organization predicts a decline of around 7.6 million nurses worldwide by 2030 (6). This shortage might result in a deficiency in the health services offered and negatively impact on quality of nursing care (7), Also, leads to adverse patient outcomes, including elevated rates of patient mortality and infections, which may further lead to an increase in the incidence of health care problems (8)

In addition to the financial consequences resulting from replacing competent nurses who exit from the ICU. (9)

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According to Xu G, et al. (10) recommend future research on turnover intention among ICU nurses should prioritize the assessment. Furthermore, the intention to leave among Iraqi nurses have not been the topic of any studies. Therefore, this study will aim to assess the intention to leave their jobs between intensive care unit nurses in the Iraqi government.

### Materials and methods

#### Study design

A descriptive correlational design was applied.

#### Setting and Samples

The study was conducted in the intensive care units (ICUs) of hospitals located in the Karbala governorate, Iraq, including Imam Hussein Medical City, Imam Hassan Al-Mujtaba Hospital, Children's Teaching Hospital, Women's Teaching Hospital, and Hindi Teaching Hospital. A non-probability convenience sampling method was employed to recruit participants. The inclusion criteria for the study comprised nursing staff working in ICUs with at least one year of experience, and nurses across all educational levels were eligible to participate. Exclusion criteria included nurses with less than one year of experience and those in administrative or office-based roles, such as nursing managers. The total number of nurses employed in the ICUs across these five hospitals is approximately 300. The minimum sample size was calculated based on an 80% confidence level and a 5% margin of error, resulting in a required sample size of 107 nurses. Two samples were excluded due to incomplete responses, yielding a response rate of 98.1%. Data collection was carried out over a one-month period, from December 1 to December 30, 2024, targeting nurses working during both day and night shifts.

#### Instrument

The questionnaire to collect data consisted of two parts. Demographics, and Anticipated Turnover Scale ATS (11). For the ATS scales the Arabic version was used after obtained permission from Almalki's paper. (12)

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### Part One: Demographics

This part contains the respondents age, sex, marital status, educational level, years of experience, and type of shift.

### Part Two: Anticipated Turnover Scale

The ATS was originally developed in 1978 by Hinshaw et al. (11) to study ITL among nurses, ATS many tests were conducted on him before using it in the expected turnover study on nursing staff (13). The ATS is designed to measure an employee's perspective or judgement of the likelihood of leaving their current job voluntarily (14). The Likert format self-report tool consists of 12 items with seven response options, ranging from strongly agree to strongly disagree. The scoring key categorizes each item as either negative or positive. Items with negative scoring assign a score of 1 to a strongly agree response. Conversely, a strongly agree response for positive scoring give a score of 7. Within the scoring interval of 12 to 84. The overall score was derived by summing all items and dividing by the numbers. Higher scores indicate a greater ITL from the current employment. Responses with means exceeding 3.5 were deemed indicative of ITL (15) . According to Hinshaw and Atwood (1984), use this scale for nursing staff, and the internal consistency reliability, as determined by Cronbach's  $\alpha$ , was 0.84 (13).

### Data Collection

The data were analyzed using SPSS version 27, with a significance level set at 0.05 for all statistical tests. Descriptive statistics, including means, frequencies, standard deviations, and percentages, were calculated to summarize the variables and demographic characteristics. Inferential statistics appropriate for the data distribution were applied to further analyze the data. Pearson's correlation coefficient was used to examine the relationships between the main variables. For data with a normal distribution, independent samples t-tests and one-way analysis of variance (ANOVA) were conducted to assess differences in means for intention to leave, and demographic variables.

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### 1. Results

Out of 107 questionnaires distributed to nurses in the targeted hospitals, 105 were completed, yielding a response rate of 98.13%. Table 1 presents the distribution of participants-based their sociodemographic characteristics. The results indicate that the average age of participants working the ICU was 26.97 years, with ages ranging from 21 to 34 years (SD = 2.666). In sex, the sample was relatively balanced, with 48.6% (n = 51) being male and 51.4% (n = 54) female. The participants had an average of 4.09 years of professional experience, ranging from 1 to 8 years (SD 1.241). Regarding educational attainment, the majority of participants (66.7%) held a Bachelor's degree, while 25.7% had a diploma, 6.7% had completed preparatory school, and only 1% had postgraduate studies. The sample was evenly distributed between morning shifts (51.4%, n = 54) and evening shifts (48.6%, n = 51). In terms of marital status, most participants were single (49.5%), followed by married (46.7%), with a small proportion being divorced (1.0%) and widowed (2.9%)

Table 1. Demographic and work-related characteristics of the participants (N= 105).

