

Original Research

Received 07 June 2026

Revised 18 July 2026

Accepted 01 August 2026

Natural Resources for Human
Health 2026, Vol. 6 (14s): 1377–1385

KEYWORDS:

Technology Acceptance Model;
Nursing Informatics; Technology
Adoption; Health Information
Technology.

Determinants of Computer Technology Adoption in Nursing Practice: A Technology Acceptance Model-Based Cross-Sectional Study

Suraya Hider Hassan majrashi¹, Noha Hassan Ali khazae¹,
Mona Ahmed Alharis¹, Aseel Ali Mojab Alalarjaa¹, Nouf Manfa
Lafi Aljahdali¹, Zohour Mohammed Ibrahim², Sarah Fahad
Alanazi³, Afraa Faisal ALsubaie⁴, Marwah Ibrahim Alhawsawi³,
Hashimah Haidar Majrshi⁵

¹Najran Armed Forces Hospital (NAFH), Saudi Arabia.

²King Fahad Armed Forces Hospital, Jeddah, Saudi Arabia.

³King Salman Armed Forces Hospital, Saudi Arabia.

⁴Al Kharj Armed Forces Hospital, Saudi Arabia.

⁵King Salman Armed Forces Hospital, Saudi Arabia.

⁵Al-Thagher Hospital, Jeddah, Saudi Arabia.

ABSTRACT:

Background: Computer technology has become an integral component of modern nursing practice, supporting clinical documentation, communication, decision-making, improving efficiency, accuracy and patient safety.

Aim: The aim of this survey was to determine the key factors influencing adoption of computer technology in nursing practice, with a comparative focus on cognitive instrumental and social influence approaches.

Methods & sample: A cross-sectional study was conducted among registered nurses working in public and private hospitals. Data were collected using a structured self-administered electronic questionnaire based on the Technology Acceptance Model. After data screening, 146 completed questionnaires were included in the analysis. Descriptive statistics, Cronbach's alpha, Pearson correlation analysis, and multiple linear regression were performed using Python.

Results: All study constructs demonstrated satisfactory internal consistency, with Cronbach's alpha coefficients ranging from 0.774 to 0.913. Subjective norm had the highest mean score (3.71 ± 0.89), whereas perceived ease of use had the lowest mean score (3.20 ± 0.82). Correlation analysis showed significant positive associations among all study constructs. Multiple linear regression revealed that perceived ease of use ($B = 0.232$, $p = 0.001$), facilitating conditions ($B = 0.221$, $p = 0.001$), and subjective norm ($B = 0.161$, $p = 0.040$) were significant predictors of actual computer technology use. Perceived usefulness was not independently associated with actual use ($B = 0.067$, $p = 0.380$). The regression model explained 46.0% of the variance in actual computer technology use ($R^2 = 0.460$).

Conclusion & Recommendation: Computer technology adoption among nurses is primarily influenced by system usability, organizational support, and social influence rather than perceived usefulness alone. Healthcare organizations should prioritize user-friendly technologies, strengthen technical infrastructure, and provide continuous training and managerial support to enhance nurses' adoption of computer technology.

1. INTRODUCTION

Healthcare systems worldwide are undergoing rapid digital transformation, with computer technologies increasingly integrated into routine clinical practice. Electronic health records, computerized provider order entry systems, clinical decision support systems, digital medication administration platforms, and telehealth services have become fundamental components of healthcare delivery [1,2]. These technologies have the potential to improve documentation quality, facilitate communication among healthcare professionals, reduce medical errors, enhance patient safety, and increase organizational efficiency [3]. However, the successful implementation of digital technologies depends not only on technological infrastructure but also on the willingness and ability of healthcare professionals to adopt and use these systems effectively [4].

Nurses represent the largest group of healthcare professionals and are the primary users of many hospital information systems. Throughout their daily clinical activities, nurses interact extensively with electronic documentation systems, patient monitoring technologies, medication administration platforms, and communication tools. Consequently, nurses' acceptance and routine use of computer technology play a critical role in realizing the anticipated benefits of digital health initiatives [5,6]. Limited acceptance or inconsistent use may reduce the effectiveness of these technologies, contribute to workflow inefficiencies, and compromise the quality of patient care [4].

