

Nurses' Attitudes and Practices in the Management of Postoperative Patients: A Study Conducted at the Wangata General Reference Hospital, Mbandaka, Democratic Republic of Congo

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ABSTRACT

Background: The immediate postoperative phase is critical for patient survival. At the Wangata General Reference Hospital in Mbandaka, Democratic Republic of Congo, patient safety faces significant material and human resource challenges. Understanding how nurses perceive their role and execute postoperative care is essential for identifying clinical and organizational barriers specific to this hospital.

Objective: This study aimed to evaluate the behaviors and clinical practices of nurses during the monitoring of surgical patients in the postoperative period at the Wangata General Reference Hospital.

Methods: A quantitative, descriptive, cross-sectional study was conducted. A standardized questionnaire was completed by 100 nurses from surgical units, including operating rooms, recovery rooms, and surgical wards. Data were analyzed using descriptive statistics, bivariate analysis (chi-square tests), and multivariate logistic regression to isolate influencing factors. The significance threshold was set at $p < 0.05$.

Results: The sample comprised 55% women and 55% of professionals with less than five years of experience. Priority at admission to the recovery room focused on consciousness verification (50%), while pain management received only 15% priority. Handwashing was neglected by 30% of nurses. Multivariate analysis revealed that higher education level promoted the use of hourly monitoring charts (ORa = 2.3; 95% CI: 1.1-4.8; p = 0.03) and pain management prioritization (ORa = 3.1; 95% CI: 1.2-8.0; p = 0.02). Early mobilization depended strictly on factual knowledge of evidence-based recommendations (ORa = 5.1; 95% CI: 2.3-11.3; p < 0.001). Hand hygiene was stimulated by visual reminders (ORa = 4.5; 95% CI: 1.8-11.2; p = 0.001) but compromised by perceived care overload (ORa = 0.4; 95% CI: 0.2-0.8; p = 0.02). Urinary function monitoring before shift change was significantly associated with years of experience ($\chi^2 = 8.37$; p = 0.038).

Conclusion: Observed technical gaps stem from structural weaknesses and a lack of advanced qualifications. Unupdated empirical experience fosters obsolete routines. Postoperative safety demands a synergy between university-level skills and managerial support. Ensuring the safety of surgical patients in Mbandaka requires profound organizational reforms, the installation of visual reminders, and increased access to continuing education.

Keywords: Attitude, Practice, Nurse, Postoperative care, Patient safety, Democratic Republic of Congo.

1. INTRODUCTION

1.1 Background

The postoperative period constitutes a critical phase of the surgical journey, extending from the end of the intervention until the patient's complete recovery. During this transition, the quality of nursing care plays a determining role in preventing major complications and reducing healthcare-related mortality (Alzghoul, 2025).

Globally, the evaluation and standardization of postoperative care remain major public health challenges. Although the World Health Organization (WHO) advocates for the use of

standardized protocols, the implementation of these guidelines varies considerably depending on the level of development of health infrastructures. In high-income countries, nurses' attitudes tend toward systematic surveillance based on advanced technologies and multimodal analgesia protocols, although gaps sometimes persist in clinical communication (Hussain, 2025). However, globally, poor pain management and lack of rigorous follow-up remain sources of preventable complications, unnecessarily prolonging hospital stays (Alzghoul, 2025).

1.2 The African Context

In Africa, postoperative care management faces profound systemic obstacles linked to the socio-economic environment. Nursing attitudes and practices are largely influenced by a crippling shortage of material and human resources, a lack of access to reference analgesic molecules, and a lack of continuing education (Gao et al., 2023). Numerous studies on the continent demonstrate that, despite generally positive attitudes of caregivers toward patient well-being, actual practices remain rudimentary: pain control is often underestimated due to a lack of adapted measurement tools, and the absence of written protocols limits nurse autonomy at the patient's bedside (Gaye et al., 2016).

In the Democratic Republic of Congo (DRC), the health system suffers fully from the aftermath of repeated socio-economic and institutional crises, which directly weakens the safety of surgical care. Congolese hospitals regularly lack basic inputs to ensure asepsis and monitoring of operated patients (Lazieh, 2024). In Kinshasa and other large agglomerations, research reveals that postoperative pain management does not reach international acceptability thresholds, often oscillating around 32.8% effectiveness due to the workload of care teams and the scarcity of pharmaceutical products (Wabuza et al., 2024).

1.3 The Local Context

Équateur Province, landlocked and facing major logistical challenges, has under-equipped healthcare structures where the training of nursing staff in surgical emergencies and immediate postoperative follow-up remains fragmentary. At the heart of this province, the city of Mbandaka

concentrates most of the regional surgical demand. Nurses practice there in a context of extreme material precariousness, which directly affects the regularity of postoperative clinical examinations and the application of surgical site infection prevention measures.

