

# Attitude, Perception and Level of Utilization of Modern Technology among Nurses in Alimosho General Hospital, Lagos State

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## Abstract

This study examined the attitudes, perceptions, and extent of utilization of modern technological innovations among nurses at Alimosho General Hospital, Lagos State. A descriptive cross-sectional research design was employed. A total of 120 questionnaires were administered, all of which were completed and analyzed using Statistical Package for the Social Sciences (SPSS) version 26 and Microsoft Excel 2010. Descriptive statistics, including frequencies and percentages, were used to summarize the data, while the chi-square test was applied to assess relationships between variables at a 0.05 level of significance. The findings indicated that most respondents exhibited positive attitudes and favorable perceptions toward the use of modern technologies in nursing practice. However, the overall level of utilization was moderate, suggesting that although nurses are receptive to technological adoption, structural and institutional constraints limit optimal use in clinical settings. Hypothesis testing showed no statistically significant association between nurses' attitudes and their utilization of technology ( $p = 0.900$ ), whereas a statistically significant relationship was found between perception and utilization ( $p = 0.0001^*$ ). The study concluded that nurses' perceptions exert a stronger influence on technology utilization than attitudes alone. It recommended regular training, enhanced institutional support, and appropriate motivation to improve both perceptions and practical application of healthcare technologies among nurses. Strengthening nurses' digital competencies is expected to improve the quality and efficiency of patient care in Alimosho General Hospital, Lagos State.

**Keywords:** attitude, perception, utilization, nurses, modern technology

## Chapter One

### Introduction

#### Background of the Study

Integration of contemporary technologies into healthcare has revolutionized nursing practice through tools like electronic health records (EHRs), telemedicine, artificial intelligence (AI), and wearable monitoring devices, thereby boosting clinical efficiency, patient outcomes, and error reduction (Bimerew & Chipps, 2022).

#### Technological Perceptions and Challenges

Administrators exhibit cautious optimism toward humanoid robots in caregiving, citing benefits in patient engagement yet voicing concerns over costs, human interaction erosion, and efficacy (Imtiaz & Khan, 2024). Remote monitoring adoption among professionals is tempered by security, privacy, and connectivity issues, underscoring needs for sustainable advancements (Jat et al., 2024).

#### Nurses' Role in Adoption

Nurses, as primary users, shape technology success via their attitudes and perceptions, often viewing user-friendly tools positively despite barriers like training deficits, workload increases, and fears of dehumanization (Alruwaili et al., 2024; BMC Health Services Research, 2025). The COVID-19 era amplified telemedicine gaps, advocating nurse-inclusive designs (Dykes & Chu, 2020). Assessing these dynamics informs training, policy, and system enhancements for superior care.

### Statement of the Problem

Modern innovations like EHRs, telehealth, AI, and apps transform care delivery, positioning nurses centrally amid adoption variability (Alruwaili et al., 2024). Positive attitudes notwithstanding, barriers—training shortages, job displacement fears, workload burdens, and infrastructure woes—persist (Bimerew & Chipps, 2022; Dykes & Chu, 2020; Jat et al., 2024).

### End-User Disconnects

Developer-end-user misalignment yields non-intuitive tools misaligned with workflows (Dykes & Chu, 2020). Scarce research in developing contexts on utilization, attitudes, and perceptions hampers targeted strategies. Evaluating these elements identifies impediments, optimizing integration for nursing efficacy and patient gains.

### Objectives of the Study

**Broad Objective:** To investigate nurses' attitudes, perceptions, and utilization of modern technological innovations in selected hospitals.

**Specific Objectives:**

- Assess nurses' attitudes toward modern technology in clinical practice.
- Examine perceptions of healthcare technologies' relevance and efficacy.
- Determine utilization extent in patient care.
- Analyze relationships among attitudes, perceptions, and utilization.

### Research Questions and Hypotheses

**Research Questions:**

- What attitudes do nurses hold toward modern technology in clinical practice?
- How do nurses perceive modern healthcare technologies' relevance and effectiveness?
- To what extent do nurses utilize these innovations in patient care?
- Does a significant relationship exist between attitudes, perceptions, and utilization?

### Hypotheses:

- $H_{01}$ : No significant relationship exists between nurses' attitudes and utilization of modern technological innovations.