Although healthcare organizations continue to invest substantially in health information technologies, successful implementation remains challenging. Previous studies have shown that technology adoption among nurses is influenced by multiple factors, including perceptions of usefulness, ease of use, organizational support, training opportunities, leadership encouragement, and technical infrastructure. Understanding these determinants is essential for designing interventions that promote sustainable technology adoption and maximize the return on digital health investments [7].

The Technology Acceptance Model (TAM), originally proposed by Davis, is one of the most widely applied theoretical frameworks for explaining individuals' acceptance of information technology. The model suggests that perceived usefulness and perceived ease of use are primary determinants of technology adoption. Over time, researchers have expanded the model by incorporating additional organizational and social variables, including subjective norm and facilitating conditions, to better explain technology adoption in healthcare settings. These extensions acknowledge that technology use is influenced not only by individual beliefs but also by workplace culture, leadership support, available resources, and organizational readiness [8,9].

Recent studies have demonstrated the usefulness of TAM in explaining healthcare professionals' acceptance of electronic health records, mobile health applications, telemedicine systems, artificial intelligence applications, and other digital health technologies. Nevertheless, evidence remains inconsistent regarding the relative importance of different TAM constructs across healthcare settings and geographical regions. Moreover, many previous investigations have focused on physicians or mixed healthcare professionals, while studies specifically examining nurses remain comparatively limited [10,11].

Understanding the determinants of computer technology adoption among nurses is particularly important as healthcare systems continue to expand digital transformation initiatives. Identifying modifiable factors associated with technology use can inform organizational strategies, training programs, and policy decisions aimed at improving digital competency and facilitating successful implementation of health information technologies.

Therefore, this study aimed to examine the determinants of computer technology adoption among nurses using the Technology Acceptance Model by investigating the influence of perceived usefulness, perceived ease of use, subjective norm, and facilitating conditions on actual computer technology use.

2. METHODS

2.1 Study Design

This study employed a cross-sectional analytical design to investigate the determinants of computer technology adoption among nurses using the Technology Acceptance Model (TAM). The study examined the relationships between perceived usefulness, perceived ease of use, subjective norm, facilitating conditions, and actual computer technology use among practicing nurses.

2.2 Study Setting

The study was conducted in Najran hospitals during the period from May-July 2026 among registered nurses working in public and private hospitals. Participants represented a variety of clinical departments, including emergency, medical, surgical, operating room, maternity and pediatric units, intensive care units, dialysis units, burn units, and other specialized departments. This diversity provided a comprehensive representation of nurses working in different clinical environments.

Eligibility for Study Population

The target population consisted of registered nurses currently in-job.

Inclusion criteria

Participants were eligible if they:

- were registered nurses;
- were actively working in a clinical setting during the study period;
- voluntarily agreed to participate by providing electronic informed consent.

Exclusion criteria

Participants were excluded if they:

- did not provide informed consent;
- submitted incomplete questionnaires; or
- provided duplicate responses.

2.3 Sample Size

A total of 296 questionnaire responses were received during the study period. Following data screening, 143 questionnaires were excluded because they contained incomplete responses. Of the remaining 153 completed questionnaires, seven were excluded because the respondents did not provide informed consent to participate in the study. Consequently, 146 complete and consented questionnaires were retained for the final statistical analysis. Figure 1 illustrates the participant selection process.

The study analyzed 146 completed questionnaires. This sample size was considered adequate for multiple linear regression analysis, exceeding the commonly recommended minimum of 10–20 observations per predictor variable. Given that the final regression model included four independent variables, the available sample provided sufficient statistical power to detect meaningful associations.

