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## Introduction

Intensive care unit (ICU) nurses are highly skilled healthcare professionals responsible for providing continuous monitoring and life-sustaining interventions to critically ill patients (Al-Jubouri & Jaafar, 2018; Bachi & Al-Fayyadh, 2022). These nurses are essential in providing safe and effective care, applying their knowledge and skills to manage difficult patient conditions. (Jaafar et al., 2020; Waheed & Abdulwahhab,

# Quality of Work Life and Resilience among Intensive Care Unit Nurses: A Descriptive Study

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## ABSTRACT

**Objective:** The present study aimed to investigate the relationship between the quality of life and resilience of intensive care unit (ICU) nurses.

**Methods and Materials:** A cross-sectional study was conducted, involving 105 ICU nurses from five hospitals in Iraq, using a convenience sampling method. Data were gathered through a self-administered questionnaire that included three sections: the demographics, the Brooks Quality of Nursing Work Life survey, and the Connor-Davidson Resilience Scale-10 (CD-RISC-10).

**Findings:** The QWL of the ICU nurses was moderately satisfied (mean = 161.42), and the level of resilience was moderate (mean = 26). A statistically significant positive correlation exists between QWL and resilience.

**Conclusion:** Strategies to improve work-life quality may further enhance the resilience of the ICU nursing workforce. These findings have significant implications for hospital managers and policymakers in developing and implementing measures that enhance the quality of work life and resilience. These efforts may enhance nurses' well-being and patient care outcomes.

**Keywords:** Quality of work life, Resilience, Intensive Care Unit, Nurses

2022). The ICU environment, known for its long working hours, higher patient acuity, and exposure to emotionally intense situations, may face significant challenges that could negatively impact its work-life balance (Hassan Helaly et al., 2022; Ni et al., 2023).

Brooks (2001) defines quality of work life (QWL) as the degree to which nurses can achieve their essential personal needs through their employment. While simultaneously contributing to organizational goals. A

positive QWL among ICU nurses has been linked to higher quality of care (Davoodi et al., 2020), greater productivity (Wara et al., 2018), and improved efficiency (Mansouri et al., 2025). On the other hand, a lack of Quality of Work Life (QWL) can negatively impact nurses' personal lives, subsequently affecting the nursing care quality and threatening patients' safety (Suleiman et al., 2019). Key factors influencing QWL include job security, work environment, opportunities for professional development, positive interpersonal relationships, job satisfaction, and work-life balance (Alharbi et al., 2019). By improving these elements, healthcare institutions can create an attractive working environment that enhances QWL and strengthens nurses' resilience (Atay et al., 2021; Zahednezhad et al., 2021).

Resilience, defined as the ability to adapt, recover, and thrive in the face of challenges, is a crucial trait for ICU nurses (Mealer et al., 2014). When nurses feel valued, supported, and empowered, they are better able to promote resilience and pass the challenges associated with their profession (Mealer, Jones, Newman, et al., 2012). ICU nurses may experience elevated levels of occupational stress due to the demanding nature of their duties, which involve managing life-threatening conditions, making rapid decisions, providing post-mortem care, and maintaining constant wakefulness (Bayda'a, 2009; Mealer et al., 2014). Additionally, the need to communicate with distressed families and collaborate with multidisciplinary teams further exacerbates the emotional and psychological strain (Vahedian-Azimi et al., 2019). Continued exposure to these stressors may lead to burnout, compassion fatigue, and a decline in mental well-being if not properly managed (Ruiz-Fernández et al., 2020). Research shows that around 25% of critical care nurses exhibit symptoms of post-traumatic stress disorder (PTSD), 21% experience anxiety, 14% demonstrate signs of depression, 85% suffer from burnout, and 63.4% express elevated levels of compassion fatigue (Dadoosh & Al-Fayyadh, 2022; Mealer et al., 2014). These findings underscore the importance of developing resilience in ICU nurses to mitigate the adverse effects of occupational stress (Olaleye et al., 2022). This study was conducted to examine the levels of QWL and resilience among ICU nurses within healthcare organizations in Iraq.

## Methods and Materials

### *Study Design and Participants*

The research design was a descriptive correlational design.

The study was conducted in the ICU at Imam Hussein Medical City, Imam Hassan Al-Mujtaba Hospital, Children's Teaching Hospital, Women's Teaching Hospital, and Hindia Teaching Hospital in Karbala governorate, Iraq. Information was gathered via a self-administered questionnaire comprising three parts. The participants were selected using non-probability convenience sampling. The study included nurses with at least one year of ICU experience and varying educational backgrounds, while excluding those with less than one year of experience or those in administrative or managerial roles, such as nursing managers.

