

# Quality of nursing work life and related factors among emergency nurses in Jordan

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## Abstract

**Objectives:** The objective of this study is to assess quality of nursing work life (QNWL) and related factors among nurses working in emergency room (ER).

**Methods:** A cross-sectional descriptive design was employed. Data were collected from a convenient sample of nurses working in ER. Eligible participants were required to complete a demographic and work related variables sheet, the Brooks Quality of Nursing Work Survey (BQNWLS).

**Results:** A total of (186) nurses participated in the study. Study participants reported a BQNWL mean score of ( $M = 140.15$ ,  $SD = 28.34$ ) indicating a moderate BQNWL. Additionally, the participants scored moderate levels on all BQNWL subscales. The mean score of BQNWL was statistically better for nurses who had training courses on emergency department ( $t = -2.663$ ,  $P = 0.008$ ). However, no other statistically significant differences were found in BQNWL scores in regarding to demographic and work related variables.

**Conclusion:** The results of this study reported a noticeable alteration in QNWL among nurses working in ER. The nurses had a moderate QNWL levels. Also, the results emphasized on the importance of conducting further interventional research studies in the future to establish effective measures to enhance nurse QNWL. Consequently, this may improve the provided nursing care for the patients and their families.

## KEYWORDS

emergency, Jordan, nurses, QNWL

## 1 | INTRODUCTION

QNWL is an essential concept in nursing work settings. Alterations in QNWL may lead to serious consequences for nurse's personal life, and this consequently may lead to improper nursing care<sup>1,2</sup> and threaten safety of patient and their families.<sup>3-6</sup> Numerous studies had reported alterations in QNWL among nurses working in different hospital

departments<sup>7,8</sup> and in primary health clinics.<sup>9</sup> Furthermore, many studies had explored many factors that may contribute to these alterations such as sociodemographic and work-related variables.<sup>9,10</sup>

No previous studies have examined QNWL among Jordanian nurses working in ER or any other practice settings, however, one study found had examined QNWL among Arab nurses working in primary health care centers.<sup>9</sup>

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The researchers used Brooks' Quality of Nursing Work Life Survey (BQNWLS)<sup>11</sup> for data collection (possible score is 42–252). Almalki et al<sup>9</sup> reported that the nurses were not comfortable with their working life ( $M = 139.45$ ;  $SD = 22.7$ ). Also, Arab nurses scored below the average in work life/home life dimension ( $M = 18.9$ ,  $SD = 5.2$ ), and work context dimension ( $M = 66.2$ ,  $SD = 12.4$ ).

Likewise, some studies reported that non-Arab nurses were also not satisfied with their QNWL and were dissatisfied with all QNWL dimensions.<sup>10,12</sup> In contrast other researchers reported a moderate QNWL among nurses from different practice settings.<sup>11,13,14</sup> Previous studies revealed inconsistent results about QNWL which may lead to improper nursing care and threaten patient's safety and their families. This warrant further studies to investigate QNWL and its different dimensions in order to improve nurses QNWL. Thus, it is important to conduct this study to reveal the concept of QNWL and its dimensions among Jordanian nurses taking nurses working in ER as an example in order to encourage other researchers and raise their consciousness about this important concept.

Many factors were found in the literatures which have a relationship with QNWL.<sup>7–9,15</sup> The most frequently factors that was examined include sociodemographic variables in addition to other factors which are related to work environment. Other researchers have categorized these factors into work and non-work-related variables.<sup>7,9</sup>

Gender, educational level, and marital status were the most sociodemographic factors that have a relationship with QNWL.<sup>8,9</sup> Hemanathan et al<sup>7</sup> found a significant differences of QNWL scores in different levels of sociodemographic factors. For instance, graduate nurses ( $F = 2.23$ ,  $P = 0.05$ ) and married nurses ( $F = 2.23$ ,  $P = 0.05$ ) reported higher QNWL scores. In the other hand, nurses with more years of experience reported higher QNWL scores ( $F = 3.23$ ,  $P = 0.01$ ). Similarly, Almalki et al<sup>9</sup> found that female nurses have a higher QNWL scores ( $t = -3.11$ ,  $P = 0.002$ ) than male nurses. In contrast with other researchers, single nurses had a significant higher QNWL scores ( $F = 6.49$ ,  $P = 0.002$ ) than other marital status categories. No significant differences were found in term of educational level. On the other hand, Salary ( $F = 5.05$ ,  $P = 0.007$ ) and years of experience ( $F = 16.21$ ,  $P < 0.001$ ) were found to have significant relationship with QNWL scores.