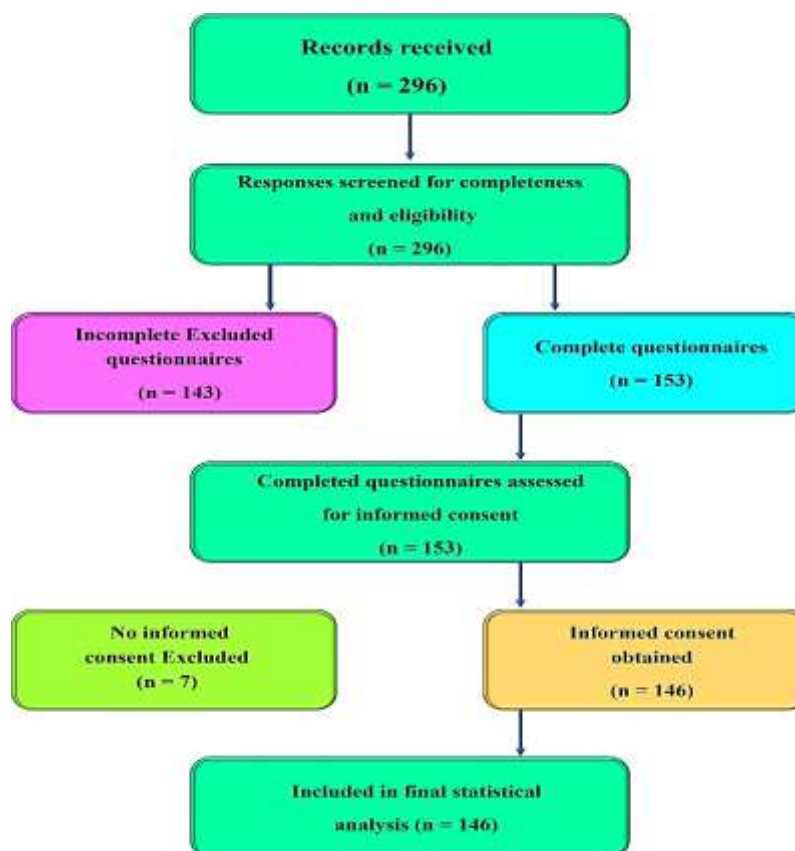


Figure 1: The participant selection process.

2.4 Validity and Reliability

The questionnaire items were developed based on the Technology Acceptance Model and adapted from previously published instruments assessing technology adoption in healthcare settings. Prior to data analysis, the internal consistency reliability of each construct was evaluated using Cronbach's alpha coefficient.

Cronbach's alpha values ranged from 0.774 to 0.913, indicating acceptable to excellent internal consistency for all study constructs.

2.5 Data Collection Procedure

Data were collected electronically using Google Forms. The survey link was distributed to eligible nurses through professional communication channels. Before completing the questionnaire, participants received an electronic participant information sheet explaining the study objectives, confidentiality procedures, and voluntary nature of participation. Electronic informed consent was obtained before participants could proceed to the questionnaire.

Responses were automatically recorded within Google Forms and exported to comma-separated value (CSV) format for statistical analysis.

2.6 Ethical Considerations

Participation was entirely voluntary, and electronic informed consent was obtained from all participants before questionnaire completion. No personally identifiable information was collected, and all responses were treated confidentially.

2.7 Statistical Analysis

Statistical analysis was performed using Python in the Google Colab environment. Initially, data were screened for completeness and eligibility. Responses without informed consent were excluded from the analysis. Descriptive statistics were used to

summarize participant characteristics and study variables. Continuous variables were presented as means and standard deviations, whereas categorical variables were summarized using frequencies and percentages.

The internal consistency reliability of each construct was assessed using Cronbach's alpha coefficient. Pearson correlation analysis was conducted to evaluate the relationships among the Technology Acceptance Model constructs.

To identify independent predictors of actual computer technology use, multiple linear regression analysis was performed. Perceived usefulness, perceived ease of use, subjective norm, and facilitating conditions were entered simultaneously as independent variables, while actual computer technology use served as the dependent variable. Model performance was evaluated using the coefficient of determination (R^2), adjusted R^2 , F-statistic, regression coefficients (B), standard errors (SE), 95% confidence intervals (CI), and corresponding p-values.

A two-sided p-value < 0.05 was considered statistically significant. Data cleaning and examination of missing data were followed. Relationships between variables were examined using bivariate correlations, and Chi-square analyses were used to examine relationships between groups. Significance was set at $p < 0.05$.

3. RESULTS

The final study sample comprised 146 nurses employed in public and private hospitals. Participants represented a range of demographic and professional backgrounds, including different age groups, genders, nationalities, educational qualifications, years of nursing experience, hospital sectors, and previous computer training experience.

