



Research Article

Open Access

Assessment of Nurse's Job Satisfaction in Hemodialysis Units

Luay A. Mansoor MSc.*; Tahseen Rajab Muhammad, Ph.D.**.

* Registered Nurse, Ministry of Health, Diyala Health Directorate, Iraq.

E-mail: Luay.Abd2102m@conursing.uobaghdad.edu.iq

** Assistant Prof. Dr, Adult Nursing Department/ College of the Nursing.

E-mail: Dr.tahseen@conursing.uobaghdad.edu.iq

ARTICLE INFO

Article History:

Received: 07/08/2023

Accepted: 16/09/2023

Published: 30/06/2025

Keywords:

Assessment,

Job satisfaction,

Hemodialysis unit,

Nurses.

ABSTRACT

Objective(s): This study aimed to assess job satisfaction of nurses' working in the Haemodialysis centres and to determine the relationship between job satisfaction and their socio-demographic characteristics.

Methods: A descriptive design was carried out among nurses working in haemodialysis units in Baquba Teaching Hospital and Baladrooz General Hospital in Diyala Governate from December 14th, 2022 to March 20th, 2023. A non-probability (purposive) sampling was conductive on 80 nurses. The study's instrument has two parts: the sociodemographic characteristics of nurses with (8) questions; and the Job Satisfaction Scale for Clinical Nurses (JSS-CN), which has (38) questions. A panel of (12) experts was used to assess the content validity of the questionnaire. Using Pearson Correlations (0.87) for the job satisfaction measure, the validity of the instrument scales was assessed. Data analysis using statistical methods for inferencing and describing the data.

Results: The study results showed that two third of the studied nurses (75%), had moderate level of job satisfaction. There was highly statistically significant relation between nurses job satisfaction and their monthly incomes (0.034).

Conclusion: The current study concluded that nurses working in haemodialysis units had moderate level of job satisfaction and their monthly income negatively affect their job satisfaction as a nurse in the haemodialysis units.

Recommendation: The study recommends health institution to improving the monthly income for nurses and conducting future studies on this subject by taking a sample from a wider group to determine the level of general satisfaction of nurses and its impact on social status.

© 2023 College of Nursing. Published by University of Baghdad.

*Corresponding author: Registered Nurse, Ministry of Health, Diyala Health Directorate, Iraq. E-mail: Luay.Abd2102m@conursing.uobaghdad.edu.iq (Mansoor L. A.). ORCID: <https://orcid.org/0009-0007-2918-1078>, DOI: <https://doi.org/10.58897/k1evdz85>

2023 College of Nursing. Published by University of Baghdad

تقييم الرضا الوظيفي للممرضين في وحدات الإنفاذ الدموي

المستخلص

الهدف: هدفت هذه الدراسة إلى تقييم مستوى الرضا الوظيفي للممرضين في وحدات الإنفاذ الدموي ومعرفة العلاقة بين الرضا الوظيفي للممرضين والخصائص الاجتماعية والديموغرافية لهم.

المنهجية: أجريت دراسة وصفية للممرضين العاملين في وحدات الإنفاذ الدموي في مستشفى بعقوبة التعليمي ومستشفى بلدروز العام، حيث بدأت الدراسة من ١٤ كانون الأول ٢٠٢٢ إلى ٢٠ آذار ٢٠٢٣. تم اختيار عينة غير احتمالية (غرضية) مكونة من (٨٠) ممرض وممرضة يعملون في وحدات الإنفاذ الدموي في كلا من مستشفيات بعقوبة وبلدروز. تكونت أدوات الدراسة من جزئين. الجزء الأول يتضمن المعلومات الديموغرافية للممرضين (٨ أسئلة) والجزء الثاني يتضمن مقياس الرضا الوظيفي للممرضين (JSS-CN)، ويتكون من (٣٨) فقرة، تم تحديد صلاحية محتوى الاستبيان من خلال لجنة خبراء مكونة من (١٢) خبيراً وتم تحديد الصلاحية باستخدام ارتباطات بيرسون (٠.٨٧) لمقياس الرضا الوظيفي. تم تحليل البيانات بتطبيق الأساليب الإحصائية الوصفية والاستنتاجية.

النتائج: أظهرت نتائج الدراسة أن ثلثي الممرضين الخاضعين للدراسة (٧٥٪) أظهروا مستوى متوسط من الرضا الوظيفي. توجد علاقة ذات دلالة إحصائية عالية بين الرضا الوظيفي والدخل الشهري (٠.٠٣٤).