Furthermore, work-related variables associated with QNWL include type of hospital, level of experience, and salary.<sup>8,15</sup> Fu et al<sup>15</sup> reported that in-charge nurses had a higher significant QNWL scores ( $F = 19.25$ ,  $P = 0.001$ ) more than senior or junior nurses. Also, team leaders had a higher scores ( $F = 20.57$ ,  $P = 0.001$ ) more than staff or assistant nurses. In contrast with other studies, nurses with lower salary reported significantly ( $F = 31.20$ ,  $P = 0.001$ ) higher QNWL scores. Additionally, Moradi et al<sup>8</sup> reported

a higher significant QNWL scores among associate nurses ( $F = 2.71$ ,  $P = 0.04$ ), nurses with experience more than 15 years ( $F = 3.43$ ,  $P = 0.01$ ), nurses work in specialty hospitals ( $F = 6.00$ ,  $P = 0.003$ ), and also among nurses with higher income ( $F = 3.00$ ,  $P = 0.052$ ).

Previous studies revealed inconsistent results about the relationship between QNWL and factors such as sociodemographic and work-related factors. This warrant further studies to investigate this relationship and to help nurses to improve their QNWL. Therefore, the purpose of this study was to examine QNWL levels and compare the differences in terms of selected demographic characteristics and work-related factors among nurses working in ER in Jordan.

## 2 | MATERIALS AND METHODS

### 2.1 | Study design

A descriptive cross-sectional design was used to meet the aims of this study.

### 2.2 | Study settings

The study was conducted in emergency rooms at six hospitals, three public and three private with a capacity of over 200 beds and operated ER with at least 15 beds. Hospitals have been chosen as the largest referral and educational hospitals in Amman, Jordan. Health care facilities in Jordan including hospitals that are either public or private hospitals. Six educational and referral public or private hospitals were included in the current study.

### 2.3 | Study population and sample

The sample was recruited by non-probability convenient sampling technique. All available nurses who work in ERs on three shifts, and at least had a degree in nursing were invited to participate in the study. The inclusion criteria were nurses working on the three shifts, and at least had an associate degree in nursing. Nurses working in administrative position were excluded from the study.

### 2.4 | Measurements tools

A questionnaire package was given to the subjects, which consisted of a demographic sheet, and the Arabic versions of Brook's Quality of Nursing Work Life Survey.<sup>16</sup> The demographic sheet asked questions about nurses' age, gender, experience duration as nurse in ER, salary, shift schedule, number of people the nurse supported, marital status; educational status; ER training courses and hospital type.

## 2.5 | Brook's quality of nursing work life survey

The BQNWLS is 42 items scale that assess nurses' quality of work life.<sup>16</sup> Each item asks participants how much they agree or disagree on a six point scale from 1; strongly disagree to 6; strongly agree. The total score for the BQNWLS can be obtained by adding all the 42 items score and it ranges from 42 to 252; with a higher score indicating better QWL. Brooks<sup>16</sup> set up a cut-point for the total score to indicate the levels of QWL as follows; low (42-112), moderate (113-182), and high (183-252).

The 42 items are combined to form<sup>4</sup> dimensions; work life/home life dimension (seven items, scores range is 7-42) which describes the interface between nurses' work and home life. This dimension also reflects the role of the nurses in caring for children (mother role), elderly parents (daughter role), and the family (spouse role). The work design dimension (10 items, scores range is 10-60) describes the actual work nurses do. So, it measures the nurses' immediate work environment such as workload, staffing, and autonomy. The work context dimension (20 items, scores range is 20-120) reflects the resources to do the work in the practice settings in which the nurses work such as lifelong learning and the impact of work environment on both nurse and patient. Furthermore, this dimension examines the relationship with supervisors, coworkers, and other colleagues form the health team. Finally, the work world dimension (5 items, scores range is 5-30) reflects the effect of change and societal influences of nursing practice. This dimension concerned with society image of nurses and job security.<sup>11</sup>

Furthermore, in order to facilitate the analysis, Brooks and Anderson<sup>11</sup> truncated the ratings of the scale into two areas of agree; which include responses of agree to strongly agree that had rated of (4, 5, or 6) and disagree; which include responses of strongly disagree agree to disagree that had rated of (1, 2, or 3).