The majority of participants were female nurses (75.8%), reflecting the gender distribution commonly observed within the nursing workforce. Most respondents held a bachelor's degree in nursing (47.7%), while participants also represented varying levels of professional experience and employment across both public and private healthcare institutions. In addition, most respondents (75.2%) reported previous computer training, indicating substantial prior exposure to information technology in the healthcare setting respectively. Detailed demographic characteristics of the study participants are presented in Table 1.

Table 1: Demographic characteristics of participants (n=146).

Variable	Characteristic	%
Age in years	20-29	34.6%
	30-39	39.2%
	40-49	17.6%
	≥ 50	8.5%
Gender	Male	24.2%
	Female	75.8%
Nationality	Saudi	35.9%
	Non-Saudi	64.1%
Highest qualification	Diploma	20.3%
	Bsc	47.7%
	Msc	20.9%
	PhD	11.1%
Experience in years	<5	39.2%
	5-10	30.7%
	11-15	16.3%
	>15	13.7%
Hospital type	Public (Governmental)	51%
	Private	49%
Previous computer training	Yes	75.2%
	No	24.8%

As shown in figure 2 the participated nurses are distributed in various department, The majority of them in medical section (20.3%).

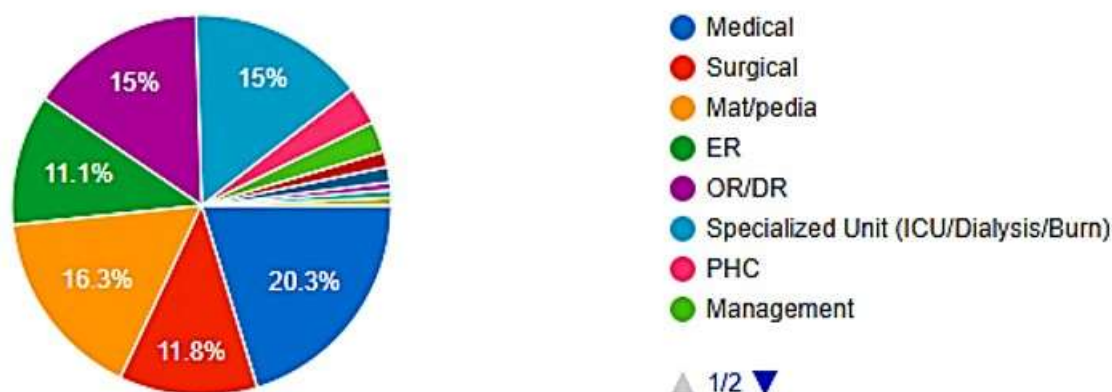


Figure 2: The participants' distribution according to their working departments (n=146).

Table 2: Descriptive Statistics of the Technology Acceptance Model Constructs.

Construct	No. of Items	Mean	SD	Minimum	Maximum
Perceived Usefulness (PU)	5	3.47	0.94	1.00	5.00
Perceived Ease of Use (PEOU)	5	3.20	0.82	1.00	5.00
Subjective Norm (SN)	5	3.71	0.89	1.00	5.00
Facilitating Conditions (FC)	5	3.62	0.79	1.00	5.00
Actual Use (AU)	5	3.65	0.68	2.00	5.00

Table 2 presents the descriptive statistics for the five latent constructs included in the Technology Acceptance Model. Among the study participants, Subjective Norm demonstrated the highest mean score ($M = 3.71$, $SD = 0.89$), suggesting that organizational and social influences were perceived as important factors encouraging the use of computer technology in nursing practice. This was followed by Actual Use ($M = 3.65$, $SD = 0.68$) and Facilitating Conditions ($M = 3.62$, $SD = 0.79$), indicating relatively favorable perceptions regarding institutional support and the routine use of computer technology.

Perceived Usefulness showed a mean score of 3.47 ($SD = 0.94$), reflecting generally positive perceptions of the benefits of computer technology for nursing performance. Perceived Ease of Use recorded the lowest mean score ($M = 3.20$, $SD = 0.82$), suggesting that although respondents generally considered computer systems sable, there remained opportunities to improve system usability and user experience.

Overall, the descriptive findings indicate moderate to high levels of agreement across all Technology Acceptance Model constructs, providing preliminary evidence of positive attitudes toward computer technology adoption among the participating nurses.