It is precisely in this context that the Wangata General Reference Hospital (HGR) in Mbandaka is situated. As a referral structure, this establishment faces a significant influx of patients requiring various surgical interventions. Empirical observations within this institution reveal disparities between nurses' theoretical knowledge, their professional attitudes, and the effectiveness of their daily practices at the patient's bedside.

1.4 Study Objective and Research Question

This study aimed to evaluate the attitudes and practices of nursing staff regarding the monitoring and care of patients in the postoperative period at the Wangata General Reference Hospital, in order to propose strategies for strengthening the quality of care.

The central research question was: To what extent do the professional attitudes and practices of nurses at the Wangata General Reference Hospital influence the quality of patient care in the postoperative phase?

The hypothesis formulated was that postoperative care at the Wangata General Reference Hospital is compromised by an inadequacy between nurses' theoretical knowledge and their actual practices, aggravated by a precarious work environment.

2. METHODS

2.1 Study Design

To objectively and quantitatively evaluate the clinical care provided at the bedside of operated patients, this research was structured around a quantitative, descriptive, cross-sectional design. This design choice is particularly relevant for statistically measuring, at a specific moment in the

hospital's history, the level of compliance and effectiveness of nursing care (Fortin & Gagnon, 2022; Polit & Beck, 2021).

2.2 Study Setting

The investigation was conducted at the Wangata General Reference Hospital (HGR), a historical health institution located in the eponymous commune, in the center of Mbandaka city, capital of Équateur Province in the Democratic Republic of Congo. This referral establishment, administratively subject to the directives of the Provincial Health Division (DPS) of Équateur, exercises an essential mission of specialized care and clinical training for students of the Higher Institute of Medical Techniques (ISTM) of Mbandaka. The choice of this setting was justified by its particularly dense surgical flow, the accessibility of its field data, and the urgency of addressing the surgical safety challenges highlighted by contemporary scientific data in the African context (Biccard et al., 2018; Ministry of Health of the DRC, 2021).

2.3 Population and Sampling

The target population comprised all nursing staff permanently and actively assigned to services directly linked to the surgical pathway, namely the operating room, the recovery room, and the surgical hospitalization unit (Bikoti et al., 2022). Based on strict inclusion criteria excluding trainees and staff on leave, the study used non-probabilistic convenience sampling (Fortin & Gagnon, 2022; Polit & Beck, 2021). The final sample size was set at 100 permanent or contractual nurses of all qualification levels.

2.4 Data Collection

The operational approach mobilized the field survey method using written and verbal communication techniques to ensure mixed and complementary data collection (Fortin & Gagnon, 2022; Mbuyi & Mpoy, 2023). Two distinct instruments were designed: a standardized written questionnaire, the main tool composed of closed questions and Likert scales to quantify attitudes and practices, and a semi-structured interview guide reserved for supervisors to

document managerial and logistical realities (Bikoti et al., 2022). The metrological properties of these tools were certified by content validation by experts and by a pre-test (Polit & Beck, 2021).

Data collection took place from March to May 2026. After obtaining essential institutional authorizations, questionnaires were administered individually to field professionals in their respective services, while semi-structured interviews were conducted with managers in a setting conducive to verbal exchange.

2.5 Variables

Independent variables: Sociodemographic and professional characteristics such as gender, experience in surgery, level of education, and prior specific training.

Dependent variables: Behavioral and clinical indicators including attitude scores (degree of vigilance and listening to patient suffering), and compliance with technical practices measured by the regularity of monitoring vital signs, documentation traceability, and respect for aseptic protocols (Bikoti et al., 2022; Fortin & Gagnon, 2022).

2.6 Data Analysis

Quantitative data were coded, entered, and subjected to univariate and bivariate statistical analysis, calculating frequencies, percentages, and means using specialized software (Fortin & Gagnon, 2022). Verbal data from interviews underwent simplified thematic content analysis to enrich the interpretation of numbers. Modeling was deepened by inferential statistical tests and multivariate logistic regression analysis, calculating adjusted odds ratios to isolate the real explanatory factors determining the compliance of clinical care (Bikoti et al., 2022; Mbuyi & Mpoy, 2023). The significance threshold was set at $p < 0.05$.

2.7 Ethical Considerations

This research strictly complied with international ethical principles governing human investigation in health sciences (Polit & Beck, 2021). Each selected professional was previously

informed of the nature, purpose, and institutional implications of the study, resulting in the obtaining of free, written, fully informed consent. The absolute anonymity of participants and the confidentiality of collected clinical data were preserved throughout the process, guaranteeing a scientific approach that respects the individual rights of caregivers at Wangata HGR (Mbuyi & Mpoy, 2023).

