

# Quality of Work Life Among Nurses

## A case study from Ad Dakhiliyah Governorate, Oman

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### جودة الحياة العملية بين الممرضين دراسة حالة من محافظة الداخلية، عمان

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**ABSTRACT: Objectives:** Quality of work life (QWL) is an important indicator of job-related satisfaction among nurses; however, there is little information regarding the QWL of nurses in Oman. Therefore, this study aimed to explore factors affecting QWL among nurses working in governmental health institutions in Ad Dakhiliyah Governorate, Oman. **Methods:** This descriptive cross-sectional study was conducted between September and November 2018 at 29 governmental health institutions in Ad Dakhiliyah Governorate. A total of 374 nurses employed at these institutions were recruited via stratified random sampling. A demographic questionnaire incorporating Brooks' Quality of Nursing Work scale was used to collect data. **Results:** A total of 345 nurses participated in the study (response rate: 92.2%). The mean age was  $33.3 \pm 5.1$  years and the majority were female (90.7%), married (88.7%), of Omani nationality (70.1%) and had a diploma degree (70.7%). Overall, the nurses demonstrated moderate levels of QWL (mean total score:  $179.99 \pm 24.17$ ). Both job designation and nationality were found to be significant predictors of QWL ( $P = 0.041$  and  $<0.001$ , respectively). **Conclusion:** The findings of this study represent a baseline for further research on this important topic. As with all healthcare professionals, the QWL of nurses indirectly affects quality of patient care and associated health outcomes. As such, identifying areas of poor QWL among nurses can help in the development of initiatives to improve their professional satisfaction, thereby enhancing job performance and employee retention.

**Keywords:** Nursing; Quality of Life; Work Satisfaction; Occupational Burnout; Workload; Motivation; Health Workforce; Oman.

**المخلص: الهدف:** تعد جودة الحياة العملية (QWL) مؤشراً مهماً للرضا الوظيفي بين الممرضين و الممرضات؛ ومع ذلك، هناك القليل من المعلومات حول QWL للكادر التمريضي في عمان. لذلك، هدفت هذه الدراسة إلى استكشاف العوامل التي تؤثر على جودة الحياة العملية (QWL) بين الكادر التمريضي العامل في المؤسسات الصحية الحكومية في محافظة الداخلية، عمان. **الطريقة:** أجريت هذه الدراسة المقطعية الوصفية بين شهري سبتمبر ونوفمبر 2018 في 29 مؤسسة صحية حكومية في محافظة الداخلية. تم تعيين ما مجموعه 374 ممرضاً يعملون في هذه المؤسسات عن طريق أخذ العينات العشوائية الطبقية. تم استخدام استبيان يحتوي أسئلة ديموغرافية على مقياس بروكس لجودة عمل التمريض لجمع البيانات. **النتائج:** شارك في الدراسة 345 ممرضة (معدل الاستجابة: 92.2%). بلغ متوسط العمر  $33.3 \pm 5.1$  سنة غالبيتهم من الإناث (90.7%)، متزوجين (88.7%)، عمانيين الجنسية (70.1%) وحاصلين على دبلوم (70.7%). بشكل عام، أظهر الممرضون و الممرضات مستويات معتدلة من QWL (متوسط الدرجة الإجمالية:  $179.99 \pm 24.17$ ). تم العثور على كل من تعيين الوظيفة والجنسية ليكونا تنبؤات مهمة لجودة الحياة العملية (على التوالي،  $P = 0.041$  و  $<0.001$ ). **الخلاصة:** تمثل نتائج هذه الدراسة أساساً لمزيد من البحث حول هذا الموضوع المهم. كما هو الحال مع جميع المتخصصين في الرعاية الصحية، تؤثر QWL للكادر التمريضي بشكل غير مباشر على جودة رعاية المرضى والنتائج الصحية المرتبطة بها. على هذا النحو، وأيضاً يمكن أن يساعد تحديد مجالات ضعف QWL بين الكادر التمريضي في تطوير مبادرات لتحسين رضاهم المهني، وبالتالي تعزيز الأداء الوظيفي والاحتفاظ بالموظفين.