- $H_{02}$ : No significant relationship exists between nurses' perceptions and utilization of modern technological innovations.

### Significance of the Study

#### Nursing Profession

- Illuminates nurse-technology interactions, pinpointing informatics education needs.

#### Healthcare Professionals

- Fosters interdisciplinary synergy via enhanced communication tools.
- Identifies adoption barriers for systemic remedies.

#### Patients

- Yields superior care quality, safety, and efficiency.
- Advances patient-centered approaches through optimized technology.

The study offers a foundation for nursing informatics and digital health research.

### Scope of the Study

Focus centers on attitudes, perceptions, and utilization of modern technological innovations among nurses at Alimosho General Hospital, Igando, Lagos State.

### Operational Definition of Terms

- **Adoption:** Nurses' decisions and actions to initiate and integrate modern technologies into routine clinical tasks.
- **Attitude:** Nurses' favorable or unfavorable predispositions, encompassing beliefs and readiness toward technological tools.
- **Barriers:** Obstacles impeding utilization, including training gaps, infrastructure deficits, time pressures, and resistance.
- **Healthcare:** Organized medical and nursing services in hospitals, leveraging technology for health promotion and restoration.
- **Innovations:** Novel or enhanced tools like EHRs, telehealth, and automated systems improving care.
- **Technology:** Digital, electronic, or automated hardware/software for nursing, such as monitors and decision aids.
- **Utilization:** Frequency, consistency, and purposeful application of innovations in daily tasks.

**Chapter Two****Literature Review**

This chapter synthesizes extant literature on nurses' attitudes, perceptions, and utilization of modern technological innovations in hospital settings. Organized into conceptual review, theoretical frameworks (Health Belief Model and Technology Acceptance Model), their application, and empirical evidence, it identifies gaps informing the present study.

**Conceptual Review****Modern Technological Innovations in Nursing**

Contemporary innovations encompass advanced systems like electronic health records (EHRs), smart IV pumps, barcode medication administration (BCMA), telehealth, and mobile health (mHealth) applications, optimizing care, documentation, and communication (Ajayi & Oladimeji, 2022; Adebayo et al., 2022).

**Key Benefits:**

- **Workflow Enhancement:** EHRs enable real-time data access; automated tools streamline scheduling and apps support bedside decisions (Topaz et al., 2021).
- **Error Reduction:** BCMA ensures medication accuracy; clinical decision support systems (CDSS) flag interactions; smart pumps regulate infusions (Alotaibi & Federico, 2020).
- **Patient Outcomes:** Telehealth facilitates remote monitoring; analytics predict complications; platforms aid education (Carayon et al., 2022). Success hinges on training, infrastructure, and readiness (Musa et al., 2019).

**Attitudes Toward Technology in Nursing**

Attitudes denote evaluative responses—positive, negative, or neutral—shaped by beliefs, emotions, and experiences (Oyetunde & Akinyemi, 2020). Positive views foster adoption; negative ones breed resistance.

**Influencing Factors:**

- **Age/experience:** Older nurses may resist due to unfamiliarity (Mather & Cummings, 2021).
- **Digital literacy:** Enhances acceptance (Farokhzadian et al., 2022).
- **Support:** Training and leadership boost positivity (Koivunen et al., 2020; Kim et al., 2023).

Positive attitudes correlate with proactive use; negatives yield underutilization (Mather & Cummings, 2021).

**Nurses' Perceptions of Technology**

Perceptions assess relevance, usability, and trustworthiness (Koivunen et al., 2020; Dixit et al., 2021; Kim et al., 2023).

- **Time Dynamics:** Automating tasks saves time; complexity burdens workflows (Topaz et al., 2021; Carayon et al., 2022).
- **Safety/Quality:** Viewed as error-reducing, though over-reliance risks depersonalization (Alotaibi & Federico, 2020).

**Utilization of Technology in Nursing**

Integration spans documentation (EHRs), diagnostics, medication (BCMA), telehealth, and monitoring (Koivunen et al., 2020; Farokhzadian et al., 2022).

**Setting Variations:**

- **ICUs:** Intensive monitoring/decision tools.
  - **Wards/Outpatient:** EHRs/medication systems.
  - **Community:** Portable/telehealth devices.
- Barriers: Training gaps, resistance, usability issues, support deficits, privacy fears.  
Facilitators: Training, intuitive design, incentives, outcomes evidence.

