

Patient Satisfaction with the Quality of Nursing Care in Public and Private Hospitals in Erbil City

Ali Taher Mohammedameen; *Department of Nursing, College of Nursing, Hawler Medical University, Erbil, Kurdistan Region, Iraq.* (Correspondence: ali.mohammedameen@hmu.edu.krd)

Azzadin Kamal Mahmod; *Department of Nursing, College of Nursing, Hawler Medical University, Erbil, Kurdistan Region, Iraq.*

Yousif Bakr Omar; *Department of Nursing, College of Nursing, Hawler Medical University, Erbil, Kurdistan Region, Iraq.*

Haval Mohammed Qadir; *Department of Nursing, College of Nursing, Hawler Medical University, Erbil, Kurdistan Region, Iraq.*

Sideeq Sadir Ali; *Department of Nursing, College of Nursing, Hawler Medical University, Erbil, Kurdistan Region, Iraq.*

Burhan Ezzadin Sabir; *Department of Nursing, College of Nursing, Hawler Medical University, Erbil, Kurdistan Region, Iraq.*

ABSTRACT

Background and Objectives: Patient satisfaction is an essential parameter in assessing the quality of care and healthcare facility performance and the most important competitive advantage of the government and private hospitals. The study aims to investigate patients' satisfaction regarding the quality of nursing care in both public and private hospitals.

Methods: A quantitative, comparative study was conducted among 330 patients (165 from public hospitals and 165 from private hospitals) in Erbil City from October 2023 to February 2024. Data were collected through structured interviews using a standardized questionnaire and analyzed using descriptive and inferential statistics via the Statistical Package for the Social Sciences.

Results: Among the 330 patients surveyed, the majority were aged 18 to 39 years (55.8%), predominantly female (65.5%) and married (75.2%). Notably, 50.3% had been hospitalized over four times in public hospitals. Patients reported their health status as fair (38.8% before hospitalization), with 64.2% transferred from other facilities. In private hospitals, 100% of patients had single occupancy in their rooms. Satisfaction scores for nursing care were significantly higher in private hospitals compared to public ones ($p < 0.001$). Significant associations were observed between sociodemographic factors and nursing care satisfaction ($p < 0.001$), with gender showing no significant association ($p = 0.819$).

Conclusions: The study concludes that patients in private hospitals exhibit strong satisfaction with the quality of nursing care compared to those in public hospitals. This highlights the importance of addressing disparities in nursing care quality between hospital types to enhance overall patient satisfaction and healthcare outcomes.

Keywords: Patient Satisfaction; Quality of Nursing Care; Public Hospitals; Private Hospitals.

Received: 19/05/2022

Accepted: 22/10/2024

Published: 30/11/2024



INTRODUCTION

Patient satisfaction with nursing care is a critical part of healthcare quality assessment, directly affecting patient outcomes, adherence to treatment plans, and overall healthcare delivery. It measures the patient's perception to which extent they are satisfied with receiving healthcare from their healthcare provider. [1] The quality of nursing care includes several features that contribute to providing the highest care to patients, such as effectiveness, efficiency, patient safety, best patient outcomes, and effective communication by addressing patients' physical, psychological, emotional, sociocultural, and spiritual aspects of care needs competently, resulting in the best possible outcomes. [2, 3] Providing holistic nursing care rather than physical nursing care only increased the patient's level of satisfaction. As such, exploring the relationship between holistic care and patient satisfaction becomes imperative for optimizing healthcare delivery and improving patient-centered outcomes. [4] Access to quality nursing care is a fundamental human right that significantly impacts patient Well-being. [5] One of the measurement methods to assess the quality of nursing care is by assessing patients' level of satisfaction. It can be improved by providing proper nursing care. [6, 7] A study conducted in Erbil City in 2021 compared patient satisfaction levels between private and public hospitals. The research findings revealed a significant disparity in satisfaction levels, with patients in private hospitals being approximately 10 times more satisfied with overall healthcare services compared to those in public hospitals. This result underscores the importance of examining differences in patient experiences between healthcare sectors and highlights potential areas for improvement within the public healthcare system. Factors contributing to higher satisfaction rates in private

hospitals may include shorter wait times, perceived higher quality of care, more personalized attention, and better amenities. [8] Lack of understanding of patients' perception regarding the level of satisfaction with adult nursing care provided in private and public hospitals; the main part of hospital care is nursing care, and there is a critical gap in understanding healthcare quality. To compare satisfaction levels between these two types of hospitals, this study aims to provide insights to assess and compare the level of patient satisfaction with the adult nursing care provided by public and private hospitals in Erbil City. This investigation holds significance for healthcare providers, administrators, and policymakers, as it can inform strategies to enhance the quality of nursing care delivery and improve overall patientsatisfaction.