**الكلمات المفتاحية:** الكادر التمريضي؛ جودة الحياة العملية؛ الرضا عن العمل؛ الإرهاق المهني؛ عبء العمل؛ التحفيز؛ القوى العاملة الصحية؛ عمان.

#### ADVANCES IN KNOWLEDGE

- This study found that nurses in Ad Dakhiliyah Governorate, Oman, demonstrated moderately high levels of quality of work life (QWL).
- Nationality and job designation were significant predictors of QWL, with nurses in high leadership positions and Omani nurses reporting greater QWL compared to general nurses and non-Omani nurses.
- There is a need for further research to explore factors influencing the QWL of nurses in Oman.

#### APPLICATION TO PATIENT CARE

- Improving the QWL of nurses can indirectly influence the quality of patient care, thereby promoting better healthcare outcomes. As such, the findings of this study underline the need for strategies to improve the QWL of nurses in the Ad Dakhiliyah region.

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**N**URSES CURRENTLY COMPRISE THE LARGEST proportion of the healthcare workforce, with employment in this field expected to continue to rise over the next few years.<sup>1</sup> This specialty encompasses a myriad of functions, from direct primary and preventative care, education, quality assurance and case management to specialised care in a myriad of areas such as family medicine, obstetrics and gynaecology, neurology, surgery, oncology, anaesthesiology, paediatrics and geriatric medicine.<sup>1</sup> Nurses also face many challenges in the workplace including staff shortages, low salary, burnout and work overload; as a result, the rate of staff turnover among experienced nurses is high.<sup>2,3</sup>

Consequently, these factors may affect the provision of high-quality nursing care and lead to poor productivity.<sup>4</sup> It is therefore integral to explore factors affecting job-related satisfaction in the nursing sector, particularly as high rates of job satisfaction help increase employee retention and improve patient outcomes. Quality of work life (QWL) is a measurement of the degree of satisfaction of an employee with regards to the fulfilment of personal and professional needs and demands in the workplace.<sup>4</sup> The philosophy behind the concept of QWL posits that every employee deserves the opportunity to contribute meaningfully to their organisation and improve their professional growth and career. As such, assessing QWL allows employers to recognise challenges or obstacles within a work environment that affect issues such as the job satisfaction or retention of their employees.<sup>4</sup>

Globally, the majority of nurses report low-to-moderate QWL.<sup>5,6</sup> In the Gulf region, Kaddourah *et al.* reported that more than half of nurses (54.7%) employed at two tertiary healthcare institutions in Riyadh, Saudi Arabia, were dissatisfied with their work life; moreover, 94% of participants indicated their intent to resign from their current roles.<sup>7</sup> Despite the importance of QWL among nurses, little attention has been paid to this topic in Oman. Oman is divided into 11 governorates comprising 61 *wilayats* (counties) served by a total of 65 hospitals, 242 health centres and 974 private clinics.<sup>8</sup> As in other governorates in Oman, nurses in the Ad Dakhiliyah Governorate face many challenges that can affect their QWL. A better understanding of factors affecting the QWL of nurses in this region is crucial in order to develop strategies to improve their motivation, job performance and retention, thereby indirectly improving the quality of patient care.<sup>9</sup> Accordingly, this study aimed to explore factors affecting the QWL of nurses working in governmental health institutions in Ad Dakhiliyah Governorate, Oman.

## Methods

This descriptive cross-sectional study was conducted between September and November 2018 at 29 governmental health institutions in Ad Dakhiliyah Governorate. All registered full-time nurses with at least six months of experience who were involved in direct patient care and who spoke, read and could write in English were included in the study. The nurses were recruited from all departments including medical/surgical wards, outpatient departments and paediatric, maternity and critical care units. However, nurses with less than six months of experience, those not directly involved in patient care (e.g. those working in infection control and quality assurance departments, excluding those in leadership positions such as head nurses or nurse supervisors) and those who were on leave during the study period were excluded.