**Interrelation of Attitude, Perception, and Utilization**

Positive attitudes/perceptions drive utilization; negatives impede it, necessitating holistic strategies (Adebayo et al., 2022).

**Theoretical Framework****Health Belief Model (HBM)**

Developed in the 1950s (Rosenstock, 1974), HBM predicts behaviors via beliefs: susceptibility (risk without action), severity (consequences), benefits, barriers, cues to action, and self-efficacy (Glanz et al., 2008).

**Technology Acceptance Model (TAM)**

Davis (1989) posits perceived usefulness (performance enhancement) and ease of use shape attitudes, intentions, and adoption.

## Application of Theories

### HBM Application:

- Susceptibility/Severity: Risks like errors motivate use (Oyetunde & Akinyemi, 2020; Ajayi & Oladimeji, 2022).
  - Benefits/Barriers: Efficiency vs. complexity/training gaps (Musa et al., 2019; Brown et al., 2020).
  - Cues/Self-Efficacy: Training/peers build confidence (Johnson & Adeyemo, 2021).
- TAM Application:
- Usefulness: Time savings/safety (Kim et al., 2023).
  - Ease: Intuitive interfaces foster intent (Farokhzadian et al., 2022).

### Empirical Review

Olawale & Adeola (2023) found 62% positive attitudes toward digital systems in Lagos but 47% usage due to training/downtime (Musa et al., 2022). Okeke et al. (2024) identified ease/support as predictors. Liew et al. (2023) noted Nigerian lags in telemonitoring. Yakubu & Onuoha (2025) reported 28% rural access yet 73% willingness. Zhang et al. (2023) showed 40% efficiency gains via mHealth; Mokoena & Lethabo (2024) error reductions via BCMA. Kalu & Daramola (2023) linked leadership/training to attitudes; Umeadi et al. (2023) tracked AI triage acceptance. Oyetunde & Akinyemi (2020) affirmed 70% positive perceptions; Adeyemi et al. (2023) 75% mHealth support. Mekonnen et al. (2020) highlighted Ethiopian barriers; O'Connor et al. (2020) training-driven uptake.

Influencing Factors: Training, support, design, usefulness/ease (Brown et al., 2020).

### Summary of Literature Review

Literature affirms positive knowledge/perceptions yet suboptimal utilization due to barriers. HBM/TAM elucidate dynamics; studies urge training, design, and support. Gaps in localized, hospital-specific data justify this inquiry.

## Chapter Three

### Methodology

This chapter outlines the study's execution, encompassing research design, setting, target population, sampling techniques, data collection

instruments, ethical considerations, data collection procedures, and analysis methods.

### Research Design

A descriptive cross-sectional survey design was employed to evaluate nurses' attitudes, perceptions, and utilization of modern technological innovations. This approach facilitates data capture at a single point to delineate prevailing conditions, beliefs, and behaviors within selected hospitals.

### Study Setting

The investigation occurred at Alimosho General Hospital, Igando, a prominent public secondary healthcare facility in Lagos State, Nigeria. Selected for its substantial patient volume and diverse nursing workforce, the hospital functions as a referral center offering maternal-child health, surgical, internal medicine, and emergency services, with pervasive integration of technological tools across units.

### Target Population

The target population comprised registered nurses at Alimosho General Hospital, Igando, spanning various wards and units, with diverse experience levels and technology exposure in care delivery.

### Sample Size Determination

Sample size was calculated employing a 95% confidence level, 5% margin of error, and estimated prevalence of nurses' knowledge, perceptions, and attitudes, utilizing Taro Yamane's (1967) simplified formula.

$$n = \frac{N}{1 + N(e)^2}$$

$$1 + N(e)^2$$

Where n= sample size

N= the total population under study (200)

e= margin of error (0.05)

$$n = \frac{1 + 150(0.05)^2}{1 + 150(0.05)^2}$$

$$n = 150 / 1.375$$

$$n = 109$$

Attrition rate= 10% of sample size (109) 10.9

$$\text{Total sample size} = n + \text{attrition rate} = 109 + 10.9 = 119.9 = 120$$

Therefore, a total number of one hundred and twenty (120) nurses will participate in the study

### Sampling Technique

A stratified random sampling approach was utilized, stratifying the nursing population by departments (e.g., medical, surgical, emergency, maternity) followed by simple random selection within strata. This method ensures proportional representation and bolsters findings' generalizability.