Table 3: Predictors of Actual Computer Technology Use {Multiple Linear Regression Analysis}.

Predictor	B	SE	t	p
Constant	1.273	0.224	5.671	<0.001
Perceived Usefulness	0.067	0.076	0.880	0.380
Perceived Ease of Use	0.232	0.068	3.430	0.001
Subjective Norm	0.161	0.078	2.076	0.040
Facilitating Conditions	0.221	0.067	3.301	0.001

Table 3 illustrates that Perceived Ease of Use (PEU) ($B = 0.232, p = 0.001$), Facilitating Conditions (FC) ($B = 0.221, p = 0.001$), and Subjective Norm (SN) ($B = 0.161, p = 0.040$) were significant positive predictors of Actual Use. In contrast, Perceived Usefulness was not independently associated with Actual Use after adjustment for the other predictors ($B = 0.067, p = 0.380$).

4. DISCUSSION

The present study investigated factors influencing computer technology adoption among nurses using an extended Technology Acceptance Model framework. The findings demonstrate that nurses generally reported positive perceptions toward computer technology, with all study constructs showing satisfactory reliability and moderate-to-high mean scores. The same conclusions had been reported by Jedwab et. al and Tissera et al [12,13].

Regression analysis identified Perceived Ease of Use, Facilitating Conditions, and Subjective Norm as significant determinants of Actual Use. These findings suggest that successful technology adoption depends not only on individual perceptions but also on organizational support and the usability of digital systems. Nurses were more likely to integrate computer technology into their daily practice when systems were easy to operate, when adequate infrastructure and technical support were available, and when supervisors and colleagues encouraged technology use. Numerous studies were documented almost the same results [14,15,16].

Interestingly, Perceived Usefulness did not independently predict Actual Use after controlling for the other constructs. One possible explanation is that most participants already recognized the benefits of computer technology, resulting in limited variability in perceived usefulness. Consequently, practical considerations such as ease of use and organizational support became more influential determinants of actual adoption, which were predicted to what had been mentioned by Nguyen et al, Kweon and Lee [17,18].

One of the principal findings was that perceived ease of use significantly predicted actual computer technology use. This finding is consistent with the original Technology Acceptance Model, which proposes that technologies requiring less effort are more likely to be adopted. Nurses are more inclined to integrate electronic systems into routine clinical practice when the systems are intuitive, easy to navigate, and require minimal additional cognitive effort. Given the demanding nature of nursing practice, user-friendly systems may reduce frustration and improve workflow efficiency. Surprisingly, numbers of articles reported similar findings [19,20,21].

Very important point to be highlighted that the key findings of this survey can be summarized across three interconnected domains. First, the foundational importance of cognitive instrumental factors, namely Perceived Usefulness (PU), Perceived Ease of Use (PEOU), and Task-Technology Fit (ITF), has been firmly established. Nurses, as pragmatic and performance-oriented professionals, are most receptive to technologies that they believe will genuinely enhance their ability to provide safe and effective patient care, and that do so without imposing an undue burden of effort or disrupting their clinical workflows. These factors form the rational bedrock of technology acceptance. Second, this investigation has demonstrated that these cognitive assessments do not occur in a vacuum. They are profoundly shaped by social influence factors, including the subjective norms set by peers, the critical role of supportive leadership, and the overarching organizational culture. The social context can amplify positive cognitive perceptions or, conversely, create insurmountable barriers even for a technologically superior system.

These findings highlight the importance of investing in user-friendly health information systems, continuous training programs, and supportive organizational policies to enhance computer technology utilization in nursing practice.

5. CONCLUSION AND RECOMMENDATION

In conclusion, the successful integration of computer technology into nursing is one of the most critical challenges facing the healthcare industry. To meet this challenge, we must embrace a more sophisticated and humane understanding of what drives adoption. The decision of a nurse to engage with a digital tool is a complex calculus of the head and the heart, of individual reason and collective influence. By recognizing the dual importance of both cognitive instrumental benefits and a supportive social fabric, and by designing implementation strategies that honor both, healthcare organizations can begin to bridge the persistent gap between the promise of technology and the reality of clinical practice. The ultimate goal is not merely to digitize nursing but to empower nurses with tools that amplify their expertise, streamline their work, and enable them to dedicate more of their time and energy to digitize nursing but to empower nurses with tools that amplify their expertise, streamline their work, and enable them to dedicate more of their time and energy to the irreplaceable, human art of caring.

