

Impact of Nurse's Job Satisfaction Upon Quality of Nursing Care for Patients Undergoing Hemodialysis

Luay A. Mansoor^{1*}, Tahseen Rajab Muhammad²

¹Ministry of Health, Diyala Health Directorate, Diyala, Iraq.

²Department of Adult Nursing, College of Nursing, University of Baghdad, Baghdad, Iraq.

*Correspondence to: Luay A. Mansoor (E-mail: Luay.Abd2102m@conursing.uobaghdad.edu.iq)

(Submitted: 20 June 2023 – Revised version received: 11 July 2023 – Accepted: 09 August 2023 – Published Online: 26 December 2023)

Abstract

Objectives: This study aimed to assess nurses' job satisfaction levels at hemodialysis units and to find out the relationship between nurses' job satisfaction and quality of nursing care.

Methods: A descriptive cross-sectional design study was carried out among nursing working in hemodialysis units at Baquba Teaching Hospital and Baladrooz general Hospital, study starting from 14th December 2022 to 10th March 2023. A non-probability (purposive) sample of (80) nurses working in hemodialysis units in Baquba and Baladrooz Hospital. The study instruments consist of three parts; Part one is involved the demographic information of nurses (8) items; the second part is involved Job Satisfaction Scale for Clinical Nurses (JSS-CN), it is comprised of (38) items and observational checklist for nurses practices of hemodialysis procedures consist from (29) items. Content validity of the questionnaire was determine through a panel of (12) experts. Reliability of the instrument scales is determined by using Pearson Correlations (0.87, 0.84) for of job satisfaction scale and observational checklist for nurses practices respectively. The collected data will be categorized, scored, tabulated, and analyzed by computer using statistical package for social science (SPSS) version 25. Descriptive statistics will be used in the form of frequency distribution and percentages. Pearson correlation coefficient statistical tests were applied for data analysis.

Results: Findings of the current study showed that (75%, 65%), of the studied nurses offered moderate job satisfaction level and good quality of nursing care respectively. There was highly statistically significant relation between job satisfaction and quality of nursing care offered to patient undergoing haemodialysis.

Conclusion: This study concluded that, nearly three quarter of the nurses were coping with their jobs and they are satisfied to certain extent. However, nearly two third of them offered good quality of nursing care to patient undergoing hemodialysis.

Keywords: Impact, nurse's, job satisfaction, nursing care

Introduction

Nurses' job satisfaction within essential nursing duties. Nurses' job satisfaction within nursing care to patients undergoing hemodialysis. Work environment in hemodialysis units is highly technical and nurses need to master complex hemodialysis machine/equipment to provide proper and safe care.¹ Patients can experience physical effects of fatigue, pruritis, cramping, and deterioration of bone health, and can also be faced with the psychosocial burden of being dialysis-dependent.² Nurses constitute an important pillar of the health care system. The stability of this pillar ensures the provision of high-quality and safe patient care and effective health care delivery. The World Health Organization has expressed its concerns about the suboptimal quality of health care services to leading health care providers and managers with great fanfare and these issues have received substantial media attention.³ Various variables can affect the quality of nursing care, increased workload and, subsequently, increased stress could reduce the quality of nursing care. Job satisfaction seems to be another factor mediating the relationship between workload and the quality of nursing care.⁴ Workload as a strong stressor can negatively affect the job satisfaction of nurses. Job satisfaction is a multidimensional emotional concept which reflects the interaction between nurses' expectations and values, their environment and personal characteristics.⁵

Methods

Descriptive correlational design was utilized to achieve the aim of this study. This study was conducted in two different settings (the hemodialysis units of the Baquba teaching hospital and Baladrooz general Hospital) at Diyala- City, Iraq. A Purposive sampling technique was used to recruit the participants, who working in hemodialysis units in at Diyala- City, Iraq. This study starts from 14th December 2022 to 10th March 2023. The inclusion criteria for participation in the study included (a) nurses aged 18 years and above (who working in hemodialysis units); (b) both males and females exclusion criterion. The total study sample consists of 80 participants. There were no particular exclusion criteria, other than working outside the Diyala region. The three tools utilized to conduct this study were used in the following order: First tool; Nurses' demographic data assessment sheets which developed by the researcher to assess age, gender, marital status, qualification degree, nurses' years of experience in hemodialysis unit, and nurses' years of experience in hospital. Second tool; Job Satisfaction Scale for Clinical Nurses (JSS-CN), it is comprised of (38) items and observational checklist for nurses' practices of hemodialysis procedures consist from (29) items. The scoring system for nurse's satisfaction were measured by using a five-point Likert scale, each item was evaluated at the five-point Likert scale (i.e., 1 = strongly disagree, 2 = disagree, 3 = decided, 4 = agree, 5 = strongly agree). This gave possible