### Instruments for Data Collection

A structured, self-administered questionnaire comprised four sections:

- **Section A:** Socio-demographic characteristics.
- **Section B:** Attitudes toward technological innovations.
- **Section C:** Perceptions of technological innovations.
- **Section D:** Extent of utilization in nursing practice.

Responses employed a 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree).

### Validity of the Instrument

Content validity was established via expert review from nursing education and health informatics specialists, incorporating feedback for refinement. A pilot test with 10 nurses from a non-participating public hospital further validated appropriateness.

### Reliability of the Instrument

Instrument reliability was assessed using Cronbach's alpha coefficient, with values  $\geq 0.70$  deemed acceptable for internal consistency.

### Method of Data Collection

Questionnaires were personally distributed during shift breaks or management-approved intervals, allowing 1–2 days for completion. Follow-ups ensured high retrieval rates, with collection handled by the researcher or trained assistants.

### Method of Data Analysis

Data were coded and analyzed in Statistical Package for the Social Sciences (SPSS) version 25. Descriptive statistics (frequencies, percentages, means, standard deviations) summarized findings; inferential tests (Chi-square, Pearson's correlation) examined relationships among demographics, attitudes, perceptions, and utilization at  $p < 0.05$  significance.

### Ethical Considerations

Approval was secured from the Lagos State Health Research Ethics Committee (LASHREC) and Alimosho General Hospital management. Informed consent was obtained; participation remained voluntary, with confidentiality assured via anonymized data for academic use exclusively.

### Chapter Four Results

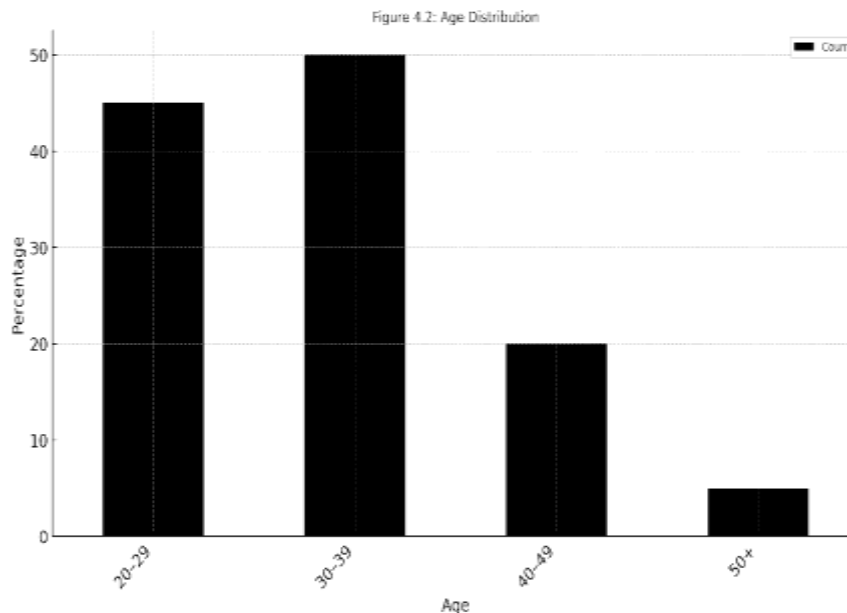
This chapter delineates findings from data gathered among nurses at Alimosho General Hospital, Lagos State. Analysis employed Statistical Package for the Social Sciences (SPSS) version 26 and Microsoft Excel 2010, utilizing descriptive statistics (frequencies, percentages) for summarization and chi-square ( $\chi^2$ ) tests for hypotheses at  $p < 0.05$  significance. All 120 distributed questionnaires were retrieved and analyzed, yielding a 100% response rate. Results align sequentially with research questions and hypotheses.