Participants were recruited using a stratified random sampling technique in order to ensure that variability within subgroups was low compared to that which might ensue from targeting the entire population.<sup>10</sup> According to data from the Ministry of Health, the total number of nurses working in governmental healthcare institutions in the Ad Dakhiliyah Governorate in 2018 was 1,259, including 622 nurses at Nizwa Hospital and 637 at the other 28 health institutions in the region (i.e. local hospitals, polyclinics and health centres).<sup>11</sup> Using Slovin's formula, the required sample size was calculated to be 374 participants (including 185 respondents from the tertiary hospital and 189 from other healthcare institutions), based on an *a priori* power of 0.80, medium effect size of 0.50 and a one-tailed *P* value of  $\leq 0.050$ .<sup>12</sup>

A nine-item English-language questionnaire was designed to collect information regarding the participants' sociodemographic characteristics including institution, age, gender, marital status, education level, number of years of experience, job designation, nationality and ward assignment. In addition, Brook's Quality of Nursing Work Life (BQNWL) scale was incorporated into this survey; this scale consists of 42 items in four dimensions including home or work life (eight items), work design (10 items), work context (20 items) and work world (four items).<sup>4</sup> The BQNWL scale has been confirmed to have acceptable construct validity (Cronbach's alpha = 0.89) and test-retest reliability (intraclass correlation coefficient = 0.9).<sup>4-7</sup> According to the Flesch-Kincaid formula, the readability of the scale is ranked at the seventh grade level with an estimated time of completion of 9–13 minutes.<sup>4,10</sup>

For the purposes of the current study, each item of the BQNWL tool was scored on a 6-point Likert scale, with 1 indicating strongly disagree and 6 strongly agree, for a total score ranging from 42–252. Total scores of 42–112, 113–182 and 183–252 were considered to indicate low, moderate and high QWL, respectively.<sup>4</sup> The full version of the questionnaire was piloted among 20 nurses from Nizwa Polyclinic to assess the clarity of the instrument and time needed for completion, as well as to explore suggestions for improvement. Based on the participants' feedback, several modifications were made to the questionnaire. The internal consistency of the final version of the questionnaire was high (Cronbach's alpha = 0.889).

A total of 374 questionnaires were distributed at all governmental healthcare institutions in Ad Dakhiliyah Governorate. Beforehand, the institutions were contacted individually to inform them of the study, specifying that a random sampling method would be used so that every nurse had an equal chance of participating. Heads of nursing departments and nurses-in-charge were requested to help disseminate the necessary information to all staff nurses working at these institutions. In addition, research assistants were recruited and trained to facilitate the distribution and collection of hard copies of the questionnaires.

The Statistical Package for the Social Sciences, Version 23.0 (IBM Corp., Armonk, New York, USA) was used for the data analysis. Results were reported using descriptive and inferential statistics including percentages, means and standard deviations and frequency distributions. A multiple regression analysis was conducted to examine relationships between BQWNL scores and sociodemographic characteristics (e.g. age, gender, ward assignment, marital status, nationality, job designation, institution, education level and number of years of experience). A *P* value of  $\leq 0.050$  was considered statistically significant.

This study received ethical approval from the Research and Ethical Review and Approval Committee of the Ministry of Health, Oman. Informed consent was granted by all participants prior to the administration of the questionnaire. All data were kept anonymous and the nurses were assured that participation in the study was voluntary.

## Results

Of the 374 questionnaires distributed, 29 were excluded due to incomplete data. The final analysis therefore consisted of 345 complete questionnaires (response rate: 92.2%). Of the 345 nurses who submitted completed questionnaires, the majority worked at Nizwa Hospital (53.6%) and were female (90.7%),

**Table 1: Sociodemographic characteristics of nurses working in governmental health institutions in Ad Dakhiliyah Governorate, Oman (N = 345)**