METHODS

A quantitative, comparative study was designed to assess patients' satisfaction with the quality of adult nursing care in private and public hospitals in Erbil City from October 2023 to February 2024. The sample size for this study was determined using a standard formula based on power analysis to detect statistically significant differences in patient satisfaction between public and private hospitals. With nearly 2250 patients admitted monthly to public hospitals, key parameters were established: a confidence level of 95% (with a Z-value of approximately 1.96), a margin of error of 5% (0.05), and an estimated proportion (p) assumed to be 0.5 to maximize variability. Using these parameters, the initial sample size was calculated with the formula $n = Z^2 * p * (1-p) / E^2$. Substituting the values, the calculation yielded approximately 384.16. To account for the finite population size [32] of 2250, the sample size was adjusted.

The adjustment helps maintain the statistical validity of the study. Without this correction, the results may be skewed, leading to incorrect conclusions about the population. Using the formula $n_{adjusted} = n / (1 + (n-1)/N)$ [33], resulting in an adjusted sample size of about 328.6. Ultimately, the study recruited a total of 330 patients, with 165 from public hospitals and 165 from private hospitals. This sample size calculation, based on a 5% margin of error and a 95% confidence level, ensured sufficient statistical power for the study, facilitating meaningful comparisons of patient satisfaction across hospital types. Patients were selected from most of the public hospitals in Erbil City, including Rizgary Teaching Hospital, Hawler Teaching Hospital, Maternity Teaching Hospital, West Emergency Hospital, and East Emergency Hospital. In this study, a total of seven private hospitals were initially identified as eligible candidates for inclusion, namely Paky Hospital, Serdem Private Hospital, Zheen International Hospital, CMC Private Hospital, Mehrabani Surgical Hospital, Hawler Private Hospital, and Zanko Hospital. However, five private hospitals were selected for participation to maintain confidentiality and impartiality without singling out any specific institution. The selection process was conducted based on factors such as accessibility, patient volume, and diversity of services offered. By including a diverse representation of private hospitals, the study aims to comprehensively compare private and public hospitals regarding the quality of adult nursing care in Erbil City while ensuring fairness and confidentiality. This study included adult patients aged 18 years and older, regardless of gender. Patients who were unconscious or had significant mental health issues were excluded to ensure valid responses. Data were collected through structured interviews utilizing a two-part questionnaire. Part I captured

socio-demographic characteristics, while Part II employed the "Patient Satisfaction with Nursing Care Quality Questionnaire (PSNCQQ)" developed by Laschinger et al. [9]. This questionnaire was originally developed by a multidisciplinary research team and was adapted from "The Patient Judgments of Hospital Quality (PJHQ)" questionnaire. Prior assessments of reliability, as indicated by Cronbach coefficients, have consistently demonstrated high values. The scoring of the questionnaire involves calculating a general satisfaction score for each patient by summing the scores for all items and dividing by the total number of items. This process yields a single average score that reflects the patient's overall satisfaction with the nursing care received. Ethical approval was initially obtained from the Ethics Committee at the College of Nursing, Hawler Medical University (Approval No. 5, January 21, 2024). Subsequently, official permission was secured from the General Directorate of Health for data collection in public hospitals. For private hospitals, an official request was made by the university through administrative channels to obtain permission from each hospital's administrative department. Additionally, verbal consent was obtained from each patient before data collection. The collected data were analyzed using descriptive statistics to calculate frequency and percentage distributions. Additionally, for finding the mean difference, the T-test was used, and for finding the level of significance, the Mann-Whitney U test (because they were not normally distributed) was employed to compare variables between groups. All statistical analyses were conducted using the Statistical Package for Social Sciences (SPSS), version 23.