Brooks<sup>16</sup> reported that the BQNWL had a high internal consistency coefficient of (Cronbach  $\alpha = 0.89$ ). Brooks and Anderson<sup>11</sup> reported a high test-retest reliability among 53 registered nurses over a 14 days interval between testing for the total BQNWL score ( $r = 0.90$ ,  $P < 0.001$ ). Lee et al<sup>17</sup> provided an evidence of discriminant validity with a significant positive Pearson correlation ( $r = 0.72$ ,  $P < 0.01$ ) between BQNWL and the Practice Environment Scale.<sup>17</sup> Additionally, an evidence of concurrent validity with a significant weak negative correlation ( $r = -0.22$ ,  $P < 0.01$ ) between BQNWL and Beck Depression Inventory.<sup>18</sup> In an Arab nursing sample ( $n = 508$ ), the internal consistency reliabilities of the total BQNWL scores was (0.89).<sup>9</sup>

## 2.6 | Data analysis

The Statistical Package for Social Sciences (SPSS) version 19 was used for data analysis. All data were double checked

for accuracy. Frequency distributions were examined to check for outliers and normality of distributions. Inferential statistics was performed utilizing t test and Analysis of variance (ANOVA) to detect the differences between the groups in terms of QNWL.

Similar to previous studies, all variables were treated as categorical variables. The age was categorized into four categories; (20-30), (31-40), (41-50), and (51-60). The dependent children and the dependent adults' variables were categorized to yes and no. The monthly income also was categorized into three categories: (<300 JD), (300-500 JD), and (>500 JD). Experience as a nurse and the experience in ER also categorized as (<5) years, (6-10) years, (11-15) years, and (>15) years. P-value equal or less than (0.05) were considered significant for all tests.

## 2.7 | Study procedures

Approval to conduct the study was obtained from the IRB at all involved institutions. Participants were recruited through direct contact with the investigators at hospitals sites. The investigators are not working in the same clinical settings as the participants. Three of the investigators work in academic setting, while one work in a hospital that did not meet the selection criteria. So the investigators did not have a supervising position to evaluate the nurses, and their participation or refusal was not informed to their supervisors.

The participants were screened for the inclusion and exclusion criteria and were invited to participate in the study. The study purpose, objectives, risks, and benefits were explained for potential participants. The participants were assured that their participation is voluntary and they can withdraw at any time during the study without any penalty. Additionally, the subjects were informed that all the information including their names was kept confidential. All data files had a password and kept in a personal computer for the purpose of analysis with no names of participants and every participant was given an identification number. Hard copies of data were kept in a cabinet in a locked office.

## 3 | RESULTS

In total, 200 questionnaires were distributed to nurses working in ER at the selected hospitals. However, the total number of participants who actually responded to the study was 186 nurses with 93% response rate. Six questionnaires were not returned back, five nurses did not complete the questionnaire, and three nurses were not Jordanian.

The participants in the current study almost represent Jordanian nurses working in ER in Jordanian hospitals. They are similar in the distribution of their education which include associate degree ( $n = 51$ , 27.4%), bachelor ( $n = 125$ ,

67.2%), and higher education certificates ( $n = 9, 4.8\%$ ). Also, similar work settings in Jordan is either public ( $n = 116, 62.4\%$ ) or private sectors ( $n = 70, 37.6\%$ ) and in many other demographical data including age ( $M = 30.53, SD = 6.46$ ), gender (females;  $n = 95, 51\%$ ) of the sample), and marital status (married;  $n = 99, 53.2\%$ ) (Table 1).

The mean of the participants experience on emergence room was ( $M = 5.63, SD = 5$ ) years. The participants had a moderate monthly income ( $M = 449.2 \text{ JD}, SD = 173$ ). About half of the participants ( $n = 95, 51\%$ ) received training courses on emergence care. The respondents have in average 1.21 ( $SD = 1.54$ ) children, and they supported in average 2.53 ( $SD = 2.29$ ) persons such as other family members. Furthermore, all of respondents were working on three shifts (Table 1).