الاستنتاجات: خلصت الدراسة الحالية إلى أن الممرضين العاملين في وحدات الإنفاذ الدموي يتمتعون بمستوى متوسط من الرضا الوظيفي وان مستوى الدخل الشهري يؤثر سلباً على مستوى رضاهم الوظيفي في وحدات الإنفاذ الدموي.

التوصيات: أوصت الدراسة المؤسسة الصحية بتحسين الدخل الشهري للممرضين وإجراء دراسات مستقبلية حول هذا الموضوع من خلال أخذ عينة من مجموعة أوسع لتحديد مستوى الرضا العام للممرضين وتأثيره على الوضع الاجتماعي.

الكلمات المفتاحية: الرضا الوظيفي، تقييم، وحدات الإنفاذ الدموي، الممرضين.

Introduction

Over 10% of the globe has chronic kidney disease (CKD), which is a very common ailment ⁽¹⁾. The CKD is characterized by inability of kidneys to filtrate of less than (60) ml/mint hat persists for 3 months ⁽²⁾. Nurses are working in the frontlines in most health care systems and their contributions were recognized as essential element in delivering effective patients care. Therefore, provision of quality nursing care is an important consideration when discussing quality of care that is offered to patients undergoing hemodialysis ⁽³⁾.

Job satisfaction is a crucial component of organizational development. Managers establish strategies with the goal of raising employee happiness and

achieving the highest levels of responsibility, creativity, and productivity ⁽⁴⁾. International organizations such as the World Health Organization (WHO), the International Council of Nurses (ICN) and the International Labor Organization (ILO) have identified inadequate working conditions that can affect nurses' health and job satisfaction, including increased workload, lack of human resources, fixed-term contracts that decrease job security, lack of supplies to provide services and low salaries ⁽⁵⁾.

Positive ideas that characterize how people behave at work are called "job satisfaction." It is regarded as the degree of feeling about a task and its crucial components ⁽⁶⁾. Accordingly, among the elements affecting the workforce's

productivity are both workplace stress and occupational satisfaction. Keeping up these levels of nurses professionals to provide high-quality nursing care, job satisfaction is essential in hemolysis unit (7).

When work is a major source of stress, nurses' job satisfaction may decline. The multifaceted emotional sense of job satisfaction that nurses have is influenced by their expectations and values, their environment, and their personal characteristics (8).

Methods

Study Design and Setting

A descriptive design was carried out among nurses working in Hemodialysis units in Baquba Teaching Hospital and Baladrooz General Hospital units in Diyala Governorate from December, 14th 2022 to March 20th, 2023.

Study Sample and Sampling

A non-probability "purposive" sample size of (80) nurses working in the hemodialysis units was used. The sample was chosen according to certain inclusions and exclusions criteria that included those nurses who working in the hemodialysis units and nurses from different educational levels. An excluding nurse those who refused to participate in study.

Ethical Considerations

Ethical approvals for this study were obtained from the College of Nursing, University of Baghdad. The study overall purpose and how to complete the questionnaire to the study participants were explained. The participants were instructed that their data would be kept private and safe during and after their participation in the study. The study participants also informed that their

names will be kept anonymous in the study's introduction, publishing, and/or subsequent publication.

Instrument of the Study

The study's instruments have two part part1: the sociodemographic characteristic of nurses (8) questions and part 2: Job Satisfaction Scale for Clinical Nurses (JSS-CN) consists of (38) items. The JSS-CN composed of (15) question on work and workplace-related items. (10) Items pertaining to management and the supervisor, (5) items pertaining to rewards and perks, (5) recognition-related items, and (3) items on communication. Scoring was as the following: low satisfaction= 1 to 2.33 for all job satisfaction criteria, moderate satisfaction= 2.34-3.67, high satisfaction for 3.68-5.

Part2: Nurses' socio-demographic data was contained of (8) components: age, sex, marital status, education level, monthly income, experience with hemodialysis, and kind of work.

Validity and Reliability of Study Instrument

The questionnaire's validity was evaluated by 12 experts, and its reliability was evaluated by a pilot study that involved gathering information from 10 employees and running tests Cronbach alpha (0.70, 0.87).

Data Analysis

The data was analyzed using the statistical analysis system (SPSS), applying version 25 and contingency Coefficients. Both absolute number and relative frequencies are used to characterise categorical variables, whilst the mean, standard deviation, minimum, and maximum values are used to summarise quantitative variables.

Results**Table 1.** Socio-Demographic Characteristics of the Study Sample.