### Presentation and Interpretation of Results Relative to Research Questions

**Table 1: Respondents' Socio-demographic Characteristics**

| Variables      | Parameters   | Frequency (N=120) | Percentage (%) |
|----------------|--------------|-------------------|----------------|
| Gender         | Male         | 35                | 29.2           |
|                | Female       | 85                | 70.8           |
| Age (years)    | 20–29        | 45                | 37.5           |
|                | 30–39        | 50                | 41.7           |
|                | 40–49        | 20                | 16.6           |
|                | 50 and above | 5                 | 4.2            |
| Marital status | Single       | 40                | 33.3           |

|                           |                   |    |      |
|---------------------------|-------------------|----|------|
|                           | Married           | 70 | 58.4 |
|                           | Divorced/Widowed  | 10 | 8.3  |
| Educational Qualification | RN                | 25 | 20.8 |
|                           | RN/RM             | 45 | 37.5 |
|                           | B.Sc. Nursing     | 30 | 25.0 |
|                           | Post-basic        | 15 | 12.5 |
|                           | Specialty         | 5  | 4.2  |
| Years of Experience       | Others            |    |      |
|                           | Less than 5 years | 25 | 20.8 |
|                           | 5-10 years        | 55 | 45.8 |
|                           | 11-15 years       | 25 | 20.8 |
|                           | Above 15 years    | 15 | 12.6 |



**Figure 1: Age distribution,**

Table 1 and Figure 1 above reveals that the majority of respondents were female (70.8%), aged 30–39 years (41.7%), and married (58.4%). A substantial proportion (37.5%) possessed RN/RM qualifications, with most reporting 5–10 years of nursing experience.

### Implications for Workforce Profile

These demographics reflect a mature, professionally credentialed nursing cadre well-

positioned to comprehend and implement technological innovations in clinical settings.

### Research Question 1: What are the attitudes of nurses toward the use of modern technology in clinical practice?

**Table 2: Attitude of Nurses toward Modern Technological Innovations**

| Statement  | Agree (%) | Neutral (%) | Disagree (%) |
|--|-----------|-------------|--------------|
| I have a positive attitude toward the use of modern technology in clinical practice. | 75 (62.5) | 30 (25.0)   | 15 (12.5)    |
| I feel comfortable using modern technological tools in my nursing activities.        | 70 (58.3) | 35 (29.2)   | 15 (12.5)    |
| I am motivated to learn and adapt to new healthcare technologies.                    | 80 (66.7) | 25 (20.8)   | 15 (12.5)    |
| Modern technologies improve my performance as a nurse.                               | 85 (70.8) | 25 (20.8)   | 10 (8.4)     |
| I often resist the introduction of new technologies at my workplace.                 | 30 (25.0) | 40 (33.3)   | 50 (41.7)    |



Table 2 above demonstrates that over 60% of nurses endorsed positive attitudes toward integrating modern technologies into clinical practice, with merely 12.5% expressing disagreement. This reflects broad receptivity at Alimosho General Hospital, positioning technology as an enhancer of nursing care, though approximately 25% adopted neutral stances suggestive of lingering hesitation.

### Attitudinal Distribution and Implications

A majority (58.3%–70.8%) affirmed comfort with technologies, motivation for skill acquisition, and conviction in performance augmentation. Dissent was minimal (12.5%), neutrality moderate (25%).

### Summary of Findings

These results signify general enthusiasm for technological evolution and its healthcare contributions among Alimosho General Hospital nurses. Residual resistance, potentially stemming from confidence deficits or training inadequacies, underscores the imperative for sustained education and hands-on exposure to translate favorable dispositions into routine application.

### Research Question 2: How do nurses perceive the relevance and effectiveness of modern healthcare technologies?

**Table 3: Nurses' Perception of Modern Healthcare Technologies**

| Statement  | Agree (%) | Neutral (%) | Disagree (%) |
|--|-----------|-------------|--------------|
| Modern healthcare technologies improve patient outcomes.                     | 82 (68.3) | 30 (25.0)   | 8 (6.7)      |
| Modern technologies are effective in enhancing nursing practice.             | 78 (65.0) | 30 (25.0)   | 12 (10.0)    |
| Modern technologies simplify healthcare tasks.                               | 75 (62.5) | 35 (29.2)   | 10 (8.3)     |
| The use of modern technologies leads to more accurate nursing interventions. | 80 (66.7) | 30 (25.0)   | 10 (8.3)     |
| Modern technologies negatively affect nurse–patient relationships.           | 25 (20.8) | 40 (33.3)   | 55 (45.9)    |

Table 3 above indicates that a majority (62.5%–68.3%) of respondents viewed modern technologies as efficacious in elevating nursing care quality, with limited disagreement (6%–10%) and minimal neutrality. This underscores predominantly favorable perceptions among Alimosho General Hospital nurses, tempered by minor reservations regarding interpersonal care dynamics.