Characteristic	n (%)
<b>Gender (n = 345)</b>	
Male	32 (9.3)
Female	313 (90.7)
<b>Age in years (n = 339)</b>	
21–30	117 (34.5)
31–40	196 (57.8)
41–50	24 (7.1)
51–55	2 (0.6)
<b>Type of institution (n = 345)</b>	
Tertiary hospital (i.e. Nizwa Hospital)	185 (53.6)
Local hospital	67 (19.4)
Polyclinic	34 (9.9)
Health centre	59 (17.1)
<b>Marital status (n = 345)</b>	
Single	33 (9.6)
Married	306 (88.7)
Widowed	3 (0.9)
Divorced	3 (0.9)
<b>Education level (n = 345)</b>	
Diploma	244 (70.7)
Post-diploma	30 (8.7)
BSN	68 (19.7)
MSN	3 (0.9)
<b>Job designation (n = 345)</b>	
General nurse	329 (95.4)
Nurse-in-charge/ward-in-charge	10 (2.9)
Head of nursing	2 (0.6)
Supervisor	4 (1.2)
<b>Nationality (n = 345)</b>	
Omani	242 (70.1)
Indian	50 (14.5)
Filipino	49 (14.2)
Tunisian	1 (0.3)
Sri Lankan	1 (0.3)
Bangladeshi	2 (0.6)
<b>Number of years of experience (n = 345)</b>	
1–5	44 (12.9)
6–10	122 (35.2)
11–15	103 (29.9)
16–20	57 (16.4)
21–25	18 (5.3)
$\geq 25$	1 (0.3)

BSN = Bachelor of Science in Nursing; MSN = Master of Science in Nursing. \*Not including the 59 nurses working at health centres who were not assigned to a specific ward or department.

**Table 1 (cont'd):** Sociodemographic characteristics of nurses working in governmental health institutions in Ad Dakhilayah Governorate, Oman (N = 345)

Characteristic	n (%)
<b>Ward assignment (n = 286)*</b>	
Accident and emergency	25 (8.7)
Burns	6 (2.1)
Coronary care	13 (4.5)
Delivery	28 (9.8)
General	18 (6.3)
Outpatient	37 (12.9)
Intensive care	27 (9.4)
Obstetric and maternity	23 (8.0)
Medical	15 (5.2)
Surgical	18 (6.3)
Operating theatre	13 (4.5)
Paediatric	28 (9.8)
Renal medicine	12 (4.2)
Special baby care	16 (5.6)
Other (i.e. supervisory position)	7 (2.4)

BSN = Bachelor of Science in Nursing; MSN = Master of Science in Nursing. \*Not including the 59 nurses working at health centres who were not assigned to a specific ward or department.

married (88.7%) and of Omani nationality (70.1%). The mean age was 33.3 ± 5.1 years. Additionally, 244 nurses (70.7%) held a diploma in nursing and 329 (95.4%) were general nurses. Most had between 6–10 (35.2%) or 11–15 (29.9%) years of experience [Table 1].

With regards to individual items on the BQNWL scale, nurses most highly ranked the importance of private break areas for nursing staff (mean score: 5.34 ± 1.15), followed by their ability to communicate well with nurse managers or supervisors (mean score: 5.08 ± 1.08) and friendships with their co-workers (mean score: 5.08 ± 1.21). On the other hand, items which were ranked lowest included the negative effect of rotating schedules (mean score: 3.08 ± 1.59), followed by the sufficiency of registered nurses in the work place (mean score: 3.28 ± 1.56) and having energy left after work (mean score: 3.32 ± 1.59) [Table 2]. According to the total BQNWL scores for specific subscales, the score for the work context subscale was high compared to the other three subscales which received moderate scores. The overall mean BQNWL score was 179.99 ± 24.17, thereby indicating a moderate level of QWL [Table 3].

A multiple linear regression analysis was conducted to examine relationships between BQNWL scores and sociodemographic characteristics. The overall model explained 6.8% of the variability in BQNWL scores (R<sup>2</sup> change = 0.068; P = 0.005). Job

**Table 2:** Scores for individual items assessing quality of work life\* among nurses working in governmental health institutions in Ad Dakhilayah Governorate, Oman (N = 345)