There are about 300 nurses in the I.C.U. at the five hospitals. A sample size of 107 nurses was calculated at an 80% confidence level and 5% margin of error. Two incomplete answers were discarded, resulting in a response rate of 98.1%. Data was collected from December 01, 2024, to December 30, 2024. Data collection was conducted using the Arabic versions of the two scales, with permission obtained from the authors of both scales. The questionnaire took approximately 15 to 20 minutes for each participant to complete.

### *Instruments*

The survey used to gather data consisted of three sections. Demographics, Brooks' quality of nursing work life QNWL scale (Brooks, 2001), and Connor-Davidson Resilience Scale-10 CD-RISC-10 (Connor & Davidson, 2003).

#### **Section One: Demographics**

This section includes the respondent's age, sex, marital status, education level, years of experience, and type of shift.

#### **Section Two: Brooks Quality of Nursing Work Life Scale**

The Quality of Nurses' Work Life (QNWL) scale was developed to assess work-life quality among nurses (Brooks, 2001). The scale comprises 42 items, grouped into four dimensions. The home-life/work-life dimension includes (Brooks, 2001) Items that reflect the personal and professional experiences of nurses within

their work setting. The second dimension, work design, comprises 10 items that represent the division of nursing duties and the nature of tasks performed by nurses. The third dimension, containing 20 items, characterizes the practicing areas for nurses and examines the impact of the work setting on both nurse and patient systems. The work world is the fourth dimension, encompassing five key factors that influence and change society and their impacts on nursing care. The total score of the QWL scale can be obtained by summing the scores of all 42 items, ranging from 42 to 252; a higher score reflects a better QWL. Brooks specified the cut-off points of the QWL overall score as: low 42–112, moderate 113–182, and high 183–252. QWL was evaluated by a 6-point Likert scale from strongly disagree (1) to agree (6) for the positive items. The scale reliability is 0.90, and the construct validity is 0.89 (Brooks & Anderson, 2005). The Arabic version used in the current study had a Cronbach's alpha of 0.89 (Almalki et al., 2012).

### Part Three: Connor-Davidson Resilience Scale-10

The 10-item version (CD-RISC-10) was developed as a brief, self-administered instrument to measure resilience (Connor & Davidson, 2003). The CD-RISC-10 was based on identifying ten items that defined different aspects of resilience. All items are evaluated on a five-point scale (0–4), where zero indicates that the resilience statement is completely false and four means it is almost

always true. Total score obtained by the Summation of all 10 elements (max 40). Higher scores indicate greater resilience. For the original scale, Cronbach's  $\alpha$  was 0.8 (Campbell-Sills & Stein, 2007).

### Data Analysis

Data were analyzed using SPSS, version 27, and all statistical tests were performed at an alpha level of 0.05. Descriptive statistics were calculated to summarize the variables and demographic characteristics. The Spearman Correlation Coefficient is used to study the relationship between QWL and resilience.

### Findings and Results

In total, 107 questionnaires were administered to nurses of the target hospitals, and of these, 95.10% (107/113) completed the questionnaire. The participants' characteristics indicate that the average age of ICU staff was 26.97 years, with a range of 21 to 34 years. The sex distribution was 48.6% male and 51.4% female. The average work experience was 4.09 years, with a range of 1 to 8 years. The majority of the sample held a Bachelor's degree, at a rate of 66.7%. Employees had morning shift work in more than half (51.4%,  $n = 54$ ) of the cases. In terms of marital status, 49.5% of participants were single (Table 1).

**Table 1**

*Demographic and work-related characteristics of the participants (N= 105)*

Demographic Characteristics	Subgroup	N	%
Age	Mean $\pm$ SD 26.97 $\pm$ 2.666 Min- Max 21 - 34 years		
Sex	Male	51	48.6 %
	Female	54	51.4 %
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 %
Type of shift	Morning	54	51.4 %
	Evening	51	48.6 %
Marital Status	Single	52	49.5 %
	Married	49	46.7 %
	Divorced	1	1.0 %
	Widow	3	2.9 %

In the present study, the mean value of the QWL scale was 161.42 (SD = 18.80), indicating a moderate level of QWL. The work context dimension showed the highest

mean score among the dimensions. ( $M = 81.6$ ) And for the work world dimension ( $M = 17.7$ ), it is the lowest. In the work context dimension, more than 50% of

respondents reported effective communication with their nurse manager/supervisor (74%), sufficient direction provided by their nurse manager/supervisor (73%), and a sense of belonging in the workplace (81%).