In this study, the total mean scores' of QNWL was 140.15 ( $SD = 28.34$ ) which indicate a moderate QNWL. The QNWL levels among the study respondents were classified as follows: high level ( $n = 12, 6.8\%$ ), moderate level ( $n = 141, 79.7\%$ ), and low level ( $n = 24, 13.6\%$ ). Table 2 shows the

**TABLE 1** Sociodemographic and work-related characteristics of the study sample

| Variable                 | Total ( $n = 186$ ) |        |
|--------------------------|---------------------|--------|
|                          | Mean                | SD     |
| Age                      | 30.53               | 6.46   |
| Experience               | 6.81                | 5.27   |
| Children number          | 1.21                | 1.54   |
| Monthly income           | 449.28              | 173.18 |
| Experience on ER         | 5.63                | 5.00   |
| Support people           | 2.53                | 2.29   |
| Marital status N (%)     |                     |        |
| Single                   | 84 (45.2)           |        |
| Married                  | 99 (53.2)           |        |
| Divorced                 | 3 (1.6)             |        |
| Gender N (%)             |                     |        |
| Male                     | 90 (48.4)           |        |
| Female                   | 95 (51)             |        |
| Educational status N (%) |                     |        |
| Associate degree         | 51 (27.4)           |        |
| Bachelor                 | 125 (67.2)          |        |
| Higher                   | 9 (4.8)             |        |
| ER courses N (%)         |                     |        |
| Yes                      | 95 (51)             |        |
| No                       | 89 (47.8)           |        |
| Hospital type N (%)      |                     |        |
| Public                   | 116 (62.4)          |        |
| Private                  | 70 (37.6)           |        |

Abbreviation: ER, emergency room.

total scores of the QNWL scale and its four subscales of the respondents.

The majority of the respondents were moderately satisfied with the work life-home life subscale. Most of the respondents reported that they did not have adequate policies for family leave time ( $n = 117, 62.9\%$ ), and they believed that childcare facilities should be available ( $n = 128, 68.8\%$ ). Also, more than half of the respondents reported imbalance between work life and family needs ( $n = 97, 52.2\%$ ) and they are in need to have support for taking care of elderly parents ( $n = 106, 58.6\%$ ).

Nursing work force shortage and the heavy work load were the most influential factors in the work design subscale. The majority of nurses found that their workload was heavy ( $n = 114, 61.6\%$ ), felt that there were inadequate nurses in the work setting ( $n = 112, 60.5\%$ ). Furthermore, nurses were not satisfied with their job ( $n = 97, 52.2\%$ ) and they did not provide good quality patient care ( $n = 128, 68.8\%$ ).

The analysis of the work context subscale revealed that about half of the nurses were able to communicate with nurse manager ( $n = 98, 52.7\%$ ), receive feedback on their performance from their managers ( $n = 102, 54.8\%$ ), work within a team ( $n = 99, 53.5\%$ ), felt respected by physicians ( $n = 118, 63.8\%$ ), and were able to communicate with the other therapists in the unit ( $n = 114, 61.3\%$ ), belong to the workplace ( $n = 102, 54.8\%$ ), and they were in need for a private break area ( $n = 124, 67\%$ ).

In the work world subscale, more than half of the nurses believed that their job is secured ( $n = 105, 56.5\%$ ), and that they can find such the same job in another organization on the same salary ( $n = 116, 62.4\%$ ). In contrast, the majority of nurses thought that the society had a negative image toward nursing ( $n = 127, 68.3\%$ ), do not receive adequate salary ( $n = 146, 78.5\%$ ) in comparison to the job market and their job impacts the lives of patients and families ( $n = 121, 65.1\%$ ).

The differences in the QNWL scores by demographic and work-related variables were assessed by independent sample t test and one-way ANOVA. There were no significant correlations between QNWL scores with demographic (Table 3) and work-related variables (Table 4). The mean score of QNWL was higher in nurses who received special courses on ER and it was found statistically significant ( $t = -2.663, P = 0.008$ ). However, no other significant differences were found in QNWL scores with other demographic and work-related variables.

## 4 | DISCUSSION

The total score from the BQNWLS is widely used in research studies to examine QNWL. The mean total score of the BQNWL in this study revealed that participants were

| QNWL total and dimensions | Total possible score | Mean (SD)           | Range in sample |
|---------------------------|----------------------|---------------------|-----------------|
| Total QNWL                | 42-252               | 140.15 (SD = 28.34) | 47-209          |
| Work life—home life       | 7-42                 | 23.46 (SD = 5.49)   | 12-36           |
| Work design               | 10-60                | 33.25 (SD = 8.43)   | 10-52           |
| Work context              | 20-120               | 67.70 (SD = 15.6)   | 20-107          |
| Work world                | 5-30                 | 15.75 (SD = 4.1)    | 5-25            |

Abbreviation: QNWL, quality of nursing work life.

