ISSN 3135-338X

HOLISTIC NURSING JOURNAL

Scientific Journal in Holistic Nursing

VOLUME 1 | ISSUE 1 | 2025

Research • Care • Evidence • Wellness

Published by the
College of Nursing – University of Baghdad

Legal Deposit Number
Deposit Number at the House of Books and
Documents in Baghdad: 2827 for the year 2025

The Holistic *Nursing Journal is published biannually in both Arabic and English.*

Address:
All correspondence should be sent to:
Editor-in-Chief, Holistic Nursing Journal
College of Nursing, University of Baghdad
Baghdad – Iraq
P.O. Box: 14149
E-mail: injns@conursing.uobaghdad.edu.iq
Legal Deposit Number:
Deposit Number at the House of Books and Documents in Baghdad: 2827 for the year 2025

Holistic Nursing Journal (HNJ)

Instructions for Authors

The Holistic Nursing Journal (HNJ) welcomes original research articles, review articles, case studies, and scholarly papers in nursing and healthcare-related disciplines.

1. Manuscripts must be original, unpublished, and not under consideration by another journal. Manuscripts previously published, accepted for publication, or under consideration elsewhere will not be accepted.
2. All manuscripts are subject to a double-blind peer review process conducted by qualified reviewers from Iraq and abroad to ensure scientific quality, originality, and relevance to the journal scope.
3. Manuscripts must be written in clear, accurate, and scientifically appropriate English and prepared according to the official journal template.
4. An abstract not exceeding 250 words must be provided together with an Arabic abstract. The heading "Abstract" should be written in Times New Roman, 12 pt, Bold, while the abstract text should be written in Times New Roman, 10 pt, justified.
5. Authors should provide 3–5 keywords relevant to the manuscript topic. Keywords should be written in Times New Roman, 10 pt, Italic.
6. Manuscripts should include the following sections:
   Title, Abstract, Keywords, Introduction, Methods, Results, Discussion, Conclusion, and References.

• Title: Times New Roman, 16 pt, Bold, centered.
• Author names: Times New Roman, 12 pt, left aligned.
• Affiliations: Times New Roman, 10 pt, left aligned.
• Main headings: Times New Roman, 14 pt, Bold.
• Subheadings: Times New Roman, 12 pt, Bold and numbered.
• Body text: Times New Roman, 12 pt, justified with 1.5 line spacing.

7. Manuscripts must be prepared on A4 paper with margins of 2.5 cm on all sides. Text should be justified and page numbers should appear at the bottom right of each page starting from page 2. The total manuscript length should not exceed 10 pages, including tables, figures, and references.
8. Authors must provide their full names, institutional affiliations, email addresses, and clearly identify the corresponding author.
9. References must be prepared according to the Vancouver citation style, cited numerically within the text, and listed at the end of the manuscript in numerical order.
10. Tables and figures must be numbered consecutively and cited within the manuscript text. Titles should appear above tables and figures. Any abbreviations used should be explained in footnotes below the table or figure.

11. Research involving human participants or animals must include ethical approval from the appropriate Ethics Committee or Institutional Review Board (IRB). The Methods section must clearly describe ethical approval, informed consent procedures, and compliance with applicable ethical and institutional requirements.
12. Authors must disclose all sources of financial support, funding agencies, sponsoring institutions, and any potential conflicts of interest related to the submitted work.
13. All manuscripts are screened for plagiarism using Turnitin and/or iThenticate before peer review. Manuscripts with unacceptable similarity levels may be rejected or returned for revision.
14. Authors must disclose any use of Artificial Intelligence (AI) tools in manuscript preparation. AI tools cannot be listed as authors.
15. Article Processing Charges (APC) apply only to accepted manuscripts. Authors affiliated with institutions inside Iraq are required to pay **100,000 Iraqi Dinars (IQD)** upon acceptance of the manuscript. Authors from outside Iraq are required to pay **100 USD** upon acceptance. Payment of publication fees does not guarantee manuscript acceptance, as all submissions remain subject to peer review and editorial evaluation.
16. Accepted articles are published under the journal's Open Access Policy.
17. Submitted manuscripts will not be returned to authors regardless of the editorial decision.

For detailed Author Guidelines, publication policies, and submission requirements, please visit the journal website or contact the editorial office.

Website: hnj.uobaghdad.edu

HNJ 1 (1), (2025) 1- 8

Holistic Nursing Journal

https://hnj.uobaghdad.edu.iq/index.php/hnj/en/index

ISSN: 3135-338X

Evaluation of Patient Satisfaction with Postoperative Nursing Care Among Cardiac Surgery Patients

Ahmed Fleih Hassan

* Prof., University of Baghdad, College of Nursing, Fundamental Nursing Department, Baghdad, Iraq.

Email : ahmedfh@conursing.uobaghdad.edu.iq , ORCID: 0000-0002-3968-37x

Abstract

Background: Patient satisfaction is a key indicator of healthcare quality and has become a major concern for healthcare systems worldwide.

Objectives: This study aimed to evaluate patient satisfaction with postoperative nursing care among cardiac surgery patients.

Methodology: A quantitative descriptive study design was conducted from November 22, 2023, to April 15, 2024. A purposive (non-probability) sample of 50 cardiac surgery patients from Baghdad Teaching Hospital was selected. Data were collected using a self-administered questionnaire and analyzed using SPSS version 26.0 through descriptive and inferential statistical methods.

Results: The findings showed a high level of patient satisfaction with postoperative nursing care across all satisfaction domains (Mean ± SD = 3.74 ± 0.367). No statistically significant associations were found between patient satisfaction and sociodemographic variables.

Conclusion: The study concluded that most cardiac surgery patients were satisfied with the quality of postoperative nursing care.

Recommendation: It recommends implementing training programs for nursing staff to enhance postoperative care quality and regularly reviewing and updating nursing care protocols to meet patient expectations and current best practices

IRAQI Academic Scientific Journals

Article info:

Article history:

Received: 05/01/2025
Accepted: 10/03/2025
Published: 01/07/2025

Keywords:

Patient, satisfaction, nursing care, Cardiac surgery

∗Corresponding author at: University of Baghdad, College of Nursing, Department of Maternal and Neonate Nursing, Baghdad, Iraq. Assist. Prof. (Hassan, A. F.). Email ahmedfh@conursing.uobaghdad.edu.iq . ORCID https:// orcid.org/0000-0002-3968-37x. DOI: https://doi.org/

تقييم رضا المرضى عن الرعاية التمريضية بعد العمليات الجراحية لدى مرضى جراحة القلب.

المستخلص:

الخلفية: أصبح رضا المرضى من القضايا المهمة التي تحظى باهتمام الحكومات حول العالم، إذ يُعدّ مؤشرًا أساسيًا لتقييم جودة الخدمات الصحية. هدفت هذه الدراسة إلى تقييم رضا المرضى عن الرعاية التمريضية بعد العمليات الجراحية لدى مرضى جراحة القلب.

استخدمت الدراسة المنهج الوصفي الكمي بأسلوب التقييم، وأُجريت خلال الفترة من 22نوفمبر 2023 إلى 15 أبريل 2024 .شملت الدراسة 50مريضًا من مستشفى بغداد التعليمي، وتم اختيارهم بطريقة العينة القصدية (غير الاحتمالية) .جُمعت البيانات باستخدام استبانة تعتمد على التقرير الذاتي للمشاركين، وتم تحليلها باستخدام برنامج SPSSالإصدار 26 بالاعتماد على الأساليب الإحصائية الوصفية والاستدلالية.

أظهرت النتائج أن المرضى أبدوا مستوى مرتفعًا من الرضا عن جودة الرعاية التمريضية بعد الجراحة في جميع مجالات الرضا، بمتوسط حسابي وانحراف معياري .(3.74 ± 0.367) كما لم تُظهر النتائج وجود علاقة ذات دلالة إحصائية بين مستوى رضا المرضى والمتغيرات الديموغرافية المختلفة.

خلصت الدراسة إلى أن معظم المرضى كانوا راضين عن جودة الرعاية التمريضية المقدمة لهم بعد جراحة القلب. وأوصت الدراسة بـ تنفيذ برامج تدريبية للكادر التمريضي لتحسين جودة الرعاية بعد جراحة القلب، بالإضافة إلى التقييم والتحديث المستمر لبروتوكولات الرعاية التمريضية بما يتوافق مع توقعات المرضى وأفضل الممارسات الصحية.

Introduction

Cardiac surgery aims to alleviate physical symptoms, prolong life and improve quality-of-life. Patients' preoperative concerns, expectations of the impact of surgery, anticipated timeline of recovery, and pre- and postoperative education affect recovery and health-related quality-of-life following cardiac surgery [(1)]. The help of allied nurses is increasingly sought in providing patients with perioperative information, in particular during the pre- and postoperative phases [(2)].

Although nurses' adherence to nursing care behavior principles while providing care protects patient safety and promotes faster recovery, researches illustrate that nurses do not adhere to nursing caring behaviors when providing care [(3, 4)].Nursing Care concentrates on the nurse–patient relationship by responding to patients' physical, psychological, and social needs, avoiding harm by maintaining a safe healing environment, and providing proper health teaching [(5)]. Preoperative care encompasses the provisions given prior to surgery, wherein the patient's unique requirements are considered to undertake physical and psychological preparations in anticipation of the procedure [(6)]. Nurses play a crucial role in formulating, developing, expanding, and implementing interventions and modifications [(7,8)] and patient safety has emerged as a paramount concern and is currently placed at the forefront of priorities[(9)]. Patient satisfaction is defined as a subjective reaction to the context, process, andresult of the service experience one has received [(10)]. The measurement of quality is closely linked to the satisfaction levels expressed by patients regarding the care they have received [(11)].

Methods and materials

Design of the study:

A quantitative design, descriptive study was used and evaluation approach has been applied for the purpose of achieving the earlier stated objective. The study was initiated from November 22, 2023 to April 15, 2024.

Setting of the study:

The study has been conducted in three Baghdad Teaching Hospitals at Al-Karkh Health Department/Ibn Al-Bitar Specialized Center for Cardiac Surgery, Baghdad Medical City /Al-Iraqi Cardiac Surgery Center, Al-Rusafa Health Department/Ibn Al-Nafis Teaching Hospital.

Sample of the study:

The target population of the study includes all patients. A purposive sample was used for this study which includes 50 patients who are participated and filled the questionnaire with exception of 10 participants who participated in pilot study. The Colleges mentioned above were selected by simple random sampling (Lottery). A confidence level of 95% and a power of 80% were applied to determine the appropriate sample size, ensuring that the results would be both valid and generalizable to the broader population of patients.

Study Instrument:

The questionnaire consisted of two parts: the first part contained the covering letter of participation to obtain students' agreement to participate in the study and socio – demographic characteristic of the patients.

The second part is concerned with the scale of patients' satisfaction .which composed of 25 items and rated into 4-Likert scale and scored as follow: Strongly Disagree (1), Disagree (2), Agree (3), , and Strongly Agree (4). The total score of addiction was calculated by summation of total score of mean and rated into two levels as follow: ≤2.5=Un Satisfaction (US), 2.5-4= Satisfaction (S).

Validity and Reliability:

The validity and reliability of the questionnaire were ensured through several processes. Content validity was established by a panel of experts who reviewed the instrument for clarity, relevance, and adequacy to meet the study objectives. Based on their feedback, modifications were made to finalize the questionnaire. The original scale's validity, with a content validity ratio of over 0.7, was also considered. Additionally, translation validity was ensured through forward and back translation methods, focusing on conceptual and cultural equivalence. A pilot study was conducted with 10 patients to test the instrument, and the reliability was confirmed with a Cronbach's alpha of 0.86, indicating a high level of internal consistency.

Data analysis:

The data were analyzed by application of descriptive and inferential statistics through the Statistical Program for Social Sciences (IBM-SPSS, version 26.0).

Ethical Considerations

The instrument's content of this study was reviewed by "Institutional Review Board (IRB)" in Nursing Faculty at Baghdad University before conducting a study. In expansion, the participants' agreement was obtained before engagement in this study. This work has been carried out in accordance with The Code of Ethics of the World Medical Association (Declaration of Helsinki) for studies involving humans**Results**

Table 1: Distribution of the Patients according to their Demographic Characteristics

No.	Characteristics		f	%
1	sex	Male	34	68.0
		Female	16	32.0
		Total	**50**	**100**
2	Age Group	18- less than 28	6	12.0
		28- less than 38	2	4.0
		38-less than 48	7	14.0
		48 –less than 58	10	20.0
		≥58	25	50.0
		Total	**50**	**100**
3	Residence	Urban	42	84.0
		Rural	8	16.0
		Total	**50**	**100**
4	Smoking	Yes	14	28.0
		No	36	72.0
		Total	**50**	**100**

Table (1) shows that 68% of the patients are males and 32% are females, the higher proportion of age group seen in more than 58 years (32.5%) with highly percentage of urban (84%). The specialty of smoking refers to (72%) no have smoking.

Table 2: Mean of Score of Patients satisfaction domain about quality of nursing care post cardiac surgery

No	Items	Strongly disagree	disagree	Agree	Strongly Agree	Std.	M.S	Ass
		F	**F**	**F**	**F**			
1	The nursing staff are skilled in performing the nursing procedures they take	0	2	19	29	.579	3.54	S
2	The nursing staff are able to discover anything immediately (changes that can affect my health condition)	1	2	20	27	.676	3.46	S
3	The nursing staff performs their work well to avoid delayed provision of time care	0	1	17	32	.530	3.62	S
4	The nursing staff gives treatment on time and according to the doctor's order	0	2	12	36	.551	3.68	S
5	The nursing staff are able to answer my questions the way I can understand	0	4	23	23	.635	3.38	S

6	The nursing staff provides nursing care to patients before and after the surgery	0	2	19	29	.579	3.54	S
7	The nursing staff are excited to perform their work	0	2	26	22	.571	3.40	S
8	The nursing staff examines the patient regularly to see if it is fine	0	4	17	29	.647	3.50	S
9	The nursing staff provides sufficient information about the patient's health condition	0	3	28	19	.587	3.32	S
10	The nursing staff provide advice and advice on the patient's health condition	0	2	23	25	.579	3.46	S
11	The nursing staff explains every nursing procedure before doing it	0	6	27	17	.648	3.22	S
12	The nursing staff are very interested in the patient's health condition	0	1	23	26	.544	3.50	S
13	The nursing staff provides general information about the signs and symptoms that can occur after leaving the hospital	0	1	10	20	.808	3.14	S
14	The Patient Feels Confident in Discussing His Health Problems with the Nursing Staff	0	4	21	25	.642	3.42	S
15	The nursing staff always listens carefully when the patient talks about his health problems	0	3	27	20	.593	3.34	S
16	The nursing staff shows sympathy and understanding with what is the patient's health condition	0	0	22	28	.501	3.56	S
17	The nursing staff gives full attention while providing nursing care	0	1	20	29	.541	3.56	S
18	The nursing staff provides a quiet environment for patients' comfort	0	2	22	26	.580	3.48	S
19	The nursing staff provides a special place for treatment to maintain the privacy of the patient	0	2	20	28	.580	3.52	S
20	The nursing staff is confirmed by the patient's enjoyment of complete privacy	0	1	21	28	.542	3.54	S
21	The nursing staff treats me in a very friendly way	0	2	22	26	.580	3.48	S
22	I feel that the nursing staff enjoy caring for me	0	3	22	25	.611	3.44	S
23	The nursing staff helps me in my personal cleanliness	1	9	19	0	.808	3.20	S
24	The nursing staff gives more respect to patients	0	2	17	31	.575	3.58	S
25	The nursing staff makes me feel safe hands	0	0	16	34	.471	3.68	S
	Total	2	61	513	634	.367	3.47	S

The Table (2) reveals that the patient satisfaction response regarding quality of nursing care was satisfaction at all patient satisfaction domains (3.74)

Table 3: Association between patients Satisfaction and Socio-demographic variables.

Socio-demographic variables	Patients satisfaction		
	Contingency Coefficients	P value	Sig.*
Gender	0.569	0.578	NS
Age groups	0.971	0.083	NS
Residence	0.830	0.303	NS
Smoking	0.896	0.154	NS

*. Correlation is significant at the 0.05 level (2-tailed).

Table 3 indicates presented the relationship between demographic and patient satisfaction. The findings displayed no correlation between socio-demographic and patient satisfaction at p value ≤ 0.05.

Discussion

The descriptive analysis of patients reveal that more than half of the patients are males and remaining are females, such finding suggests male more risk cardiovascular disease. The highest percentage of age group in present study (50%) was over 58 years old and lowest percentages (4%) were (20- less than 38) years old. Study show that females make (170 respondents) 48.03 % of the patients on the other hand; male respondents represented (184 respondents) 51.97 % of the sample [(12)].

Study in Baghdad city this study finding shows that the socio-demographic data of the study sample of the present study were 66.7% was females in Iraqi center, 61.5 in Ibn-Al-Nafess hospital, and 76. % was female in Ibn- Al-Bitar hospital, were females [(13)]

The same study in Baghdad city by Isam, S. R., & Hassan, H. S, (2023). The findings of the study showed that most of patients (66%) were males, (38%) were within the age group (48- 57 years)[(14)].

This finding agrees by other study who took part in this research were ages 40- 50 years (34.2 %) [(14)]. Other Study by Lotfi M, (2019) the result of study sample most of the patients were aged between 16–44 years old, and male [(15)].

The residence of study sample (84%) for urban and the majority of study sample non-smoker. The findings agreement by Qadir CS. , (2023).who show that highest percentage of studied coronary heart disease patients were male, (68.6%) coming from urban, 54.3% was non-smoker [(16)].

The result of accurate study that show patient satisfaction domain in table(2) regarding quality of nursing care was satisfaction at all patient satisfaction domains (M ± SD = 3.74± .367). A finding suggest the most of study sample older age more than 58 years old because the nursing care provider from nurses in surgical word to give more feeling comfortable after relief of pain before and after surgery. This finding is agreement by other researcher. The study show that Patients 'satisfaction before intervention, with mean score of 104.2(9) was in moderate level and after intervention, with mean score of 116.4(52) was in good level of satisfaction p=0.000. [(17)].

Other study agree by Almomani R,(2020).who show that Health service quality explained %65.7 of the variation of patient satisfaction, which was also, illustrated the extent to which the quality of health service had the potential to make a change in the level of patients' satisfaction in public hospitals. Health service quality had a positive effect on patient satisfaction [(12)]. The same study in

Erbile show that the overall degree of satisfaction with coronary angiography care was 57.4 % while 42.6 % of the patients were dissatisfied with coronary angiography care [16].

Sex, age, residence and smoking in comparison of the respondent's total patient satisfaction domains in table (3), there was non-significant between sex, age, residence and smoking with patient satisfaction domains. This finding is disagreeing by other research, who shows significant positive relationship between Health-related quality of life and patient's socio-demographic and clinical characteristics [14].

Studies in Al-Najaf Governorate and Baghdad city, Show that there is a non – significant association between the (age, gender, residence and smoking) and the patient perspective at p value 0.05 [14, 20].

Conclusions

The study concluded that most patients at Baghdad Teaching Hospitals exhibit strong agree of patient's satisfaction on post-operative nursing care .However, sociodemographic variables (such as Sex, age, residence and smoking) did not significantly affect patient's satisfaction.

Recommendations

Implement training programs for nursing staff to enhance the quality of care post cardiac surgery, and regularly assess and update nursing care protocols to align with patient expectations and best practices .A manual booklet of post cardiac surgery and how to manage t should be written in simple words and use attractive pictures given to the patients and family.

References

(1) Levett D, Grimmett C. (2019). Psychological factors, prehabilitation and surgical outcomes: evidence and future directions. Anaesthesia , 74: 36–42.

(2) Kalogianni A, Almpani P, Vastardis L et al.(2016). Can nurse-led preoperative education reduce anxiety and postoperative complications of patients undergoing cardiac surgery? Eur J Cardiovasc Nurs , 15: 447–458

(3) Bijani, M., Ghodsbin, F., Javanmardi Fard, S., Shirazi, F., Sharif, F., & Tehranineshat, B. (2017). An evaluation of adherence to ethical codes among nurses and nursing students. Journal of Medical Ethics and History of Medicine, 10, 6. http://www.ncbi.nlm.nih.gov/pubmed/29 291039

(4) Lukmanulhakim, L., Afriyani, A., & Haryani, A. (2019). Caring Efficacy and Nurse Caring Behavior in Taking Care of Critical Patients. Jurnal Ners, 14(1).https://doi.org/10.20473/jn.v14i1.9664

(5) Juujärvi, S., Ronkainen, K., & Silvennoinen, P. (2019). The ethics of care and justice in primary nursing of older patients. Clinical Ethics, 14(4), 187–194. https://doi.org/10.1177/14777509198762 50

(6) Dos Santos MMB, Martins JCA, L.M.N.J.R.d.E R, Oliveira. Anxiety, depression and stress in the preoperative period of surgical patients. 2014. 4(3): p. 7–15 https://doi.org/10.12707/RIII1393.Return to ref 5 in article

(7) Health F. Continuous Health Care Quality Improvement through Knowledge Management. Federal Democratic Republic of Ethiopia Ministry of Health, 2019: p. 5 https://www.healthynewbornnetwork.org/resource/continuous-health-care-quality-improvement-through-knowledge-management-in-ethiopia/.

(8) Gómara AOJEc. The occurrence of adverse events potentially attributable to nursing care in hospital units. 2014. 24(6): p. 356–7 https://doi.org/10.1016/j.enfcli.2014.08.001.

(9) Susai Mari, Jannatabi A. Ganjigatti, Divya Tellis, Jeevita, Daniya Grace Jimson, Fiona Babu, Gangamol P. Siju, Janaki G. Haller, Jayalakshmi Nagesh Naik, Jerlin Niveditha K.. Addiction to Social Media Platforms among Undergraduate Students. International Journal of Community Health Nursing and Practices. 2024; 02(01):1-9.

(10) Deressa D et al. Satisfaction with preoperative education and surgical services among adults elective surgical patients at selected public hospitals in Addis Ababa, Ethiopia. 2022. 10: p. 20503121221143219 https://doi.org/10.1177/20503121221143219.

(11) Stimpfel AW et al. Common predictors of nurse-reported quality of care and patient safety. 2019. 44(1): p. 57–66 https://doi.org/10.1097/HMR.0000000000000155.

(12) Almomani R,(2020). Patients' satisfaction of health service quality in public hospitals: A PubHosQual analysis. Management Science Letters. 10(8):1803-12.

(13) Hajy MA, (2016). Patient Satisfaction with Nursing Care Based on Newcastle Satisfaction with Nursing Scale in Erbil/Iraq. continuity.8:9.

(14) Isam, S. R., & Hassan, H. S. (2023).Effectiveness of Cardiac Rehabilitation Instructional Program on Health-related Quality of Life for Patients Undergone Coronary Artery Bypass Graft Surgery. Iraqi National Journal of Nursing Specialties, 36(1), 59-70.

(15) Damen, R.,(2017). Health care service quality and its impact on patient satisfaction "case of Al-Bashir Hospital". International Journal of Business and Management; 2017, Vol. 12, No. 9;136-152 doi:10.5539/ijbm.v12n9p136

(16) Qadir CS. , (2023). Knowledge and Satisfaction for Patients Undergoing Coronary Angiography at Surgical Specialty Hospital Cardiac Center in Erbil City. Erbil Journal of Nursing and Midwifery. 6(2):94-105.