minimum and maximum sum total scores of 38 and 190 for job satisfaction. Scoring system for the observational checklist for quality of nursing care offered to a patient undergoing hemodialysis was done as follows; this tool contains 29 items that were measured by using a three point Likert scale ranging from (i.e., 1 = never, 2 = sometimes, 3 = always). This gave possible minimum and maximum sum total scores of 29 and 87 for nurses practices. Validity of data collection tools was done to ensure that, the study content covers all assessment items related to the study and each tool contains assessment items that cover the aim of the study and research question. As well, the tools were reviewed for their completeness and relevance, by 12 experts are expert of Medical Surgical Nursing. The Jury members judged the tools by rating each item for the degree to which it reflects the aim and research question being studied and they recommended some modifications on the tools. After receiving the feedback from the Jury, the researchers made the recommended modifications. Then, the researcher translated the data collection tools into simple Arabic language, after that, the Jury reassessed data collection tools one more time and ascertained that, the face and content validity of the tools are ready to be used. The study proposal was approved by the ethics and research committee in the faculty of nursing. Official permissions to conduct the study were secured. All participants gave their oral informed consent to participate in the study sample. They were informed about the study purpose, procedure and about their rights to refuse or withdraw without giving reasons. The collected data will be categorized, scored, tabulated, and analyzed by computer using statistical package for social science (SPSS) version 25. Descriptive statistics will be used in the form of frequency distribution and percentages. Pearson correlation coefficient statistical tests were applied for data analysis.

Results

Of the 80 nurses, the majority were male (52.5%). The range of age of the participating nurses was between 21 and 31 years, with a mean of 27.67 years (standard deviation [SD]: 5.52). More than 65.5% of the nurses across all the sites held bachelor degree in nursing. The total professional experience of the participants ranged from 1–5 years in hemodialysis unit, with more nurses having experience in hospitals between 1 and 5 years. The detail of nurses' characteristics appears in Table 1.

Table 2 illustrated descriptive assessment of specific domains of job satisfaction among nurses working in hemodialysis center. The results demonstrated that all domains were within moderate satisfy levels for (work and workplace, supervisor and management, benefits and rewards, recognition and communication) their means of score as follows (3.59, 3.363, 2.59, 3.33, 2.85) respectively.

Table 3 illustrated a descriptive analysis of overall nurse's practices for hemodialysis procedure in terms of their frequencies and percentages. The finding revealed nurses' practices levels, (always, some time, and never) as follow (43.8%, 21.2%, and 35%). This finding indicated that nurses had good quality of nursing care delivery to patient undergoing hemodialysis.

Findings of current study revealed a moderate positive correlation between job satisfaction and practices variables as general variables indicated by the Pearson correlation coefficient (0.475) at a *P*-value \leq of 0.5 (Table 4).

Discussion

Throughout the course of the data analysis of the current study, the findings show that the most of the study samples are males (52.5%) while the remaining samples are females, it also demonstrates that (71%) of the study samples are at an age between (21–31) year old. Regarding level of education two third (65.5%) of nurses hold bachelor degree

Table 1. Distribution demographic characteristics of the study sample

Demographic Variables	Groups	F.*	%
1. Gender	Male	42	52.5
	Female	38	47.5
2. Age	21–30	57	71
	31–40	21	26.5
	41–50	2	2.5
3. Educational level	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
	901.000 and 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

*The number of nurses.

Table 2. Descriptive analysis of nurses job satisfaction areas in hemodialysis unit

Specific nurses Job satisfaction domains	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	2.59	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 3. **Descriptive analysis over all of nurses job satisfaction and practices for hemodialysis procedure**

Domain	Levels	F.*	%
Practices level	Never	28	35.0
	Some time	17	21.2
	Always	35	43.8
	Total	80	100.0

*Number of nurses.