Demographic Variables	Groups	F.*	%
1.sex	Male	42	52.5
	Female	38	47.5
2.Age	21-30 years	57	71
	31-40 years	21	26.5
	41 years & over	2	2.5
3. Nursing qualification	Nursing school graduate	5	6.2
	Institute graduate	23	28.8
	Bachelor graduate	52	65.0
4.Marital Status	Single	31	38.8
	Married	45	56.2
	Divorced	3	3.8
	Widowed	1	1.2
5. Monthly Income	300.000-600.000	15	18.8
	601.000-900.000	55	68.8
	901.000and above	10	12.5
6.Experance Years in Hospital	1-5 Years	57	71.2
	6-10 Years	13	16.2
	11 -15 Years	9	11.2
	16&above Years	1	1.2
7.Experience Years in Hemodialysis unit	1-5 Years	48	60.0
	6-10 Years	14	17.5
	11 -15 Years	15	18.8
	16&above Years	3	3.8
8 .Type of Work	Morning	44	55.0
	Evening	36	45.0

F= frequence, %= percentage.

Table (1) revealed that (52.2%) of the studied sample were male, 71% of them were in that age range between 21-30 years, and 65% held Bachelor degree in nursing. More than half of the study sample (56.2%) were married and most of them (65.7%) were paid between 601,000 to 900,000 Iraqi dinars, nearly 3/4 of nurses had the experience of (1-5) years working in hospital and 60% of total study participants had (1-5) years' experience in hemodialysis center, and 55% of nurses were working in the morning shift.

Table 2. Nurses Job Satisfaction in Hemodialysis units

Specific Nurses Job Satisfaction domin	Items	M.S	SD	Ass.
1.Work and workplace	17	3.59	1.01	MS
2.Supervisor and management	10	3.63	1.20	MS
3.Benefits and rewards	4	0.592	1.09	MS
4.Recognition	3	3.33	1.11	MS
5.Communication	4	2.85	1.20	MS

M.S =Mean of M.S= mean score, SD=standard deviation, Assess. =Level of assessment, 1-2.33 = Low Satisfy (LS), 2.34-3.67= Moderate satisfy (MS), 3.68-5= High Satisfy (HS).

Table (2) showed that all areas nurses job satisfactions domans were within moderate levels of satisfaction, with corresponding averages of scores.

Table 3. Association between Socio-Demographic with Nurses Job Satisfaction in Hemodialysis units

Socio-demographic and clinical variables	Nurses Job Satisfaction		
	Contingency Coefficients	P value	Sig.*
sex	0.189	0.416	NS
Age groups	0.296	0.319	NS
Marital status	0.034	0.409	NS
Nursing qulification	0.312	0.254	NS
Monthly Income	0.412	0.034	HS

* Sig. = significance level, P Value ≤ 0.05= significant.

Table (3) showed indicated that there is no statistically significant relationship between socio-demographic factors (sex, age group, and marital status) and nurses' job satisfaction, with the exception of a very significant relationship between monthly salary and job satisfaction at a p value less than 0.05.

Discussion

Based on the mean of the assessments, the results showed that nurses' job satisfaction ratings were within moderate ranges in all dimensions (work and workplace, supervisor and management, benefits and rewards, and recognition and communication)

The study's findings are corroborated by a descriptive cross-sectional survey carried out in 2022 at a general acute care hospital in the Southwest of the United States. Of those who worked on surgical wards for one to five years, (34%) reported being "moderately satisfied" with their coworkers. Mean result (3.59)⁽⁹⁾.

The results of another quantitative descriptive cross-sectional survey conducted in 2016 in the North-West province of South Africa, showed that the subscale for nurses had the highest levels of participant satisfaction (Mean= 4.02). One of the subscales with the greatest levels of dissatisfaction (Mean= 2.99) was family/work Balance⁽¹⁰⁾.

The findings are backed by a correlation descriptive research conducted in 2019 at a public hospital in Athens, Greece. This survey's revealed that 88% of participants were unsatisfied with their pay⁽¹¹⁾.

The current study result is consistent with cross-sectional research conducted in Addis Ababa; Ethiopia found that 63% of midwives were satisfied with the acknowledgment they received from their work⁽¹²⁾.

The current study results on nurses' satisfaction are in line with the other findings from Iran found that emotional tiredness among nurses was at a low level and job satisfaction was at a moderate level⁽⁷⁾.

A Cross-sectional study conducted at three hospitals in Jordan in 2022 the study revealed that somewhat favorable relationship between practices factors and work satisfaction (Pearson correlation coefficient: 0.475, p-value: 0.5)⁽¹³⁾.