(17) Zamani Babgohari KH, et al, (2014). Effect of evidence-based nursing guidelines implementation on satisfaction of the patients hospitalized in coronary care unit. Iran J Crit Care Nurs 7(1):23-30.

(18) Mustafa, M. A., Al-Tameemi, H. M., & Hakim, M.(2020). Nurses' roles towards patient undergoing cardiac catheterization at Al-Najaf Governorate: Patient Perspective. American Scientific Research Journal for Engineering, Technology, and Sciences (ASRJETS), 64(1), 200-209.

HNJ 1 (1), (2025) 2- 8

Holistic Nursing Journal

https://hnj.uobaghdad.edu.iq/index.php/hnj/en/index
ISSN: 3135-338X

Psychosocial Problems among Nursing College Students

Wuod Aadi Hasan *, Saja Kamal Farhan**, Wassan Jumaa Saleem **, Aya Abbas Fadil

* Assist. Lecturer., University of Baghdad, College of Nursing, Department of Psychiatric and Mental Health, Baghdad, Iraq.
Email: Wuod.a@conursing.uobaghdad.edu.iq **ORCID:** https://orcid.org/0000-0002-6218-5835
** BSc student, University of Baghdad, College of Nursing, Department of Community Health Nursing, Baghdad, Iraq.
Email: wuod.a@conursing.uobaghdad.edu.iq

Abstract:

Introduction: Nursing students often face stressful situations during their academic journey. Previous studies indicate that psychosocial problems—such as stress, anxiety, depression, motivation, social support, satisfaction, self-efficacy, family, and emotional factors—are significantly related to academic performance.

Aims: The study aimed to assess psychosocial problems among nursing students at the University of Baghdad – College of Nursing and to examine their association with demographic variables.

Method: A descriptive cross-sectional design was used with a sample of 185 undergraduate students. The tool included sociodemographic data (6 items) and psychosocial problem questions (50 items). Data were analyzed using SPSS version 26.0.

Results: Most students (57%) were aged 18–21 years (mean 21.63), with the majority being female (78.9%). The largest group (37.3%) was in the final academic year. Over half (55.7%) reported sufficient monthly income, and most (83.2%) lived in urban areas. Psychosocial problems were moderate overall. Significant differences were found across academic stages, sex, income, and residency, while age showed no significant association.

Conclusion: College life is a critical period where students face stress due to imbalance between environmental demands and personal resources. Psychosocial problems were moderate, with differences across demographic groups but not age.

Recommendations: Attention should be given to factors hindering academic achievement, with early interventions to prevent psychosocial problems. Future research should include larger samples from different faculties.

IRAQI Academic Scientific Journals

Article info:

Article history:

Received: 12/01/2025
Accepted: 18/03/2025
Published: 1/07/2025

Keywords:

Psychosocial, problems, nursing, students

∗Corresponding author at: University of Baghdad, College of Nursing, Department of psychiatric and mental health Nursing, Baghdad, Iraq. Assist. Lecturer (Hassan W. A.). Email: wuod.a@conursing.uobaghdad.edu.iq. ORCID: https://orcid.org/0000-0002-6218-5835, DOI: https://doi.org/

المشكلات النفسية الاجتماعية لدى طلاب كلية التمريض

المستخلص:

المقدمة :يواجه طلبة التمريض العديد من المواقف الضاغطة خلال مسيرتهم الأكاديمية. وتشير الدراسات السابقة إلى أن المشكلات النفسية الاجتماعية – مثل التوتر، القلق، الاكتئاب، الدافعية، الدعم الاجتماعي، الرضا، الكفاءة الذاتية، العوامل الأسرية والعاطفية – ترتبط بشكل كبير بالأداء الأكاديمي.

الأهداف :هدفت الدراسة إلى تقييم المشكلات النفسية الاجتماعية لدى طلبة كلية التمريض في جامعة بغداد، وفحص علاقتها بالمتغيرات الديموغرافية.

المنهجية :استخدم الباحثون تصميمًا وصفيًا مقطعيًا شمل عينة من (185) طالبًا جامعيًا. تضمنت الأداة بيانات اجتماعية ديموغرافية (6 فقرات) وأسئلة حول المشكلات النفسية الاجتماعية (50 فقرة). تم تحليل البيانات باستخدام برنامج SPSS الإصدار 26.0.

النتائج :أظهرت النتائج أن معظم الطلبة (57%) تتراوح أعمارهم بين 18–21 سنة بمتوسط 21.63 سنة، وأن غالبية العينة من الإناث (78.9%). شكّل طلبة المرحلة الأخيرة النسبة الأكبر (37.3%). أكثر من نصف الطلبة (55.7%) لديهم دخل شهري كافٍ، بينما يعيش معظمهم (83.2%) في المناطق الحضرية. تبين أن المشكلات النفسية الاجتماعية كانت بمستوى متوسط. وظهرت فروق ذات دلالة إحصائية بحسب المرحلة الدراسية، الجنس، الدخل، والسكن، في حين لم يظهر ارتباط معنوي بالعمر.

الاستنتاج :تمثل الحياة الجامعية فترة حرجة يواجه فيها الطلبة ضغوطًا ناجمة عن عدم التوازن بين متطلبات البيئة والقدرات الفردية. كانت المشكلات النفسية الاجتماعية بمستوى متوسط، مع وجود فروق بين المجموعات الديموغرافية باستثناء العمر.

التوصيات :ينبغي إيلاء اهتمام خاص بالعوامل التي تعيق التحصيل الأكاديمي، مع التدخل المبكر للحد من المشكلات النفسية الاجتماعية. كما يُوصى بتوسيع نطاق الدراسات المستقبلية لتشمل عينات أكبر من كليات مختلفة.

Introduction

College students face many stressors and academic demands related to school, family, and work that contribute to the exacerbation of mental health problems. Developmental challenges, including greater freedom, decision- making, questioning family beliefs, and participating in risky activities. Behaviors or pressure to achieve good results (1). Interpersonal relationships between students include teacher-student relationships, student-student relationships, roommate relationships, and romantic relationships. Nursing students' communication skills are a factor that directly influences their university life and an important factor that influences their development prospects. Faced with students and teachers with different lifestyles, values financial situations, interests and personalities, students may experience loneliness and depression when the lack of interpersonal communication guidance or a communication barrier can lead to a severe psychological crisis (2) Relationships with friends and loved ones can be stressful because they are threatened by external sources of stress (3). Poor academic performance carries the risk of failure and exclusion, which contributes significantly to students' stress levels. One of the side effects of this type of stress is depression, which can lead to absenteeism or feelings of hopelessness, disrupting effective study habit and thus further affecting academic success (4&3). Intimacy with parents and parental support and guidance are important factors in adolescent adjustment. Parental, warmth involvement, granting of psychological autonomy, and control/monitoring of behavior are associated with attachment

security in late childhood and early adolescence and contribute to good psychosocial, academic, and behavioral adjustment (5). Parent adolescent attachment is associated with a variety of outcomes, including mental health (depression, suicidality, coping, identity), personal characteristics (self-confidence, coping skills, motivation, general well-being) and social skills, including the quality and stabilities of intimate and peer relationships.

Young adults who live with their parents are less likely to have emotional problems and are more likely to be subject to parental control over their behavior. Secure attachment during adolescence is associated with fewer mental health problems, including less depression, anxiety and low mood. personal inadequacy (1). Social support helps students reduce depression, anxiety and stress, manage the stress of daily life reduce academic workload and reduce mental health problems in students. Without adequate support from family and friends, they would fall into difficulties and be prone to depression, stress and anxiety (6&7).

Methodology:

Design of the Study: A descriptive cross-sectional design is carried throughout the present study for the period from 21th November to 25th of April 2024 to assess the Psychosocial Problems among Nursing College Students in College of Nursing - university of Baghdad .

Administrative Arrangements: We submitted a request to chair of the psychiatric mental health nursing department and o the scientific assistant then the dean of our college to allow research to be conducted within our college, and the samples are college students. The research was approved.

Setting of the Study: The setting of the study is College of Nursing, University of Baghdad.

Sample of the Study: A convenience(accidental) non probability sample of (185) students is collected for all stages of the College of Nursing, University of Baghdad.

The Study Instrument: Through the use of psychosocial problem scale and the sociodemographic data to collect the data of the study(study instrument). It is comprised of two parts:

first part: (6) items which are concerned sociodemographic data which include

The second part: Questions about social psychological problems consisting of 50 points It revolves around questions for nursing students about depression, anxiety, stress, lack of self-confidence, and feelings of loneliness and isolation.
Gender, age, stage ,monthly income ,and residents. The scal consist of the alternative which is (never=1), (some time =2)and (always=3).

Validity of the Questionnaire: Content validity of the questionnaire has been determined through the use of panel of experts, to investigate the content of the questionnaire for clarity and adequacy in order to achieve the present study objectives. A preliminary questionnaire designed to collect the

data, to be presented to has been (6) experts in order to determine validity. These experts have been asked to review the questionnaire relative to their responses all of them have agreed on the content and structure of the questionnaire and the change makes according to their suggestions.

pilot study:

With 20 nursing students, a pilot study was undertaken. The pilot study took place from Desember12th-15th 2024, and this 20 sample was omitted from the study's initial sample.The aim of the pilot study was to:

a. Make sure the research instruments are functional and acceptable to the participants.

b. Estimate how much time each participant will require to collect data.

c. To improve the questionnaire's dependability.

Reliability of the Questionnaire: The participants comprehended the questionnaire, and the average time needed to collect data was between (5-10) minutes, according to the findings of the pilot study. Internal consistency reliability has been employed through the application of the Cronbach's Alpha to measure the questionnaire's reliability which was (0.79). The alpha correlation coefficient was applied to determine the reliability of the present study instrument by application of statistical package for social science program (IBM SPSS) version 27.0.

Methods of Data Collection: After permission was obtained from our college The data were collected for the original study through applying a constructed questionnaire format and self-report as mean of data collection. Data collection was initiated from 14/1/202 to 25/2/2024

This part presents the result of the current study in tables and their correspondence with the objectives of the study as shown in the tables:

Results

Table 1: Distribution of the Participants According to their Socio Demographic Data Characteristics

Demographic Characteristics	Subgroup	f.	%
Age group	18- 21 years	107	57.8
	22- 25 years	62	33.5
	>25 years	16	8.6
	Total	185	100.0
	Mean ± SD 21.63 ± 3.223 Min- Max 18 - 35 years		
Sex	Male	39	21.1
	Female	146	78.9
	Total	185	100.0
Academic stage	First	37	20.0
	Second	58	31.4
	Third	21	11.4
	Fourth	69	37.3
	Total	185	100.0

Income	Enough	103	55.7
	Not enough	11	5.9
	Nearly enough	71	38.4
	Total	185	100.0
Resident	Rural	31	16.8
	Urban	154	83.2
	Total	185	100.0

f= frequencies, %=Percentages, M = Mean of score, S.D = Standard Deviation, Min= minimum and Max= maximum

Table 2: Evaluation of the psychosocial problems among nursing college students'.

Items	Mean	Eva.
1. It seems to me that no one understands me	1.97	M
2. I find it difficult to concentrate on the work I am doing	1.93	M
3. When I make a small mistake, my conscience scolds me for a long time	2.48	H
4. Dream about things I'd rather not talk about	2.43	H
5. I feel lonely when I'm with others	1.77	M
6. Things happen that scare me	1.78	M
7. I feel like life is a heavy burden on me	1.89	M
8. I lose focus every day	1.90	M
9. There are times when I cannot stay in one place	2.05	M
10. I would rather daydream than do any work	1.79	M
11. I hear strange noises when I'm on my phone	1.30	L
12. My dreams revolve around sexual matters	1.19	L
13. Sounds and noises wake me up easily	2.15	M
14. I feel general weakness in my body	2.05	M
15. I cry easily	2.23	M
16. I feel like a useless person	1.35	L
17. I am less capable or intelligent than most of those around me	1.49	L
18. I feel depressed	1.91	M
19. I lack confidence in myself	1.36	L
20. My sleep is restless and restless	1.88	M
21. I feel like breaking things	1.70	M
22. I would like to be a child again	2.08	M
23. I fear the future	2.01	M
24. I'm worried about acne on my face	1.89	M
25. My father objects to the type of people I associate with	1.49	L
26. My behavior is affected by the habits of the friends around me	1.66	
27. I have the idea of leaving home and not returning to it	1.57	L
28. My father treats me as if I were a child.	1.75	M
29. I punish myself for no reason	1.45	L
30. I have a desire to do things that harm others	1.22	L
31. I feel hatred towards some members of my family	1.26	L
32. I like to go to public parties	1.86	M
33. It bothers me to participate in competitions or express a certain opinion	1.72	M
34. I complain about the family's lack of respect for my privacy	1.45	L

35. My parents prefer my brothers over me	1.35	L
36. My family forbids me from going out	1.49	L
37. I would like to have more freedom	2.05	M
38. It hurts me that my family is unable to fulfill my requests	1.49	L
39. I complain about the bad relationship with my teachers	1.43	L
40. I'm shy	2.13	M
41. I prefer to stay away from facing crises and problems	2.02	M
42. Criticism and reprimand hurt my feelings	2.14	M
43. I fear exams	2.31	M
44. I am confused because I do not know the source of my troubles	1.97	M
45. I feel afraid of people who I know will not harm me	1.51	L
46. I feel like cursing	1.58	L
47. Just being around people bothers me	1.62	L
48. I tend to sit alone or with one person in places	2.18	M
49. I complain that my family does not care about me	1.30	L
50. I avoid being honest with my family members	1.74	M
Overall	**1.77**	**M**

%= percentage, Eva. = Evaluation, L = low (1 – 1.66), M = Moderate (1.67 – 2.32) and H= High (2.33 - 3).

The results in table 2 showed the valuation of the psychosocial problems among nursing college students were moderate with mean 1.77 (Min- Max 1 - 3), and the higher percentage in item number 3 with mean 2.48, while the lower percentage in item number 12 with mean 1.19.

Table (3): The levels of psychosocial problems among nursing college students.

	Range	F	%	Mean	SD
Low	**50 - 83**	79	42.7		
Moderate	**84 - 116**	103	55.7		
High	**117 -150**	3	1.6		
Total	**50 -150**	185	100.0	88.23	13.742

F= frequency %= percentage

In table 3 the result showed the levels psychosocial problems among 185 nursing college students at most were moderate (55.7%) with mean 8.23 (Min- Max 50 - 150).

Table 4: Identify the association between students age and psychosocial problems:

N= 185	Students age	
	Cc	p. value
Psychosocial problems	-.045-	.543

Cc= Correlation coefficient, P=probability value, NS: Non-Significant at P > 0.05, S: Significant at P < 0.05, HS: Highly Significant at P < 0.001.

In table 4 the results showed there were non-significant statistical association between students age and the psychosocial problems at P > 0.05

Table (5): The differences in the psychosocial problems between the groups of sex, Academic stage, monthly income, and residency:

Data	Subgroup	Mean	Analysis	p. value
Age group	18- 21 years	1.79	F= 1.675	.190
	22- 25 years	1.72		
	>25 years	1.82		
	Total	1.77		
Sex	Male	1.75	t= -.464-	.643
	Female	1.77		
	Total	1.77		
Academic stage	First	1.83	F= 5.178	.002
	Second	1.84		
	Third	1.71		
	Last	1.68		
	Total	1.77		
Income	Enough	1.75	F= .670	.513
	Not enough	1.83		
	Nearly enough	1.78		
	Total	1.77		
Resident	Rural	1.75	t= -.413-	.680
	City	1.77		
	Total	1.77		

P=probability value, NS: Non-Significant at P > 0.05, S: Significant at P < 0.05, HS: Highly Significant at P < 0.001.

In table 5 the result showed there was a significant statistical differences in the psychosocial problems between the groups of academic stage at P < 0.05.

Discussion

In table (1) the results showed the age for students at most from) %57(21-18 years with mean 21.63years. Regarding the sex, the majority)%78.9(of the participants were female. According to the academic stage the most (%37.3) at the last year of the study. The results also shown the most (%55.7) of the students with sufficient monthly income and the majority (83.2%) living in the city in studies conducted on 10,676Chinese university students were included. Among them, %21.4were identified as having possible mental health problems. Students being a female, aged 18– 22years old, whose mother held college degrees and above, and drinking alcohol were more likely to have mental health problems (P < 0.05). Contrarily, having general or higher household economic levels, work-rest regularly, and sleeping ≥ 7h were preventive factors (P < 0.05). Especially, a decreasing trend in the risk of having mental health problems with the improvement of SSQ was identified.**(8).**

In Table (2) showed that the level of psychosocial problems among nursing college students was moderate, with a mean score of 1.77 (range = 1–3). Item number 3 had the highest mean score (M = 2.48), whereas item number 12 had the lowest mean score (M = 1.19). Strong

feelings of frustration, anger, sadness, or shame can lead to psychological difficulties such as anxiety **(9).**

In table (3) This study on the levels of psychosocial problems among 185 nursing college students reveals several important findings. Firstly, the majority of the students (55.7%) reported experiencing moderate levels of psychosocial problems. This suggests that a significant portion of nursing college students may be dealing with various psychosocial challenges during their academic journey. The mean score of 88.23 further corroborates this, falling within the moderate range on the measurement scale used (ranging from 50 to 150). Several studies have examined psychosocial problems among college students, including those in nursing programs. One such study by study explored the mental health status of Chinese nursing students and found that a considerable proportion experienced symptoms of anxiety and depression(10). Similarly, a another study investigated stress and mental health among nursing students in China, highlighting the prevalence of stress and its impact on mental well-being. These studies align with the findings of the present study, indicating that psychosocial issues are prevalent among nursing students worldwide (11).

In table (4) The finding of a non-significant statistical association between students' age and psychosocial problems in the study of nursing college students is interesting and may have several implications. Firstly, it suggests that psychosocial problems among nursing students may not necessarily vary significantly based on age. This finding challenges assumptions that older students may experience fewer psychosocial issues due to greater maturity or life experience. Similar results have been reported in other studies examining the relationship between age and psychosocial problems among college students. For instance, a study by a study explored stress and coping mechanisms among undergraduate medical students in Malaysia and reported no significant association between age and stress levels (12)

In table (5) The significant statistical differences in psychosocial problems between different academic stages among nursing college students suggest that the challenges they face may vary depending on their progress through their academic program. This finding underscores the importance of recognizing the unique stressors and demands associated with each stage of the educational journey. Several studies have explored the relationship between academic stage and psychosocial problems among college students, including those in nursing programs(13). For example, a study investigated stressors and coping strategies among nursing students in Iran and found that students in higher academic stages reported higher levels of stress compared to those in lower stages. This suggests that as students advance in their academic program, they may encounter increased pressure and demands, leading to greater psychosocial challenges. Similarly, a study examined stress, coping strategies, and psychological distress among nursing students in China and

reported that students in more advanced academic stages experienced higher levels of psychological distress compared to their counterparts in earlier stages. These findings highlight the importance of providing targeted support and resources to nursing students as they progress through their program to help them cope with the unique stressors they may face at different stages.(14)

Conclusion:

The findings highlight the importance of addressing psychosocial problems among nursing students through effective mental health support and student-centered interventions. Factors such as academic demands, financial stress, social support, and coping abilities may have a greater influence on students' psychosocial well-being than age alone. Additionally, understanding the relationship between academic stage and psychosocial problems is essential for developing appropriate support strategies tailored to students' needs throughout their educational journey.

Recommendations:

Academic institutions should implement comprehensive support services, including counseling programs, stress management interventions, and mental health education within the nursing curriculum. A holistic approach that promotes both academic success and psychological well-being should be adopted. Furthermore, institutions should regularly evaluate and improve existing support systems through continuous assessment and collaboration with mental health professionals to ensure that students' evolving needs are effectively addressed.

References

1. Kadison R, DiGeronimo TF. *College of the overwhelmed: The campus mental health crisis and what to do about it*. San Francisco: Jossey-Bass; 2004.
2. Gurung RAR. *Health psychology: A cultural approach*. Belmont (CA): Thomson Wadsworth; 2006.
3. Rob S, Callahan N. *Undergraduate completion and persistence at four-year colleges and universities*. National Institute of Independent Colleges and Universities; 2011.
4. Lakey B, Cohen S. Social support theory and measurement. In: Cohen S, Underwood LG, Gottlieb BH, editors. *Social support measurement and interventions: A guide for health and social scientists*. New York: Oxford University Press; 2000.
5. Villanova P, Bownas DA. *Dimensions of college students of the Southeastern Virginia Polytechnic Institute and State University*. 2008.
6. Elliot TR, Gramling SE. Personal assertiveness and the effects of social support among college students. J Couns Psychol. 1990;37(4):427-36.

7. Dollete M, Steese S, Phillips W, Matthews G. Understanding Girls' Circle as an intervention on perceived social support, body image, self-efficacy, locus of control and self-esteem. J Psychol. 2004;90(2):204-15.
8. Wang C, Yan S, Jiang H, Guo Y, Gan Y, Lv C, et al. Socio-demographic characteristics, lifestyles, social support quality and mental health in college students: a cross-sectional study. BMC Public Health. 2022;22:1583.
9. Rady HEAEA, El-Sayed LA. Psychosocial and educational problems for undergraduate university nursing students. Psychol Behav Sci. 2015;4(3):116-24. doi:10.11648/j.pbs.20150403.15.
10. Zhang Y, Yang Y, Xie Q, Zhao Y, Qiu X, Jia X. Mental health status and influencing factors of Chinese nursing students: a cross-sectional survey. Perspect Psychiatr Care. 2019;55(3):476-83. doi:10.1111/ppc.12370.
11. Xie Y, Shi L, Zhang J, Zhang L, Liu D, Tian Y, et al. Stressors and mental health in Chinese nurses: Moderating effect of coping strategies and the general self-efficacy. Int J Nurs Pract. 2020;26(2). doi:10.1111/ijn.12804.
12. Ibrahim AK, Kelly SJ, Adams CE, Glazebrook C. A systematic review of studies of depression prevalence in university students. J Psychiatr Res. 2018;107:64-73. doi:10.1016/j.jpsychires.2018.09.015.
13. Khodaveisi M, Omidi A, Farokhian A, Soltanian AR, Sotoudeh G. The relationship of stressors and coping strategies with stress symptoms among nursing students. J Caring Sci. 2017;6(1):29-38. doi:10.15171/jcs.2017.004.
14. Wu Y, Wang W, Hao Y. Association between psychological distress and perceived stress among Chinese undergraduate nursing students: a cross-sectional survey. Nurse Educ Today. 2018;65:1-6. doi:10.1016/j.nedt.2018.02.024.

HNJ 1 (1), (2025) 3- 8

Holistic Nursing Journal

https://hnj.uobaghdad.edu.iq/index.php/hnj/en/index
ISSN: 3135-338X

Assessment of Patient's Diabetes Self-Management and their Activities of Daily Livings

Safad Riyadh Isam*,Fatima Jawad Jassim**,Qamar Hashim Harjan**,Mustafa Dafir Hadi**
* Lecturer , University of Baghdad, College of Nursing, Adult Nursing Department, Baghdad, Iraq.
Email : safadr.isam@conursing.uobaghdad.edu.iq

** BSc student, University of Baghdad, College of Nursing, Department of Adult Nursing, Baghdad, Iraq.

Abstract

Objectives: To assess patients' diabetes self-management, evaluate their activities of daily living (ADLs), and determine the relationship between diabetes self-management and activities of daily living among patients with diabetes mellitus.