Item	Mean score ± SD
I receive a sufficient amount of assistance	3.57 ± 1.38
I am satisfied with my job	4.77 ± 1.23
My workload is too heavy	4.27 ± 1.39
In general, society has an accurate image of nurses	3.86 ± 1.26
I am able to balance my work with my family needs	4.17 ± 1.25
I have the autonomy to make patient care decisions <sup>†</sup>	4.42 ± 1.21
I am able to communicate well with my nurse manager/supervisor <sup>†</sup>	5.08 ± 1.08
I have adequate patient care supplies and equipment	3.73 ± 1.38
My nurse manager/supervisor provides adequate supervision	4.54 ± 1.22
It is important for a hospital to offer employees on-site childcare services	4.66 ± 1.32
I perform many non-nursing tasks	4.09 ± 1.41
I have energy left after work	3.32 ± 1.59
Friendships with my co-workers are important to me	5.08 ± 1.21
My work setting provides career advancement opportunities	4.02 ± 1.40
There is teamwork in my work setting	4.76 ± 1.15
I experience many interruptions in my daily work routine <sup>†</sup>	4.05 ± 1.34
I have enough time to do my job well <sup>†</sup>	3.93 ± 1.34
There are enough RNs in my work setting	3.28 ± 1.56
I feel a sense of belonging in my workplace	4.40 ± 1.29
Rotating schedules negatively affect my life <sup>†</sup>	3.08 ± 1.59
I am able to communicate with other therapists (i.e. physical, respiratory, etc.)	4.76 ± 1.17
I receive feedback on my performance from my nurse manager/supervisor	4.27 ± 1.27
I am able to provide good-quality patient care	5.05 ± 1.06
My salary is adequate for my job, given the current job market conditions <sup>†</sup>	4.15 ± 1.62
My organisation's policy on family leave time is adequate	3.73 ± 1.52
I am able to participate in decisions made by my nurse manager/supervisor	4.27 ± 1.27

SD = standard deviation; RN = registered nurse. \*Assessed using the 42-item Brook's Quality of Nursing Work Life scale.<sup>†</sup> Each item was rated on a 6-point Likert scale from 1 (strongly disagree) to 6 (strongly agree). <sup>†</sup>Missing data were reported for this item.



**Table 2 (cont'd):** Scores for individual items assessing quality of work life\* among nurses working in governmental health institutions in Ad Dakhiliyah Governorate, Oman (N = 345)

Item	Mean score ± SD
It is important for a hospital to offer employees on-site day care facilities for elderly patient <sup>†</sup>	4.47 ± 1.38
I feel respected by physicians in my work setting <sup>†</sup>	4.57 ± 1.28
It is important to have a designated private break area for nursing staff	5.34 ± 1.15
It is important to me to have a nursing degree-granting programme available at my hospital	4.93 ± 1.18
I receive support to attend in-services and continuing education programmes	3.86 ± 1.54
I communicate well with the physicians in my work setting <sup>†</sup>	5.04 ± 1.05
I am recognised for my accomplishments by my nurse manager/supervisor	4.38 ± 1.20
Nursing policies and procedures facilitate my work	4.54 ± 1.22
The security department provides a secure environment <sup>†</sup>	3.60 ± 1.55
It is important for a hospital to offer employees on-site childcare services for ill children	4.85 ± 1.55
I would be able to find the same job in another organisation with about the same salary and benefits	3.77 ± 1.61
I feel safe from personal harm (either physical, emotional or verbal) at work	3.92 ± 1.48
I believe my job is secure <sup>†</sup>	4.27 ± 1.48
Upper level management has respect for nurses	4.29 ± 1.37
My work impacts the lives of patients/families	4.74 ± 1.19
I receive quality assistance from unlicensed support personnel (i.e. dietary aides, housekeepers and nursing assistants)	3.79 ± 1.39

SD = standard deviation; RN = registered nurse. \*Assessed using the 42-item Brook's Quality of Nursing Work Life scale.<sup>4</sup> Each item was rated on a 6-point Likert scale from 1 (strongly disagree) to 6 (strongly agree).<sup>†</sup>Missing data were reported for this item.

designation ( $P = 0.041$ ) and nationality ( $P < 0.001$ ) were the only significant predictors of QWL among the nurses. Other variables including institution, age, gender, marital status, education level, number of years of experience and ward assignment did not add any value to the prediction model [Table 4]. Multicollinearity was not a concern (variation inflation factor = 2.031).