### Distribution of Perceptions

Most affirmed enhancements in patient outcomes, practice efficiency, task simplification, and intervention precision, with dissent confined to a small fraction and neutrality at approximately 25%.

### Key Insights on Relationships and Overall Views

Notably, 45.9% rejected the notion that technologies undermine nurse-patient relationships, affirming no disruption to communication or care delivery.

### Summary of Perceptual Profile

Nurses at Alimosho General Hospital generally endorse modern innovations' effectiveness and utility. Sustained exposure, mentorship, and institutional reinforcement remain essential to mitigate residual neutrality and bolster perceptual confidence.

### Research Question 3: To what extent do nurses utilize modern technological innovations in patient care?

**Table 4: Level of Utilization of Modern Healthcare Technologies**

| Statement   | Agree (%) | Neutral (%) | Disagree (%) |
|---|-----------|-------------|--------------|
| I use modern technologies frequently in patient care.                     | 65 (54.2) | 35 (29.2)   | 20 (16.6)    |
| I am proficient in using healthcare technologies.                         | 60 (50.0) | 40 (33.4)   | 20 (16.6)    |
| I update my knowledge and skills about healthcare technologies regularly. | 55 (45.8) | 40 (33.4)   | 25 (20.8)    |
| My hospital provides adequate access to healthcare technologies.          | 60 (50.0) | 35 (29.2)   | 25 (20.8)    |
| My hospital provides regular training on new technologies.                | 55 (45.8) | 40 (33.4)   | 25 (20.8)    |

Table 4 above Reveals That Approximately Half Of Nurses Affirmed Frequent Use And Proficiency With Healthcare Technologies, Moderated By 30%–33% Neutrality And 20% Disagreement. This Profile Signifies Moderate Utilization At Alimosho General Hospital, Wherein Appreciation Of Technology Coexists With Impediments Like Equipment Scarcity And Inconsistent Training.

#### Patterns Of Proficiency And Engagement

A Majority Endorsed Routine Application In Patient Care, Yet 29%–33% Neutrality And 16%–21% Dissent Highlight Variability In Adoption.

#### Summary And Implications

Moderate Utilization Underscores Awareness Of Benefits Overshadowed By Access Deficits, Training Gaps, And Institutional Support Shortfalls. Enhancing Equipment Provision, Practical Training, And Administrative

Advocacy Is Imperative To Elevate Technology Integration In Clinical Practice.

#### Research Question 4: Is There A Significant Relationship Between Nurses' Attitude, Perception, And Their Level Of Utilization Of Modern Healthcare Technologies?

This Inquiry Examines Potential Associations Among Nurses' Attitudes, Perceptions, And Utilization Levels Of Modern Healthcare Technologies.

#### Hypothesis 1 ( $H_{01}$ )

No Statistically Significant Relationship Exists Between Nurses' Attitudes Toward Modern Technological Innovations And Their Utilization Thereof.

#### Table 5a: Chi Square Test On Nurses' Attitudes And Their Utilization Of Modern Technological Innovations.

| Attitude Category | Low Utilization | Moderate Utilization | High Utilization | Total |
|-------------------|-----------------|----------------------|------------------|-------|
| Agree             | 2               | 59                   | 11               | 72    |
| Neutral           | 1               | 18                   | 4                | 23    |
| Disagree          | 1               | 5                    | 1                | 7     |
| Total             | 4               | 82                   | 16               | 120   |

$$\chi^2 = 1.07 \quad df = 4 \quad p = 0.900$$

Table 5a above yields a p-value of 0.900, exceeding the 0.05 threshold, warranting acceptance of the null hypothesis. This confirms no statistically significant association between nurses' attitudes and utilization of modern technologies.

#### Interpretation

Despite prevalent positive attitudes, utilization remains unaffected, attributable to institutional

constraints like restricted access and inadequate technical support.