Methodology: A descriptive study was conducted at the Specialized Center for Endocrine Diseases and Diabetes from November 7, 2023, to April 17, 2024. A purposive sample of 300 patients with diabetes mellitus was selected. Data were collected using a questionnaire consisting of patients' sociodemographic and medical information, the Diabetes Self-Management Questionnaire (DSMQ), and the Activities of Daily Living (ADLs) Checklist. Validity was established through a panel of 14 experts, and reliability was confirmed through a pilot study. Data were analyzed using descriptive and inferential statistical methods.

Results: Most participants were female (60%), aged 48–57 years (34%), and overweight (38%). The majority had been diagnosed with type II diabetes mellitus for 6–10 years. The findings indicated that diabetes self-management had a significant impact on patients' activities of daily living. A statistically significant relationship was found between diabetes self-management and activities of daily living.

Conclusions: Effective diabetes self-management is closely associated with better performance of activities of daily living among patients with diabetes mellitus.

Recommendations: Patients should be encouraged to adhere to glycemic self-management practices and increase physical activity through walking and **low-**

IRAQI Academic Scientific Journals

Article info:

Article history:

Received: 20/01/2025
Accepted: 25/03/2025
Published: 01/07/2025

Keywords:

Patient, satisfaction, nursing care, Cardiac surgery

∗Corresponding author at: University of Baghdad, College of Nursing, Department of Adult Nursing, Baghdad, Iraq. Assist. Prof. (Isam, S. R.). Email safad.isam@conursing.uobaghdad.edu.iq . DOI: https://doi.org/

تقييم الإدارة الذاتية لمرضى داء السكري وأنشطتهم في الحياة اليومية

المستخلص:

الأهداف: تهدف الدراسة إلى تقييم الإدارة الذاتية لمرض السكري لدى المرضى، وتقييم أنشطة المريض في الحياة اليومية وتقييم العلاقة بين الإدارة الذاتية للمرضى لمرض السكري وأنشطة حياتهم اليومية.

المنهجية: دراسة وصفية أجريت في المركز التخصصي لأمراض الغدد الصم والسكري وأجريت الدراسة في الفترة من السابع من تشرين الثاني ٢٠٢٣ وحتى السابع عشر من نيسان ٢٠٢٤. وتتألف العينة غير الاحتمالية من (300) مريضاً مصاب بمرض السكري من زائري العيادات الخارجية في المركز التخصصي لأمراض الغدد الصم والسكري. تم جمع البيانات من خلال استخدام الاستبانة المصممة، والتي تتكون من ثلاثة استبانة: (1) معلومات المرضى: الجزء الأول (الخصائص الاجتماعية والديموغرافية)، الجزء الثاني (التاريخ الطبي للمرضى)، (2) استبيان الإدارة الذاتية لمرض السكري (DSMQ) والذي يتكون من (16) عنصرًا و(3) قائمة لأنشطة الحياة اليومية (ADLs) والتي تتكون من (15) عنصر. تم استخدام المقابلة المباشرة وغير المباشرة لجمع البيانات عن المرضى. تم تحديد صلاحية الاستبيان من خلال لجنة خبراء مكونة من (١٤) خبيرا متخصصا وتم تحديد مصداقيتها من خلال دراسة تجريبية أجريت خلال الفترة من (21 -23 كانون الثاني ٢٠٢٤). تم استخدام إجراءات التحليل الإحصائي الوصفي (التكرار، النسبة المئوية ، متوسط الدرجة ، الانحراف المعياري، مربع كاي) لتحليل البيانات.

النتائج: أشارت نتائج الدراسة إلى أن عينة الدراسة كانت من الإناث (60٪) ، (34٪) ضمن الفئة العمرية (٤٨-٥٧ سنة)، و (38٪) ضمن فئة البدانة الأولى ومعظم عينة الدراسة كانت مشخصة بالنوع الثاني من مرض السكري لمدة تتراوح بين (6-10) سنوات.

الاستنتاجات: استنتج أن هناك تأثير شديد للإدارة الذاتية لمرض السكري على أنشطة المرضى في الحياة اليومية. بينما تعكس غالبية

Introduction

Diabetes Mellitus (DM) is a metabolic disorder caused by either a lack of insulin secretion, impaired insulin action, or both. Insulin plays an important role as an anabolic hormone affecting the metabolism of carbohydrates, lipids, and proteins (1).

According to the American Diabetes Association (ADA), diabetes mellitus is classified into four categories: type 1 diabetes, type 2 diabetes, gestational diabetes, and other specific types of diabetes (2).

From a pathophysiological perspective, the main problem in diabetes is that the body either does not produce enough insulin or cannot effectively utilize the insulin it produces, resulting in elevated blood glucose levels (3).

Diabetes mellitus is associated with various complications, including nephropathy, neuropathy, cardiovascular diseases, renal complications, retinopathy, and other metabolic disturbances (4). Moreover, diabetes can lead to serious health consequences such as heart disease, blindness, kidney failure, and lower-extremity amputations (3).

Globally, diabetes has become a major public health concern. The prevalence of diabetes has reached 10.5% (536.6 million people) worldwide. Both men and women are equally affected, with the highest prevalence observed among individuals aged 75–79 years. The age-adjusted prevalence of diabetes is estimated at 12.2%, with the highest rates reported in Arab countries (5,6).

The Diabetes Self-Management Questionnaire (DSMQ), developed by Schmitt et al., is a self-report instrument designed for individuals with diabetes. It helps distinguish between patients with adequate and inadequate self-management behaviors, facilitating the early identification of individuals at high risk for poor diabetes outcomes (7).

The American Occupational Therapy Association defined Activities of Daily Living (ADLs) as activities directed toward caring for one's own body. These activities are fundamental for independent living and well-being and include bathing, toileting, dressing, and eating (8).

Methodology

Study Design and Setting

A descriptive cross-sectional study was conducted to achieve the study objectives from November 7, 2023, to April 17, 2024. The study was carried out at the Specialized Center for Endocrine Diseases and Diabetes among patients diagnosed with diabetes mellitus attending the center.

Sample and Sampling Technique

A non-probability purposive sampling technique was used to recruit the study participants. Initially, 335 patients with diabetes mellitus were approached. After excluding 20 participants involved in the pilot study and 15 patients who declined participation, a final sample of 300 patients was included in the study.

Instrument of the Study

Data were collected using a structured questionnaire developed after an extensive review of relevant literature. The instrument consisted of three sections. The first section assessed participants' demographic and clinical characteristics, including age, gender, marital status, educational level, occupation, monthly income, body mass index, associated chronic diseases, duration and type of diabetes, medications used, and family history of diabetes. The second section utilized the Diabetes Self-Management Questionnaire (DSMQ), developed by Schmitt et al. (2013), comprising 16 items that evaluate four domains of diabetes self-management: glucose management, dietary control, physical activity, and healthcare use. Responses were rated using a four-point Likert scale ranging from 1 (does not apply to me) to 4 (applies to me very much). The third section assessed Activities of Daily Living (ADLs) using a 15-item checklist adapted from the Katz Index of Independence and further developed by Newman (2021). Responses were measured using a three-point Likert scale ranging from 1 (requires help) to 3 (requires no help).

Validity of the Instrument

Content validity was established through evaluation by a panel of 14 experts, including 10 faculty members from the College of Nursing, University of Baghdad, and four specialists from the Specialized Center for Endocrine Diseases and Diabetes, each with more than 10 years of

professional experience. Minor modifications were made to selected items based on the experts' recommendations.

A pilot study involving 20 patients was conducted between January 21 and 23, 2024, to assess the clarity, feasibility, and reliability of the study instrument. Participants in the pilot study were excluded from the final sample. The pilot findings indicated that the questionnaire items were clear and understandable, with an average completion time of 10–15 minutes. Test-retest reliability analysis demonstrated good instrument stability, with a Pearson correlation coefficient of 0.84.

Data Collection

Data was collected from January 21 to February 18, 2024, through face-to-face interviews conducted at the outpatient clinics of the study setting. Each interview lasted approximately 10–15 minutes, during which participants completed the study questionnaire under the researchers' supervision.

Statistical Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 23.0. Descriptive statistics, including frequencies, percentages, means, mean scores, and standard deviations, were used to summarize the data. Inferential statistics were performed using Pearson's correlation coefficient to examine relationships between study variables and to assess test-retest reliability. Statistical significance was set at $p < 0.05$.

Results of the Study

Table (1): Distribution of the Sample According to Their Sociodemographic Characteristics.

Variables	Characteristics	Participants	
		F	%
Age (Groups)	18- 27 years	6	2.0
	28- 37 years	9	3.0
	38- 47 years	47	15.7
	48- 57 years	102	34.0
	58- 67 years	93	31.0
	≥ 68 years	43	14.3
	M.S ± SD (55.5±10.864)		
Gender	Male	120	40.0
	Female	180	60.0
	M.S ± SD (1.60±0.491)		
Marital Status	Single	13	4.3
	Married	249	83.0
	Divorced	21	7.0
	Widowed	17	5.7
	M.S ± SD (2.14±0.567)		
Education	Read and write	49	16.3

	Primary school graduate	116	38.7
	Middle school graduate	60	20.0
	Secondary school graduate	26	8.7
	Institute\ college graduate	49	16.3
	M.S ± SD (2.70±1.302)		
Occupation	Jobless	14	4.7
	Employee	39	13.1
	Free jobs	43	14.3
	Retired	49	16.3
	Housewife	153	51
	Student	2	0.7
	M.S ± SD (3.98±1.275)		
Monthly Income	≤ 300000 IQD	148	49.3
	301000- 600000 IQD	75	25.0
	601000- 900000 IQD	56	18.7
	901000- 1250000 IQD	13	4.3
	1251000- 1500000 IQD	4	1.3
	≥ 1501000 IQD	4	1.3
	M.S ± SD (1.87±1.084)		
Body Mass Index (BMI)	Underweight (< 18.4 kg\m^2)	7	2.3
	Normal (18.5- 24.9 kg\m^2)	64	21.3
	Overweight (25- 29.9 kg\m^2)	114	38.0
	Obese Class l (30- 34.9 kg\m^2)	71	23.7
	Obese Class II (35- 38.9 kg\m^2)	44	14.7
	M.S ± SD (3.27±1.030)		

F= Frequency, %= Percentage, M.S.= Mean of score, SD= Standard deviation, IQD Iraqi Dinars, kg\m2 = Kilogram/ square meter

Table (4.1) showed that the highest percentage of the patients (34%) were within age group (48-57 years). The majority of patients were female (60%). According to their marital status; the highest percentage of the patients (83%) were married. The highest percentage of the patients (38.7%) graduated from primary school.

According to their occupation; the highest percentage of the patients (51%) were housewives. Regarding their monthly income; the highest percentage of the patients (49.3%) were paid about (<300.000 IQD/ month).

The body mass index (BMI) for the study sample showed that the highest percentage (38%) were overweight (25-29.9kg\ m^2).

Table (2): Distribution of the Sample According to Chronic Diseases.

Variables	Characteristics	Participants	
		F	%
Chronic disease	Yes	214	71.3
	No	86	28.7
Heart Disease	Yes	51	17.0
	No	249	83.0
	M.S ± SD (1.83±0.376)		
Hypertension	Yes	128	42.7
	No	172	57.3
	M.S ± SD (1.57±0.495)		
Rheumatoid Arthritis	Yes	105	53.0
	No	195	65.0
	M.S ± SD (1.65±0.478)		
Kidney Failure	Yes	19	6.3
	No	281	93.7
	M.S ± SD (1.94±0.244)		
Respiratory Problems	Yes	19	6.3
	No	281	93.7
	M.S ± SD (1.94±0.244)		
Others	Yes	17	5.7
	No	283	94.3
	M.S ± SD (1.94±0.232)		

F= Frequency, %= Percentage, M.S.= Mean of score, SD= Standard deviation,

Table (2) showed that highest percentage of patients (83%) were having at least one chronic disease. While the majority of patients didn't have heart disease (83%), hypertension (57%), rheumatoid arthritis (65%), kidney failure (93.7%), respiratory problems (93.7%), and (94.3%) no other chronic diseases.

Table (3): Distribution of the Sample According to Their Clinical Characteristics.

Variables	Characteristics	Participants		Mean	SD
		F	%		
1. Diagnosis (Groups)	1- 5 years	93	31.0	2.33	1.288
	6- 10 years	100	33.3		
	11- 15 years	53	17.7		
	16- 20 years	32	10.7		
	21- 25 years	14	4.7		
	≥ 26 years	8	2.7		
2. Type of Diabetes	IDDM	107	35.7	1.64	0.480
	NIDDM	193	64.3		
3. Medications					
Insulin	No Insulin	193	64.3	4.22	1.177
	Bolus Insulin	11	3.7		
	Basal insulin	22	7.3		

	Bolus and Basal Insulin	49	16.3		
	Insulin Mixture	25	8.3		
Oral Supplement	No Supplement	104	34.7	1.74	0.722
	Daonil	182	60.7		
	Amore	9	3.0		
	Sitavia	1	0.3		
	Jardiance	2	0.7		
	Metformin	1	0.3		
	Glimepiride	1	0.3		
4. Family History	Yes	238	79.3	1.21	0.406
	No	62	20.7		

F= Frequency, %= Percentage, SD= Standard deviation, IDDM=Insulin dependent diabetes mellitus, NIDDM= non-insulin dependent diabetes mellitus

Table (3) showed that the highest percentage of the patients (33.3%) were diagnosed within (6-10 years). Most of patients (60.7%) were using Daonil. The majority of the patients (79.3%) were having family history of Diabetes Mellitus.

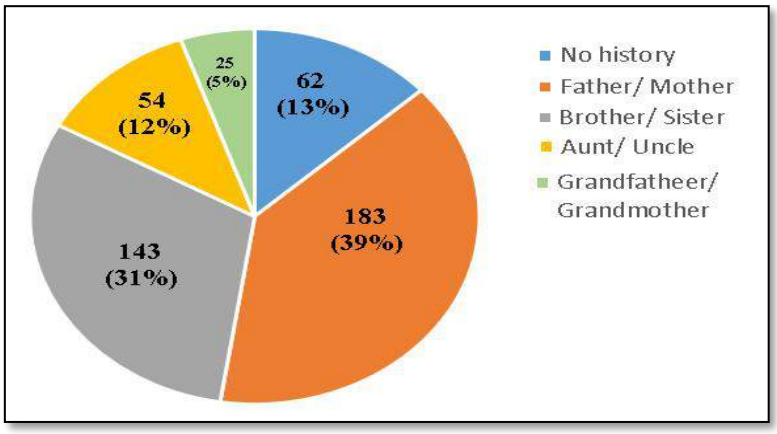

Figure (1): Distribution of Patients' Family History of Diabetes Mellitus according to Their Family Relations.

Figure (1) shows that most patients (39%) had their father/mother with history of diabetes mellitus.

Table (4): Mean of Score and Significance for Diabetes Self-Management Questionnaire Items.

Diabetes Self-Management Questionnaire (DSMQ) Items.	Applies to me very much	Applies to me to a considerable	Applies to me to some degree	Does not apply to me	Mean	SD	Significance
1. I check my blood sugar levels with care and attention.	125	79	64	32	2.99	1.030	HS
2. The food I choose to eat makes it easy to achieve optimal blood sugar levels.	90	111	59	40	2.84	1.003	HS
3. I keep all doctors' appointments recommended for diabetes treatment.	194	65	25	16	3.46	0.859	HS
4. I take my diabetes medication (e. g. insulin, tablets) as prescribed.	244	38	11	7	3.73	0.642	HS
5. Occasionally I eat lots of sweets or other foods rich in carbohydrates.	49	59	104	88	2.77	1.046	HS
6. I record my blood sugar levels regularly (or analyse the value chart with my blood glucose meter).	82	60	79	79	2.48	1.152	MS
7. I tend to avoid diabetes-related doctors' appointments.	41	42	76	141	3.06	1.076	HS
8. I do regular physical activity to achieve optimal blood sugar levels.	34	39	69	158	1.83	1.041	MS
9. I strictly follow the dietary recommendations given by my doctor or diabetes specialist.	100	82	76	42	2.80	1.054	HS
10. I do not check my blood sugar levels frequently enough as would be required for achieving good blood glucose control.	41	52	109	98	2.88	1.018	HS
11. I avoid physical activity, although it would improve my diabetes.	147	48	63	42	2.00	1.124	MS
12. I tend to forget to take or skip my diabetes medication (e. g. insulin, tabs).	48	55	74	123	2.91	1.108	HS
13. Sometimes I have real 'food binges' (not triggered by hypoglycaemia).	80	89	80	51	2.66	1.049	MS
14. Regarding my diabetes care, I should see my medical practitioner(s) more often	135	79	49	37	3.04	1.053	HS
15. I tend to skip planned physical activity.	154	45	63	38	1.95	1.110	MS
16. My diabetes self-care is poor	75	92	84	49	2.36	1.029	MS

DSMQ= Diabetes Self-Management Questionnaire, SD= Standard Deviation, LS= Low significance, MS= Moderate significance, HS= High significance.
Rating of significance (LS = 1- 1.33, MS = 1.34- 2.76, HS= 2.77-4).

Table (4) showed that there was high statistical significance at P < 0.05 in most DSMQ items. While showing moderate statistical significance in the remaining items as shown in significance bar.

Table (5): Mean of Score and Significance for Activities of Daily Livings Items.

Activities of Daily Livings Items	Requires No Help	Requires Modifications	Requires Help	Mean	SD	Significance
1. Bathing	294	2	4	2.97	0.243	HS
2. Dressing	293	3	4	2.96	0.249	HS
3. Grooming	295	2	3	2.97	0.215	HS
4. Toileting	299	0	1	2.99	0.115	HS
5. Eating	297	1	2	2.98	0.173	HS
6. Transferring	284	8	8	2.92	0.357	HS
7. Mobility	270	14	16	2.85	0.487	HS
8. Shopping	234	14	52	2.61	0.766	HS
9. Cooking	196	22	82	2.38	0.886	HS
10. Managing Meds	235	35	30	2.68	0.646	HS
11. Housework	166	33	101	2.22	0.920	MS
12. Laundry	177	28	95	2.27	0.914	MS
13. Transportation	127	15	158	1.90	0.971	MS
14. Managing Finances	282	8	10	2.91	0.390	HS
15. Communication	237	5	58	2.60	0.793	HS

SD= Standard Deviation, LS= Low significance, MS= Moderate significance, HS= High significance. Rating of significance (LS = 1- 1.66, MS = 1.67- 2.32, HS= 2.33- 3).

Table (5) showed that there was a high statistical significance at P <0.05 in most ADLs items. While showing moderate statistical significance in items concerned with (housework, laundry and transportation).

Table (6): Overall Score for Diabetes Self-Management Questionnaire and Activities of Daily Livings.

Overall Scores	Mild	Moderate	Severe	Mean	SD	Severity
DSMQ*	19	168	95	2.25	0.563	M
ADLs**	4	35	261	2.86	0.387	H

SD= Standard Deviation, L= Low, M= Moderate, HS= High. DSMQ= Diabetes self-management questionnaire, ADLs= Activities of daily livings

*Rating of severity (DSMQ) (L= 1- 1.33, M= 1.34- 2.76, H= 2.77-4)

**Rating of severity (ADLs) (L= 1- 1.66, M= 1.67- 3.33, H= 3.34-5)

Table (6) showed that there was moderate impact of diabetes on patients' self-management for most of patients. While showing high limitation in patients' activities of daily livings.

Table (7): Impact of Diabetes Self-Management on Patient's Activities of Daily Livings.

DSMQ Score	ADLs Score			Total	Paired t test		
	Mild	Moderate	Severe		t value	df	Sign.
Mild	2	18	16	36	4.616	299	0.000 (HS)
Moderate	18	36	30	84			
Severe	46	94	40	180			
Total	66	148	86	300			

df= Degree of freedom, Sign.= Significance, DSMQ= Diabetes self-management questionnaire, ADLs= Activities of daily livings

*Rating of severity (DSMQ) (L= 1- 1.33, M= 1.34- 2.76, H= 2.77-4)

**Rating of severity (ADLs) (L= 1- 1.66, M= 1.67- 3.33, H= 3.34-5)

Table (7) showed that there were high significant statistical differences at p> 0.005 between DSMQ and ADLs, this means that there is severe impact of diabetes self-management on patients' activities of daily livings.

Discussion:

The findings of the current study showed that females constituted the majority of the study sample (60%), with most participants aged between 48–57 years and the majority being married. These findings were generally consistent with previous studies (9,11,12), although some studies reported different gender distributions and marital statuses (10,13).

In terms of educational level, most participants had completed primary education, which was comparable to findings reported in earlier studies (13), while other studies found higher educational attainment among participants (9). Additionally, most participants were housewives with low family income, which may contribute to increased disease burden and reduced quality of life (14).

Regarding clinical characteristics, over one-third of participants were overweight, supporting previous evidence that overweight and obesity are important risk factors for type II diabetes mellitus and may negatively influence activities of daily living (ADLs) (15,16).

Most participants had at least one chronic disease, although the prevalence of heart disease, kidney failure, respiratory diseases, and rheumatoid arthritis remained relatively low. Previous

studies have also highlighted the association between diabetes and comorbid conditions, including cardiovascular and renal complications (9,17-19).

Concerning diabetes-related characteristics, approximately one-third of participants had been diagnosed with diabetes for 6–10 years, and the majority had type II diabetes mellitus. Most participants reported a positive family history of diabetes, consistent with previous studies demonstrating that family history is associated with increased susceptibility to diabetes and its complications (12,13,21,22). Furthermore, Daonil was the most frequently used medication among participants, although other studies reported metformin as the most commonly prescribed antidiabetic medication (20,21).

The findings related to diabetes self-management indicated significant deficiencies in several self-care behaviors. Most DSMQ items demonstrated statistically significant results, suggesting inadequate self-management practices among participants. Similar findings have been reported in previous studies that identified poor adherence to blood glucose monitoring, dietary recommendations, and overall diabetes self-management behaviors (23,24). However, some studies reported lower rates of inadequate self-care behaviors (25,26).

Regarding activities of daily living, significant limitations were observed in most ADL domains, indicating that diabetes adversely affects patients' functional abilities. Previous studies have similarly demonstrated that diabetes, advanced age, lower socioeconomic status, and obesity are associated with increased ADL impairment and physical disability (16,27,28).

The current study also found a significant relationship between diabetes self-management and ADLs, suggesting that poor self-management may contribute to reduced functional independence. These findings are supported by earlier studies that reported associations between self-management behaviors, physical activity levels, and functional outcomes among individuals with diabetes (24,29,30).

Overall, the study highlights the considerable impact of diabetes mellitus on self-management behaviors and activities of daily living. Factors such as age, obesity, duration of illness, family history, socioeconomic status, and lifestyle behaviors may contribute to poorer self-management and increased functional limitations among patients with diabetes mellitus.