## Discussion

This study provides an initial baseline understanding of the overall level and factors affecting QWL among nurses in Ad Dakhiliyah Governorate, an important issue which has not been adequately assessed in Oman. Understanding this issue is vital in order to establish strategies and policies to improve QWL among nurses, thereby eventually leading to an improvement in the quality of patient care.<sup>9</sup> Moreover, the findings of this study add to the existing body of knowledge related to QWL among nurses in the Gulf region.

Overall, nurses in the current study demonstrated moderate-to-high QWL. In contrast, comparable studies conducted in Jordan, Iran and Bangladesh reported the QWL of nurses to be low-to-moderate.<sup>6,13-15</sup> In addition, much lower BQNWL scores have been reported among nurses in Nepal in comparison to those in the present study (mean score:  $100.5 \pm 57.88$  versus  $179.99 \pm 24.17$ ).<sup>16</sup> Of the four subscales of the BQNWL tool, the work context subscale received the highest score in the current study. Brooks and Anderson intended items in this subscale to evaluate the actual settings in which nurses worked and practised and to explore the impact of the work environment on both nurses and patients.<sup>4</sup> In a similar study in Saudi Arabia, the highest and lowest mean scores were observed on the work life/home life and work world subscales, findings which contrast with those of the present study.<sup>17</sup>

Recent implementation by Oman's Ministry of Health of strategies to improve working conditions in the healthcare sector over the last three years may have affected the findings of the current study. These initiatives have included increasing salaries, restricting working hours to seven-hour shifts in the morning and afternoon and 10-hour shifts at night-time and the provision of a mandatory day off per night duty. In addition, the Directorate of Nursing Affairs in Ad Dakhiliyah Governorate have also begun to conduct motivational seminars and workshops for nursing professionals. Such strategies may have increased motivation and job satisfaction among nurses in the present study, thereby increasing their QWL. A comprehensive literature review found that continuing education activities, opportunities to enhance inter-colleague relationships, stress reduction exercises and increases in salary were among the factors most likely to increase QWL among nurses in Canada and the USA.<sup>18</sup> In addition, a recent unpublished study indicated that nurses in Ad Dakhiliyah Governorate have moderate-to-low levels of burnout and moderate-to-high retention compared to other countries.<sup>19</sup>

**Table 3:** Overall scores for quality of work life\* among nurses working in governmental health institutions in Ad Dakhiliyah Governorate, Oman (N = 345)

Subscale	Possible score range	Actual score range	Mean score ± SD	Assessment of QWL
Work life/home life <sup>†</sup>	7–42	9–41	28.26 ± 5.10	Moderate
Work design <sup>‡</sup>	10–60	16–59	41.21 ± 6.08	Moderate
Work context <sup>§</sup>	20–120	27–118	89.69 ± 13.94	High
Work world <sup>¶</sup>	5–30	5–30	20.79 ± 4.01	Moderate/high
Overall <sup>//</sup>	42–252	63–232	179.99 ± 24.17	Moderate

SD = standard deviation; QWL = quality of work life.

\*Assessed using the 42-item Brook's Quality of Nursing Work Life scale.<sup>†</sup> Scores of 7–18, 19–29 and 30–42 were considered low, moderate and high, respectively. <sup>‡</sup>Scores of 10–26, 27–44 and 45–60 were considered low, moderate and high, respectively. <sup>§</sup>Scores of 20–38, 39–77 and 78–100 were considered low, moderate and high, respectively. <sup>¶</sup>Scores of 5–12, 13–20 and 21–30 were considered low, moderate and high, respectively. <sup>//</sup>Overall, total scores of 42–112, 113–182 and 183–252 were considered low, moderate and high, respectively.

**Table 4:** Predictors of quality of work life among nurses working in governmental health institutions in Ad Dakhiliyah Governorate, Oman (N = 345)

Variable*	Unstandardised coefficients		Standardised coefficients		P value
	B	SE	Beta	t value	
Constant	158.470	18.289	-	8.665	<0.001
Institution	1.088	1.264	0.051	0.861	0.390
Age	0.076	0.539	0.016	0.141	0.888
Gender	-2.838	4.510	-0.034	-0.629	0.530
Marital status	2.003	3.758	0.030	0.533	0.594
Education level	-0.688	1.906	-0.024	-0.361	0.718
Job designation	7.256	3.536	0.116	2.052	0.041
Nationality	7.323	2.056	0.254	3.561	<0.001
Number of years of experience	-0.136	0.530	-0.030	-0.256	0.798
Ward assignment	0.273	0.332	0.046	0.822	0.412

\*Overall quality of work life was the dependent variable.