RESULT

Table 1 shows the socioeconomic characteristics of patients in both private and public hospitals. In terms of age distribution, the majority of patients in both hospital types were young adults aged between 18 and 39 years, comprising 55.2% in private hospitals and 55.8% in public hospitals. Middle-aged adults (40-59 years) accounted for 30.9% in private hospitals and 25.5% in public hospitals, while old adults (60-99 years) constituted 13.9% in private hospitals and 18.8% in public hospitals. The mean age and standard deviation for patients in private hospitals were 39.47 ± 15.857 years, whereas in public hospitals they were 40.62 ± 16.797 years. Regarding gender distribution, more patients were females in both private (58.2%) and public (65.5%) hospitals. The majority of patients in both hospital types were married,

comprising 75.2% in private hospitals and 73.3% in public hospitals. Regarding time of hospitalization, the majority of patients in private hospitals (39.4%) were admitted only once in the past two years, whereas in public hospitals, the majority (50.3%) were hospitalized over four times, likely due to the high cost of private hospitals. Before hospitalization, most patients in private hospitals (38.8%) reported their health status as fair, while in public hospitals, a slightly lower percentage (33.9%) reported fair health status. In terms of admission manner, a significant proportion of patients in both private (64.2%) and public (53.3%) hospitals were transferred from another facility. Lastly, in private hospitals, the majority of patients (100%) stayed alone in their rooms, whereas in public hospitals, the majority (79.4%) stayed with more than one other person.

Table 1: Socioeconomic Characteristics of patients in Private and Public hospitals

Variable	Private hospitals n=165	Public hospitals n=165	
	N (%)	N (%)	
Age group (years)	18-39 Young Adult	91 (55.2)	92 (55.8)
	40-59 Middle-aged Adult	51 (30.9)	42 (25.5)
	60-99 Old-Adult	23 (13.9)	31 (18.8)
	M ± SD	39.47 ± 15.857	40.62 ± 16.797
Gender	Male	69 (41.8)	57 (34.5)
	Female	96 (58.2)	108 (65.5)
	Single	23 (13.9)	28 (17)
Marital status	Married	124 (75.2)	121 (73.3)
	Divorced	4 (2.4)	2 (1.2)
	Widowed	14 (8.5)	14 (8.5)

Table 1: Socioeconomic Characteristics of patients in Private and Public hospitals

Variable	Private hospitals n=165	Public hospitals n=165	
	N (%)	N (%)	
Times of hospitalization during the past 2 years	Only once	65 (39.4)	38 (23)
	Twice	23 (13.9)	27 (16.4)
	3 Times	14 (8.5)	11 (6.7)
	4 Times	10 (6.1)	6 (3.6)
	Over 4 Times	53 (32.1)	83 (50.3)
Overall patient's health before hospitalization	Excellent	1 (0.6)	0 (0)
	Good	39 (23.6)	22 (13.3)
	Fair	64 (38.8)	56 (33.9)
	Poor	44 (26.7)	58 (35.2)
	Very Poor	16 (9.7)	29 (17.6)
Manner of admission toward	Unsure	1 (0.6)	0 (0)
	Admitted through the Emergency Department	20 (12.1)	67 (40.6)
	Transferred from another facility	106 (64.2)	88 (53.3)
	Admitted through patient registration/to the unit directly	36 (21.8)	8 (4.8)
	Admitted after day procedure or test	1 (0.6)	2 (1.2)
The number of patients in a room for most of the hospital stay	Others	2 (1.2)	0 (0)
	By yourself	165 (100)	30 (18.2)
	With another patient	0 (0)	4 (2.4)
	With 2 or more patients	0 (0)	131 (79.4)

Table 2 shows the overall level of satisfaction reported by patients, showing a notable disparity between private and public hospitals. Patients in private hospitals exhibited higher levels of satisfaction with nursing care, with 79.4% expressing being 'excellent.' Conversely, a mere 7.9% of them in public hospitals expressed that they were "excellent" regarding the quality of nursing care. In addition to the high percentage of "excellent" patients in

private hospitals, a total of 90.3% of respondents in this setting reported being "excellent" and "very good." In contrast, only 21.8% of patients in public hospitals fell into the same categories. The data reveal that a significant proportion of public hospital patients, 41.2%, reported a "good", 28.5% were "fair", and 8.5% were "poor". Therefore, the total percentage in those similar lower categories was 9.7% among private hospitals.