Demographic Characteristics	Subgroup	f.	%
Age	Mean $\pm$ SD 26.97 $\pm$ 2.666		
	Min- Max 21 - 34 years		
Sex	Male	51	48.6 %
	Female	54	51.4 %
	Total	105	100.0 %
Years of experience	Mean $\pm$ SD 4.09 $\pm$ 1.241		
	Min- Max 1 - 8 years		
Educational level	Preparatory school	7	6.7 %
	Diploma	27	25.7 %
	Bachelor	70	66.7 %
	Postgraduate studies	1	1.0 %
	Total	105	100.0 %

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Type of shift	Morning	54	51.4 %
	Evening	51	48.6 %
	Total	105	100.0 %
Marital Status	Single	52	49.5 %
	Married	49	46.7 %
	Divorced	1	1.0 %
	Widow	3	2.9 %
	Total	105	100.0 %

### Intention to leave level

According to the ATS criteria, using a cutoff score of  $> 3.5$  to measure intention to leave the current position, the study findings revealed that 42% (n=44) of participants expressed a willingness to leave their current jobs, while the majority, 58% (n=61), indicated their desire to remain in their professions.

**Table 2: Assess the intention to leave among nurses in intensive care units**

	Means	Numbers	Percent
Cut off	$\leq 3.5$	61	58%
	$> 3.5$	44	42%

### The correlations between the Intention to leave and demographics

Table 5 displays the analysis results, indicating a non-significant correlation between Intention to leave, and nurses' age, years of experience, sex, educational level, type of shift, marital status.

Table 6 show the correlations between Intention to leave and demographics

Demographic Characterist	Subgroup	Intent to leave	
		Analysis	P-Value

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Age		Cc= .020	.839*
Sex	male	t= -.937-	.351**
	female		
Years of experience		Cc= .039	.692*
Educational level	Preparatory school Diploma Bachelor Postgraduate	F= 1.270	.289***
Type of shift	Morning Evening	t= .998	.320**
Marital status	Single Married Divorced Widow	F= 1.108	.350***

### Discussion

This study aimed to identify the levels of intention to leave among ICU nurses in Karbala city hospitals. Additionally, this study aimed to identify association between the levels of ITL and demographic characteristics.

The study revealed that 42% of ICU nurses expressed an intention to leave their current jobs, a finding that aligns with similar research conducted in various regions. For instance, studies in Saudi Arabia 40% (12), North Ethiopia 43.9% (16), South Africa 41.4% (17), reported comparable rates of nurses' willingness to leave their positions. These consistent findings across different geographical contexts suggest that the phenomenon of nurse turnover is a widespread issue, particularly in high-stress environments such as intensive care units (ICUs).

However, the rate of intention to leave identified in this study was notably higher than those reported in other countries, including; Indonesia 12–34% (18), South Korea 22.2% (19), Jordan 23.3% (20), Italy 35% (21). Conversely, the study's findings were lower than those reported in other regions, such as China 56.8% (22), Ethiopia 59.4% (23), Iran 64% (24), Bahrain 72.8% (25). These differences may be attributed to differences in healthcare organizations, working environments conditions (26), or the availability of alternative employment opportunities (27), which could influence nurses' decisions to

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remain in or leave their profession. In this study conducted in Iraq, the majority of nurses (58%) expressed a preference to remain in their current positions. This inclination can be attributed to the highly competitive job market, which is characterized by limited opportunities for stable employment and significant challenges in securing jobs. Nursing, as a profession, often provides relatively greater job security compared to other fields, which may explain why nurses are reluctant to leave their roles despite potential dissatisfaction or difficulties within their work environment

Regarding the association between nurses' intention to leave and demographic factors was examined in this study. The results revealed no statistically significant correlation between intention to leave and both age and years of experience, sex, educational level, type of shift, and marital status. These findings are consistent with previous studies, such as Cao X(22) , Sokhanvar M et al.(28) , which also reported no significant correlations between turnover intention and age, sex, educational status, and marital status. However, these results contrast with other studies that have identified significant associations between demographic factors and nurses' intention to leave. For instance, Halter M et al. (29) reported that age, sex, and educational attainment, were associated with intention to leave among nurses , Similarly, Salahat M et al.(20), found that intention to leave was significantly correlated with sex and educational level ,Specifically, male nurses expressed a greater intention to leave compared to females, and nurses with higher degrees in nursing were more likely to intend to leave due to the lack of additional rewards for advanced qualifications.

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## Conflict of interest

There is no conflict of interest.

## Conclusion

The finding that 42% (n = 44) of the participants expressed an intention to leave their current jobs. The absence of significant correlations between the intention to leave and demographic factors. The results underscore the need for healthcare organizations to address systemic and organizational factors that contribute to job dissatisfaction and turnover intentions among ICU nurses. Interventions such as improving work conditions, providing mental health support, fostering a positive organizational culture, and offering career development opportunities may help mitigate the desire to leave. By focusing on these areas, healthcare institutions can enhance nurse retention, improve job satisfaction, and ultimately ensure better patient outcomes.

## Implication practice

The finding that a moderate level of nurses expressed an intention to leave their current jobs has significant implications for nursing practice and healthcare organizations. To address this issue, healthcare organizations must prioritize interventions aimed at improving job satisfaction and retention. This could include implementing strategies to reduce burnout, such as providing access to mental health resources, fostering a supportive work environment, and ensuring manageable workloads. Additionally, offering opportunities for career advancement, recognizing nurses' contributions, and promoting work-life balance through flexible scheduling could help mitigate turnover intentions. By addressing these factors, healthcare organizations can create a more positive and sustainable work environment, ultimately enhancing nurse retention, improving patient outcomes.

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