| Variable             | N (%)      | Mean   | SD    | t/F-Value | P-Value |
|----------------------|------------|--------|-------|-----------|---------|
| Gender               |            |        |       |           |         |
| Male                 | 90 (48.4)  | 138.82 | 31.14 | −0.66     | 0.512   |
| Female               | 95 (51)    | 141.74 | 29.14 |           |         |
| Age                  |            |        |       |           |         |
| 20-30                | 103 (55.4) | 140.05 | 30.67 | 0.150     | 0.930   |
| 31-40                | 64 (34.4)  | 142.25 | 31.09 |           |         |
| 41-50                | 11 (5.9)   | 136.55 | 17.53 |           |         |
| 51-60                | 3 (1.6)    | 138.00 | 15.39 |           |         |
| Marital status       |            |        |       |           |         |
| Never married        | 84 (45.2)  | 139.21 | 30.17 | 0.2230    | 0.8000  |
| Married              | 99 (53.2)  | 140.81 | 30.37 |           |         |
| Divorced/<br>Widowed | 3 (1.6)    | 150.00 | 14.18 |           |         |
| Dependent children   |            |        |       |           |         |
| Yes                  | 102 (54.8) | 141.77 | 31.55 | 0.712     | 0.478   |
| No                   | 84 (45.2)  | 138.64 | 28.43 |           |         |
| Dependent adults     |            |        |       |           |         |
| Yes                  | 86 (46.2)  | 140.31 | 29.51 | 0.023     | 0.982   |
| No                   | 100 (53.7) | 140.20 | 30.37 |           |         |
| Education level      |            |        |       |           |         |
| Associate degree     | 51 (27.4)  | 144.16 | 26.29 | 0.608     | 0.546   |
| Bachelor             | 125 (67.2) | 138.74 | 31.58 |           |         |
| Higher               | 9 (4.8)    | 138.11 | 30.38 |           |         |

**TABLE 2** Total scores of the quality of nursing work life scale and its four dimensions

**TABLE 3** Quality of work life by demographic variables

on average experiencing moderate QNWL. Similar findings were reported by most of the research studies that examined QNWL. An example of moderate QNWL what was reported in nurses working in public health care centers in Saudi Arabia<sup>9</sup> and in Iranian nurses working in general educational hospitals.<sup>8</sup> Thus, the total QNWL score in the current study reflects the moderate QNWL that the nurses experience regardless the place of work or the country.

Nurses in the current study reported moderate total scores for work life/home life dimension. Nurses in the current study reported increased workload which resulted in exhaustion and having no energy after the work. This often results in an imbalance between work life and home life. Furthermore,

nurses were not satisfied with organizational policies regarding family leave time. Similar results were reported by previous studies<sup>9,12,19</sup> despite the fact the nurses in the previous studies were from different practice settings including public health care centers.<sup>9</sup> In addition, nurses from public and private hospitals were found dissatisfied due to the lack of childcare facilities.<sup>12</sup>

In Jordan, nurses work about 48 hours per a week, and they only have 3 days off per each 2 weeks. Similarly, as in other countries, the majority of nurses in Jordan are females. Females are responsible to take care about their kids, as well as housekeeping and other families' activities. Therefore, they need to keep in touch with children even at working hours in

**TABLE 4** Quality of work life by work-related variables

| Variable                 | N (%)      | Mean   | SD    | t/F-Value | P-Value |
|--------------------------|------------|--------|-------|-----------|---------|
| Payment per month        |            |        |       |           |         |
| <300 JD                  | 24 (12.9)  | 146.89 | 32.09 | 1.593     | 0.193   |
| 300-500 JD               | 114 (61.3) | 136.62 | 30.21 |           |         |
| >500                     | 35 (18.8)  | 138.17 | 29.77 |           |         |
| Experience (y)           |            |        |       |           |         |
| <5                       | 93 (50)    | 142.90 | 30.68 | 1.556     | 0.1880  |
| 6-10                     | 50 (26.9)  | 134.92 | 25.53 |           |         |
| 11-15                    | 25 (13.4)  | 137.78 | 34.78 |           |         |
| >15                      | 17 (9.1)   | 144.30 | 24.06 |           |         |
| Experience on ER (y)     |            |        |       |           |         |
| <5                       | 107 (57.5) | 142.07 | 28.12 | 0.499     | 0.736   |
| 6-10                     | 35 (18.8)  | 136.29 | 27.21 |           |         |
| 11-15                    | 24 (12.9)  | 136.04 | 35.32 |           |         |
| >15                      | 8 (4.3)    | 147.88 | 22.50 |           |         |
| ER courses               |            |        |       |           |         |
| Yes                      | 95 (51)    | 146.44 | 27.24 | -2.663    | 0.008   |
| No                       | 89 (47.8)  | 135.18 | 30.12 |           |         |
| Hospital type            |            |        |       |           |         |
| Public                   | 116 (62.4) | 141.22 | 29.92 | 0.569     | 0.570   |
| Private                  | 70 (37.6)  | 138.61 | 30.34 |           |         |
| Shift system             |            |        |       |           |         |
| Rotating shift schedules | 175 (94.1) | 140.16 | 30.19 | -0.780    | 0.574   |
| No shift                 | 10 (5.3)   | 152.00 | 21.21 |           |         |
| Shift type               |            |        |       |           |         |
| 8 h                      | 146 (83.4) | 139.65 | 30.40 | 0.219     | 0.804   |
| 12 h shift               | 15 (8.5)   | 147.00 |       |           |         |
| 16 h shift               | 14 (8.0)   | 144.86 | 26.91 |           |         |