5.1 PRACTICAL IMPLICATIONS

The findings have several practical implications for nursing administrators and healthcare organizations. Improving technology adoption should extend beyond simply introducing new computer systems. Hospitals should prioritize user-centered system design, ensure the availability of reliable technical infrastructure, provide regular training programs, and cultivate leadership support for digital transformation. Strengthening these organizational factors may improve nurses' acceptance and routine use of computer technologies, ultimately enhancing documentation quality, communication, and patient care.

5.2 STRENGTHS OF THE STUDY

This study has several strengths. First, it employed a theoretically grounded framework based on the Technology Acceptance Model to examine computer technology adoption among nurses. Second, the questionnaire demonstrated good internal consistency across all constructs, supporting the reliability of the measurements. Third, the use of multiple linear regression enabled the identification of independent predictors of actual technology use while accounting for the influence of the remaining study variables.

5.3 LIMITATIONS

Several limitations should be acknowledged. The cross-sectional design precludes causal inference, and the findings reflect associations rather than cause-and-effect relationships. The use of self-reported data may introduce response and social desirability bias. Furthermore, participants were recruited from a limited geographical setting, which may reduce the generalizability of the findings to other healthcare contexts. Future studies using longitudinal or multicenter designs are recommended to validate and extend these findings.

FUNDING

No external funding was received for this study.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

DATA AVAILABILITY

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

ACKNOWLEDGMENT

The authors express their gratitude and many thanks to the nurses who participated in the current survey.

REFERENCES

- [1] Edo, O.C.; Ang, D.; Etu, E.E.; Tenebe, I.; Edo, S.; Diekola, O.A. Why do healthcare workers adopt digital health technologies—A cross-sectional study integrating the TAM and UTAUT model in a developing economy. *Int. J. Inf. Manag. Data Insights* 2023, 3, 100186.
- [2] Philippi, P.; Baumeister, H.; Apolinário-Hagen, J.; Ebert, D.D.; Hennemann, S.; Kott, L.; Lin, J.; Messner, E.-M.; Terhorst, Y. Acceptance towards digital health interventions—Model validation and further development of the Unified Theory of Acceptance and Use of Technology. *Internet Interv.* 2021, 26, 100459.
- [3] Walle, A.D.; Ferede, T.A.; Baykemagn, N.D.; Shimie, A.W.; Kebede, S.D.; Tegegne, M.D.; Wubante, S.M.; Yehula, C.M.; Demsash, A.W.; Melaku, M.S.; et al. Predicting healthcare professionals' acceptance towards electronic personal health record systems in a resource-limited setting: Using modified technology acceptance model. *BMJ Health Care Inform.* 2023, 30, e100707.
- [4] Alhashmi, S.F.; Salloum, S.A.; Mhamdi, C. Implementing Artificial Intelligence in the United Arab Emirates Healthcare Sector: An Extended Technology Acceptance Model. *Int. J. Inf. Technol. Lang. Stud.* 2019, 3, 27–42.
- [5] Bohr, A.; Memarzadeh, K. The rise of artificial intelligence in healthcare applications. In *Artificial Intelligence in Healthcare*; Elsevier: Amsterdam, The Netherlands, 2020; pp. 25–60.