Table 2: Overall patients' Satisfaction with the quality of nursing care in Private and Public hospitals

Overall Satisfaction	Setting of Hospitals		Total
	Private N=165 N (%)	Public N=165 N (%)	
Excellent	131 (79.4)	13 (7.9)	144 (43.64)
Very Good	18 (10.9)	23 (13.9)	41 (12.41)
Good	13 (7.9)	68 (41.2)	81 (24.55)
Fair	2 (1.2)	47 (28.5)	49 (14.85)
Poor	1 (0.6)	14 (8.5)	15 (4.55)
Total	165 (100)	165 (100)	330 (100)

Table 3 shows the comparative analysis of patient satisfaction with the quality of nursing care between private and public hospitals. The results indicate a very highly significant difference between the two types of hospitals (P-Value <0.001), with patients in private hospitals reporting notably significantly higher satisfaction levels.

The mean satisfaction score in private hospitals was 4.678 with a standard deviation of 0.451, whereas in public hospitals, the mean satisfaction score was lower at 3.478 with a standard deviation of 0.682. This finding underscores the importance of hospital type in influencing patient satisfaction with nursing care.

Table 3: Comparative between public and private hospitals regarding patients' Satisfaction with the quality of nursing care

Total Mean of patients' satisfaction					
Public	Private	Mean	95% Confidence Interval of the Difference		P-Value (Sig.)
Mean ±SD	Mean ±SD	Difference	Lower	Upper	
3.491± 0.698	4.678± 0.451	1.187	1.060	1.314	2344.5* < 0.001 (VHS)**

* Mann-Whitney U test

** Very High significant difference

Table 4 reveals the association between the levels of patients' satisfaction with some variables of socio-demographic data. The age group 18-39 years reported the highest level of "excellent" satisfaction, with 39.3% of patients indicating they were highly satisfied. In comparison, 25.9% of patients in the same age group rated their experience as "very good". For the older age groups (40-59 and 60-99 years), satisfaction levels decrease, with fewer patients reporting "very good" or "excellent" are used. The relationship between age and satisfaction was found to be statistically significant ($p = 0.029$), indicating that younger patients tend to express higher levels of satisfaction. Gender did not show a significant relationship with patient satisfaction ($p = 0.819$), as the levels of satisfaction between male and female patients were fairly comparable. However, slightly more females reported "very good" or "excellent" satisfaction than males, but the difference was not statistically significant. Marital status was significantly associated with satisfaction ($p = 0.020$). Married patients were more likely to report "very good" or "excellent" satisfaction, with 44.9% of married patients indicating high satisfaction, compared to lower satisfaction among single individuals, with only 33.3% of single patients reporting similarly high levels of satisfaction. The number of times a patient had been hospitalized significantly impacted satisfaction ($p = 0.003$). Patients who had been hospitalized more than four times reported the lowest satisfaction levels, with only 33.8% rating their care as "very good" or "excellent". On the other hand, those hospitalized only once were more likely to report high satisfaction (52.4%). Patients admitted through the emergency department (ED) or transferred from another facility showed significantly lower satisfaction levels ($p < 0.001$). Only 17.2% of

ED-admitted patients reported "very good" or "excellent" satisfaction, whereas those admitted through patient registration or elective procedures reported much higher levels of satisfaction. A very significant relationship was found between room-sharing and satisfaction ($p < 0.001$). Patients who were in a room alone or with one other person reported higher satisfaction levels, with 68.2% of these patients rating their experience as "excellent". Conversely, patients who shared rooms with multiple individuals reported lower satisfaction, with only 8.4% rating their care as "Excellent".