Table 4. **Correlations between job satisfaction and practices among hemodialysis nurses**

Pearson Correlation	P value	Sig.
0.081	0.475	Significant

Sig.; significance level.

in nursing, the more than half of them are (56.2%) were married, (68.8%) of the have a barely sufficient of monthly income. Concerning the nurses experience years in hospital nearly to three quarter 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 (55%) of nurses were working in the morning shift. These findings agreed with study done by⁶ who assessed the effect of work conditions on the perceived quality of care among nurses working in hemodialysis centers in Asser region. The current study included 109 participants. Among them, there were 89 females (81.7%) and 20 males (18.3%). The most frequent age group was 31–40 years (62.4%). The most frequent duration of working experience was more than 10 years (34.9%). The most frequent academic degree was bachelor's degree (70.6%).

This finding is in accordance with Alotaibi,⁷ who stated that the participants were predominantly male nurses (67% of the sample population), while the rest were female, and some did not want to disclose their gender. The majority of the participants were nurses and had bachelor's degrees as their highest level of education. More than half the sample reported that they faced problems managing their family life due to workload. The respondents' average age was 36.71 years (\pm 6.05), meaning that the participants were most likely in their mid-thirties, while the average years of experience was 11.71 (\pm 6.30), meaning that most of the participants had more than 10 years' nursing experience. These findings are in line with study done by Mohammed et al.,⁸ who stated that the most of the study participants (46%) were ages group (18–27) years old, nearly three quarter of study participants (74%) were married, and (38%) of them had (1–5) years were employment in nursing. These findings agreed with study done by Majeed et al.,⁹ who stated that the majority of the study were male who accounted for (63%) of the total participants while female constituted (37%). Most of participants (49%) were ages between (18–27) years old, a high percentage of them were have institute graduate (40%), (50%) of the nurses were single and the remainder was married. Majority of them (37%) were employee (1–5) years in employment in nursing. This finding are agrreements with many studies,^{10–13} it was discovered that the majority of the study participants were female who accounted for (60%) of the total participants while male

constituted (40%) making a female male ratio of 1.5:1. Most of the study participants (46%) were between ages 18 and 27 years old. Seventy four percent of the nurses were married and the remainder was single (38%). Majority of them (34%) were employee (1–5) years in surgical wards.

Discussion of the mean of score for the job satisfaction items. the present study revealed that, 75% of nurses who participated in this study were satisfied related to their work in the hemodialysis unit respectively. Another study agree with the finding of the study are agree with Salahat & Al-Hamdan¹⁴ the The RNs in the current study were “moderately satisfied” ($X > 3$) in terms of: 1) co-workers— such as nursing peers and the physicians they work with; 2) interaction—such as the social contact with their colleagues after work, care delivery method used in the unit, and opportunities for social contact at work and for professional interactions with other disciplines; 3) praise/recognition— such as recognition from immediate supervisor, work peers, and work supervisor, and the amount of encouragement and positive feedback; and 4) control/responsibility— such as the opportunities for career advancement, control over occurrences in the work setting, amount of responsibility, participation in organizational decision making, and control over work. The results with the other subscales and overall global score differ with other studies.^{15,16} These findings are in the same line with findings of many studies the present study reported that, overall quality of nursing care offered to satisfied, as well less half of them were satisfied to certain the patients undergoing hemodialysis, their job from the perspective of availability of that, 74.3, 10.4 and 15.3% of the nurses offered good safety measures in hemodialysis units, which is reflected quality, good quality to certain extent and poor quality of by the following items; supplies and resources available nursing care to the patients throughout the whole for infection control, strict rules to follow infection control hemodialysis sessions respectively.^{1,17,18} However, other previous studies have shown higher and lower levels of satisfaction, such as the studies by.^{19–20} The difference in the results is probably attributed to the difference in the sample populations used and the selected settings. Every nursing professional has a different perception because their experiences are subjective in nature, which probably caused the discrepancies in the results. Thus, it is important to conduct studies using a wide sample population to determine general views on health care professionals' job satisfaction. The salary of nurses was demonstrated as the most powerful factor of job dissatisfaction. The findings show that nurses pay a great deal of attention on their remuneration. They indicated that if nurses are paid according to the structure of the Ministry of health; if they receive on time their salaries and if they are advanced each year; then their job satisfaction will automatically increase. Failure to provide these advantages, it causes dissatisfaction among nurses.²¹ The finding of the study agrees with Shalonda,²² who reported that the study reveals that 74% were satisfied, while 26% were dissatisfied applying their own methods of doing their jobs, of being someone in the community with the overall satisfaction of 87%, and 76% satisfied with their freedom to use own judgment. However, recognition is not experienced by all employees which should be addressed by an organisation. Table 3 presented level of nurse's practices for hemodialysis procedure based on mean of score items. The findings of nurse's practices regarding hemodialysis procedure demonstrated nurses have good practices. These

findings in agreements with Ismail et al.,²³ who stated that the result of the current study revealed that work environments in this unit were characterized by poor foundations for quality of care, participation in hospital affairs, nurse-physician team work and also lack of staffing and resources.