Conclusions

The study findings showed that most participants were female, married, housewives, and within the age group of 48–57 years. The majority had primary school education and were diagnosed with type II diabetes mellitus for 6–10 years. The results also indicated that diabetes self-management had a significant impact on activities of daily living among the participants.

Recommendations

Patients with diabetes should be encouraged to adhere to glycemic control practices, maintain regular physical activity, and follow a healthy diet to achieve an ideal body weight. Additionally, educational programs on diabetes self-management should be provided to minimize the negative impact of diabetes on activities of daily living**.**

References

1) Poznyak A, Grechko AV, Poggio P, Myasoedova VA, Alfieri V, Orekhov AN. The diabetes mellitus–atherosclerosis connection: the role of lipid and glucose metabolism and chronic inflammation. *Int J Mol Sci.* 2020;21(5):1835.
2) American Diabetes Association. Classification and diagnosis of diabetes: Standards of Medical Care in Diabetes—2019. *Diabetes Care.* 2019;42(Suppl 1):S13-S28.
3) Mukhtar Y, Galalain A, Yunusa U. A modern overview on diabetes mellitus: A chronic endocrine disorder. *Eur J Biol.* 2020;5(2):1-14.
4) Wong CY, Al-Salami H, Dass CR. Potential of insulin nanoparticle formulations for oral delivery and diabetes treatment. *J Control Release.* 2017;264:247-275.
5) Sun H, Saeedi P, Karuranga S, Pinkepank M, Ogurtsova K, Duncan BB, et al. IDF Diabetes Atlas: Global, regional and country-level diabetes prevalence estimates for 2021 and projections for 2045. *Diabetes Res Clin Pract.* 2021;183:109119.
6) El-Kebbi IM, Bidikian NH, Hneiny L, Nasrallah MP. Epidemiology of type 2 diabetes in the Middle East and North Africa: Challenges and call for action. *World J Diabetes.* 2021;12(9):1401-1425.
7) Schmitt A, Gahr A, Hermanns N, Kulzer B, Huber J, Haak T. The Diabetes Self-Management Questionnaire (DSMQ): development and evaluation of an instrument to assess diabetes self-care activities associated with glycaemic control. *Health Qual Life Outcomes.* 2013;11:138.
8) American Occupational Therapy Association. Occupational Therapy Practice Framework: Domain and Process. 3rd ed. *Am J Occup Ther.* 2014;68(Suppl 1):S1-S48.
9) Tietjen AF, Ghandour R, Mikki N, Jerdén L, Eriksson JW, Norberg M, et al. Quality of life of type 2 diabetes mellitus patients in Ramallah and al-Bireh Governorate–Palestine: a part of the Palestinian diabetes complications and control study (PDCCS). *Qual Life Res.* 2021;30(5):1407-1416.
10) Reina-Bueno M, Palomo-Toucedo IC, Medina-Núñez MÁ, Munuera-Martínez PV, Castro-Méndez A, Vázquez-Bautista MDC. Impact on the quality of life and physiological parameters in patients with diabetes mellitus. *Appl Sci.* 2021;11(15):6829.
11) Schmitt A, Kulzer B, Ehrmann D, Haak T, Hermanns N. A self-report measure of diabetes self-management for type 1 and type 2 diabetes: The Diabetes Self-Management

Questionnaire-Revised (DSMQ-R). *Front Clin Diabetes Healthc.* 2022;2:823046.

12) Sonsona JB. Factors Influencing Diabetes Self-Management of Filipino Americans with Type 2 Diabetes Mellitus: A Holistic Approach [dissertation]. Walden University; 2014.
13) Chrvala CA, Sherr D, Lipman RD. Diabetes self-management education for adults with type 2 diabetes mellitus: A systematic review of the effect on glycemic control. *Patient Educ Couns.* 2016;99(6):926-943.
14) Sepúlveda E, Poínhos R, Constante M, Pais-Ribeiro J, Freitas P, Carvalho D. Health-related quality of life in type 1 and type 2 diabetic patients in a Portuguese central public hospital. *Diabetes Metab Syndr Obes.* 2015;8:219-229.
15) Veit M, van Asten R, Olie A, Prinz P. The role of dietary sugars, overweight, and obesity in type 2 diabetes mellitus: A narrative review. *Eur J Clin Nutr.* 2022;76:1497-1501.
16) Ahmed S, Faruque M, Moniruzzaman M, Roby NU, Ashraf F, Yano Y, et al. The pattern of physical disability and determinants of activities of daily living among people with diabetes in Bangladesh. *Endocrinol Diabetes Metab.* 2022;5(5):e00365.
17) Klajda MD, Scott CG, Rodeheffer RJ, Chen HH. Diabetes mellitus is an independent predictor for the development of heart failure. *Mayo Clin Proc.* 2020;95(1):124-133.
18) Hu F, Zhang T. Study on risk factors of diabetic nephropathy in obese patients with type 2 diabetes mellitus. *Int J Gen Med.* 2020;13:351-360.
19) Crepaldi G, Scirè CA, Carrara G, Sakellariou G, Caporali R, Hmamouchi I, et al. Cardiovascular comorbidities relate more than others with disease activity in rheumatoid arthritis. *PLoS One.* 2016;11(1):e0146991.
20) Ajulo OM, Ajulo OH. Evaluation of patients' responses to oral hypoglycemic agents at a university health centre. *J Pharm Res Int.* 2019;25(5):1-7.
21) Alharithy MK, Alobaylan MM, Alsugair ZO, Alswat KA. Impact of family history of diabetes on diabetes control and complications. *Endocr Pract.* 2018;24(9):773-779.

HNJ 1 (1), (2025) 4- 8

Holistic Nursing Journal

https://hnj.uobaghdad.edu.iq/index.php/hnj/en/index

ISSN: 3135-338X

Assessment of Women's Acceptance about Breast Cancer Changes

Nuha Adel Ibrahim, Ehab Jamal Saleh ,Qabas Khalid Soud, Maha Methaq Swaid, Naba'a Mohammed Ameen

* Assist. Prof., University of Baghdad, College of Nursing, Department of Maternal and Neonate Nursing, Baghdad, Iraq.

Email: nuhaa@conursing.uobaghdad.edu.iq ORCID: orcid.org/0000-0002-2652-3534

** BSc student, University of Baghdad, College of Nursing, Department of Maternal and Neonate Nursing, Baghdad, Iraq.

Abstract

Objectives: to Assess women's acceptance about breast cancer changes.

Methodology: A descriptive study design is carried out throughout present in Medical City Hospitals. The study took place from the period 1st Feb 2024 to 1rst April 2024. The subjects of the study consisted of (100) women with breast cancer, Women who had mastectomy were excluded. The study took place in (Al-Awram Hospital & Al-Amal Hospital)

Results: The highest percentage of participants at age group 38-less than 48 years is (31%), the highest percentage of participants martial status is married (77%), and the highest percentage of participants with breast cancer family history that have no family history of breast cancer is (65%).Women's acceptance about breast cancer change was moderate.

Recommendations: It is recommended to conduct further study in the future to assess women's acceptance about breast cancer changes. It is also important to conduct an educational program to health care providers about the tools that help to assess self-acceptance and body image for breast cancer patient

IRAQI Academic Scientific Journals

Article info:

Article history:

Received: 28/01/2025
Accepted: 02/04/2025
Published: 01/07/2025

Keywords:

Breast Cancer, Women's Acceptance, Body Image Changes, Psychological Adaptation, Self-Acceptance

∗Corresponding author at: University of Baghdad, College of Nursing, Department of Maternal and Neonate Nursing, Baghdad, Iraq. Assist. Prof. (Ibrahim, N. A.). Email nuhaa@conursing.uobaghdad.edu.iq . ORCID https:// orcid.org/0000-0002-2652-3534. DOI: https://doi.org/

تقييم تقبل النساء حول تغيرات سرطان الثدي

المستخلص:

الأهداف: تهدف الدراسة إلى تقييم مدى تقبل النساء للتغيرات الناتجة عن الإصابة بسرطان الثدي.

المنهجية: أُجريت دراسة وصفية في مستشفيات مدينة الطب للفترة من 1 شباط 2024 ولغاية 1 نيسان 2024. تألفت عينة الدراسة من (100) امرأة مصابة بسرطان الثدي، وتم استبعاد النساء اللاتي خضعن لعملية استئصال الثدي. أُجريت الدراسة في مستشفى الأورام ومستشفى الأمل.

النتائج: أظهرت النتائج أن أعلى نسبة من المشاركات كانت ضمن الفئة العمرية (38 إلى أقل من 48 سنة) وبنسبة (31%). كما كانت أعلى نسبة للحالة الاجتماعية من المتزوجات وبنسبة (77%). وأشارت النتائج إلى أن أعلى نسبة من المشاركات لم يكن لديهن تاريخ عائلي للإصابة بسرطان الثدي، حيث بلغت (65%). كما تبين أن مستوى تقبل النساء للتغيرات المرتبطة بسرطان الثدي كان متوسطًا.

التوصيات: توصي الدراسة بإجراء المزيد من الدراسات مستقبلًا لتقييم مدى تقبل النساء للتغيرات الناتجة عن سرطان الثدي. كما توصي بتنفيذ برامج تعليمية لمقدمي الرعاية الصحية حول الأدوات التي تساعد في تقييم تقبل الذات وصورة الجسم لدى مريضات سرطان الثدي.

Introduction

Cancer is a group of diseases characterized by uncontrolled cell growth resulting from genetic mutations that disrupt normal cellular regulatory mechanisms. These mutations may be inherited or acquired, leading to abnormal proliferation and evasion of immune surveillance (1). Among various cancers, breast cancer remains one of the most common malignancies affecting women worldwide and represents a significant public health concern (2).

Globally, breast cancer incidence and mortality rates have increased over recent decades. It is projected that by 2030, approximately 2.7 million new breast cancer cases and 0.87 million deaths will occur annually. Lifestyle changes, improved cancer registration, and enhanced screening programs contribute to the increasing incidence, particularly in low- and middle-income countries (3).

In Iraq, cancer is the second leading cause of death after cardiovascular diseases. Breast cancer has ranked as the most common cancer among Iraqi women for several decades. According to the Iraqi Cancer Registry, breast cancer accounted for 34.4% of all female cancers, with the highest incidence reported among women aged 45–54 years (4). Breast cancer and its treatments are associated with various physical and psychological challenges. Patients commonly experience fatigue, nausea, pain, body image disturbances, anxiety, depression, and concerns regarding recurrence, all of which may negatively affect self-acceptance and adherence to treatment (5). Low self-acceptance can reduce patients' motivation to continue therapy and impair their ability to cope with the disease (6).

Body acceptance has been described as the process of acknowledging and adapting to changes in body appearance and function resulting from breast cancer and its treatment. Many breast cancer survivors eventually develop a positive perception of their bodies, viewing

treatment-related changes as symbols of strength and survival (7). Therefore, nursing care should address not only the physical aspects of breast cancer but also the psychological and emotional needs of patients throughout the cancer trajectory (1).

Methodology

Design of the Study

A descriptive study design is carried out throughout present in Medical City Hospitals. The study took place from the period 1st Feb 2024 to 1rst April 2024.

Administrative Arrangement:

Prior to data collection, a formal administrative approval was obtained to conduct the study from: Ministry of Health

The data through the application of the questionnaire and sample. Panel of experts who have checked and advice as for the questionnaire

Subject of the Study

The subjects of the study consisted of women with breast cancer.

The Sitting of the Study

The study took place in (Al-Awram Hospital & Al-Amal Hospital)

Selection of The Study Sample

Purposive sample, consist of 100 women who have breast cancer

Inclusion criteria

Those who met the criteria for selection were:

1. Women who have been early diagnosed with breast cancer.
2. Women with breast cancer undergoing non-sergical treatment.
3. Women who had conservative breast surgery.

Exclusion criteria

1. Women who had mastectomy.

Construction of Instrument

The Body Image Scale is used in the questionnaire. The Body Image Scale (BIS) is a 10-item, self-rating scale that was developed to ascertain changes in the body image of cancer patients. BIS as a brief questionnaire for assessing body image changes in patients with cancer, suitable for use in clinical trials. (Oers & Schlebusch, 2020)

- **Part One**

  Demographic Data that includes personal information (age, marital status, occupation, family history of breast cancer, educational level, family type, living)

- **Part Two**

The Body Image Scale (BIS) is a 10-item, self-rating scale that was developed to ascertain changes in the body image of cancer patients.18 Five BIS items concern general body image issues: feeling self-conscious, dissatisfied when dressed, difficulty looking at yourself naked, avoid others because of appearance, and dissatisfied with body. The other 5 BIS items concern body image in relation to the cancer experience: less physically attractive, less feminine, less sexually attractive, body less whole, and dissatisfied with scar. Each item is scored on a 4-point Likert scale as follows: 0, not at all; 1, a little; 2, quite a bit; and 3, very much. Higher scores represent poorer body image. Because no cutoff value for body image problems has been defined for the BIS, we defined those greater than the 70th percentile of the BIS score in 2004 as the poorer body image group (BIS score _8) compared with the other BCSs who were defined as the better body image group (BIS score <8). These definitions also were used for the 2007 BIS scores. (Dahl, A., Reinertsen, & Fossa, 2010)

Validity & Reliability

The Study instrument was presented to a panel of 5 experts at first (Appendix B) at University of Baghdad/ College of Nursing. The experts investigate the questionnaire clearly, relevancy, and adequacy. With their guidance and modifications we have achieved the present study's objectives.

Method of Data Collection

The study data was collected through the utilization of questionnaire and direct interview techniques. Data collection process from women with breast cancer in Oncology hospitals to assess the acceptance of breast cancer changes. The study took place from 1st of Feb 2024 to 1st of April 2024.

Data analysis

The descriptive statistical measures of frequency and percent were used.

The arithmetic mean and standard deviation were also used

Results

Table (1): Distribution of the Study Samples by Socio-Demographic Characteristics.

No.	Variable	Frequency	Percent
1.	Age(year)		
1.1	18- less than 28	10	10.0
1.2	28- less than 38	14	14.0
1.3	38-less than 48	31	31.0
1.4	48 –less than 58	27	27.0
1.5	≥58	18	18.0
	Me± Std(46.14±13.29)		
2.	Marital status		

2.1	Single	15	15.0
2.2	Married	77	77.0
2.3	Divorced	8	8.0
3.	Occupation		
3.1	Housewife	72	72.0
3.2	Employee	17	17.0
3.3	Retired	6	6.0
3.4	Student	3	6.0
3.5	Freelancer	2	2.0
4.	Family History of Breast Cancer		
4.1	Yes	35	35.0
4.2	No	65	65.0
5.	Level of Education		
5.1	Illiterate	11	11.0
5.2	Literate	22	22.0
5.3	Primary school graduate	17	17.0
5.4	Middle school graduate	1	1.0
5.5	High school graduate	17	17.0
5.6	Diploma	10	10.0
5.7	College or above	22	22.0
6.	Family Type		
6.1	Nuclear	58	58.0
6.2	Extended	42	42.0
7.	Living		
7.1	City	92	92.0
7.2	Countryside	5	5.0
7.3	Suburb	3	3.0

This table (1) revealed that most of study samples (31%) at age group 38-less than 48 years old and (77%) for married. The occupation of study sample (77%) for housewife and (11%) for literate and college or above graduate. Family History of Breast Cancer for study sample (65%) have no family history of breast cancer and (58%) of study sample Nuclear of type of family. Also, this table shows (92%) of study samples living in city.

Table (2): Mean of Score of Women's Acceptance about Breast Cancer Change.

No	Items	Not at all	A little	Quite a bit	Very much	Std.	M.S	Ass
		F	F	F	F			
1	Have you been feeling self-conscious about your appearance?	42	23	13	22	1.19	2.15	**MA**
2	Have you felt less physically attractive as a result of your disease or treatment?	52	14	15	19	1.20	2.01	**MA**
3	Have you been dissatisfied with your appearance when dressed?	52	21	17	10	1.04	1.86	**MA**
4	Have you been feeling less feminine as a result of your disease or treatment?	62	13	12	13	1.10	1.77	**LA**

5	Did you find it difficult to look at yourself naked?	28	25	17	30	1.19	2.49	**LA**
6	Have you been feeling less sexually attractive as a result of your disease or treatment?	49	25	9	17	1.12	1.94	**LA**
7	Did you avoid people because of the way you felt about your appearance?	65	15	5	15	1.10	1.70	**LA**
8	Have you been feeling the treatment has left your body less whole?	38	24	11	27	1.23	2.27	**MA**
9	Have you felt dissatisfied with your body?	48	19	12	20	1.19	2.04	**MA**
10	Have you been dissatisfied with the appearance of your scar ?	26	12	10	52	1.29	2.88	**MA**
	Total	462	191	121	225	1.16	2.10	**MA**

M.S=mean of score, std. =stander deviations, *Ass. = the level of assessment, 1-1.99=Low Acceptance (LA), 2-2.99=Moderate Acceptance (MA)., 3- 4= High Acceptance.

This table shows that women's acceptance about breast cancer change was moderate acceptance at women's acceptance domains (2.10)

Table (3): Association between (Age, Marital Status, Educational level, and Occupation) Women's Acceptance about Breast Cancer Change.

Socio-demographic variables	**Women's Acceptance**		
	Contingency Coefficients	P value	Sig.*
Age groups	0.752	0.112	NS
Marital status	0.675	0.495	NS
Educational level	0.782	0.715	NS
Occupation	0.768	0.023	HS

*** Sig. = significance level ≤ 0.05= significant**

This table (3) presented the relationship between demographic and women's acceptance. The findings displayed no correlation between age, marital status and educational level but high correlation with occupation and women's acceptance at p value ≤ 0.05.

Table (4): BIS score

Body Image			
		Frequency	Percent
Valid	Better Body Image	48	48.0
	Poor Body Image	52	52.0
	Total	100	100.0

This table (4-4) presented the score of BIS , (52%) of the participants had poor body image while (48%) of the participants had better body image

Discussion

The findings of the present study showed that the highest percentage of participants (31%) were aged between 38 and less than 48 years, indicating that middle-aged women constituted the most affected group. Most participants were married (77%) and housewives (77%). Regarding educational level, 22% of the participants were literate and 22% had a college education or above. Most participants (65%) reported no family history of breast cancer, 58% belonged to nuclear families, and 92% resided in urban areas. These findings are consistent with the study, which reported that the most affected age group was 41–50 years (40%), with most participants being married (85%) and housewives (85.7%).[8]

The current study revealed that women undergoing breast cancer treatment without mastectomy demonstrated a moderate level of acceptance toward breast cancer-related ch anges, with a mean score of 2.10. Furthermore, the Body Image Scale (BIS) results indicated that 52% of participants had poor body image, while 48% reported better body image perception.

Similar findings, who found that women receiving neoadjuvant chemotherapy experienced greater dissatisfaction with their appearance, particularly those undergoing mastectomy compared with women treated with breast-conserving therapies [9]. Likewise, a study reported that women who underwent lumpectomy and conservative surgery experienced fewer body image difficulties than those who underwent modified radical mastectomy [10].

Additionally, a study found that women who underwent mastectomy had significantly poorer body image scores compared with those who received breast-conserving surgery, while age and time since diagnosis were not associated with body image outcomes. [11]

Regarding the relationship between demographic characteristics and women's acceptance, the present study found no significant association between age, marital status, and educational level with women's acceptance. However, a significant relationship was identified between occupation and women's acceptance at a p-value ≤ 0.05.

Conclusion

The study findings showed that most participants were aged 38 to less than 48 years (31%), married (77%), and had no family history of breast cancer (65%). Women's acceptance of breast cancer-related changes was moderate (mean score = 2.10). More than half of the participants (52%) had poor body image, while 48% had better body image. No significant correlation was found between acceptance and demographic characteristics, including age, marital status, and educational level.

Recommendation

Further studies are recommended to explore women's acceptance of breast cancer-related changes. Educational programs should be provided for healthcare professionals to enhance assessment of self-acceptance and body image. Additionally, breast cancer patients should receive adequate information regarding treatment options and their potential effects on physical appearance and quality of life.

References

1. Hinkle JL, Cheever KH, Hinkle JL. Brunner & Suddarth's Textbook of Medical-Surgical Nursing. 14th ed. Philadelphia: Wolters Kluwer; 2018.
2. Ignatavicius DD, Workman ML. Medical-Surgical Nursing: Patient-Centered Collaborative Care. 7th ed. St. Louis: Elsevier Saunders; 2013.
3. Łukasiewicz S, Czeczelewski M, Forma A, et al. Breast Cancer—Epidemiology, Risk Factors, Classification, Prognostic Markers, and Current Treatment Strategies—An Updated Review. Cancers (Basel). 2021;13(17):4287.
4. Al Alwan NA. Establishing national guidelines for early detection of breast cancer in Iraq: Clinical implications and perspectives. International Journal. 2015;3(12):539-555.
5. Merlin NM, Chandra BR. The effects of quantum psychological relaxation technique on self-acceptance in patients with breast cancer. Canadian Oncology Nursing Journal. 2019;29(4):232.
6. Oers H, Schlebusch L. Indicators of psychological distress and body image disorders in women with breast cancer. Journal of Mind and Medical Sciences. 2020;7(2):179-187.
7. Ahn J, Suh EE. Body acceptance in women with breast cancer: A concept analysis using a hybrid model. European Journal of Oncology Nursing. 2023;62:102269.
8. Alhusban Y. Changed Body Image as Perceived by Jordanian Women Undergoing Breast Cancer Treatment. Asian Pacific Journal of Cancer Prevention. 2019;20(3):767.
9. Lagos Prate AC, Freitas-Junior R, Oliveira Prates MF, Veloso MD, Barros ND. Influence of Body Image in Women Undergoing Treatment for Breast Cancer. Rev Bras Ginecol Obstet. 2017;39(4):175-183.
10. Spatuzzi R, Vespa A, Lorenzi P, Miccinesi G, Ricciuti M, Cifarelli W. Evaluation of Social Support, Quality of Life, and Body Image in Women with Breast Cancer. Breast Care. 2016;11(1):28-32.
11. Moreira H, Silva S, Marques A, Canavarro MC. The Portuguese version of the Body Image Scale (BIS): Psychometric properties in a sample of breast cancer patients. Eur J Oncol Nurs. 2010;14(2):111-118.

HNJ 1 (1), (2025) 5- 8

Holistic Nursing Journal

https://hnj.uobaghdad.edu.iq/index.php/hnj/en/index

ISSN: 3135-338X

Nurses' Knowledge Regarding Nursing Adherence to Treatment for Patients with Heart Failure

Wafaa Abed Ali Hattab , Shahad Saeed Rahm,Muntazer Zaheer Sahib,Ali Abbas Ali,Musa Maher Ali

* Assist Prof, University of Baghdad, College of Nursing, Adult Nursing Department, Baghdad, Iraq.

Email : Waffa.a@conursing.uobagdad.edu.iq

Abstract

Objectives: To assess medication adherence for patients with heart failure, determine nurses' knowledge regarding medication adherence for patients with heart failure, and identify the relationship between medication adherence and socio-demographic characteristics.

Methodology: An experimental study was conducted using a non-probability sampling method. Data were collected through personal interviews with nurses working at Ibn Al-Bitar Center for Cardiac Surgery, ICU, CCU, and Ibn Al-Nafis Teaching Hospital in Al-Rusafa Health Directorate, Baghdad. The study instrument consisted of 10 items, and data were analyzed using SPSS version 23.