Table 4: Association between level of patients’ satisfaction with some variables of socio-demographic data

	Variables	Level patients’ Satisfaction					P-Value (Sig.)
		Poor N (%)	Fair N (%)	Good N (%)	Very Good N (%)	Excellent N (%)	
Age group (years)	18-39	11 (6)	39 (21.3)	42 (23)	19 (10.4)	72 (39.3)	0.029 S
	40-59	4 (4.3)	5 (5.4)	25 (26.9)	12 (12.9)	47 (50.5)	
	60-99	0 (0)	5 (9.3)	14 (25.9)	10 (18.5)	25 (46.3)	
Gender	Male	4 (3.2)	18 (14.3)	34 (27)	12 (9.5)	58 (46)	0.819 NS
	Female	11 (5.4)	31 (15.2)	47 (23)	29 (14.2)	86 (42.2)	
Marital status	Single	4 (7.8)	9 (17.6)	13 (25.5)	8 (15.7)	17 (33.3)	0.02 HS
	Married	10 (4.1)	37 (15.1)	59 (24.1)	29 (11.8)	110 (44.9)	
	Divorced	0 (0)	0 (0)	1 (16.7)	0 (0)	5 (83.3)	
	widowed	1 (3.6)	3 (10.7)	8 (28.6)	4 (14.3)	12 (42.9)	
Times of hospitalization	Only once	5 (4.9)	9 (8.7)	14 (13.6)	21 (20.4)	54 (52.4)	0.003 HS
	Twice	4 (8)	8 (16)	14 (28)	2 (4)	22 (44)	
	3 Times	1 (4)	6 (24)	0 (0)	4 (16)	14 (56)	
	4 Times	1 (6.3)	1 (6.3)	5 (31.3)	1 (6.3)	8 (50)	
	Over 4 Times	4 (2.9)	25 (18.4)	48 (35.3)	13 (9.6)	46 (33.8)	
Manner of admission toward	Admitted through the ED	11 (12.6)	30 (34.5)	19 (21.8)	12 (13.8)	15 (17.2)	<0.001 VHS
	Transferred from another facility	4 (2.1)	17 (8.8)	54 (27.8)	25 (12.9)	94 (48.5)	
	Admitted through patient registration	0 (0)	2 (4.5)	6 (13.6)	3 (6.8)	33 (75)	
	Admitted after day procedure	0 (0)	0 (0)	2 (66.7)	0 (0)	1 (33.3)	
	Others	0 (0)	0 (0)	0 (0)	1 (50)	1 (50)	
The number of patients in a room	By yourself	3 (1.5)	18 (9.2)	21 (10.8)	20 (10.3)	133 (68.2)	<0.001 VHS
	With another patient	0 (0)	1 (25)	2 (50)	1 (25)	0 (0)	
	With 2 or more patients	12 (9.2)	30 (22.9)	58 (44.3)	20 (15.3)	11 (8.4)	

NS= Not significant relationship
S= significant relationship
HS= High significant relationship
VHS= Very High significant relationship

Discussion

In this study, the participants predominantly comprised younger adults, with similar distributions observed in both private and public hospitals (55.2% and 55.8% respectively). Additionally, the majority of the study samples were female and married, and the results align with previous studies conducted by Al-Khafaji Z and Al-Hussein I. [10], Lotfi et al. [11], Karaca A. and Durna Z. [12], and Goes et al. [13]. Concerning the frequency of hospitalization over the past two years, the findings revealed that while the majority of participants in private hospitals were hospitalized only once, those in public hospitals experienced hospitalization over four times more frequently. This result corroborates the findings of studies conducted by Findik et al. [14], Eyasu et al. [15], and Thapa S. and Joshi A. [16] which revealed that most patients in private hospitals were hospitalized only once, compared with those in public hospitals. The study also found that the overall health status of patients in private hospitals before hospitalization was predominantly fair. This finding is consistent with research conducted by Alsaqri S. [17] in Ha'il City, Saudi Arabia. Furthermore, a significant proportion of participants were transferred from another hospitalization facility, which supports the findings of Milutinović et al. [18]. In terms of room arrangements, while most patients in public hospitals shared rooms, all participants in private hospitals stayed alone in their rooms. This trend is similarly observed in studies by Akhtari-Zavare et al. [19] In Tehran most cases were admitted in general wards, and Alharbi, et al. [20] In Saudi Arabia, more than half of the participants shared a hospital room with others, and nearly half had a family member with them during their hospitalization.