This finding is in accordance with Abd Elkhaliq et al.,²⁴ who reported that the nurses' level of practice about care of children undergoing hemodialysis therapy this table clarified that, more than half of the studied nurses had competent level of practice regarding measuring of blood pressure and pulse (66% and 60%) respectively, while more than half of them (56%) had incompetent level of practice regarding nursing care during hemodialysis session and measurement of body weight. Similar findings were found in a study done by Al-Mawsheki,²⁵⁻²⁶ who found that more than half of studied nurses (56%) had satisfactory level of practice regarding care in hemodialysis therapy. The current study revealed a moderate positive correlation between job satisfaction and practices variables as general variables indicated by the Pearson correlation coefficient (0.475) at a P -value \leq of 0.5. This result is congruent with Salahat & Al-Hamdan,¹⁴ regarding the relationship between quality of nursing work life and job satisfaction, the results of the Pearson's correlation test indicated a strong and significantly positive correlation (191) ($r = 0.579$, $P = 0.000$). This study supported

the correlation between the quality of care and job satisfaction of nurses. These findings are compatible with those reported by.²⁷⁻³²

Conclusion

Job satisfaction for hemodialysis nurses is influenced by experiences of the nurses, environmental factors and quality of care offered to the patients. This study concluded that, more than two third of the nurses were satisfied by their jobs. However, nearly two third of them offered good quality of nursing care to patients undergoing hemodialysis. As well there are statistically significant moderate positive correlation ship between job satisfaction and quality of nursing care.

Acknowledgements

This research was funded by authors. Moreover, we would like to thank the study. Participants and data collectors for their fully participation and responsible data collection.