Results: The findings showed highly significant associations between nurses' knowledge regarding heart failure and socio-demographic variables, including educational level, source of information, prior knowledge regarding heart failure, years of experience in the nursing field, and years of experience in cardiac units ($p < 0.005$).

Conclusions: The study concluded that nurses' knowledge regarding medication adherence for patients with heart failure requires further development and improvement.

Recommendations: The study recommends implementing World Health Organization standards related to medication adherence for patients with heart failure and conducting regular training courses to enhance nurses' knowledge regarding medication adherence.

IRAQI Academic Scientific Journals

Article info:

Article history:

Received: 05/02/2025
Accepted: 10/04/2025
Published: 01/07/2025

Keywords:

Heart Failure, Medication Adherence, Nurses' Knowledge, Cardiac Units.

⁎Corresponding author at: University of Baghdad, College of Nursing, Department of Adult Nursing, Baghdad, Iraq. Assist. Prof. (Hattab, W. A.). Email Waffa.a@conursing.uobagdad.edu.iq DOI: https://doi.org/

معارف الممرضين تجاه التدابير التمريضية للالتزام بالعلاج لمرضى فشل القلب

المستخلص:

الأهداف :تقييم الالتزام الدوائي لدى مرضى فشل القلب، وتحديد مستوى معرفة الممرضين بالالتزام الدوائي لهؤلاء المرضى، والكشف عن العلاقة بين الالتزام الدوائي والخصائص الديموغرافية الاجتماعية.

المنهجية :أُجريت دراسة تجريبية باستخدام عينة غير احتمالية من الممرضين العاملين في مركز ابن البيطار لجراحة القلب ووحدات العناية المركزة (ICU) والعناية القلبية (CCU) ومستشفى ابن النفيس التعليمي التابع لدائرة صحة الرصافة/ بغداد. جُمعت البيانات من خلال المقابلات الشخصية باستخدام أداة مكونة من (10) فقرات، وتم تحليل البيانات باستخدام البرنامج الإحصائي SPSS الإصدار 23.

النتائج :أظهرت النتائج وجود علاقة ذات دلالة إحصائية عالية بين معرفة الممرضين المتعلقة بفشل القلب والمتغيرات الديموغرافية، والتي شملت المستوى التعليمي، ومصدر المعلومات، ووجود معرفة سابقة بفشل القلب، وسنوات الخبرة في مجال التمريض، وسنوات الخبرة في وحدات القلب.($p < 0.005$)

الاستنتاجات :أشارت الدراسة إلى ضرورة تطوير وتحسين معرفة الممرضين المتعلقة بالالتزام الدوائي لدى مرضى فشل القلب في هذه الوحدات.

التوصيات :أوصت الدراسة بتطبيق معايير منظمة الصحة العالمية الخاصة بالالتزام الدوائي لدى مرضى فشل القلب، وتنظيم دورات تدريبية دورية لتحسين معارف الممرضين في هذا المجال

Introduction

Heart failure (HF) is a chronic and progressive condition that affects an increasing number of individuals worldwide and is associated with poor outcomes, including reduced quality of life, increased mortality, and frequent hospital readmissions (1). Self-care is considered an essential component of HF management and is recommended as part of effective treatment strategies. Self-care encompasses behaviors aimed at maintaining health, promoting well-being, and managing illness-related symptoms. Adherence to medical treatment represents a key aspect of self-care among patients with HF (2).

The World Health Organization (WHO) defines adherence as the extent to which a person's behavior corresponds with agreed recommendations from a healthcare provider. Adherence in HF management involves multiple self-care behaviors, including medication compliance, symptom monitoring, dietary and fluid restrictions, and regular physical activity. Poor adherence to these recommendations has been associated with increased hospital readmissions and mortality among HF patients (3). Symptom monitoring and management are also critical components of self-care in patients with heart failure, as they contribute to improved clinical outcomes and may prevent acute exacerbations requiring hospitalization. Nurses play a vital role in disease management programs through patient education, optimization of treatment plans, follow-up care, and promotion of self-care behaviors (4) In addition to implementing evidence-based interventions, integrating clinical expertise derived from nursing practice is essential for developing innovative strategies that improve patient outcomes. Combining research evidence with expert clinical knowledge facilitates the translation of effective interventions into routine clinical practice (5). Therefore, the present study aims to enhance understanding of the interventions utilized by heart

failure nurses in clinical practice to improve adherence to medication and symptom monitoring among patients with heart failure (6).

Methodology

Study Design

An experimental study design was employed to achieve the objectives of the study. A purposive non-probability sampling technique was used to recruit participants through direct interviews conducted at their workplaces. The study was carried out from January 1, 2024, to April 28, 2024.

Sample and Sampling Technique

A purposive sample of nurses working in the ICU, CCU, and Cardiac Catheterization Units was recruited for this study. Both male and female nurses were eligible to participate.

Inclusion Criteria: Participants were included if they:

1. Worked in the ICU, CCU, or Cardiac Catheterization Units at the selected hospitals.
2. Were registered male or female nurses.
3. Had any educational qualification level.
4. Had at least one year of nursing experience.

Ethical Considerations

Ethical approval was obtained from the Ethics Committee of the College of Nursing, University of Baghdad. Official permission to conduct the study was granted by Al-Rusafa Health Directorate, including Ibn Al-Bitar Center for Cardiac Surgery and Ibn Al-Nafis Teaching Hospital. Written informed consent was obtained from all participants prior to data collection. Participants were assured that their information would remain confidential and would be used solely for research purposes.

Study Setting: The study was conducted in the Intensive Care Unit (ICU), Coronary Care Unit (CCU), and Cardiac Catheterization Unit at Ibn Al-Bitar Center for Cardiac Surgery and Ibn Al-Nafis Teaching Hospital, affiliated with Al-Rusafa Health Directorate, Baghdad. These settings were selected to assess nurses' knowledge regarding adherence to treatment among patients with heart failure.

Study Instrument

Data were collected using a structured questionnaire consisting of two parts. The first part assessed nurses' socio-demographic characteristics, including age, gender, educational level, years of experience in nursing practice, years of experience in cardiac units, and sources of knowledge. The second part consisted of nine items designed to assess nurses' knowledge regarding adherence to treatment among patients with heart failure. Responses were recorded by selecting the appropriate answer option.

Validity and Reliability

Content validity of the instrument was established through review by a panel of five experts from relevant scientific disciplines, each with a minimum of five years of professional experience. The experts evaluated the instrument for clarity, relevance, and content adequacy.

Instrument reliability was assessed using the test-retest method on two nurses who were not included in the main study sample. Internal consistency reliability demonstrated an acceptable Cronbach's alpha coefficient of 0.82.

Data Collection

Data collection was conducted between February 15 and March 1, 2024. After obtaining informed consent, participants completed the questionnaire through self-report interviews scheduled according to their work shifts in the selected units. The questionnaire included socio-demographic characteristics and knowledge-related items.

Statistical Analysis: Data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 23. Descriptive statistics, including frequencies, percentages, and mean scores, were used to summarize the data and describe participants' characteristics. Inferential statistics, including correlation analysis, were performed to examine relationships among study variables. Statistical significance was considered at a p-value of ≤ 0.05

Result Table (1): Socio-demographic data for study sample

N.	Variables	Domains	Fr.	%
1	Age	20-30 years	31	62%
		30- 40 years	19	38%
2	Gender	Female	31	62%
		Male	19	38%
3	Source of information	Internet	22	44%
		Throughout your academic career	10	20%
		Doctor	6	12%
		Nursing textbook	12	24%
4	Level of education	Preparatory school	12	24%
		Diploma degree	27	54%
		Bachelor degree	9	18%
		Higher education	2	4%
		Total	50 %	100%
5	Do you have any knowledge regarding heart failure	Yes	49	98%
		No	1	2%
6	Years of Experience in nursing field	> 5 years	38	76%
		≤ 5years	12	24%
7	Years of Experience in cardiac unite	> 5 years	17	46%
		≤ 5years	33	54%
8	Have you been enrolled in courses related to heart failure	Yes,	18	36%
		No,	32	64%

Fr.: frequency, %: percentage

The table (1) shows that more than half of the nurses with age group of 20-30 years are (62%). The nurses gender the highest percentage with female (62%). According to sort of information; the highest percentage of the nurses refers that 44% of them are from the internet. Regarding to the level of education of nurses; the highest percentage refers that (54%) of them are diploma degree. Around (98%) of the nurses were have information about heart failure. Years of experience in nursing field most of nurses (76%) were have experience more than 5 years. Years of experience in cardiac unit (54%) have worked more than 5 years. (64%) of nurses have never enrolled in heart failure courses.

Table (2): Assessment Nurses' knowledge regarding nursing adherence to treatment for patients with heart failure

N	Items	Mean	Ass.
1	Are the necessary medications available for heart failure patients in the hospital where you work?	1.08	Poor
2	Are there qualified nurses available to care for heart failure patients?	1.36	Good
3	Do you have the necessary information and training for you, for the nurses and for other medical staff?	1.40	Good
4.	Are there courses and workshops available that encourage commitment to provide the best services and care for heart failure patients?		
4.1	Do you forget to give treatment?	1,08	poor
4.2	Do you have difficulty remembering to give treatment on time?	1,07	poor
4.3	Do you feel the importance of committing to giving treatment to patients with heart failure?	1,07	poor
4.5	Do you have a desire to learn about the latest treatments and recommendations regarding treatment for patients with heart failure.	1,04	poor
4.6	Is there cooperation with the health team to provide integrated care for heart failure patients	1,04	poor
4.7	Do you feel satisfied with your work in heart failure patient care services?	1,04	poor

Level of assessment of the knowledge: poor level < 1.3 good level ≥ 1.3

Table (2) reveals the level of nurses' knowledge to treatment for patients with heart failure in which the mean of score of items are refer to good knowledge among items except the items 2,3 that show good knowledge about treatment for patients with heart failure.

Table (3): Relationship between socio-demographic data and knowledge of nurse' concerning nursing adherence to treatment for patients with heart failure.

Variable		Items	MS	F	Sig
Level of knowledge	Age	I1	0.051	0.886	**.0632**
		I2	0.030	0.390	
	Gender	I1	0.075	2.839	**0.983**
		I2	0.005	0.262	

	Educational level	I1	0.005	0.262	**0.000**
		I2	0.068	0.995	
		I3	0.102	1.086	
		I4	0.089	0.708	
	Source of information	I1	0.019	0.525	**0.002**
		I2	0.009	0.252	
		I3	0.109	1.716	
		I4	0.053	1.089	
	Do you have any knowledge regarding heart failure	I1	0.035	0.991	**0.004**
		I2	0.034	1.191	
	Years of Experience in nursing field	I1	0.011	0.520	**0.005**
		I2	0.074	1.503	
	Years of Experience in cardiac unite	I1	0.034	0.950	**0.003**
		I2	0.015	0.537	
	Have you been enrolled in courses related to heart failure	I1	0.031	1.227	**0.006**
		I2			

Table (3): This table show highly significant between knowledge of nurses concerning heart failure and socio-demgraphic data for items education level, Source of information, Do you have any knowledge regarding heart failure,Years of Experience in nursing field,Years of Experience in cardiac unite at p-value <0.005.

Discussion of the Results

The findings of the present study revealed that the majority of nurses working in Ibn Al-Bitar Center for Cardiac Surgery and Ibn Al-Nafis Teaching Hospital were females aged more than 30 years. Most participants held a diploma degree and graduated from technical institutes. Additionally, the majority had more than five years of nursing experience, although their experience in cardiac units was generally less than five years. These findings are consistent with previous studies that reported a predominance of female nurses aged over 30 years working in coronary care units (7,8).

However, most participants had not attended training courses related to heart failure management, which may have contributed to inadequate knowledge regarding adherence to treatment among heart failure patients.

The current study demonstrated that nurses had insufficient knowledge concerning adherence to treatment among patients with heart failure, particularly regarding medication adherence and symptom monitoring. This finding is supported by previous studies reporting inadequate knowledge among nurses about medication administration and adherence management in heart failure patients (9,12). Conversely, educational interventions and training programs have been shown to significantly improve nurses' knowledge and practices related to medication adherence and the prevention of complications among heart failure patients (10).

Similarly, previous studies have indicated deficiencies in nurses' knowledge and clinical practices related to heart failure management, emphasizing the importance of continuous professional development and evidence-based educational strategies to improve patient outcomes (11). Nurses play a critical role in educating patients about treatment adherence and self-care behaviors, which are essential components in reducing hospital readmissions and improving quality of life among patients with heart failure.

The findings of the present study also revealed statistically significant relationships between nurses' knowledge regarding adherence to treatment and several demographic characteristics, including educational level, sources of information, and years of nursing experience. Nurses with higher educational qualifications and longer professional experience demonstrated better knowledge concerning treatment adherence among patients with heart failure. These findings are supported by previous evidence suggesting that professional experience and educational preparation positively influence nurses' competencies in delivering effective care for patients with chronic cardiovascular conditions (13).

The inadequate level of knowledge identified among nurses in this study highlights the need for ongoing educational programs and specialized training in heart failure management. Improving nurses' knowledge and skills related to treatment adherence may enhance patient education, promote effective self-care behaviors, reduce complications, and decrease hospital readmission rates among patients with heart failure.

Conclusion

The findings of this study indicated that nurses working in Ibn Al-Bitar Center for Cardiac Surgery and Ibn Al-Nafis Hospital had insufficient knowledge regarding adherence to treatment among patients with heart failure. Most nurses were females and held diploma qualifications. Additionally, a significant association was identified between nurses' socio-demographic characteristics, particularly educational level and professional experience, and their knowledge regarding treatment adherence in heart failure patients.

Recommendations

Continuous assessment of nurses' knowledge regarding treatment adherence in patients with heart failure is recommended, particularly among nurses working in ICUs and CCUs. Regular educational and training programs should be implemented to enhance nurses' knowledge and competencies related to heart failure management. Future studies focusing on nursing care for patients with heart failure are encouraged. Furthermore, incorporating specialized content on heart failure nursing care into nursing institute curricula may improve nurses' preparedness to provide evidence-based care.

References

1. Ponikowski P, Voors AA, Anker SD, Bueno H, Cleland JGF, Coats AJS, et al. 2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure: The Task Force for the diagnosis and treatment of acute and chronic heart failure of the European Society of Cardiology (ESC). *Eur Heart J.* 2016;37(27):2129-2200.
2. Yancy CW, Jessup M, Bozkurt B, Butler J, Casey DE Jr, Drazner MH, et al. 2013 ACCF/AHA guideline for the management of heart failure: Executive summary: A report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. *Circulation.* 2013;128(16):1810-1852.
3. World Health Organization. *Adherence to Long-Term Therapies: Evidence for Action*. Geneva: World Health Organization; 2003.
4. Moser DK, Dickson VV, Jaarsma T, Lee CS, Stromberg A, Riegel B. Role of self-care in the patient with heart failure. *Curr Cardiol Rep.* 2017;19(12):102.
5. Kitson A, Harvey G, McCormack B. Enabling the implementation of evidence-based practice: A conceptual framework. *Qual Health Care.* 1998;7(3):149-158.
6. Interventions used by heart failure nurses to improve adherence to medication and symptom monitoring in heart failure patients. *Eur J Cardiovasc Nurs.* 2023.
7. Rooke C, Liu D. Logistic regression analysis of risk factors for intracranial infection after multiple traumatic craniotomy and preventive measures. *J Craniofac Surg.* 2019;30(7):1946-1948.
8. Husain J, Golmard JL, Elcheick A, Bismuth R, Van Effenterre R, Coriat P, et al. Risk factors for neurosurgical site infections after craniotomy: A critical reappraisal of antibiotic prophylaxis on 4578 patients. *Br J Neurosurg.* 2005;19(2):155-162.
9. Groenewegen A, Rutten FH, Mosterd A, Hoes AW. Epidemiology of heart failure. *Eur J Heart Fail.* 2020;22(8):1342-1356.
10. Berry C, Murdoch DR, McMurray JJV. Economics of chronic heart failure. *Eur J Heart Fail.* 2001;3(3):283-291.
11. Tomasoni D, Adamo M, Lombardi CM, Metra M. Highlights in heart failure. *ESC Heart Fail.* 2019;6(6):1105-1127.
12. Kemp CD, Conte JV. The pathophysiology of heart failure. *Cardiovasc Pathol.* 2012;21(5):365-371.
13. Mudd JO, Kass DA. Tackling heart failure in the twenty-first century. *Nature.* 2008;451(7181):919-928.

HNJ 1 (1), (2025) 6- 8

Holistic Nursing Journal

https://hnj.uobaghdad.edu.iq/index.php/hnj/en/index

ISSN: 3135-338X

Using Snapchat Filters and Beauty Perception among Young Women

Ahmed Keisar Jassim ,Ruqaya, Miqdad Ibrahim, Fatima, Dawood Salman, Yaqeen Thaker Mahmoud, Safia Assi Abood

* Instructor, University of Baghdad, College of Nursing, Psychiatric & Mental Health Nursing Department, Baghdad, Iraq.
Email : ahmed.kaiser1205a@conursing.uobaghdad.edu.iq
** BSc student, University of Baghdad, College of Nursing, Department of Community Health Nursing, Baghdad, Iraq.

Abstract

Background : The current study was conducted to investigate the relationship between using snap chat filters and beauty perceptions among female nursing students. The study was carried out with a sample size (N=244). The sample was drawn from university of Baghdad colleges of nursing.

Methods and design :The sample was collected by using non-probability purposive sampling technique. Demographical data of sample were collected and the researchers utilized the Broad conceptualization of women's beauty scale prepared by Tylka, T. L., & Iannantuono, A. C. (2016). Descriptive and inferential data analyses were used to determine whether the objectives of the study are met or not. To see if using snap chat filters and beauty perceptions are correlated, the Pearson correlation and an ova test was used.

Results :The study revealed that there is a significant association between using snap chat filters and beauty perceptions among female nursing students.

Recommendation :The study recommends to develop comprehensive educational programs and support initiatives that foster body positivity, self-acceptance, and critical media literacy skills among female students. Promote media literacy programs to raise awareness about the impact of filtered images on self-image

IRAQI Academic Scientific Journals

Article info:

Article history:

Received: 15/02/2025
Accepted: 20/04/2025
Published: 01/07/2025

Keywords:

Snapchat Filters; Beauty Perception; Female Nursing Students

∗Corresponding author at: University of Baghdad, College of Nursing, Department of Psychiatric & Mental Health, Nursing ,Baghdad, Iraq. Instructor (Jassim A. K.). Email ahmed.kaiser1205a@conursing.uobaghdad.edu.iq
DOI: https://doi.org/

استخدام فلاتر سناب شات وتصورات الجمال لدى الفتيات

المستخلص:

الخلفية :أُجريت هذه الدراسة الحالية للتحقق من العلاقة بين استخدام فلاتر تطبيق سناب شات وتصورات الجمال لدى طالبات كلية التمريض. أُجريت الدراسة على عينة بلغ حجمها (244) طالبة من كلية التمريض/جامعة بغداد.

المنهجية والتصميم :جُمعت العينة باستخدام أسلوب العينة غير الاحتمالية الهادف .وتم جمع البيانات الديموغرافية للمشاركات، كما استخدم الباحثان مقياس التصور الواسع لجمال المرأة (Broad Conceptualization of Women's Beauty Scale) الذي أعده Iannantuono (2016). وTylka واستخدمت التحليلات الإحصائية الوصفية والاستدلالية للتحقق من تحقيق أهداف الدراسة. ولتحديد العلاقة بين استخدام فلاتر سناب شات وتصورات الجمال، استُخدم معامل ارتباط بيرسون واختبار تحليل التباين.(ANOVA)

النتائج :أظهرت الدراسة وجود علاقة ذات دلالة إحصائية بين استخدام فلاتر سناب شات وتصورات الجمال لدى طالبات التمريض.

التوصيات :توصي الدراسة بتطوير برامج تعليمية ومبادرات دعم شاملة تعزز الإيجابية تجاه صورة الجسم، وتقبل الذات، وتنمية مهارات الثقافة الإعلامية النقدية لدى الطالبات. كما توصي بتعزيز برامج التثقيف الإعلامي لزيادة الوعي بتأثير الصور المعدلة باستخدام الفلاتر على الصورة الذاتية وتقدير الذات.

Introduction

Snapchat has become one of the fastest-growing social media platforms worldwide, with millions of active users engaging in photo and video sharing through augmented reality technologies. Its increasing popularity has attracted researchers' attention to its potential impact on users' behaviors and perceptions (1&2).

Snapchat was launched in 2011 as a mobile application that enables users to share temporary photos and videos. In 2015, the platform introduced face filters, allowing users to modify their appearance through augmented reality features such as skin smoothing, facial reshaping, and virtual makeup application (3&4).

Physical appearance and self-presentation play a significant role in women's self-evaluation. Women often select and edit images that create a favorable impression, and the use of filters has been associated with idealized self-presentation on social networking sites (5&6).

Research has demonstrated several positive aspects of Snapchat use, including enhancing social interaction, self-expression, and user engagement. Snapchat has also been utilized in educational settings and as a tool for strengthening social connections (7&8).

Conversely, studies have identified negative psychological outcomes associated with Snapchat filter use, including appearance dissatisfaction, unrealistic beauty standards, and harmful self-comparisons. Exposure to idealized images may negatively influence users' self-image and body satisfaction (9&10).

Moreover, evidence suggests that beauty filters may contribute to increased interest in cosmetic procedures by encouraging users to achieve appearances similar to their filtered images.

Therefore, understanding the influence of Snapchat filters on beauty perceptions among women is essential for promoting healthy body image and awareness of social media effects (11-13).

Methodology:

Study Design

A descriptive correlational study was conducted to assess the use of Snapchat filters and beauty perceptions among young women. The study was carried out from November 23, 2023, to April 29, 2024.

Study Setting

The study was conducted at the College of Nursing, University of Baghdad. The total number of female students enrolled in the college was 244.

Population and Sample

The target population comprised undergraduate female students at the College of Nursing, University of Baghdad. A non-probability purposive sampling technique was used to recruit participants. The study sample consisted of 244 female undergraduate students who met the inclusion criteria.

Inclusion Criteria

The study included undergraduate female students enrolled at the College of Nursing, University of Baghdad.

Study Instrument

Data were collected using a structured questionnaire consisting of two parts. The first part included demographic characteristics and four questions related to Snapchat filter use. The second part utilized the Broad Conceptualization of Beauty Scale (BCBS) developed by Tylka and Iannantuono (2016) to assess beauty perceptions among participants. The scale consists of nine items rated on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Participants were instructed to indicate the extent to which they agreed with each statement based on their personal beliefs regarding women's beauty.

Validity and Reliability

Content validity of the questionnaire was established through evaluation by a panel of ten experts from the College of Nursing, University of Baghdad, who assessed the clarity, adequacy, and relevance of the instrument items. The questionnaire was considered valid based on the experts' agreement. Reliability was assessed using Cronbach's alpha coefficient to determine internal consistency. The instrument demonstrated excellent reliability, with a Cronbach's alpha coefficient of 0.94, indicating a high level of internal consistency.

Data Collection

Data collection was conducted from January 28, 2024, to February 5, 2024. An electronic

version of the questionnaire was distributed to eligible participants.