Job designation was found to be a significant predictor of QWL among nurses in Ad Dakhiliyah Governorate. This indicated that nurses with more elevated job titles, such as nurse-ward-in-charge, head of nursing or supervisor, demonstrated a greater level of satisfaction in terms of their QWL compared to general nurses. One possible reason for this finding is that more advanced job designations may offer a supervisory role compared to staff nurses who are mainly on the frontline of patient care and dealing directly with patients and their attendants, an often stressful experience. However, Suleiman *et al.* reported contradictory findings indicating that nurses-in-charge in Jordan had significantly higher QNWL scores compared to both junior and senior staff nurses.<sup>6</sup> However, further research in this context is necessary in light of the fact that most studies on QWL focus only on general nurses and not on nurse managers.

The second significant predictor of QWL in the current study was nationality, with Omani nurses exhibiting higher levels of QWL compared to non-Omani nurses. This finding is supported by a study in Saudi Arabia in which Saudi nationality was identified as a predictor of QWL among nurses working in Jeddah.<sup>20</sup> In contrast, Alharbi *et al.* found that the opposite was true, with non-Saudi nationality significantly associated with higher BQNWL scores.<sup>21</sup> Nationality may play a role in promoting QWL in the sense that local nurses may demonstrate higher morale compared to foreign nurses at the thought of serving their own country and taking care of their own people. Besides morale, other factors potentially based on nationality—such as culture, religion and salary—may also be linked to QWL and job-related satisfaction.

Other sociodemographic variables in the current study had no significant association with QWL, including age, gender, and marital status. Kelbiso *et*

*al.* and Thakre *et al.* similarly reported no significant relationships between BQNWL scores and age, gender or marital status among nurses in Ethiopia and India, respectively.<sup>5,22</sup> In contrast, Kowitzlawkul *et al.* demonstrated that age and marital status were predictors for QWL among nurses in Singapore.<sup>23</sup> The present study also revealed no significant association between QWL and type of healthcare institution (e.g. regional hospital, polyclinics, local hospitals and health centres) or ward assignment. However, Kelbiso *et al.* reported working unit and working environment to be significant predictors of QWL among Ethiopian nurses, with nurses working in outpatient settings more likely to have higher QWL compared to those in inpatient settings.<sup>5</sup> A possible explanation could be that nurses working in outpatient settings usually have fewer responsibilities in comparison to those in inpatient settings. However, much like the present study, Nagammal *et al.* reported no significant relationship between unit assignment and QWL among a cohort of nurses working in an oncology care centre in Qatar.<sup>24</sup>

The findings of this study should be considered in the light of certain limitations. First, the study was set in a single region of Oman; as such, the results cannot be generalised on a national level. Second, although the BQNWL scale is a valid and reliable tool for assessing QWL, there was a risk of response bias due to the self-reported of the responses.<sup>4-7</sup> Third, the questionnaire was administered in English which was a second language for most of the respondents; therefore, some nurses may have had difficulty understanding and answering certain questions. Third, the regression model explained only 6.8% of the variability in BQNWL scores, a factor which requires further exploration. Finally, monthly salary, a variable not assessed in the present study, has previously been observed to affect perception of QWL among nurses.<sup>15,18,22</sup>

## Conclusion

In the nursing sector, QWL is a challenging issue which can affect the quality of care provided to patients. As such, it is important to explore this topic further in order to plan strategies to increase motivation and retention. The current study demonstrated that nurses in Ad Dakhiliyah Governorate had moderately high levels of QWL; moreover, nationality and designation were the only significant predictors of QWL, with nurses in high leadership positions and Omani nurses reporting greater QWL compared to general nurses and non-Omani nurses. These findings provide a baseline for future studies to examine the issue of

QWL among all types of healthcare professionals and across multiple regions of Oman.

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## CONFLICT OF INTEREST

The authors declare no conflict of interest

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