Regarding the working world, many nurses believed that the general public had a negative view of nursing jobs (70%), and 80% received inadequate salaries compared to the job market and living requirements (Table 2).

**Table 2**

*Total scores for the quality of work life scale and its dimensions*

QWL Total and its dimensions	Possible range		Mean (SD)	Actual range
QWL Total	42	252	161.42 (SD= 18.88)	108-210
Home life -work life	7	42	27.07 (SD = 4.29)	16-39
Work design	10	60	39.17 (SD=5.42)	22-53
Work context	20	120	81.61 (SD =12.32)	45-111
Work world	5	30	17.74 (SD=3.08)	13-25

The majority of nurses, 58% demonstrated moderate levels of resilience, as shown in Table 3.

**Table 3**

*Levels of resilience among ICU nurses*

Mean scale	Levels of resilience	Frequency	Percentage
0-10	Very low	2	2
11-20	low	17	16
21-30	Moderate	61	58
31-40	high	25	24
Total		105	100

The results showed a positive and statistically significant relationship between QWL and resilience among ICU nurses (Table 4).

**Table 4**

*Quality of Work Life and Resilience among ICU Nurses*

	Cc	P. value
Quality of work life	.291**	.003

## Discussion and Conclusion

This study emphasized the need for ICU nurses to be aware of the professional challenges and problems they face. Participants had a mean overall score on the QWL that reflected a moderate level of QWL (mean = 161). These findings align with other research indicating that the general quality of work life among nurses is moderate (Francis et al., 2021; Momeni et al., 2016).

In contrast, these findings do not align with previous studies (Salahat & Al-Hamdan, 2022; Suleiman et al., 2019), which reported a low QWL among nurses.

According to the QWL dimensions, Nurses express more satisfaction in the work context dimension and lower satisfaction in the work world dimension. In addition, these findings align with other studies (Salahat & Al-Hamdan, 2022; Suleiman et al., 2019), which report that the work context aspect received the highest average scores, while the work world dimension had the lowest.

The ICU nurses exhibit moderate resilience, consistent with previous studies (Al-Shomrani et al., 2024; Hasan et al., 2023; Jazzaa Alruwaili et al., 2024), which also found that nurses scored moderately in terms of resilience. However, these findings contradict studies by Afshari et al. (2021) and Ang et al. (2018), which found

lower levels of resilience among nurses. Differences in resilience result from a combination of individual, organizational, and social/environmental factors. Some of these factors can be related to personal characteristics, coping strategies (Mealer, Jones, & Moss, 2012), organizational factors including workplace support (Foster et al., 2019), and social/environmental factors such as social support and work-life balance (Foster et al., 2019). A thorough awareness of these aspects helps develop tailored strategies to enhance the resilience of nurses.

This study's results demonstrated a significant positive correlation between QWL and resilience among ICU nurses. Moreover, this result aligns with the findings of studies (Leners et al., 2014; Shin & Choi, 2024), which also demonstrate a consistent association between work-life quality and resilience. Many research findings reveal that a better QWL promotes stress handling, emotional stability, and empowerment of the nurse. These aspects lead to elevated, sustained performance, even under high-pressure and demanding situations (Ameen & Hussein, 2023; Kelbiso et al., 2017).

Resilience is enhanced among ICU nurses through QWL. Healthcare managers and policymakers can use these findings to create and implement effective strategies to improve ICU nurses' QWL and resilience. These modifications will enhance nurse wellness and elevate the standard of patient care.

### Recommendation

Policies for improving QWL in nurses by

- Adequate salary and reward systems conducive to growth and development.
- Workload management by provision of adequate nurse workforce, professional development opportunities, providing rest breaks, and flexible scheduling.
- Enhance the image of nursing in the community by increasing public awareness through media campaigns, success stories, and social media platforms, which can highlight the critical role nurses play in healthcare.
- Encouraging nurses working in clinical settings to participate in resilience training programs, to reduce psychological problems, and preserve emotional well-being.

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### Declaration of Interest

The authors of this article declared no conflict of interest.

### Ethical Considerations

The study protocol adhered to the principles outlined in the Declaration of Helsinki, which provides guidelines for ethical research involving human participants. Ethical considerations in this study included the fact that participation was entirely optional. The Ethical Committee at the College of Nursing, University of Baghdad, approved the study (approval no. 18, November 16, 2014), upon reviewing the study protocol. Nurses were informed about the study's aim, and all information collected was used solely for research purposes. All subjects provided written informed consent before participating in the study.

### Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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### Authors' Contributions

All authors equally contribute to this study.

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