Statistical Analysis

Data were analyzed using the Statistical Package for Social Sciences (IBM SPSS) version 24.0. Descriptive statistical methods, including frequencies, percentages, means, mean scores, and standard deviations, were used to describe participants' characteristics and summarize study variables. Standard deviations were calculated to assess the variability of the data around the mean values.

Results

Table (1) Distribution of socio-demographic variables for study sample .

Address	Study sample	
	Fr.	%
Urban	108	42.7
rural	136	53.8
Total	244	100.0
Mean+ SD	1.5574 ± 0.49772	
Economic status	Fr.	%
enough	128	50.6
no enough	8	3.2
Enough to some extent	108	42.7
Total	244	100.0
Mean+ SD	1.9180±0.98206	
Marital status	Fr.	%
single	209	82.6
married	35	13.8
Total	244	100.0
Mean+ SD	1.1434±0.35124	
How many times a week do you use Snap chat?	Fr.	%
one time every week	105	50.6
1-2 time in week	44	3.2
2-3 time in week	80	42.7
3-5 time in week	15	100.0
Total	244	100.0
Mean± SD	2.0710+1.23938	
Do you use Snap chat filters when taking your photos or videos?	Fr.	%
yes	51	20.2
Some time	126	49.8
never	67	26.5
Total	244	100.0
Mean± SD	2.0656±0.69374	
How many photos or videos do you take daily using	Fr.	%
Snap chat filters?		
Less than 5 photos per day	158	**62.5**

6-10 photos daily	56	**22.1**
11-15 photos per day	26	**10.3**
More than 20 photos per day	4	**1.6**
Total	244	**96.4**
Mean+ SD	**1.5455±0.77207**	

Fr: frequency, %: percentage, SD: stander deviation

The table shows that most of the study sample resides in the countryside, and most of them have a sufficient economic level and are not married, as they use snapchat once per week, with a frequency rate of 103, and less than 5 photos per a day.

Table (2) : Assess beauty perception among female students for snapchat use.

N	Main domains	Mean	Level of perception
1	I believe that a woman can be beautiful even if she is unattractive to others or society	1.47	**low perception**
2	A woman's confidence level can change my perception of her physical beauty	3.08	**high perception**
3	I think a wide range of body shapes are beautiful for women	1.77	**moderate perception**
4	I think thin women are more beautiful than women with other body types	1.66	**low perception**
5	A woman's spirit or inner spirit can change my perception of her physical beauty.	1.74	**moderate perception**
6	I define women's beauty differently than what is portrayed in the media.	2.06	**moderate perception**
7	A woman's acceptance of herself can change my view of her physical beauty	2.63	**high perception**
8	I believe that the most beautiful women appear in the media, such as models and actresses	2.06	**moderate perception**
9	I believe that women of all body sizes can be beautiful.	2.22	**moderate perception**
total		**244**	

Level of perception: low effect= 1.47-1.74, middle = 1.78-2. 63, high effect =2.64 – 3.08

The table above shows that there is a clear correlation between demographic information and beauty perception of the female students who used the categories, which had $p<0.001$.

Table (3): relationship between the use of snap-chat filters and beauty perception among female students .

Sig. <0.001		**Perception**
Address	Pearson Correlation	**0.640****
	Sig. (2-tailed)	**0.000**

	N	**244**
Economic status	Pearson Correlation	**0.696****
	Sig. (2-tailed)	**0.000**
	N	**244**
Marital status	Pearson Correlation	**0.878****
	Sig. (2-tailed)	**0.000**
	N	**244**
How many times a week do you use Snap chat?	Pearson Correlation	**0.229****
	Sig. (2-tailed)	**0.000**
	N	**244**
Do you use Snap chat filters when taking your photos or videos?	Pearson Correlation	**0.857****
	Sig. (2-tailed)	**0.000**
	N	**244**
How many photos or videos do you take daily using Snap chat filters?	Pearson Correlation	**0.218****
	Sig. (2-tailed)	**0.001**
	N	**244**

Sig: significant at p>0.001, N:number of sample

The table above shows that there is a clear correlation between demographic information and beauty perception of the female students who used the categories, which had p<0.001

Discussion

The correlation between demographic factors and beauty perception is a topic that has been explored in various research studies. Demographic factors such as age, ethnicity, socioeconomic status, and cultural background can all influence individuals' perceptions of beauty.

Several studies have examined how demographic factors impact beauty standards and perceptions. For example, research found that cultural factors, including ethnicity and socialization, significantly influenced body image and beauty ideals among women (14). Similarly, studies have explored the role of ethnicity and cultural background in shaping beauty perceptions and body image satisfaction (15&16).

Moreover, demographic factors can intersect with other variables such as media exposure and peer influence, further shaping individuals' perceptions of beauty. For instance, research in (2008) found that media exposure to idealized beauty standards was associated with body dissatisfaction among adolescent girls, with differential effects based on ethnicity and cultural background(15).

Understanding the correlation between demographic factors and beauty perception is crucial for promoting body positivity and addressing societal beauty standards. By recognizing the diverse range of beauty ideals across different demographics, interventions can be tailored to promote inclusive and healthy body image attitudes

Conclusion:

The findings indicate that demographic factors and Snapchat use significantly influence beauty perceptions among female students. Frequent exposure to Snapchat filters and idealized images may shape beauty standards and self-perception. The interaction between demographic characteristics and social media use highlights the complexity of beauty perception. Therefore, promoting positive body image requires comprehensive interventions that address both social media influences and individual demographic factors to foster healthier and more realistic beauty perceptions

Recommendations:

Educational institutions should implement programs that promote body positivity, self-acceptance, and media literacy to help female students critically evaluate social media content and the influence of filtered images on self-perception. Encouraging mindful and balanced use of platforms such as Snapchat may reduce negative effects on body image and self-esteem. Additionally, further research is recommended to better understand the interaction between demographic factors and social media influences on beauty perception, while promoting diversity and inclusivity in beauty-related discussions and representations

References

1. Tankovska H. Number of daily active Snapchat users worldwide from 1st quarter 2014 to 1st quarter 2021 [Internet]. Statista; 2021 [cited 2026 Jun 13]. Available from: https://www.statista.com/
2. Rios K, Ketterer EM, Wohn DY. Snap happy: An exploration of social media users' motivations for using Snapchat. In: Proceedings of the Annual Conference of the International Communication Association; 2018.
3. Bayer JB, Ellison NB, Schoenebeck SY, Falk EB. Sharing the small moments: Ephemeral social interaction on Snapchat. Inf Commun Soc. 2016;19(7):956-77.
4. Barker V. The social significance of selfies: Understanding social media and identity through Snapchat filters. Soc Media Soc. 2020;6(2):1-12.
5. Wang Y, Wang X, Liu H, Xie X, Wang P, Lei L. Selfie-editing and female adolescents' self-objectification and appearance concerns: The role of appearance comparisons. Body Image. 2020;33:264-70.
6. Alsaggaf S. Self-presentation and identity construction on social networking sites among women users. J Arab Media Soc. 2019;28:1-15.
7. Phua J, Jin SV, Kim JJ. Uses and gratifications of social networking sites for bridging and bonding social capital: A comparison of Facebook, Twitter, Instagram, and Snapchat. Comput Human Behav. 2017;72:115-22.
8. Kerr B, Faulkner J. Snapchat use in educational contexts: Opportunities and challenges for

student engagement. Educ Inf Technol. 2020;25(6):1-15.

9. Fox J, Vendemia MA, Smith MA, Brehm K. The social media diet: A scoping review to investigate the association between social media, body image and eating disorders among young people. Body Image. 2020;35:1-17.
10. Vogel EA, Rose JP. Self-reflection and interpersonal connection: Making the most of self-presentation on social media. Transl Issues Psychol Sci. 2016;2(3):294-302.
11. Eshiet AI. The influence of social media beauty filters on cosmetic surgery intentions among young women. Int J Soc Sci Stud. 2020;8(4):45-53.
12. Ramphul K, Mejias SG. Is "Snapchat Dysmorphia" a real issue? Cureus. 2018;10(3):e2263.
13. Zhao S, Zappavigna M. Beyond the self: Intersubjectivity and the social semiotic interpretation of the selfie. New Media Soc. 2018;20(5):1735-54.
14. Cash TF, Cash DW, Butters JW. "Mirror, mirror, on the wall...?": Contrast effects and self-evaluations of physical attractiveness. Pers Soc Psychol Bull. 1983;9(3):351-8.
15. Grabe S, Ward LM, Hyde JS. The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. Psychol Bull. 2008;134(3):460-76. doi:10.1037/0033-2909.134.3.460.
16. Swami V, Frederick DA, Aavik T, Alcalay L, Allik J, Anderson D, et al. The attractive female body weight and female body dissatisfaction in 26 countries across 10 world regions: Results of the International Body Project I. Pers Soc Psychol Bull. 2010;36(3):309-25. doi:10.1177/014616720935970

HNJ 1 (1), (2025) 7- 8

Holistic Nursing Journal

https://hnj.uobaghdad.edu.iq/index.php/hnj/en/index

ISSN: 3135-338X

QT Interval Correction in Complicated and Non-Complicated Acute Myocardial Infarction: A comparative study

Hakemia Shakir Hasan**, Maryam Ali Rasool* Zainab Jassim Qahtan * Zina Turki Aboud * Zainab Mohammed Sahib *

* Prof., University of Baghdad, College of Nursing, Fundamental Nursing Department, Baghdad, Iraq.

Email dr.hakemia@conursing.uobaghdad.edu.iq **ORCID:** orcid.org/0000-0001-8433-2341

** BSc student, University of Baghdad, College of Nursing, Department of Community Health Nursing, Baghdad, Iraq.

Email: dr.hakemia@conursing.uobaghdad.edu.iq

Abstract

Objective(s): To assess the QT interval in complicated and non-complicated acute myocardial infarction, and to identify the difference in QT correction interval with regard to complicated and non-complicated acute myocardial infarction.

Methodology: A comparative study. A total of 50 patients diagnosed with acute myocardial infarction were divided into those with complicated and non-complicated admitted to the Coronary Care Unit of Baghdad teaching hospital The duration of the QT interval, corrected QT interval, and QRS complex measurements were made from the electrocardiography (ECG) recorded when the patients admitted to the coronary care unit

Results: There is significant differences between complicated myocardial infarction and non-complicated myocardial infarction groups related to the ORS duration and QTC.

Conclusions: The study concluded that that the QTc interval can be used as a useful risk marker for identifying high-risk patients with acute myocardial infarction

Recommendations: It is recommended to that abnormal QTc prolongation has significant potential for use in enhancing risk stratification as well as future

IRAQI Academic Scientific Journals

Article info:

Article history:

Received: 10/03/2025
Accepted: 20/05/2025
Published: 01/07/2025

Keywords:

QT Interval Correction, Non-Complicated Acute Myocardial Infarction, Complicated Acute Myocardial Infarction

∗Corresponding author at: University of Baghdad, College of Nursing, Department of Fundamental Nursing, Baghdad, Iraq. Assist. Prof. (Hassan, H.S.). Email dr.hakemia@conursing.uobaghdad.edu.iq . ORCID https:// orcid.org/0000-0001-8433-2341. DOI: https://doi.org/

مؤشر المصححه QT في احتشاء عضلة القلب الحاد المعقد والغير المعقد للمضاعفات: دراسة مقارنة

المستخلص:

الهدف: هدفت الدراسة إلى تقييم فترة QT في احتشاء عضلة القلب الحاد المعقد والغير معقد للمضاعفات و تحديد الفرق في فترة QT التصحيحية فيما يتعلق باحتشاء عضلة القلب الحاد المعقد وغير المعقد للمضاعفات

المنهجية: أُجريت دراسة مقارنة. قُسِّم من مجموعه 50 مريضًا شُخِّصوا باحتشاء عضلة القلب الحاد إلى مرضى مصابين باحتشاء عضلة القلب الحاد المعقد وغير المعقد، والذين أُدخلوا إلى وحدة العناية التاجية في مستشفى بغداد التعليمي خلال الفترة من. وتم قياس فترة QTوفترة QT المصححة، ومركب QRS من تخطيط القلب الكهربائي عند دخول المريض الى وحدة الرعاية التاجية

النتائج: أظهرت النتائج ان هناك فروق معنويه بين مجموعات احتشاء عضلة القلب المعقدة ومجموعات احتشاء عضلة القلب غيرالمعقدة فيما يتعلق بفترة QRS وفترةQTc .

الاستنتاجات: أظهرت نتائج هذه الدراسة إمكانية استخدام فترة QTc كمؤشر خطر مفيد لتحديد المرضى المعرضين لخطر كبير للإصابة بنوبة قلبية حادة.

التوصيات توصي الدراسة بان اطالة فترة QTC غير الطبيعية لها إمكانات كبيرة في تحسين تصنيف المخاطر والوقاية من توقف القلب المفاجيء. ومع ذلك، قبل استغلال هذه الإمكانية، من المهم فهم مسببات إطالة فترة لدى مرضى الشريان التاجي QTc

الكلمات المفتاحية: مؤشر كيو تي المصححة :احتشاء عضلة القلب الحاد المعقد للمضاعفات : احتشاء عضلة القلب الحاد الغير معقد للمضاعفات

Introduction

Epidemiological studies have shown the association between heart-rate corrected QT (QTc) interval and cardiovascular mortality or all-cause mortality in the general population (1). inherited Long QT syndrome (LQTS) is estimated to affect between one in 2,500 and 7,000 people (2).The QT interval on the surface electrocardiogram (ECG) represents the time from the onset of ventricular depolarization to the completion of repolarization. Previous studies have shown that prolonged corrected QT (QTc) is associated with high arrhythmic event rates, sudden death, and all-cause mortality in the normal population and patients with acute myocardial infarction (AMI)(1,2).Acute myocardial ischemia has been shown to increase repolarization heterogeneity and prolong the QT interval(3). Studies have shown that the QTc interval is prolonged in AMI and begins to shorten after successful reperfusion (5) However, data on the change of the QTc interval in the early period after revascularization and the prognostic significance of this change are limited. In a study by Bonnemeier et al (4).The QT interval prolongation is the earliest event during ischemia (6). Abnormal QT interval prolongation has been reported in patients with ST elevation myocardial infarction (7) or unstable angina (8). Furthermore, QT has been found to be an independent predictor of arrhythmic death following acute MI (9). As many as 28% of patients admitted to cardiac care units may present with QT_c interval prolongation (defined as ≥ 470 ms in males and ≥ 480 ms in females), and nearly 1 in 5 have admitting QT_c intervals > 500 ms.(10)

Material and methods

Study design:

A comparative study design is carried out throughout the present

Study setting:

The study has been conducted at the coronary care unit in Baghdad Teaching Hospital

Sample of the Study:

A non-probability (purposive) sample was selected to obtain representative and accurate data. The size of the sample was (50) patients with acute myocardial infraction patients who are admitted to the CCU of Baghdad teaching hospital. Patients were included in the study if they fulfilled all of the following criteria (1) History suggestive of acute coronary syndrome within the preceding 48 hrs of admission. (2) ST segment and T wave changes typical of myocardial infarction. (3) Positive cardiac markers: cardiac troponin T or CPK – MB

Instrument of study:

Data were collected using a structured questionnaire developed by investigators based on an extensive review of relevant literature, particularly the study by Ko et al. (2013) titled " QT Interval Correction in Complicated and Non-Complicated Acute Myocardial Infarction: A comparative study." The questionnaire consisted of two main sections. The first section included items related to Socio-demographic and Clinical Characteristics. The second section focused on ECG Forma. The standard 12 lead standard EKG were evaluated for all the cases on admission, after 4 hrs, on ECG strips running at speed of 25 mm/sec and at a setting of 1mv=10mm. QT interval was measured manually from the onset of QRS complex to the end of T wave. The end of T wave was considered the point of return to the isoelectric line. EKGs in which the QT interval was not measurable in more than 8 leads were excluded from the study. If “U” waves were present then QT interval was taken from the beginning of QRS complex to the lowest point between T and U wave. QT correction was deduced using Bazett’s formula i.e.

$$QTC = \frac{QT}{\sqrt{R - R\,int\,erval}}$$

QRS dispersion was calculated as, QRSd = QRSmax – QRSmin

Ethical consideration

The project of the study has approved by the Ethical Committee of Research Projects and the Committee of Undergraduate Project at the College of Nursing Council \ University of Baghdad and Baghdad teaching hospital The researcher obtained written approval from each acute myocardial infraction patients and compare

.**Data Analyze**

IBM-Statistic Package for Social Sciences (SPSS) version 26 was used to analyse the data, an both descriptive and inferential statistical measures, were used.

Result

Table (1): Distribution of the Socio-demographic Characteristics for the study sample

SDVs	Classification	*Complicated MI Group*		*NON Complicated MI Group*	
		N	**%**	**N**	**%**
Sex	**Male**	15	75.0	24	80.0
	Female	5	25.0	6	20.0
Age	**30-40**	2	10	1	3.33
	41-51	3	15	9	30
	52-62	6	30	8	26.6
	63-73	9	45	12	40
	Mean± SD	58.05± 13.60		57.23 ± 11.08	
Level of education	**Illiterate**	4	20.0	5	16.7
	Read and write	1	5.0	-	-
	Primary school	8	40.0	12	40.0
	Intermediate	1	5.0	.2	6.7
	Secondary school	1	5.0	.4	13.3
	University	3	15.0	.5	16.7
	Postgraduate	2	10.0	.2	6.7
	Government employment	3	15.0	4	13.3
Occupation	**Self-employment**	5	25.0	14	46.7
	Unemployed	4	20.0	6	20.0
	Retired	3	15.0	1	3.3
	House Wife	5	25.0	5	16.7
Smoking	**Passive**	6	30.0	.8	26.7
	Active	14	70.0	22	73.3
	Living with Smoker	10	50.0	8	26.7
	Don't living	10	50.0	22	73.3
Duration of Smoking	**Less than 10 years**	6	30.0	7	23.3
	11-20 years	.2	10.0	5	16.7
	More than 20 years	12	60.0	18	60.0
Alcohol Drinking	**No Drinking**	20	**100**	29	96.7
	Drinking	-	**-**	1	3.3
	Total			30	100.0

Freq.=Frequency ,%= Percentage , N=number

The findings indicate that males constituted the majority in both groups, accounting for 75% in the complicated MI group and 80% in the non-complicated group. The highest proportion of participants fell within the 63–73 years age group, comprising 45% of the complicated group and 40% of the non-complicated group. Regarding level of education, (40%) in both groups had primary school level. Concerning occupation, (25%) of the complicated group were housewives and (25%) self-employed, while (46.7%) of the non-complicated group were self-employed. As for smoking, (70%) of the complicated group were active smokers, and (60%) of them had smoked for more than 20 years. and (73.3%) don't living with smokers. (100%) of the complicated group didn't drink alcohol. Regarding

smoking, (73.3%) of the non-complicated AMI group were active smokers. (60%) of them smoked for more than 20 years. About second-hand smoking, half of them living with smokers and half of them not .As for alcohol drinking, (96.7%) of them were non-drinkers.

Table (2): Distribution of Study Sample by their Clinical Characteristics

Variable	Classification	*Complicated MI Group*		*NON-Complicated MI Group*	
		N	**%**	**N**	**%**
Past Medical History	Hypertension	18	90.0	22	73.3
	Diabetic Mellitus	14	70.0	1.7	56.7
	Kidney Stone	6	30.0	8	26.7
	Urinary Tract Infection	1	5.0	2	6.7
Past Surgical History	Appendix Surgery	5	25.0	15	50.0
	Cesarean Section	4	20.0	4	13.3

N=Number ; %= Percentage; MI=myocardial infraction

This table shows that (90%) of the complicated AMI group had hypertension, while (73.3%) of the non-complicated AMI group had the same condition. Regarding past surgical history, (25%) of the complicated group had appendix surgery, while (50%) of the non-complicated group had the same.

Table (3): Comparative Between Complicated Myocardial Infarction and non-Complicated Myocardial Infarction Groups According to The Electrocardiographic Changes

ECG Changes	*Complicated MI Group*		*NON Complicated MI Group*		*t-test*	C.S
	X	**SD**	**X**	**SD**		
P wave	**97.550**	**21.7944**	**89.100**	**32.1426**	**.975**	**N.S**
QRS Duration	**110.150**	**69.6195**	**93.800**	**15.3335**	**1.057**	**S**
QRS Desperation	**68.55**	**21.615**	**63.35**	**16.928**	**-.952**	**N.S**
QT	**386.900**	**49.6004**	**382.900**	**73.3097**	**.256**	**N.S**
QTC	**481.3450**	**46.11015**	**468.225**	**40.9768**	**1.047**	**S**
PR	**194.900**	**105.8211**	**182.8000**	**91.77639**	**.362**	**N.S**

X=mean, SD=stander deviation, MI=myocardial infraction, S=significant, N.S= non-significant, C.S=comparative significance

Table (3) showed there is significant differences between complicated acute myocardial infarction and non-complicated acute myocardial infarction groups related to the QRS duration and QTC

Discussion

This study used purposive design, to identify the difference in QT correction interval with regard to complicated and non-complicated acute myocardial infarction. The sample consists of 50 patients who were purposive allocated to either complicated myocardial infarction group (n=20 or non-complicated myocardial infarction group (n=50). The mean age of the sample was (58.05± 13.60) years for the complicated myocardial infarction group and (57.23 ± 11.08) years for the non-complicated myocardial infarction group which ranged from (30-73) years (table.1).The study conducted by (9) that present the mean ±SD age at baseline was 57.68 ± 5.74 years.Concerning level of education of the study sample, the highest percent (40%) of sample in the complicated myocardial infarction group and the same percentage of sample in the non complicated myocardial infarction group were primary school table (.1).Another study conducted by (10) who present that majority of patients 41 (63,1) were primary education. (11) demonstrated that 12 (24%) in

the experimental group and 8 (16%) in the control group were illiterate.The study confirmed that higher education levels often correlate with better access to healthcare information and resources, potentially influencing diseases prevention and management. However, this similarity in education levels between the groups can be advantageous for controlling education-related confounders in the analysis. Concerning occupation status, the present study shows that majority of patients (25%) in complicated myocardial infarction group and (46%) of non-complicated myocardial infarction group were of sample were self-employment. (12) reported that patients who worked in business showed a higher prevalence of constipation (28.55%). (11) reported that (42%) of patients with AMI ere self-employee and (30%) of patients were housewife in the experimental group. while (56%) of patients were self-employee and (24%) of patients were housewife in the control group.

The finding of this study presented that both the complicated acute myocardial infarction group and complicated acute myocardial infarction group had hypertension, they accounted for (90%) percent of the complicated acute myocardial infarction group and (73%) percent of the complicated acute myocardial infarction group respectively (table 2).Study conducted by (13) showed that38 (76%) patients of experimental group and 34 (68%) patients in control group had hypertension, while (74%) of patients in the study group patients and, (60%) of patients in the control group with diabetes mellites' mechanistic link between the prolonged corrected QT interval (QTc) and increased risk of fatal arrhythmogenesis is well established by the detailed investigation of the relatively rare monogenic, long QT syndromes) (14).