The study's investigation into overall patient satisfaction with nursing care revealed notable disparities between private and public hospitals. The majority of participants in private hospitals reported excellent levels of satisfaction, whereas those in public hospitals expressed a good level of satisfaction. These findings are in line with studies by Alhusban M. and Abualrub R. [21] and Mulugeta et al. [22]. Conversely, Lotfi et al. [11], found that most patients were fair with nursing care in specific hospital wards. Karaca A. and Durna Z. [12], found that the patients were more satisfied, which means very good with the nursing care from a private hospital in Istanbul Turkey. KOÇ et al. [23], indicate that patients were generally moderately satisfied with the care they received. The study done by Yusefi et al. [3] in Shiraz, Tehran, revealed that the total quality of nursing care from the patient's perspective was moderate. Thapa S, and Joshi A. [16] in Nepal, The finding revealed that the majority (51 %) of patients had poor satisfaction with the quality of nursing care provided; in this study, the good level equals moderate level because the researcher used five Likert scales. The comparison between public and private hospitals regarding patient satisfaction further substantiates these disparities. The study identified a highly significant difference in satisfaction levels, with patients in private hospitals expressing higher satisfaction rates. These findings agree with Hepsiba R. and Bhattacharjee T. [24] in India, Dinsa et al. [25] in Ethiopia, and Khattak et al. (2012) in Pakistan. Similarly, Sharma S. and Kamra P. [26] observed differing nursing care practices between public and private hospitals. Additionally, Mutiarasari et al. (2021) reported higher satisfaction levels among patients treated in private hospitals compared to public hospitals. This is supported by Ali S. [27], who observed differing

nursing care practices between public and private hospitals. Additionally, Mutiarasari et al. [28] in Indonesia reported higher satisfaction levels among patients treated in private hospitals compared to public hospitals. Regarding the association between the levels of patients' satisfaction with some variables of socio-demographic data related to the quality of nursing care, the study identified significant associations with all variables the biographical data of the patients in both (private and public) hospitals except gender, which did not show a significant relationship with patient satisfaction. These findings are consistent with Charalambous et al. [29] in Cyprus, Siraj S. and Arifa S. [30] in Srinagar, Jammu and Kashmir, India, and Sachdeva S. and Kaur H. [31] in New Delhi Hospital, India, who observed similar trends in patient satisfaction and sociodemographic factors. However, the study found no significant associations between sociodemographic characteristics and nursing care quality in either public or private hospitals, which is consistent with findings by Eyasu et al. [15] and Al-Khafaji Z. and Al-Hussein I. [10] in their examination of nursing care practices.

CONCLUSION

The quality of nursing care significantly influences patient satisfaction in both private and public hospitals in Erbil City. This study concluded that staff nurses in private hospitals provide higher-quality nursing care compared to those in public hospitals. Patients' satisfaction levels were higher in private hospitals; the difference was statistically significant. From the study, it has been clear that in private and public hospitals, patient satisfaction was positively associated with some socio-demographic variables related to nursing care. Finally, the quality of nursing care in public hospitals should be improved.