The result of study shows that, two third of the study samples were between the ages of 21 and 31. Male study samples account for the majority of the sample population. The majority of nurses have a bachelor's degree in nursing, and over half of them were married. Most of them have a barely sufficient of

monthly income. Concerning the nurses' years of experience in the hospital, nearly three quarter of nurses had the experience of (1-5) years, and more than half had (1-5) years' experience in hemodialysis center, and the same percentage of nurses were working in the morning shift.

These results are corroborated by study conducted in Baghdad Teaching Hospitals in 2022, when males made up 63% of participants overall and women 37%, 49 percent of participants were between the ages of 18 and 27. Of individuals, less than half were graduates of an educational institution. The remaining halves of the nurses were all single, while the remaining nurses were all married. Most of them (37%) have one to five years' experience as nurses⁽¹⁴⁾.

Age and monthly pay were the only two demographic parameters that significantly predicted work satisfaction, according to descriptive quantitative cross-sectional research done in 2012 in the al-Najaf al-Ashraf Governorate. These findings may have an impact on policy choices involving human resource management⁽¹⁹⁾.

The findings supported by a quasi-experimental study conducted in Baghdad University's Bab-Almudam colleges 2021. Participants' ages, which varied from 40 to 93 years old with a mean of 56.8 years old. A previous study included (80) participants who were between the ages of 40 and 59, and almost the same number of them between those ages of 40 and 49 and 50 to 59⁽²⁰⁾.

The current study result was corroborated by a descriptive survey done in the College of Nursing/ University of Baghdad in 2020 revealed that more than half of the participants (58%) were female. In the current study, those aged 21 to 30 represented the majority of participants (98%). This is supported by previous study found that the majority of the sample (90%) were a secondary school graduates and (93%) of them were single. Plus, their monthly income was (69%) revenue that is only just adequate⁽¹⁷⁾. Furthermore, a cross-sectional survey from Iraq revealed that 52.8% of participants

were men with an age range between 24 and 60 years, with a mean age score of 36.7 years (SD 7.37). In comparison to men (35.4; SD 6.2 years), women were slightly older on average (38.2; SD 8.3 years)⁽¹⁸⁾.

These results are supported by another study from Iraq revealed that females represented the majority of study participants. For nurses, 64.3% of the them were between the ages of 20 and 29, with a high percentage of them working in general settings (60.7%) and mental units, and (48.6%) were married⁽¹⁵⁾

A Jordanian cross-sectional study conducted at three Jordanian hospitals found that women made up 60%, giving a female to male ratio of 1.5:1 and less than half (46%) of study participants were between the ages of 18 and 27., plus, 74% were married. The bulk of them (34%) worked on surgical wards for one to five years. These outcomes are in line with research that discovered that 46% of participants were between the ages of 18 and 27; 74% were married; and 38% had between 1 and 5 years of nursing experience⁽²⁰⁾.

Conclusion

The study findings show moderate levels of job satisfaction within all dimensions (Work and workplace, supervisor and management, benefits and rewards and recognition and communication). A high significant association between monthly income with job satisfaction.

Recommendations

The study recommends health institution to improving the monthly income for nurses and conducting future studies on this subject by taking a sample from a wider group to determine the level of general satisfaction of nurses and its impact on social status.

Acknowledgments

The authors express their gratitude to the University of Baghdad's College of Nursing for their help with the accomplishment of the present research.

Conflict of interest

None to declare.

Funding

This study did not receive any specific funding from public, commercial, or not-for-profit organizations.

Data availability

The data supporting the findings of this study are not publicly available due to ethical and privacy considerations but may be made available from the corresponding author upon reasonable request and with appropriate approval.

Reference

1. Al-Haroon HI, Al-Qahtani MF. The demographic predictors of job satisfaction among the nurses of a major public hospital in KSA. *Journal of Taibah University Medical Sciences*. 2020 Feb;15(1):32.
2. Alaa Hamza Hermis, Rajaa Ibrahim Abed. Effectiveness of Self-Regulation Fluid Program on Patients with Hemodialysis Self-Efficacy for Fluid Adherence in Al-Diwaniyah Teaching Hospital. *Iraqi National Journal of Nursing Specialties*. 2022 Jan. 6 [cited 2023 Jul. 18];34(2):74-88. Available from: <https://injns.uobaghdad.edu.iq/index.php/INJNS/article/view/577>
3. Mona, M. M., & Safaa, H.(2017). Nurses' Job Satisfaction Levels: Its Effect on Quality of Nursing Care Offered to Patients Undergoing Hemodialysis. *World Journal of Nursing Sciences*, 3 (3), 45-55.
4. okabammar. Impact of Job Satisfaction on Job Performance of Nurses at Al-SuwairaGeneralHospital. *Iraqi National Journal of Nursing Specialties*, 2017 Dec. 30 [cited 2023 Jul. 18];30(2):72-81. Available from: <https://injns.uobaghdad.edu.iq/index.php/INJNS/article/view/282>
5. Hussein Z. Nurses' Job Satisfaction in Respiratory Isolation Units of Coronavirus Disease. *Iraqi National Journal of Nursing Specialties*. 2022 Jun. 30 [cited 2023 Jul. 18]; 35(1):11-9. Available from: <https://injns.uobaghdad.edu.iq/index.php/INJNS/article/view/496>