- [6] Zin, R.M.; Mokhtar, N.A.; Ani, A.I.; Mat, A.H.; Nawi, M.N.M. Unraveling the Dynamics of User Acceptance on the Internet of Things: A Systematic Literature Review on the Theories and Elements of Acceptance and Adoption. *J. Electr. Syst.* 2024, 20, 2217–2227.
- [7] Zhu, Y.; Zhao, Z.; Guo, J.; Wang, Y.; Zhang, C.; Zheng, J.; Zou, Z.; Liu, W. Understanding Use Intention of mHealth Applications Based on the Unified Theory of Acceptance and Use of Technology 2 (UTAUT-2) Model in China. *Int. J. Environ. Res. Public Health* 2023, 20, 3139.
- [8] Lee AT, Ramasamy RK, Subbarao A. Understanding Psychosocial Barriers to Healthcare Technology Adoption: A Review of TAM Technology Acceptance Model and Unified Theory of Acceptance and Use of Technology and UTAUT Frameworks. *Healthcare*. 2025; 13(3):250. <https://doi.org/10.3390/healthcare13030250>.
- [9] Malatji, W.R.; van Eck, R.; Zuva, T. Understanding the usage, modifications, limitations and criticisms of technology acceptance model (TAM). *Adv. Sci. Technol. Eng. Syst.* 2020, 5, 113–117.
- [10] Boniol M, Kunjumen T, Nair TS, Siyam A, Campbell J, Diallo K. The global health workforce stock and distribution in 2020 and 2030: a threat to equity and 'universal' health coverage? *BMJ Glob Health*. Jun 27, 2022;7(6):e009316.
- [11] Ballard EC. Improving information management in ward nurses' practice. *Nurs Stand*. 2006 Aug 23-29;20(50):43-8. doi: 10.7748/ns2006.08.20.50.43.c4486.
- [12] Jedwab RM, Manias E, Hutchinson AM, Dobroff N, Redley B. Nurses' Experiences After Implementation of an Organization-Wide Electronic Medical Record: Qualitative Descriptive Study. *JMIR Nurs*. 2022 Jul 26;5(1):e39596. doi: 10.2196/39596.
- [13] Tissera S, Jedwab R, Calvo R, Dobroff N, Glozier N, Hutchinson A, Leiter M, Manias E, Nankervis K, Rawson H, Redley B. Older Nurses' Perceptions of an Electronic Medical Record Implementation. *Stud Health Technol Inform*. 2021 Dec 15;284:516-521. doi: 10.3233/SHIT210786.
- [14] Macalindin BV, Ahmed HF, Granaghan RM, Goodfellow D. Improving nurses' digital literacy and engagement with digital workflows through a data-driven education model. *Nurs Manag (Harrow)*. 2024 Jun 6;31(3):20-26. doi: 10.7748/nm.2023.e2113.
- [15] Schlicht L, Wendsche J, Melzer M, Tschetsche L, Rösler U. Digital technologies in nursing: an umbrella review. *Int J Nurs Stud*. Jan 2025;161:104950.
- [16] Freeman S, Marston HR, Olynick J. Intergenerational effects on the impacts of technology use in later life: Insights from an international, multi-site study. *Int J Environ Res Public Health* 2020; 17(16): 5711.
- [17] Nguyen OT, Carey A, Steege LM, Cho H. Characteristics and contributors to workarounds in the electronic health record system among inpatient nurses: Secondary analysis of a mixed-methods study. *Int J Nurs Stud*. 2026 Jan;173:105261. doi: 10.1016/j.ijnurstu.2025.105261.
- [18] Kweon YR, Lee S. Nurses' Electronic Medical Record Workarounds in Mental Healthcare Settings. *Comput Inform Nurs*. 2021 May 24;39(10):592-603.
- [19] Cho H, Nguyen OT, Weaver M, Pruitt J, Marcelle C, Salloum RG, Keenan G. Electronic health record system use and documentation burden of acute and critical care nurse clinicians: a mixed-methods study. *J Am Med Inform Assoc*. 2024 Nov 1;31(11):2540-2549. doi: 10.1093/jamia/ocae239.
- [20] Kourouche S, Considine J, Li L, Murphy M, Shaban RZ, Lam MK, Berendsen Russell S, Fry M, Aggar C, Dinh MM, Shetty A, Shaw T, Seimon RV, Aryal NR, Hughes JA, Varndell W, Curtis K. Identifying Barriers and Enablers for Nurse-Initiated Care for Designing Implementation at Scale in Australian Emergency Departments: A Mixed Methods Study. *J Clin Nurs*. 2025 Jul;34(7):2718-2736. doi: 10.1111/jocn.17693.
- [21] Mohammadnejad F, Freeman S, Klassen-Ross T, Hemingway D, Banner D. Impacts of Technology Use on the Workload of Registered Nurses: A Scoping Review. *J Rehabil Assist Technol Eng*. 2023 Jun 17;10:20556683231180189. doi: 10.1177/20556683231180189.