Abbreviations: ER, emergency room; JD, Jordanian dinar = 1.5 US\$.

order to take care about them. This suggested why nurses in the current study reported moderate results in work life/home life dimension.

In work design dimension, nurses reported that their workload is heavy, and felt that there were inadequate nurses in the work setting. Furthermore, the majority of nurses were not satisfied with their job and they felt that they do not provide good quality patient care. This was found consistent with the findings of some previous studies.<sup>9,12,19</sup> Khani et al<sup>12</sup> concluded that nurses' workload was heavy, and a majority of nurses were unable to complete their work in the time available. Respondents in the current study believed that there were not enough nurses on ER. These results were consistent with Almalki et al<sup>9</sup> who confirmed that the most influential factor in work design dimension was the shortage in nursing staff. Also, Suresh<sup>19</sup> reported that the majority of nurses felt that there were inadequate nurses in the work setting and only a very small

proportion of the participants received sufficient assistance from supportive personnel.

In ER, nurses usually provide care for one patient on a time and the required time to service each patient is varied in regarding to patient severity of illness. In this case, a nurse could not service many patients as he/she must. However, as the number of patients increase in the emergency rooms, this would increase the work load and performance of nurses. Besides, emergency rooms are different than other hospital departments; emergency rooms are the first line in medical facilities, most of patients admit to them, particularly injured and in risk persons. Furthermore, each patient may be combined by other family members. All these factors and others may influence the work load and performance of nurses.

In work context dimension, the current study revealed that about half of the nurses were able to communicate with nurse manager, receive feedback on their performance from nurse manager, work within a team, feel respected by physicians,

and were able to communicate with the other therapists in the unit, and belong to the workplace. These results are consistent with Suresh<sup>19</sup> who stated that half of the sample were able to communicate with nurse manager/supervisor, and have adequate supervision by nurse supervisor. In contrast, the results of the current study were found inconsistent with other studies<sup>9,12</sup> which concluded that few nurses felt respected by the upper management, and were able to participate in decisions. Further, Almalki et al<sup>9</sup> and Khani et al<sup>12</sup> indicated that nurses work settings did not provide career advancement opportunities, and skill mix was often inadequate.

In Jordan, many hospitals, particularly rural ones and some departments face shortage in nurses and in medical equipment and materials. Besides, Jordan still did not set its own customized medical protocol of treatments, not only that and it's medical sector in general has mal administration. Despite, nurses are one of the most qualified and candidate staff in the region, these factors and many others may induce stressors on nurses.

In Work world dimension, the respondents of the current study think that the society had a negative image of nurses, do not receive adequate salary in comparison to the job market and their job impacts the lives of patients/families. The findings of this study are consistent with studies.<sup>9,12</sup> Khani et al<sup>12</sup> emphasized that people think of nurses as assistants to the physicians, and many physicians also regard nurses only as their helpers and do not consider them as specialists in the art of caring. Furthermore, nurses felt that poor public image of nursing may affect not only their recruitment but also their attitudes towards work.<sup>9,19</sup>

In spite of Jordan has one of the highest educated population in the Arabic region and worldwide, nursing professionals are not well estimated. Nurses felt that poor public image of nursing may affect nursing recruitment and attitude towards work. Also, nurses still paid less than they deserve to get in comparison to their role in medical facilities and the salary of physicians. An important issue is the gap in salary scales of medical staff. Employers must pay fairly to nurses to make them satisfied.