The present results showed there is significant differences between complicated myocardial infarction and complicated myocardial infarction groups related to the QTC (Table 4.).Published data demonstrated the association between a prolonged QT interval and all-cause mortality in the general population (15). Ventricular repolarization may delay due to myocardial ischemia or stress, prolonging of the QT interval, and predisposing to sudden death (16). A prolonged QT interval is associated with autonomic dysfunction and hyperactivity that may be manifested as elevated blood pressure, atherosclerosis, and cardiovascular events (17).

This study indicated that the QT behavior during the immediate period following acute STEMI. The QT interval elongates starting at the acute event and peaks at day three when it begins to shorten. At day five, which serves as a common discharge time point, QT does not reach baseline values. Prolonged QT duration at hospitalization, at day two, and prior to discharge is associated with mortality.

The present study that showed there is significant differences between complicated myocardial infarction and complicated myocardial infarction groups related to the QRS duration (Table 4.).The role of QRS duration in predicting complications of MI has been previously studied. (18) When QRS duration is greater than 120 ms there is delayed depolarization of the left ventricular lateral wall that is related to reduced LVEF (12) found that QRS duration between 90 and 120 ms is associated with

adverse events, lower LVEF and greater severity of the underlying coronary artery disease. Another prospective cohort study showed that, for every 10 ms increase in QRS duration, the risk of sudden death increases by 27%, and patients with a QRS duration greater than 110 ms had a 2.5-fold higher risk of sudden death. (19).

This study showed that there is no significant differences between complicated myocardial infarction and complicated myocardial infarction groups related to the ORS dispersion Although there is prolonged in complicated MI than the non-complicated MI (Table 4.).QRS dispersion was the main predictor of late VA. A previous study showed a stronger association between QRS dispersion and VA during the early phases of STEMI compared to QTd, but in that study the course of time was not taken into account. (19) Various mechanisms of VA (increased automaticity, triggered activity, reentry) may be found in patients with MI. Focal activity due to abnormal automaticity is the predominant mechanism initiating tachycardia in acute ischemia. Increased potassium levels secondary to opening of KATP channels cause shortening of repolarization, leading to slow conduction and in excitability. The resulting inhomogeneity of depolarization increases QTI and QRS dispersion during acute ischemia (20) and There is also increased sympathetic activity. (21).This study indicated that QT duration is often prolonged during STEMI; this prolongation is associated with increased mortality and adverse events. Gender is an important mediator of QT dynamics.

Conclusion

According to the present study, the results of this study demonstrated that the QTc interval can be used as a useful risk marker for identifying high-risk patients with AMI and Increased QRS duration and dispersion implied a greater likelihood of ventricular arrhythmias in early stages of AMI than increased duration and dispersion of the corrected QT interval

Recommendation

It is need larger series of patients to examine the reproducibility of the data and their impact on the prognosis, and establishment of the days in which QT values

can identify higher-risk patients is clinically relevant and may aid in the d

ecision-making process of which patients can be discharged early, and which patients

The author extends gratitude to the all patients participate in this study for cooperation in completing this work.

References

1-Beinart R, Zhang Y, Lima JA. *et al*. The QT interval is associated with incident cardiovascular events: the MESA study. *J Am Coll Cardiol.* 2014;64:2111-9

2- Levine E, Rosero SZ, Budzikowski AS, Moss AJ, Zareba W, Daubert JP (August 2008). "Congenital long QT syndrome: considerations for primary care physicians". *Cleveland Clinic Journal of Medicine*. **75** (8): 591–600. doi:10.3949/ccjm.75.8.591 (inactive 4 December 2024). PMID 18756841. S2CID 4237579.

3-Bijl M, Verheugt FW. Extreme QT prolongation solely due to reversible myocardial ischemia in single-vessel coronary disease. Am Heart J 1992;123:524-6.

4-Bonnemeier H, Hartmann F, Wiegand UK, Bode F, Katus HA, Richardt G. Course and prognostic implications of QT interval and QT interval variability after primary coronary angioplasty in acute myocardial infarction. J Am Coll Cardiol 2001;37:44-50.

5-Canavosio FG, Botta M, Bergerone S, Gaita F. Prolonged QT interval in ST-elevation myocardial infarction: predictors and prognostic value in medium-term follow-up. J Cardiovasc Med (Hagerstown) 2016;17:440-5.

6.Kenigsberg DN, Santaya K, Khanal S, Kowalski M, Krishnan SC. Prolongation of the QTc interval is seen uniformly during early transmural isquemia. *J Am Coll Cardiol.* (2007) 49:1299–305. 10.1016/j.jacc.2006.11.035

7-Rivera-Fernández R, Arias-Verdú MD, García-Paredes T, Delgado-Rodríguez M, Arboleda-Sánchez JA. Antonio prolonged QT interval in ST-elevation myocardial infarction and mortality. *J Cardiovasc Med.* (2016) 17:11–9. 10.2459/JCM.0000000000000015

8-Shawl FA, Velasco CE, Goldbaum TS, Forman MB. Effect of coronary angioplasty on electrocardiographic changes in patients with unstable angina secondary to left anterior descending coronary artery disease. *J Am Coll Cardiol.* (1990) 16:325–31. 10.1016/0735-1097(90)90581-9

9-Juul-Moller S. Corrected QT-interval during one year follow-up after an acute myocardial infarction. *Eur Heart J.* (1986) 7:299–304. 10.1093/oxfordjournals.eurheartj.a062067

10-Tisdale JE, Wroblewski HA, Overholser BR, Kingery JR, Trujillo TN, Kovacs RJ. Prevalence of QT interval prolongation in patients admitted to cardiac care units and frequency of subsequent administration of QT interval-prolonging drugs. A prospective, observational study in a large urban academic medical center in the US. Drug Saf. 2012;35:459–470. doi: 10.2165/11598160-000000000-00000

11-. Khaleel M ,G ; Hassan .H, S: Effectiveness of an Instructional Program on Knowledge of Patients with Renal Failure Undergoing Hemodialysis Concerning Self- Care in Baghdad Teaching Hospital. Indian Journal of Forensic Medicine & Toxicology, October-December 2019, Vol. 13, No. 4

12- Shah M., O. Maludum, V. Bhalla, :QRS duration and left ventricular ejection fraction (LVEF) in non-ST segment elevation myocardial infarction (NSTEMI).Int J Cardiol, 221 (2016), pp. 524-528 http://dx.doi.org/10.1016/j.ijcard.2016.07.028

13- Aljanabi MA and Hassan HS. Effectiveness of Nursing Intervention on Early Complications for Patients undergoing Coronary Catheterization. International Journal of Pharmaceutical Research. 2020 Oct 2;12(02). Available from: https://doi.org/10.31838/ijpr/2020.12.02.0307

14-Sumeet S Chugh , Kyndaron Reinier , Tejwant Singh , Audrey Uy-Evanado , Carmen Socoteanu , Dawn Peters , Ronald Mariani , Karen Gunson , Jonathan Jui : Determinants of Prolonged QT Interval and Their Contribution to Sudden Death Risk in Coronary Artery Disease: The Oregon Sudden Unexpected Death Study. Circulation. 2009 Jan 26;119(5):663–670. doi: 10.1161/CIRCULATIONAHA.108.797035

15- Straus SMJM, Kors JA, De Bruin ML, van der Hooft CS, Hofman A, Heeringa J, et al. Prolonged QTc interval and RISK of sudden cardiac death in a population of older adults. J Am Coll Cardiol. (2006) 47:362–7. 10.1016/j.jacc.2005.08.067

16- Rivera-Fernández R, Arias-Verdú MD, García-Paredes T, Delgado-Rodríguez M, Arboleda-Sánchez JA. Antonio prolonged QT interval in ST-elevation myocardial infarction and mortality. *J Cardiovasc Med.* (2016) 17:11–9. 10.2459/JCM.0000000000000015

17- Peters RW, Byington RP, Barker A, Yusuf S, et al. Prognostic value of prolonged ventricular repolarization following myocardial infarction: the BHAT experience. J Clin Epidemiol. (1990) 43:167–72. 10.1016/0895-4356(90)90180-w

18- Jain R., S. Gautam, C. Wu, :Prognostic implications of QRS dispersion for major adverse cardiovascular events in asymptomatic women and men: the multi-ethnic study of atherosclerosis. J Interv Card Electrophysiol, 56 (2019), pp. 45-53 http://dx.doi.org/10.1007/s10840-019-00614-y

19- Kurl,S. T.H. Mäkikallio, P. Rautaharju, :Duration of QRS complex in resting electrocardiogram is a predictor of sudden cardiac death in men.Circulation, 125 (2012), pp. 2588-2594

20- Mehta R.H., J. Yu, J.P. Piccini, :Prognostic significance of postprocedural sustained ventricular tachycardia or fibrillation in patients undergoing primary percutaneous coronary intervention (from the HORIZONS-AMI Trial). Am J Cardiol, 109 (2012), pp. 805-812

21- Thomas D.E., N. Jex, A.R. Thornley: Ventricular arrhythmias in acute coronary síndromes mechanisms and management. Continu Cardiol Educ, 3 (2017), pp. 22-29 may benefit from longer observation, a common clinical dilemma

HNJ 1 (1), (2025) 8- 8

Holistic Nursing Journal

https://hnj.uobaghdad.edu.iq/index.php/hnj/en/index

ISSN: 3135-338X

Nursing students` Attitudes Concerning Clinical Training in Pediatric Hospitals

Adraa Hussein Shawq*, Athraa Waleed Khalid**, Doha Alaa Saleh**, Fatima Haider Mahmoud**, Nabaa Mohammed Majeed **

* Assistant Prof., University of Baghdad, College of Nursing, Pediatric Nursing Department, Baghdad, Iraq.

Email adraa.hussein@conursing.uobaghdad.edu.iq **ORCID:** orcid.org/0000-0003-0590-3885

** BSc student, University of Baghdad, College of Nursing, Pediatric Nursing Department, Baghdad, Ir

Abstract

Objectives: This study aims to assess nursing students' attitude toward training in pediatric clinical setting.

Methods: A descriptive design was selected to collect the data from nursing students in clinical environment. The study has been carried out at College of Nursing \ University of Baghdad. The non-probability sample (convenient) of (150) students were participated in the study. The data were collected by a scale to assess students` attitude in clinical pediatric environment. The data were collected by self-administrative method. The data are analyzed by SPSS version 23.

Results: The result of the study showed, (60%) of the nursing students showed neutral attitude in clinical training at pediatric hospitals. Most of students were from age group 19-23 years with mean M ± SD (21.2 ± 3). Most of them were female, and most of them at the fourth stage of nursing college. Majority of them were trained in pediatric hospitals, and majority of them have regular training. High percentage of students, their evaluation degree in the training was very good.

Conclusion: The study concluded that, nursing students have a balance attitude about training in pediatric hospitals.

Recommendations: The study recommend to improve the students' attitudes by preparing students for clinical learning and greater interest and motivation. Use new strategies to change students' attitudes for the better, and provide a positive role in training.

IRAQI Academic Scientific Journals

Article info:

Article history:

Received: 20/03/2025
Accepted: 05/06/2025
Published: 01/07/2025

Keywords:

Nursing Students; Attitude; Clinical Training; Pediatric Hospitals

∗Corresponding author at: University of Baghdad, College of Nursing, Department of Pediatric Nursing, Baghdad, Iraq. Assist. Prof. (Shawq A. H.). Email adraa.hussein@conursing.uobaghdad.edu.iq . ORCID https:// orcid.org/0000-0003-0590-3885. DOI: https://doi.org/

توجهات طلاب التمريض فيما يتعلق بالتدريب السريري في مستشفيات الاطفال

المستخلص:

الأهداف: تهدف هذه الدراسة إلى تقييم موقف طلاب التمريض تجاه التدريب في البيئة السريرية للأطفال.

المنهجية: تم اختيار دراسة وصفية لجمع البيانات من طلاب التمريض في البيئة السريرية. أجريت الدراسة في كلية التمريض / جامعة بغداد. تم اختيار عينة غير الاحتمالية مكونة من (150) طالبا في الدراسة. تم جمع البيانات بمقياس معد لتقييم مواقف الطلاب في بيئة طب الأطفال السريرية. جمعت البيانات بطريقة الإدارة الذاتية و تم تحليلها بواسطة برنامج SPSS الإصدار 23.

النتائج: أظهرت نتائج الدراسة أن (60٪) من طلاب التمريض أظهروا موقفا متوازن في التدريب السريري في مستشفيات الأطفال. كان معظم الطلاب من الفئة العمرية 19-23 عاما بمتوسط .(3 ± 21.2) M ± SD معظمهم من الإناث ومعظمهم في المرحلة الرابعة من كلية التمريض. تم تدريب معظمهم في مستشفيات الأطفال ، ومعظمهم يتلقون تدريبا منتظما. نسبة عالية من الطلاب ، كانت درجة تقييمهم في التدريب جيدة جدا.

الاستنتاج: خلصت الدراسة إلى أن طلاب التمريض لديهم موقف متوازن حول التدريب في مستشفيات الأطفال.

التوصيات: توصي الدراسة بتحسين اتجاهات الطلاب من خلال إعداد الطلاب للتعلم السريري وزيادة الاهتمام والتحفيز. استخدام استراتيجيات جديدة لتغيير مواقف الطلاب للأفضل، وتقديم دور إيجابي في التدريب.

Introduction

Nursing is an evidence-based profession, supported by clinical learning environment which is one of the most valuable and integral component in the nursing program [(1).] Clinical training is important because it allows the nursing students to understand clinical practice, and facilitate to attain the knowledge [(2).] Clinical practice is important because it allows students to apply their theoretical knowledge in a real environment, develop psychomotor skills, observe and adapt the professional role [(3).] These clinical training environments can be influenced on students` attitudes in training setting. Moreover, many factors can also influence on the quality of clinical training including ward atmosphere, leadership style of the ward manager, supervisory relationship, and principles of nursing care and practice of learning in the ward [(4)].

In spite of clinical training challenges in health care setting, the educators need to be utilizing the student-center wrapping approach exploiting knowledge building and self-development were found to improve students' experiences. Therefore, nursing programs should implement high quality teaching based on the best available scientific evidence to improve learning quality and students' experience [(5)]. There is no denying the significance of clinical performance in the development of clinical, professional, and personal skills in nursing education. It has been demonstrated that the good clinical performance among nursing students enhances clinical competencies, enabling them to provide patients with extremely acceptable, timely, appropriate, quality, and cost effective care [(6).] In contrast, some of clinical students` experience in training were not sufficiently equipped. In addition, to the overcrowded inside clinical training hospitals which impedes students' acquisition of sufficient skills and experience to provide nursing care to patients [(7).] According to a previous study that reported, the main themes affecting the clinical learning of nursing students include

clinical learning environment, the educational behavior of clinical instructors and student's individual factors. It is identified as positive interpersonal relationships and the use of demonstration and return demonstration as being influential to learning in the clinical area [8].

The lack of adequate knowledge and skill, improper treatment, discrimination, lack of communication skill along with inadequate preparation for the clinical experience lead to higher rates of psychological problems such as stress and inferiority complex among students [9]. Most of the nursing students reported various anxiety producing factors during the clinical work and themes were factors related to the 'practice', 'patients' and 'teachers' [10]. The nursing students felt happy and proud by acknowledging their care by clients, positive comments from clients and by developing a feeling of being supportive to clients [9].

Clinical learning is the core of the professional practice and is essential to train nursing students to acquire the needed skills, values, and attitudes for future professional practice, preparing them to function as skilled and developed nurses and navigating the theory-practice gap newly qualified nurses often face in practice [10]. Practicing in real clinical settings is critical for student nurses to cultivate their competence and confidence to face the future challenges of professional practice and to integrate well into clinical settings [11].

Therefore, the current study aims to explore nursing students' attitudes concerning their training in pediatric hospitals.

Methods and materials

Design of the study:

Quantitative, descriptive study design, which was used to explore nursing students` attitudes in their experience during training at pediatric hospitals in Baghdad city.

Setting of the study:

The study has been carried at College of nursing \ University of Baghdad which established 1962 as a first college in nursing specialty in Iraq. The college contain 7 departments (fundamental, adult, pediatric, maternal and newborn, community health, mental health nursing, and basic science). Pediatric nursing department as one of these nursing department deal with pediatric in different age groups and their families. The third and the fourth stages were selected due to complete the training program of nursing students at pediatric hospitals that allowed them to express their attitude in training. The study conducted at college of nursing that affiliated to the administrative arrangement of the pediatric nursing department. The reason for chosen this department was due to the experience of students that could influence on the nursing care which provided for children and their families, and the need of preparing future nurses how to deal with children to develop their attitude in the practical field.

Sample of the Study: The non-probability sample (convenient) of (150) students out of total (240) students in both third and fourth stage at college of nursing were participated in the study. A confidence level of 95% and a power of 80% were applied to determine the appropriate sample size, they were from both sex, and within age (19-40) years. Table (I) shows the percentages of students from each stage.

Table (I) Nursing Students' Distribution

Nursing stage	Frequency	Percentage
Third stage \ pediatric nursing department	50	33.3%
Fourth stage \ community health nursing	50	33.3%
Fourth stage \ psychiatric and mental health nursing	50	33.4%
Total	150	100

Instrument of the study

The instrument of the study has adopted from a similar study by Jaganath et al. (2022), in their study about nursing students' perceptions of the clinical learning environment at a university in South Africa (30). The permission has obtained from the researcher by an e-mail method. The scale was translated to Arabic language by using back translation to get appropriate translation, and submit to the experts also to be adapted. The questionnaire format included two parts. The first contain students' socio-demographic data (age, sex, have the students a clinical training in pediatric hospitals, and their degree evaluation in clinical training at pediatric hospitals).

The second part concern nursing students` attitudes toward clinical learning pediatric environment that contain five subscales: The educational atmosphere of the ward (9) items, Leadership style of the ward manager (4) items, Premises of nursing in the ward (4) items, Supervisory relationship (8) items, and Role of the nurse teacher (9) items. The scale of the attitude was scored within 5 points of Likert scale (1=strongly disagree, 2= disagree, 3= neutral, 4= agree,

5= strongly agree). The score of attitudes was categorized into Positive= 34 – 79.3, Neutral= 79.4 – 124.6, and Negative= 124.7 – 170.

Validity and Reliability:

A construct validity has been used to determine the validity of the instrument through a panel of (10) experts related to the field of the study. These experts were asked to review and evaluate the instruments of the study for its content, clarity, and adequacy. Based on their comments and suggestions, some modifications and changes were made for better clarity and validity.

The pilot study has been conducted on (12) students to determine the content validity and internal consistency reliability of the questionnaire. The pilot study sample was excluded from the main study sample. The participants receive the questionnaire format after they agree to participated in the study, and fill it by self-administration method. The pilot study carried through the period of 7th to 31 of December 2024. The test-retest method used to determine tools reliability. The pilot study aims to confirm instrument clarity and adequacy, estimate the required time to answer questions, and find out any barriers through study process. The internal consistency reliability was employed to evaluate study instrument. The Test-retest method was used with computation of Cronbach alpha correlation coefficient by SPSS program version 20. Data was collected from (12) students at college of nursing and excluded later from the total sample. The retest was achieved after 3 weeks of the test on the students with the same instrument. The result of this study indicate that Cronbach alpha correlation coefficient is (r = 0.88) which signify that the internal consistency is accepted.

Data collection

The data has been gathered by using study instrument 9questionnaire format) through the self-administrative method, the study data was collected from the period January 15th to February 15th 2025. The participations in the study were voluntary and

the consent form was designed at the beginning of the questionnaire. The time of questionnaire answer were between (10-15) minutes.

Ethical consideration

Ethical considerations were including the consent from all the participants, who were informed of the study's objectives, purpose. They were informed that the study's results would be used solely for research purposes, and that participation was voluntary. All participants were made aware of their autonomy and right to refuse involvement. Consent forms were obtained from participants prior to data collection.

Data Analyse

The data are analyzed by Statistical Package of Social Sciences (SPSS) version 23. Descriptive statistics (frequency, percentage, mean, and standard deviation) used to analyze the results

Result

Table (1) Nursing Students` Sociodemographic Data Distribution

Data		Frequency	Percentage
Age M ± SD (21.2 ± 3)	19-23 years	105	70%
	24-28 years	12	8%
	29-33 years	12	8%
	34-38 years	12	8%
	39-43 years	9	6%
Sex	Female	129	86%
	Male	21	14%
Academic year	Third stage	50	33.3%
	Fourth stage	100	66.7%
Have you trained in pediatric hospital	Yes	149	99.4%
	No	1	0.6%
Have you regular training	Yes	144	96%
	No	6	4%
Your previous clinical evaluation	Excellent	48	32%
	Very good	63	42%
	Good	36	24%
	Average	3	2%
	Accepted	0	0
	Failed	0	0
Total		150	100%

This table shows (70%) of nursing students were at age 19-23 years, and their age mean was M ± SD (21.2 ± 3). Concerning their sex, (86%) of them were female, and (66.7%) of them at the fourth stage of nursing college. (99.4%) of them were trained in pediatric hospitals, (96%) of them have regular training. (42%) of their evaluation degree in the training was very good.