REFERENCES

- [1] Manzoor F, Wei L, Hussain A, Asif M, Shah SIA. Patient Satisfaction with Health Care Services; An Application of Physician's Behavior as a Moderator. *International Journal of Environmental Research and Public Health*. 2019;16 (18). DOI: 10.3390/ijerph16183318.
- [2] Stavropoulou A, Rovithis M, Kelesi M, Vasiliopoulos G, Sigala E, Papageorgiou D, et al. What Quality of Care Means? Exploring Clinical Nurses' Perceptions on the Concept of Quality Care: A Qualitative Study. *Clinic and Practice*. 2022;12 (4):468-81. DOI: 10.3390/clinpract12040051.
- [3] Yusefi AR, Sarvestani SR, Kavosi Z, Bahmaei J, Mehrizi MM, Mehralian G. Patients' perceptions of the quality of nursing services. *BMC Nursing*. 2022;21 (1):131. DOI: 10.1186/s12912-022-00906-1.
- [4] Rajabpour S, Rayyani M, Mangolian shahrabaki P. The relationship between Iranian patients' perception of holistic care and satisfaction with nursing care. *BMC Nursing*. 2019;18 (1):48. DOI: 10.1186/s12912-019-0374-7.
- [5] Fuseini AG, Bayi R, Alhassan A, Atomlana JA. Satisfaction with the quality of nursing care among older adults during acute hospitalization in Ghana. *Nursing Open*. 2022;9 (2):1286-93.
- [6] Aiken LH, Sloane DM, Ball J, Bruyneel L, Rafferty AM, Griffiths P. Patient satisfaction with hospital care and nurses in England: an observational study. *BMJ Open*. 2018;8 (1):e019189. DOI: 10.1136/bmjopen-2017-019189.
- [7] Gishu T, Weldetsadik AY, Tekleab AM. Patients' perception of quality of nursing care; a tertiary center experience from Ethiopia. *BMC Nursing*. 2019;18:37. DOI: 10.1186/s12912-019-0361-z.
- [8] Qadir DO, Qader SS, Al-Banna DA, Rasool AA, Shakor JK. Patient's Satisfaction with Health Care Services in Erbil City/Iraq. *Erbil Journal of Nursing and Midwifery*. 2021;3 (2):119 - 25. DOI: 10.15218/ejnm.2020.14.
- [9] Laschinger HS, Hall LM, Pedersen C, Almost J. A psychometric analysis of the patient satisfaction with nursing care quality questionnaire: an actionable approach to measuring patient satisfaction. *Journal of Nursing Care Quality*. 2005;20 (3):220-30. DOI: 10.1097/00001786-200507000-00006.