6. Alnaser H. Evaluation of Job Satisfaction among Nurses Working at Primary Health Care Centers in Samawa City. *Iraqi National Journal of Nursing Specialties*. 2022 Dec. 30 [cited 2023 Jul. 18];35(2):1-7. Available from: <https://injns.uobaghdad.edu.iq/index.php/INJNS/article/view/582>
7. Hussein Z. Nurses' Job Satisfaction in Respiratory Isolation Units of Coronavirus Disease. *Iraqi National Journal of Nursing Specialties*. 2022 Jun. 30 [cited 2023 Jul. 18]; 35(1):11-9. Available from: <https://injns.uobaghdad.edu.iq/index.php/INJNS/article/view/496>
8. Maghsoud F, Rezaei M, Asgarian FS, Rassouli M. Workload and quality of nursing care: the mediating role of implicit rationing of nursing care, job satisfaction and emotional exhaustion by using structural equations modeling approach. *BMC nursing*. 2022 Oct 8; 21(1):273.
9. Rupp K, Intention to stay & RN job satisfaction: the influence of caring leadership 2017 (Doctoral Dissertation). <http://web.b.ebscohost.com/libproxy.unm.edu/ehost/detail/detail?vid=15&sid=1c8703f4-bf5c-46f9-89b1>
10. Majeed HM, Hassan AF, Abid RI. Evaluation of nurses' knowledge and attitudes toward pain management at Baghdad Teaching Hospitals. *Indian Journal of Forensic Medicine & Toxicology*. 2020 Apr 29;14(2):1575-9.
11. Ntateri E, Gerogianni G, Kelesi M, Faso G. Correlation of the working environment with the quality of nursing care. *Health & Research Journal*. 2019 Jan 1;5(1):30-7.
12. Bekru ET, Cherie A, Anjulo AA. Job satisfaction and determinant factors among midwives working at health facilities in Addis Ababa city, Ethiopia. *PloS one*. 2017 Feb 17; 12(2):e0172397.
13. Salahat MF, Al-Hamdan ZM. Quality of nursing work life, job satisfaction, and intent to leave among Jordanian nurses: A descriptive study. *Heliyon*. 2022 Jul 1; 8(7).
14. Majeed HM, Hassan AF, Abid RI. Evaluation of nurses' knowledge and attitudes toward pain management at Baghdad Teaching Hospitals. *Indian Journal of Forensic Medicine & Toxicology*. 2020 Apr 29;14(2):1575-9.
15. Majeed H M, &Atiyah H H. Effectiveness of an Educational Program on Employees Knowledge concerning Contributing Factors and Early Detection for Prostate Cancer in Baghdad University Colleges in Bab-Almudam. *P J M H S*. 2021; 15(3):794-798
16. Majeed HM, Atiyah HH. Assessment of Employees' Knowledge Concerning Contributing Factors and Early Detection for Prostate Cancer in Baghdad University Colleges in bab-Almudam. *Indian Journal of Forensic Medicine. & Toxicology*. 2021; 15(1):1712-7.
17. Hassan AF, Majeed HM, Jasim AH. Assessment of Undergraduate Critical Care Nursing Students' Knowledge and Attitudes toward Caring of Dying Patients in Colleges of Nursing at Baghdad University. *Indian Journal of Forensic Medicine & Toxicology*. 2020 Jul 30; 14(3):1142-6.
18. Ibrahim IR, Ibrahim MI, Majeed IA, Alkhafaje Z. Assessment of job satisfaction among community pharmacists in Baghdad, Iraq: a cross-sectional study. *Pharmacy Practice (Granada)*. 2021 Mar;19(1).
19. Abbas HS, Mohammed QQ. Assessment the level of Job Satisfaction among Nurses working in Psychiatric and General Wards at Teaching Hospitals in Baghdad City: Comparative Study. *Assessment*. 2021 Dec; 44(06).
20. Salahat MF, Al-Hamdan ZM. Quality of nursing work life, job satisfaction, and intent to leave among Jordanian nurses: A descriptive study. *Heliyon*. 2022 Jul 1; 8(7).