Table (2) Nursing Students' Attitudes toward Clinical Training in Pediatric Hospitals

Items	Strongly agree	agree to some extent	Neither agree nor disagree	Disagree to some extent	Strongly disagree	Mean (SD)	Description
a. The educational atmosphere of the ward							
1. The staff members were easy to approach	44 (28.5%)	75 (51.1%)	25 (16.1%)	4 (2.9%)	2 (1.5%)	4.5 (.72)	Strongly agree
2. During staff meetings (e.g. before shifts), I felt comfortable in the discussion	22 (13.9%)	47 (30.7%)	46 (29.9%)	28 (20.4%)	7 (5.1%)	3.5 (.54)	agree
3. I felt comfortable when going to the ward at the beginning of my shift	18 (5.8%)	29 (21.2%)	59 (40.9%)	36 (26.3%)	8 (5.8%)	3.2 (.43)	neutral
4. There was a positive atmosphere in ward	12 (8.8%)	43 (21.9%)	56 (40.9%)	30 (21.9%)	9 (6.6%)	3.7 (.76)	agree

5. Staff were generally concerned with student supervision	11 (8%)	36 (24.1%)	67 (41.6%)	27 (19.7 %)	9 (6.6%)	3.1 (.34)	neutral
6. The staff learned to know the students by their names	43 (24.1%)	76 (55.5%)	24 (15.3%)	3 (2.2%)	4 (2.9%)	4.3 (.54)	Strongl y agree
7. There were sufficient meaningful learning situations on the ward	38 (25.5%)	86 (55.5%)	18 (13.1%)	5 (3.6%)	3 (2.2%)	4.4 (.74)	Strongl y agree
8. The learning situations were multidimensional in sub-dimensions	24 (15.3%)	82 (52.6%)	33 (24.1%)	6 (4.4%)	5 (3.6%)	3.8 (.41)	agree
9. The ward can be regarded as a good learning environment	30 (19.7%)	89 (57.7%)	23 (16.8%)	3 (2.2%)	5 (3.6%)	4.1 (.23)	agree
b. Leadership style of the ward manager							
1. The ward manager regarded the ward staff as a key resource	11 (5.8%)	29 (21.2%)	66 (40.9%)	36 (26.3 %)	8 (5.8%)	3.2 (.43)	neutral
2. The ward manager was a team member	12 (8.8%)	33 (21.9%)	66 (40.9%)	30 (21.9 %)	9 (6.6%)	3.7 (.76)	agree
3. Feedback from the ward manager could easily be considered a learning situation	14 (8%)	33 (24.1%)	67 (41.6%)	27 (19.7 %)	9 (6.6%)	3.1 (.34)	neutral
4. The effort of individual employees was appreciated	36 (24.1%)	86 (55.5%)	21 (15.3%)	3 (2.2%)	4 (2.9%)	4.3 (.54)	Strongl y agree
c. Premises of nursing in the ward							
1. The ward's nursing philosophy was clearly defined	36 (24.1%)	86 (55.5%)	21 (15.3%)	3 (2.2%)	4 (2.9%)	4.3 (.54)	Strongl y agree
2. Patients received individualized nursing care	38 (25.5%)	86 (55.5%)	18 (13.1%)	5 (3.6%)	3 (2.2%)	4.4 (.74)	Strongl y agree
3. There were no problems in the information flow related to patients' care	24 (15.3%)	82 (52.6%)	33 (24.1%)	6 (4.4%)	5 (3.6%)	3.8 (.41)	agree
4. Documentation of nursing (e.g. nursing plans, daily recording of nursing procedures, etc.) was clear	29 (19.7%)	90 (57.7%)	23 (16.8%)	3 (2.2%)	5 (3.6%)	4.1 (.23)	agree
d. Supervisory relationship							
1. My supervisor showed a positive attitude towards supervision	44 (28.5%)	75 (51.1%)	25(16.1 %)	4 (2.9%)	2 (1.5%)	4.5 (.72)	Strongl y agree
2. I felt that I received individual supervision	19 (13.9%)	52 (30.7%)	44 (29.9%)	28 (20.4 %)	7 (5.1%)	3.5 (.54)	agree
3. I continuously received feedback from my supervisor	8 (5.8%)	32 (21.2%)	66 (40.9%)	36 (26.3 %)	8 (5.8%)	3.2 (.43)	neutral
4. Overall, I am satisfied with the supervision I received	12 (8.8%)	40 (21.9%)	59 (40.9%)	30 (21.9 %)	9 (6.6%)	3.7 (.76)	agree

5. The supervision was based on a relationship of equality and promoted my learning	11 (8%)	36 (24.1%)	67 (41.6%)	27 (19.7 %)	9 (6.6%)	3.1 (.34)	neutral
6. There was a interaction in the supervisory relationship	36 (24.1%)	86 (55.5%)	21 (15.3%)	3 (2.2%)	4 (2.9%)	4.3 (.54)	Strongl y agree
7. Mutual respect and Sub-dimensions approval prevailed in the supervisory relationship	38 (25.5%)	86 (55.5%)	18 (13.1%)	5 (3.6%)	3 (2.2%)	4.4 (.74)	Strongl y agree
8. The supervisory relationship was characterized by a sense of trust.	38 (25.5%)	86 (55.5%)	18 (13.1%)	5 (3.6%)	3 (2.2%)	4.4 (.74)	Strongl y agree
e. Role of the nurse teacher(NT)							
1. In my opinion, the NT was capable of integrating theoretical knowledge and everyday practice	39 (28.5%)	80 (51.1%)	25 (16.1%)	4 (2.9%)	2 (1.5%)	4.5 (.72)	Strongl y agree
2. The NT was capable of operationalizing the learning goals of this clinical placement	19 (13.9%)	52 (30.7%)	44 (29.9%)	28 (20.4 %)	7 (5.1%)	3.5 (.54)	agree
3. The NT helped me to reduce the theory-practice gap	11 (5.8%)	39 (21.2%)	56 (40.9%)	36 (26.3 %)	8 (5.8%)	3.2 (.43)	neutral
4. The NT was like a member of the nursing team	12 (8.8%)	33 (21.9%)	66 (40.9%)	30 (21.9 %)	9 (6.6%)	3.7 (.76)	agree
5. The NT was capable of giving expertise	14 (8%)	33 (24.1%)	67 (41.6%)	27 (19.7 %)	9 (6.6%)	3.1 (.34)	neutral
6. The NT and the clinical team worked together to support my learning	36 (24.1%)	86 (55.5%)	21 (15.3%)	3 (2.2%)	4 (2.9%)	4.3 (.54)	Strongl y agree
7. The joint meetings between myself, mentor and NT were comfortable experiences	38 (25.5%)	86 (55.5%)	18 (13.1%)	5 (3.6%)	3 (2.2%)	4.4 (.74)	Strongl y agree
8. Climate of the meetings was congenial	24 (15.3%)	82 (52.6%)	33 (24.1%)	6 (4.4%)	5 (3.6%)	3.8 (.41)	agree
9. Focus on the meetings in my learning needs	38 (25.5%)	86 (55.5%)	18 (13.1%)	5 (3.6%)	3 (2.2%)	4.4 (.74)	Strongl y agree

(1 - 1.79=strongly disagree, 1.80 - 2.59= disagree, 2.60 - 3.39= neutral, 3.40 – 4.29= agree, 4.30 - 5= strongly agree).

This table showed that all the items of students` attitude toward clinical training at pediatric hospitals was scored between agree and strongly agree description, and the mean weight was scored agree.

Table (3): Assessment of Nursing Students` Attitude about Pediatric Clinical Training

Knowledge scale	F	%	Mean	SD.	Ass.
Positive	**48**	**32%**	**95.1**	**1.506**	**Neutral**
Neutral	**90**	**60%**			
Negative	**12**	**8%**			
Total	***150***	***100***			

Positive= 34 – 79.3, Neutral= 79.4 – 124.6, Negative= 124.7 - 170

This table showed that 60% of student recorded as neutral attitude about clinical training in pediatric hospitals, and the mean showed it scored within neutral attitude.

Discussion

Nursing experience in clinical training is essential to build a concrete and positive attitude especially for junior nursing. The following are the explanation of study result

The current result in table (1) showed, most of the study sample was from the age group 19-23 years, with mean M ± SD (21.2 ± 34). The female participants were higher than male with account, and more than half of them were studied at the fourth stage of nursing college. Majority of the participants were trained in pediatric hospitals with regular training. The highest percentage of students` clinical evaluation degree in the training was very good.

The results of the study were consistent with many studies, where females are more than males among student, and most of them were in the age group 22-24 years Karabulut et al. 2015 in their study to exam the relationship of clinical learning environment to nursing students' academic motivation, their result showed the highest percentage of students were at stage 37% third class and 28.4% fourth class at college of nursing students [(12).]

Tables (2 & 3) revealed that, more than half of student recorded as neutral attitude about clinical training in pediatric hospitals, while very little (8%) of them recorded with negative attitude. The results of the current study indicated that students' attitudes about pediatric clinical learning environment are neutral. This may be related to their satisfaction and the role of the supervisor in facilitate training. Also, these results are supported by study which finds more than half of the students have satisfied with the clinical environment. But other students were dissatisfied with the supervisory [(13).]

Mukhlif in her study in Nursing College at the University of Mosul, which aimed to assess Students' Attitudes toward the Clinical Learning Environment and Clinical Supervision revealed that, the clinical learning setting was beneficial for the student nurses. The contributions and importance of supervisors to the promotion of practice-based learning for students were described in several studies [(14).]

On the other hand, the poor attitude of the student nurses may be influenced the way supervisor and nursing staff. The literature documented that, Lack of learning will result in long-term consequences for nursing students if they don't have a good

attitude. The current results showed that clinical supervision has a positive on students' attitudes. These results are related to the fact that the learning methods with the students are through supervision and the role of the supervisor. On the other hand, students' opinions about clinical learning were significantly more positive in the third year than fourth-year students [(15)].

A previous study by Akyüz et al. 2022, for assessing nursing students experience in clinical learning environment documented that, 49.8% of the students experienced challenges during clinical practice that are related to the nurses (37.5%), the hospital (27.0%), and theoretical education (13.5%), and they believe that their challenges could be partially resolved (46.6%). More than half of students (67.5%) reported a negative event and most of these events were related to the attitudes and behaviors of the nurses. Most students` suggestions for better clinical practice were to increase the number of practice lessons and more innovative and technology-based training methods used in accordance with the technological developments of the digital age [16].

Karabulut et al. 2015 in their study to exam the relationship of clinical learning environment to nursing students' academic motivation reported, one of the prerequisites for the training of qualified students is to provide nursing students with a qualified clinical environment. It was found that nursing students' academic motivation can improve positively [17]. Vizcaya-Moreno et al. 2018 in their study to assess Student nurse perceptions of supervision and clinical learning environment documented that, Student participation in ward activities depends on the student's experience, the characteristics of the ward, the nursing team and the nurse tutor. Students feel that the role of the nurse tutor is not clearly defined. The authors concluded the supervisors need to focus on student participation, and feelings, and the clarification of the tutor role definition. [18]

Adrian et al. 2014 in their study to find the Effects of the clinical skills training on the attitudes of medical students recommended, introduce an educational intervention should take into account including attitude-building elements, that may enhance the effect of the program on medical students' attitudes [19]. Kalkhoran et al. (2011), in their study to assess Iranian staff nurses' attitudes toward nursing students. Their results demonstrated, the attitude scores toward nursing students were low and moderate. Some nurses (45.71%) believed that working with students is pleasant and most (98.57%) have thought that staff should have a good relationship with nursing students. Furthermore, staff nurses pointed out that the there is a need to overhaul the educational system of nursing students (94.3%), that nursing students do not acquire the sufficient clinical skill (67.14%), and that the students are not prepared enough for the clinical task (51.43%) [20].

Awuah-Peasah et al. (2013) in their study about attitudes of student nurses toward clinical work. The results indicated that 63% of the respondents said nursing students reported late to work, 60% reported that students were absent from clinical work without seeking permission, and 64% reported they used mobile phones during clinical working hours. In addition, 41% of the respondents stated that the nursing students did not show commitment to

clinical work. Also, the attitude portrayed by students had an influence on the way the medical and nursing staffs related to them. It is recommended that students should receive in-service training before going to the clinical area, so that they are aware of what is expected of them during clinical placement. Also, systems should be put in place to ensure that nursing students do not use mobile phones in the clinical environment. There should be preceptors in the ward to monitor and mentor student nurses. The nursing schools should periodically follow-up with practicing nurses, to assess the behaviors and attitudes of the nursing students [21, 22].

On other hand a study by Mukhlif in Mosel city is disagreed with the current finding, it showed Students had negative attitudes toward clinical supervision and the clinical learning environment (42%, 36.5%) respectively. Their study found a significant relationship between students' attitudes and the role of the clinical supervisor [23].

Conclusion

Based on the results, the result of the study concluded that, More than half of the nursing students showed moderate score of attitude in clinical training at pediatric hospitals. More than half of the nursing students showed a neutral attitude toward clinical training at pediatric hospitals. Most of students were from age group 19-23 years with mean M ± SD (21.2 ± 34). Most of them were female, and most of them at the fourth stage of nursing college. Majority of them were trained in pediatric hospitals, and majority of them have regular training. High percentage of students, their evaluation degree in the training was very good.

Recommendation

The researchers recommend the following, improved the students' attitudes by preparing students for clinical learning and greater interest and motivation. Determine the ideal clinical learning environment's setting and the use of efficient communication techniques. When a student is undergoing clinical training, supervisors play a crucial role in their development. Supervisors provide students with feedback right away to help them overcome any negative attitude toward their supervisors. Use new strategies to change students' attitudes for the better, and provide a positive role in training.

References

1. Arkan B, Ordin Y, Yılmaz D. Undergraduate nursing students’ experience related to their clinical learning environment and factors affecting to their clinical learning process. Nurse Educ Pract. 2018; 29:127–32.

2. Backes, D., Zamberlan, C., Heckler de Siqueira, H., Backes, M., Macêdo de Sousa, M., Macêdo de Sousa, M., & Lomba, M. D. L. L. D. F. Quality nursing education: A complex and multidimensional Enfermagem, 2018, 27(3), 1–7.
3. Papp, M. Markkanen, and M. von Bonsdorff, ‘’Clinical environment as a learning environment: Student nurses’ perceptions concerning clinical learning experiences,’’ Nurse Education Today, vol. 23, pp. 262- 268, 2003.
4. Anderson, J. An academic fairy tale: A metaphor of the work-role transition from clinician to academician. Nurse Educator, 2008, 33(2), 79–82.
5. Phillips, K. F., Mathew, L., Aktan, N., & Catano, B. Clinical education and student satisfaction: An integrative literature review. International Journal of Nursing Sciences, 2017, 4(2), 205–213. https://doi.org/10.1016/j.ijnss.2017.03.00
6. El-tahan Lamiaa A. Clinical Training Factors that Hinder or Facilitate Nursing Students' Learning: It's Effect on their Clinical Performance. Menoufia Nursing Journal Faculty of Nursing Menoufia University ،2023 ،MNJ, Vol. 8, No. 3, PP: 21 – 43 https://menj.journals.ekb.eg
7. Mohamed, L. Challenges of nursing students during clinical training: A nursing perspective Public Health, 2024, Volume 11, Issue 2, 379–398. https://www.aimspress.com/journal/aimsph.
8. Barbara A. Brunt Nursing Professional Development Evidence-Based Practice, National Library of Medicine, 2023, p.104. https://www.ncbi.nlm.nih.gov/books/NBK589676/
9. Jamshidi, Nahid. The Challenges of Nursing Students in the Clinical Learning Environment: A Qualitative Study, Hindawi Publishing Corporation Scientific World Journal, 2016, 7. http://dx.doi.org/10.1155/2016/184617
10. Abd-Elhady Takwa Rashawn Mohamed. Nursing Students’ Experience and Satisfaction with the Clinical Learning Environment, 2022, vol 10, p.p, 437_454.
11. Eraydın, S. & Karagozo glu, S. Investigation of self-compassion, self-confidence and submissive behaviors of nursing students studying in different curriculums. Nurse Education Today, 2017. 54, 44–50.
12. Baraz, A., Memarian, R., & Vanaki, Z. Learning challenges of nursing students in clinical environments: A qualitative study in Iran. Journal of Education and Health Promotion, 2015. 4 (52). https://doi.org/10.4103/2277-9531.162345.
13. Angelo, T. A., & Cross, K. P. Classroom Assessment Techniques: A Handbook for College Teachers (2nd ed.). San Francisco: Jossey-Bass. Bardes, B. & Denton, J. (2016, June). Using the Grading Process for Departmental and Program Assessment. Paper presented at the American Association for Higher

14. Jantzen, D. Refining nursing practice through workplace learning: A grounded theory. Journal of Clinical Nursing, 2017, 28(13-14), 2565-2576.
15. Adibelli, S. Korkmaz, Fatos. The factors Affecting Nursing Student Learning in Clinical Practice. 5th Annual World Nursing conference, 2017, vol.27,p. 491_498.
16. Labeeb, Sh. Rajith, Ch. Ibrahim ,M .Kamel ,N . A. Qualitative Study on Factors Affecting the Clinical Learning of Nursing students in College of Nursing, Kuwait, Journal of Education and Practice. 2017, Vol.8, No.36, 15 https://drive.google.com/file/d/19YezrosRXmw6v/view
17. Hari.R , Geraghty.S , Kumar.K .Clinical supervisors' perspectives of factors influencing clinical learning experience of nursing students from culturally and linguistically diverse backgrounds during placement: A qualitative study, science direct, 2021,Vol.102.
18. Mukhlif, H. H. Students' Attitudes Toward the Clinical Learning Environment and Clinical Supervision in Nursing College at the University of Mosul, Kufa Journal for Nursing Sciences,2023, Vol. 13(2), 2023: 91 –98. https://doi.org/10.36321/kjns.vi20232.12419
19. Mercy Ejodamen Avbuluimen, et. al. Perception and Attitude of Nursing Students toward Clinical Experience in Primary, Secondary and Tertiary Care Institution in Edo State Nigeria.” IOSR Journal of Nursing and Health Science (IOSR-JNHS), 10(3), 2021, pp. 01-08.
20. Türker E, Academic Self-Efficacy and Attitudes to Clinical Practices of Nursing Students, Lokman Hekim Health Sciences, 2023, 3(3):201–210
21. Parvan K, Shahbazi Sh, Ebrahimi H, Valizadeh S, Rahmani A, Jabbarzadeh Tabrizi F, Esmaili F. Nurses' lived experience of working with nursing students in clinical wards: a phenomenological study. J Car Sci 2018; 7 (1): 41-45. doi:10.15171/jcs.2018.007
22. Akyüz E, Ergöl Ş. The challenges experienced by nursing students in clinical learning environment and their suggestions. Journal of Health and Nursing Management. 2022; 9(3):463-4.
23. Hanaa Hussein Mukhlif, Students' Attitudes Toward the Clinical Learning Environment and Clinical Supervision in Nursing College at the University of Mosul. Kufa Journal for Nursing Sciences, 2023. Vol. 13(2), 2023: 91 –

13. تخضع جميع المخطوطات لفحص الانتحال العلمي باستخدام برامج كشف التشابه مثل Turnitin و iThenticate قبل إرسالها للتحكيم. وقد تُرفض المخطوطات أو تُعاد للمؤلفين لإجراء التعديلات اللازمة في حال وجود نسب تشابه غير مقبولة.

14. يجب على المؤلفين الإفصاح عن أي استخدام لأدوات الذكاء الاصطناعي (AI) في إعداد المخطوطة، ولا يجوز إدراج أدوات الذكاء الاصطناعي كمؤلفين.

15. تُطبق رسوم معالجة المقالات (APC) على المخطوطات المقبولة للنشر فقط. ويُلزم المؤلفون المنتسبون إلى مؤسسات داخل العراق بدفع مبلغ (100,000) دينار عراقي عند قبول المخطوطة، في حين يُلزم المؤلفون من خارج العراق بدفع مبلغ (100) دولار أمريكي عند القبول. ولا يضمن دفع رسوم النشر قبول المخطوطة، إذ تخضع جميع البحوث للتحكيم العلمي والتقييم التحريري.

16. تُنشر المقالات المقبولة وفق سياسة الوصول الحر (Open Access Policy) الخاصة بالمجلة.

17. لا تُعاد المخطوطات المقدمة إلى المؤلفين بغض النظر عن القرار التحريري المتخذ.

للاطلاع على تعليمات المؤلفين التفصيلية، وسياسات النشر، ومتطلبات التقديم، يرجى زيارة الموقع الإلكتروني للمجلة أو التواصل مع هيئة التحرير.

الموقع الإلكتروني: hnj.uobaghdad.edu.iq

مجلة التمريض الشامل(HNJ)

تعليمات المؤلفين

ترحب مجلة التمريض الشامل (HNJ) بنشر البحوث الأصيلة والمقالات العلمية والمراجعات العلمية ودراسات الحالة والأعمال الأكاديمية المتخصصة في علوم التمريض والتخصصات الصحية ذات العلاقة.

1. **يجب أن تكون البحوث المقدمة أصيلة وغير منشورة سابقًا وغير مقدمة للنشر أو قيد التقييم في أي مجلة أخرى. ولا تُقبل البحوث المنشورة سابقًا أو المقبولة للنشر أو المقدمة إلى جهة أخرى في الوقت نفسه.**

2. **تخضع جميع البحوث المقدمة إلى عملية تحكيم علمي مزدوج مخفي (Double-Blind Peer Review) من قبل مقيمين متخصصين من داخل العراق وخارجه لضمان الجودة العلمية والأصالة وملاءمة البحث لأهداف المجلة.**

3. **يجب أن تُكتب البحوث باللغة الإنكليزية بصورة علمية سليمة وواضحة، وأن تُعد وفق القالب الرسمي المعتمد للمجلة.**

4. **يجب أن يتضمن البحث مستخلصًا باللغة الإنكليزية لا يزيد عن (250) كلمة، مع إرفاق مستخلص باللغة العربية. ويُكتب عنوان المستخلص (Abstract) بخط Times New Roman حجم 12 عريض(Bold) ، بينما يُكتب نص المستخلص بخط Times New Romanحجم 10 مع ضبط النص.(Justify)**

5. **يجب أن يرفق الباحث من (3–5) كلمات مفتاحية تعبر عن موضوع البحث، وتُكتب بخط Times New Roman حجم 10 مائل.(Italic)**

6. **يجب أن يتضمن البحث الأجزاء الآتية:**
العنوان، المستخلص، الكلمات المفتاحية، المقدمة، المنهجية، النتائج، المناقشة، الاستنتاجات، والمراجع.

   - **العنوان: خط Times New Roman حجم 16 عريض (Bold) ومتمركز.**
   - **أسماء الباحثين: خط Times New Roman حجم 12 ومحاذاة لليسار.**
   - **جهات الانتساب: خط Times New Roman حجم 10 ومحاذاة لليسار.**
   - **العناوين الرئيسة: خط Times New Roman حجم 14 عريض.(Bold)**
   - **العناوين الفرعية: خط Times New Roman حجم 12 عريض (Bold) ومرقمة.**
   - **متن البحث: خط Times New Roman حجم 12 مع محاذاة كاملة (Justify) وتباعد أسطر 1.5.**

7. **يجب إعداد البحث على ورق بحجم (A4) مع هوامش مقدارها (2.5 سم) من جميع الجهات، وأن يكون النص مضبوطًا (Justify)، مع وضع أرقام الصفحات أسفل يمين الصفحة ابتداءً من الصفحة الثانية. يجب ألا يزيد العدد الإجمالي لصفحات البحث على (10) صفحات، متضمنًا الجداول والأشكال التوضيحية وقائمة المراجع.**

8. **يجب على المؤلفين تزويد المجلة بأسمائهم الكاملة، وجهات انتسابهم الأكاديمية، وعناوين البريد الإلكتروني الخاصة بهم، مع تحديد المؤلف المسؤول عن المراسلات.(Corresponding Author)**

9. **يجب إعداد المراجع وفق أسلوب فانكوفر(Vancouver Style) ، مع توثيقها رقميًا داخل النص وترتيبها في قائمة المراجع بحسب تسلسل ورودها في البحث.**

10. **يجب ترقيم الجداول والأشكال تسلسليًا والإشارة إليها داخل متن البحث، مع وضع عنوان لكل جدول أو شكل. كما يجب توضيح جميع الاختصارات المستخدمة في الملاحظات أسفل الجدول أو الشكل.**

مجلة التمريض الشامل
تصدر مجلة التمريض الشامل بعددين سنويا وباللغتين العربية والانكليزية

العنوان:

تُرسل كافة المراسلات إلى رئيس هيئة تحرير مجلة التمريض الشامل
كلية التمريض / جامعة بغداد / كلية التمريض
بغداد – العراق
ص.ب(14149) :
البريد الإلكترونيinjns@conursing.uobaghdad.edu.iq :

رقم الإيداع القانوني:
رقم الإيداع في دار الكتب والوثائق في بغداد **2827** :**لسنة 2025**

ISSN 3135-338X

مجلة التمريض الشامل

مجلة علمية في التمريض الشامل

المجلد ١ | العدد ١ | ٢٠٢٥

البحث العلمي ▪ الرعاية ▪ الدليل العلمي ▪ العافية

صادرة عن
كلية التمريض – جامعة بغداد
رقم الإيداع القانوني
دار الكتب والوثائق في بغداد: ٢٨٢٧ لسنة ٢٠٢٥