- [10] Al-Khafaji ZaA, Al-Hussein IQK. Patient's Satisfaction With Nursing Care In Emergency Department At Public Hospital In Al-Najaf Al-Ashraf Governorate. *Global Scientific Journal*. 2018;6 (11).
- [11] Lotfi M, Zamanzadeh V, Valizadeh L, Khajehgoodari M. Assessment of nurse–patient communication and patient satisfaction from nursing care. *Nursing open*. 2019;6 (3):1189-96. DOI: 10.1002/nop2.316.
- [12] Karaca A, Durna Z. Patient satisfaction with the quality of nursing care. *Nursing open*. 2019;6 (2):535-45. DOI: 10.1002/nop2.237.
- [13] Goes M, Oliveira H, Lopes M, Fonseca C, Pinho L, Marques M. A nursing care-sensitive patient satisfaction measure in older patients. *Scientific Reports*. 2023;13 (1):7607. DOI: 10.1038/s41598-023-33805-9.
- [14] Findik UY, Unsar S, Sut N. Patient satisfaction with nursing care and its relationship with patient characteristics. *Nursing & health sciences*. 2010;12 (2):162-9. DOI: 10.1111/j.1442-2018.2009.00511.x.
- [15] Eyasu KH, Adane AA, Amdie FZ, Getahun TB, Biwota MA. Adult Patients' Satisfaction with inpatient nursing care and associated factors in an Ethiopian Referral Hospital, Northeast, Ethiopia. *Advances in Nursing*, 2016, 6308617, 7 pages, 2016. DOI: 10.1155/2016/6308617.
- [16] Thapa S, Joshi A. Patients' satisfaction with quality nursing care at teaching hospital, Chitwan. *Journal of Nursing and Health Science (IOSR-JNHS)*. 2019;8 (3):71-5. DOI:10.9790/1959-0803077175.
- [17] Alsaqri S. Patient satisfaction with quality of nursing care at governmental hospitals, Ha'il City, Saudi Arabia. *Journal of Biology, Agriculture and Healthcare*. 2016;6 (10):128-42.
- [18] Milutinović D, Simin D, Brkić N, Brkić S. The patient satisfaction with nursing care quality: the psychometric study of the Serbian version of PSNCQ questionnaire. *Scandinavian Journal of Caring Sciences*. 2012;26 (3):598-606. DOI: 10.1111/j.1471-6712.2012.00969.x.
- [19] Akhtari-Zavare M, Abdullah MY, Hassan STS, Said SB, Kamali M. Patient satisfaction: evaluating nursing care for patients hospitalized with cancer in Tehran teaching hospitals, Iran. *Global journal of health science*. 2010;2 (1):117.
- [20] Alharbi HF, Alzahrani NS, Almarwani AM, Asiri SA, Alhowaymel FM. Patients' satisfaction with nursing care quality and associated factors: A cross-section study. *Nursing Open*. 2023;10 (5):3253-62. DOI: 10.1002/nop2.1577.
- [21] Alhusban MA, Abualrub RF. Patient satisfaction with nursing care in Jordan. *Journal of Nursing Management*. 2009;17 (6):749-58. DOI: 10.1111/j.1365-2834.2008.00927.x.
- [22] Mulugeta H, Wagnaw F, Dessie G, Biresaw H, Habtewold TD. Patient satisfaction with nursing care in Ethiopia: a systematic review and meta-analysis. *BMC Nursing*. 2019;18 (1):27. DOI: 10.1186/s12912-019-0348-9.
- [23] Koç Z, Sağlam Z, Şenol M. Patient satisfaction with the nursing care in hospital. *Turkiye Klinikleri Journal of Medical Sciences*. 2011;31 (3):629-40. DOI: 10.5336/medsci.2009-16413.
- [24] Hepsiba RP, Bhattacharjee T. A Comparative Study to Assess the Level of Patient Satisfaction on Quality of Nursing Care Among parturients admitted in Government and Private Hospitals at Lucknow. *Annals of the Romanian Society for Cell Biology*. 2021;25 (7):31-41.
- [25] Dinsa K, Gelana Deressa B, Beyene Salgado W. Comparison of patients satisfaction levels toward nursing care in public and private hospitals, Jimma, Ethiopia. *Nursing: Research and Reviews*. 2022:177-89. DOI: 10.2147/NRR.S380630.
- [26] Sharma SK, Kamra PK. Patient satisfaction with nursing care in public and private hospitals. *Nursing & Midwifery Research Journal*. 2013;9 (3):130-41. DOI: 10.1177/0974150X2013030.
- [27] Ali SS. Quality of Immediate Postoperative Nursing Care for Patients in Public and Private Hospitals in Erbil City, Iraq-Comparative Study. *Erbil Journal of Nursing and Midwifery*. 2020;3 (2):126-35. DOI: 10.15218/ejnm.2020.15.
- [28] Mutiarasari D, Demak IPK, Bangkele EY, Nur R, Setyawati T. Patient satisfaction: Public vs. private hospital in Central Sulawesi, Indonesia. *Gaceta Sanitaria*. 2021;35:S186-S90. DOI: 10.1016/j.gaceta.2021.07.012.
- [29] Charalambous M, Sisou G, Talias MA. Assessment of Patients' Satisfaction with Care Provided in Public and Private Hospitals of the Republic of Cyprus: A Comparative Study. *International Journal of Caring Sciences*. 2018;11 (1):125.

- [30] Siraj SS, Arifa S. A comparative study to assess the quality of nursing care rendered by staff nurses and the level of satisfaction perceived by patients in selected wards of selected government and private hospitals of Srinagar, Kashmir. *IP Journal of Paediatrics and Nursing Science*. 2022;5 (2):62-73. DOI: 10.18231/j.ijpns.2022.011.
- [31] Sachdeva S, Kaur H. A study to assess the patient satisfaction regarding treatment and care in emergency department of New Delhi hospital, India. *Nursing & Care Open Access Journal*. 2018;5 (6):357-60. DOI: 10.15406/ncoaj.2018.05.00173.
- [32] Thompson, S. K. (2012). Sampling. Third edition. John Wiley & Sons. (URL: https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=Sampling%2C+3rd+Edition&btnG=) page 11-13.
- [33] Althubaiti A. Sample size determination: A practical guide for health researchers. *J Gen Fam Med*. 2023; 24: 72–78. DOI: 10.1002/jgf2.600 (URL: <https://onlinelibrary.wiley.com/doi/full/10.1002/jgf2.600>)