#### Table 5b: Chi Square test on nurses' perception and their utilization of modern technological innovations.



| Perception Category | Low Utilization | Moderate Utilization | High Utilization | Total |
|---------------------|-----------------|----------------------|------------------|-------|
| Agree               | 0               | 55                   | 12               | 67    |
| Neutral             | 2               | 23                   | 6                | 31    |
| Disagree            | 2               | 4                    | 1                | 7     |
| Total               | 4               | 82                   | 16               | 120   |

$$\chi^2 = 24.56 \quad df = 4 \quad p = 0.0001$$

Table 5b above yields a p-value of 0.0001, falling below the 0.05 threshold, necessitating rejection of the null hypothesis. This establishes a statistically significant association between nurses' perceptions and utilization of modern technologies; wherein favorable perceptions correlate with heightened integration into clinical routines.

### Interpretation and Theoretical Alignment

While attitudes exert limited influence, perceptions emerge as pivotal drivers of adoption, aligning with the Technology Acceptance Model (Davis, 1989), which emphasizes perceived usefulness and ease of use. Positive attitudes notwithstanding, utilization hinges on access, temporal constraints, and institutional policies.

### Implications for Practice

Bolstering perceptions via awareness campaigns, motivational strategies, and ongoing training holds promise for elevating technology uptake among Alimosho General Hospital nurses.

## Chapter Five

### Discussion, Conclusion, and Recommendations

This chapter interprets major findings vis-à-vis pertinent literature, delineates implications for nursing practice, summarizes the study, draws conclusions, offers recommendations, and proposes avenues for future research.

### Discussion of Findings

The investigation scrutinized nurses' attitudes, perceptions, and utilization of modern technological innovations at Alimosho General Hospital, Lagos State.

### Attitudes Toward Modern Technology

Table 2 above evidenced predominantly positive attitudes (62.5%–70.8%), signifying recognition of technology's role in efficiency and outcomes. Minimal reservations (12.5%) likely stem from training deficits. This concurs with Adebayo (2020) and Okafor et al. (2022), who noted acceptance tempered by support shortages and workloads, advocating digital education.

### Perceptions of Modern Healthcare Technologies

Table 3 above affirmed favorable views (62.5%–68.3%) on relevance and efficacy, aligning with Bello (2023) and Eze & Nwankwo (2022) on usefulness/ease as adoption drivers. Sustained education can amplify motivation.

### Utilization Levels of Modern Technologies

Table 4 above indicated moderate engagement (45.8%–54.2%), with neutrality (one-third) and low use (20%), mirroring Adejumo et al. (2021) amid access/training constraints.

### Relationships among Attitude, Perception, and Utilization

Hypothesis 1 confirmed no attitude-utilization link ( $p = 0.900$ ), implicating institutional factors. Hypothesis 2 rejected the null ( $p = 0.0001$ ), affirming perception's influence, per Technology Acceptance Model (Davis, 1989) and Bello (2023).

### Implications of the Study

Nurses require ongoing digital literacy via peer learning. Curricula should embed informatics with simulations. Hospital leadership must ensure equipment access, training, and policies rewarding adoption. Future inquiries should probe perception influencers and patient impacts.

### Limitations of the Study

Confined to Alimosho General Hospital, findings lack nationwide generalizability. Self-reports risked social desirability bias.

### Contribution to Knowledge

This research enriches nursing scholarship with empirical insights from a Nigerian public hospital, revealing perception's primacy over attitude in utilization per TAM. It identifies barriers (access, training, workload), furnishing frameworks for policy and management. Emphasizing continuous development, it advances efficiency/quality while guiding comparative studies domestically and internationally.

### Summary

The study assessed attitudes, perceptions, and utilization among 120 Alimosho General Hospital nurses via descriptive/inferential analyses. Positive attitudes/perceptions contrasted moderate utilization; chi-square tests showed no attitude-utilization tie but strong perception-utilization association. Enhanced training/access is vital for adoption.

### CONCLUSION

Nurses evince positive attitudes/perceptions toward technologies, yet moderate utilization implicates infrastructure/support. Perception-utilization linkage underscores benefits of user-centric views. Prioritizing education, facilities, and policies will optimize integration, elevating outcomes.

### Recommendations

- Conduct regular workshops/seminars for digital competence.
- Supply functional equipment.
- Enact rewarding technology policies.
- Implement mentorship for adaptation.
- Integrate digital health into curricula.
- Foster IT-nursing collaboration.

### Suggestions for Further Studies

Replicate in diverse Lagos hospitals for generalizability. Employ qualitative methods for experiential depth. Evaluate training impacts longitudinally. Assess technology's patient outcome effects.

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