Conflict of Interest

None declared. ■

References

- Mona M M, & Safaa H. Nurses' Job Satisfaction Levels: Its Effect on Quality of Nursing Care Offered to Patients Undergoing Hemodialysis. *World Journal of Nursing Sciences*. 2017; 3 (3): 45–55.
- Patel D M, Raina R, & Jaar B G, Management of hemodialysis patients. *Frontiers in Medicine*. 2022; 9.
- Al-Haroon H I, & Al-Qahtani M F. The demographic predictors of job satisfaction among the nurses of a major public hospital in KSA. *Journal of Taibah University Medical Sciences*. 2022; 15(1): 32.
- Maghsood F, Rezaei M, Asgarian F S, & 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; 21(1): 273.
- Inegbedion H, Inegbedion E, Peter A, & Harry L, Perception of workload balance and employee job satisfaction in work organisations. *Heliyon*. 2020;6(1): e03160.
- Shaban, N, Bayapa R N, Fayed M A, Khalid N, The Effect of Work Conditions on the Perceived Quality of Care among Nurses Working in Hemodialysis Centers in Asser Region, Saudi Arabia: A Cross-Sectional Study. *Journal of Research in Medical and Dental Science*. 2022;7(11):229–245.
- Alotaibi A G A T, Work environment and its relationship with job satisfaction among nurses in Riyadh region, Saudi Arabia (Doctoral dissertation, Majmaah University). 2022;1–122.
- Mohammed T R, Majeed H M, & Jasim A H, Evaluation of Quality of Nursing Documentation in Surgical Wards at Baghdad Teaching Hospitals. *Medico-Legal Update*. 2020;20(2):292–297.
- Abid, R. I., Majeed, H. M., & Mohammed, T. R. (2018). Assessment of nurses documentation for nursing care at surgical wards in baghdad teaching hospitals. *Journal of Pharmaceutical Sciences and Research*, 10(10), 2568–2571.
- Majeed H M, Hassan A F, & Abid R I, Evaluation of nurses' knowledge and attitudes toward pain management at Baghdad Teaching Hospitals. *Indian Journal of Forensic Medicine & Toxicology*. 2020; 14(2): 1574–1579.
- 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.
- Majeed H M, & Atiyah H H. 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): 1712–1717.
- Hassan A F, Majeed H M, & Jasim A H. 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;14(3): 1142–1146.
- Salahat M F, & Al-Hamdan Z M, Quality of nursing work life, job satisfaction, and intent to leave among Jordanian nurses: A descriptive study. *Heliyon*. 2022; 8(7): e09838.
- Almansour H, Gobbi M, Prichard J, & Ewings S, The association between nationality and nurse job satisfaction in Saudi Arabian hospitals. *International Nursing Review*. 2020; 67: (420–426).
- Liton R, Nurses' job satisfaction at the Southeast District, Chattogram in Bangladesh: A cross-sectional study. *International Journal of Caring Sciences*. 2021; 14(1): 679–687.
- Wang Y, Dong W, Mauk K Li P, Wan J, Yang G., & Hao M, Nurses' practice environment and their job satisfaction: A study on nurses caring for older adults in shanghai. *PloS one*. 2015;10(9): e0138035.
- Hayes B, Bonner A, & Douglas C, Haemodialysis work environment contributors to job satisfaction and stress: a sequential mixed methods study. *BMC nursing*. 2015; 14(1): 1–13.
- Halawani L A, Halawani M A, & Beyari G M, Job satisfaction among Saudi healthcare workers and its impact on the quality of health services. *J Family Med Prim Care*. 2021 May; 10(5): 1873–1881.
- Aljohani K A, Nurses' job satisfaction: A multi-center study. *Saudi J Health Sci*. 2019; 8:167–81.
- Gatoya C, The Role of Job Satisfaction of Nurses on Provision of Hospital Services to Patients in Rwanda (Doctoral dissertation, The Open University of Tanzania). 2018;1–288.
- Shalonda Simon, "Factors influencing job satisfaction of registered nurses working in public hospitals in Windhoek, Namibia." PhD diss., Stellenbosch: Stellenbosch University. 2019;1–99.
- Ismail M, Angham A M, Abed A, & DN S, Impact of nursing staff perception of work environment on turnover rate in hemodialysis unit. *The Medical Journal of Cairo University*, 88(March). 2020; 85–90.
- Abd Elkhaliq Ibrahim M, El-Sayed Ouda W, & Salah Ismail S, Assessment of nurses' performance regarding care of children undergoing hemodialysis therapy. *Egyptian journal of health care*. 2019; 10(3): 113–125.
- Al-Mawsheki E, Ibrahim M H, & Taha N M, Nurses' Knowledge and Practice Regarding Care for the Patients during Hemodialysis. *Med J Cairo Univ*. 2016; 84(1): 1135–41.

26. Kiliç Barmanpek N, Şahin A, Demirel C, & Parlar Kiliç S, The relationship between nurses' job satisfaction levels and quality of life. *Perspectives in Psychiatric Care*. 2022; 58(4): 2310–2320.
27. Jasim AH, Majeed H M, & Mohammed T R. (Knowledge and Protective Health Behaviors Concerning Risk Factors for Coronary Heart Disease among Baghdad University Students. *Medico Legal Update*. 2020; 20(2): 234–239.
28. Düzgün, F, Yılmaz D, Taş T A, Bor N S, & Zengi S, The correlation between work satisfaction and quality of life in nurses and risks in the work environment: A university hospital example. *Archives of Health Science and Research*. 2020; 7(1): 50–59.
29. Aktaş G, & Özvürmaz S, Quality of life of nurses and determination of affecting variables. *Journal of Nursing Science*. 2019; 2(3): 14–18.
30. Çelik Y, & Kiliç İ, The relationships between job satisfaction, professional burnout and quality of life in nurses. *Kocatepe Medical Journal*. 2019; 20:230–238.
31. Ibrahim N K, Alzahrani N A, Batwie A A, Abushal R A, Almogati G G, Sattam M A, & Hussin B K, Quality of life, job satisfaction and their related factors among nurses working in king Abdulaziz University Hospital, Jeddah, Saudi Arabia. *Contemporary Nurse*. 2016; 52(4): 486–498.
32. Mousa A M, Abd R I, & Majeed H M. Nursing College Students' Knowledge about Dyslipidemia in University of Baghdad. *P J M H S*. 2021; 15(4): 1158–1161.

This work is licensed under a Creative Commons Attribution-NonCommercial 3.0 Unported License which allows users to read, copy, distribute and make derivative works for non-commercial purposes from the material, as long as the author of the original work is cited properly.