The current study concluded that there was no significant relationship between total QNWL scores and sociodemographic factors such as age, gender, marital status, dependent children, and dependent adults. The results are consistent with other studies which found insignificant results between QNWL and gender,<sup>8,15</sup> marital status and education level.<sup>15</sup> However, other studies found a significant relationship between QNWL and age and marital status,<sup>7,9,15</sup> and gender.<sup>9</sup>

The results of the current study revealed insignificant results in terms of dependent children and dependent adults. The result of the current study is consistent with Suresh<sup>19</sup> results. Suresh<sup>19</sup> reported insignificant association between QNWL and child care and elderly care. In contrast, the results of the current study were inconsistent with previous studies.<sup>9</sup>

The researchers found that nurses with children were more satisfied with their QWL compared to those with no children.<sup>9</sup> Additionally, Almalki et al<sup>9</sup> found that the variable of dependent adults was significantly associated with QWL and respondents with dependent adults were less satisfied with their QNWL compared to those without dependent adults.

The current study concluded that there was no significant relationship between educational levels and QNWL. These results are consistent with the result of Almalki et al<sup>9</sup> and Suresh<sup>19</sup> studies which revealed that education level of respondents was not significantly associated with the QNWL scores. On the other hand, the results were inconsistent with Moradi et al<sup>8</sup> study. They found that there is a significant relationship between educational levels and quality of nursing work life. The researchers explained that the higher level nurses reported lower scores because they have higher expectation for their work so they may be exhausted emotionally when their work environment does not meet their expectations. In Jordan, nurses from all degree levels work in the same work settings and perform the same nursing activities with exception of activities related to medication administration.

In terms of work-related variables, the current study concluded that there were significant higher QNWL scores reported by respondents who had a training course in emergency care. No previous studies examined this relationship. Probably, in the current study, nurses who got training courses may become more competent to provide the required care for patients and have better relationship with their colleagues and superiors. Consequently, this may rise their satisfaction and improve their QNWL. Furthermore, there was no significant relationship between total QNWL scores and work-related variables such as payment per month, experience, emergency courses, hospital type, and Shift system. The current study concluded that there was no significant relationship between income (salary) and the QNWL. This result is consistent with another study conducted by Moradi et al<sup>8</sup> In contrast, the result of the current study were inconsistent with the result of other studies.<sup>9,19</sup> Almalki et al<sup>9</sup> and Suresh<sup>19</sup> found that payment per month was significantly associated with QNWL scores.

The current study concluded that there was no significant relationship between experience (in years) and the QNWL. This result is inconsistent with many previous studies.<sup>8,20</sup> Mordai et al<sup>8</sup> stated that nurses with professional experience of more than 15 years had a better QWL than others. They explained their results as nurses with more work experience feel less occupational stress and more stability in their job and this may lead to higher QWL. In the current study nurses had low experience and this may be contributed to the lower QNWL.

The current study concluded that there is no a significant difference in QNWL regarding the hospital sector; private or

public. This result is inconsistent with findings of previous study.<sup>19</sup> Suresh<sup>19</sup> reported that nurses in public hospitals had higher QNWL scores than nurses in private sectors. It seems that in Jordan, regardless the type of hospital, nurses has the same work circumstances and may face the same work challenges. Also, the current study concluded that there is no significantly difference in QNWL associated with respondents working in rotating shift schedules either 8 or 12 hours shift in ER. No previous studies examined this relationship. It would be expected that nurses working in shift duration may experience less QNWL than nurses on morning shift only. The results in this point are not clear enough. Further studies are needed to clarify the relationship between working on shift schedule and QNWL.

## 5 | LIMITATIONS OF THE STUDY

Since the current study is a descriptive study that recruited nurses from ER, some limitations were identified. First, the current study sample was pulled out from nurses who were willing to participate in the study. Although not all of the nurses who were working in emergency rooms, Amman, Jordan had been included in it; the voluntary sampling methodology may limit the generalizability of the findings. Voluntary participation meant that it was possible that nurses who did not choose to participate differed from those who did participate. Also, hospitals from different geographical area in Jordan rather than Amman may exhibit different opinions regarding QNWL. Second, the data were collected through a self-reporting questionnaire, leaving the interpretation for inquires to the respondents. The use of self-reporting questionnaire may have decreased the reliability of responses due to misinterpretation of some of inquiries.

## 6 | CONCLUSION

This study concluded that nurses working in emergency rooms in Jordan had moderate levels on QNWL and its dimensions. In this respect, health services facilities need to pay a greater attention toward nurses QNWL. Therefore, it is hoped that the finding from this study may be beneficial to health facilities administrators in identifying their nurse's level of satisfaction regarding the quality of nursing work life. Furthermore, these results may raise the awareness of researchers to conduct further interventional research studies taking in consideration training courses as an intervention to improve QNWL.

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## DISCLOSURE

*Approval of the research protocol:* Approval to conduct the study was obtained from the IRB committee at Al-Zaytoonah University of Jordan. *Informed consent* has been obtained from each participant. *Registry and the registration no. of the study:* N/A. *Animal studies:* N/A. *Conflict of interest:* The authors declare no conflict of interest.

## AUTHOR CONTRIBUTIONS

Khaled Suleiman: conceived the idea, design, and data analysis, Zaineh Hijazi: data collection, and writing, Mahmoud Al Kalalkeh: writing and review of the study, and Loai Abu Sharour: design and writing.

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## REFERENCES

1. Nayeri N, Salehi T, Noghabi A. Quality of work life and productivity among Iranian nurses. *Contemp Nurse*. 2011;39(1):106-118.
2. Momeni B, Shafipour V, Esmaili R, Charati J. The relationship between the quality of work life and sleep in nurses at the intensive care units of teaching hospitals in Mazandaran, Iran. *J Nurs Midwifery Sci*. 2016;3(1):28-34.
3. Battu N, Chakravarthy G. Quality of work life of nurses and paramedical staff in hospitals. *IJBARR*. 2014;2(4):200-207.
4. Hasson D, Gustavsson P. Declining sleep quality among nurses: a population-based four-year longitudinal study on the transition from nursing education to working life. *PLoS ONE*. 2010;5(12):e14265.
5. Adriaenssens J, De Gucht V, Maes S. Determinants and prevalence of burnout in emergency nurses: a systematic review of 25 years of research. *Int J Nurs Stud*. 2015;52(2):649-661.
6. Clarke P, Brooks B. Quality of nursing worklife: conceptual clarity for the future. *Nurs Sci Q*. 2010;23(4):301-305.
7. Hemanathan R, Sreelekha S, Prakasam P, Golda M. Quality of work life among nurses in a Tertiary Care Hospital. *Nurse Health Care*. 2017;5(4):1-8.
8. Moradi T, Maghaminejad F, Azizi-Fini I. Quality of working life of nurses and its related factors. *Nurs Midwifery Stud*. 2014;3(2):1-6.
9. Almalki M, FitzGerald G, Clark M. Quality of work life among primary health care nurses in the Jazan region, Saudi Arabia: a cross-sectional study. *Hum Resour Health*. 2012;10(3):1-13.
10. Eslamian J, Akbarpoor A, Hoseini S. Quality of work life and its association with workplace violence of the nurses in emergency departments. *Iran J Nurs Midwifery Res*. 2015;20(1):56-62.
11. Brooks B, Anderson M. Defining quality of nursing work life. *Nurs Econ*. 2005;23(6):319-326.



12. Khani A, Jaafarpour M, Dyrekvandmogadam A. Quality of nursing work life. *J Clin Diagn Res*. 2008;2(6):1169-1174.
13. Bragard I, Fleet R, Etienne A-M, et al. Quality of work life of rural emergency department nurses and physicians: a pilot study. *BMC Res Notes*. 2015;8(1):116.
14. Martel J, Dupuis G. Quality of work life: Theoretical and methodological problems, and presentation of a new model and measuring instrument. *Soc Indic Res*. 2006;77(2):333-368.
15. Fu X, Xu J, Song LI, et al. Validation of the Chinese version of the quality of nursing work life scale. *PLoS ONE*. 2015;10(5):e0121150.
16. Brooks BA. *Development of an instrument to measure quality of nursing work life*. Chicago, IL: University of Illinois at Chicago; 2001.
17. Lee Y, Dai Y, McCreary L, Yao G, Brooks B. Psychometric properties of the Chinese-version Quality of Nursing Work Life Scale. *Nurs Health Sci*. 2014;16(3):298-306.
18. Steer R, Scholl T, Beck A. Self-reported depression in younger and older pregnant inner-city adolescents. *J Genet Psychol*. 1991;152(1):83-89.
19. Suresh D. *Quality of Nursing Work Life among nurses working in selected government and private hospitals in Thiruvananthapuram*. Thiruvananthapuram, India: Sree Chitra Tirunal Institute for Medical Sciences & Technology; 2013.
20. Seada A, Banan S. Performance Obstacles and its relation to the Perceived Quality of patient care and Quality of Working Life among ICU Nurses: A Comparative Study. *JNHS*. 2016;5(4):124-136.

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