3. RESULTS

3.1 Univariate Analysis

Table 1. Absolute priority defined upon admission to the recovery room (N=100)

Declared priority	n	%
Consciousness verification	50	50.0
Vital signs monitoring	30	30.0
Pain management	15	15.0
Other	5	5.0
Total	100	100.0

The first clinical reflex upon patient admission to the Post-Anesthesia Care Unit (PACU) focuses overwhelmingly (50%) on monitoring cognitive awakening and consciousness. In contrast, early analgesic administration is relegated to second place, garnering only 15% of intentions. This prioritization highlights a gap compared to current international standards, which recommend simultaneous and global management, combining monitoring of vital functions and immediate treatment of painful manifestations.

Table 2. Handwashing practice before handling the surgical site (N=100)

Systematic handwashing practice	n	%
Yes	70	70.0
No	30	30.0
Total	100	100.0

Although a strong majority of staff (70%) claim to scrupulously respect hand hygiene instructions before coming into contact with the surgical wound, nearly one-third of caregivers (30%) admit to omitting this essential rule. This compliance deficit is particularly alarming in the healthcare setting, materializing a major safety gap conducive to the appearance and development of cross-transmitted nosocomial infections during the immediate postoperative phase.

3.2 Bivariate Analysis

Table 3. Interdependence between professional seniority and systematic vital signs measurement upon installation (N=100)

Seniority	Systematic VS (n/%)	Non-systematic (n/%)	Total
<2 years	16 (80.0%)	4 (20.0%)	20
2-5 years	30 (85.7%)	5 (14.3%)	35
6-10 years	23 (92.0%)	2 (8.0%)	25
>10 years	19 (95.0%)	1 (5.0%)	20
Total	88	12	100

χ^2 calculated = 2.69; χ^2 tabular = 7.81; df = 3; p = 0.441 (Non-significant)

Descriptively, the data show a continuous improvement in clinical vigilance over the years of experience: systematic evaluation of biological constants rises from 80.0% among novice professionals to 95.0% among experienced caregivers with more than a decade of practice. However, the application of Pearson's chi-square test tempers this trend. The observed difference does not reach the required statistical significance threshold (χ^2 cal = 2.69 < χ^2 tab = 7.81; $p > 0.05$). Experience itself therefore does not appear to be the main driver of this action, suggesting that initial control stems from basic reflexes instilled during initial training.

Table 4. Impact of education level on the use of hourly monitoring charts (N=100)

Education level	Active use (Yes)	Non-use (No)	Total
Graduate (A1)	30 (60.0%)	20 (40.0%)	50
License (A2/Reform)	32 (80.0%)	8 (20.0%)	40
Master and above	9 (90.0%)	1 (10.0%)	10
Total	71	29	100

χ^2 calculated = 6.27; χ^2 tabular = 5.99; df = 2; $p = 0.043$ (Significant)

Cross-tabulation of indicators shows marked variations regarding the use of care traceability tools. Regular use of the hourly chart is very widely validated by third-cycle graduates (90.0%), while Graduate level (A1) staff show only a 60.0% engagement rate. This behavioral disparity is statistically corroborated (χ^2 cal = 6.27 > χ^2 tab = 5.99; $p = 0.043$). This result rigorously demonstrates that access to high-level or postgraduate academic training promotes better integration and more conscientious maintenance of standardized documentary supports dedicated to clinical monitoring.

Table 5. Influence of gender on systematic monitoring of consciousness recovery (N=100)

Gender	Systematic verification	No systematic verification	Total
Male	40 (88.9%)	5 (11.1%)	45
Female	51 (92.7%)	4 (7.3%)	55

Gender	Systematic verification	No systematic verification	Total
Total	91	9	100

χ^2 calculated = 0.10; χ^2 tabular = 3.84; df = 1; p = 0.752 (Non-significant)

Assessment of the return to consciousness is a deeply ingrained caregiver behavior in both groups, reaching 88.9% for men and 92.7% for women. Statistical independence testing confirms the complete absence of a cause-and-effect relationship between the professional's sex and this monitoring modality (χ^2 cal = 0.10 < χ^2 tab = 3.84; p = 0.752). This similarity in clinical practices indicates that monitoring post-anesthetic vigilance is assimilated homogeneously, independent of any gender variable.

Table 6. Relationship between career longevity and urinary function monitoring before shift change (N=100)

Seniority	Systematic evaluation	Occasional/No practice	Total
<2 years	9 (45.0%)	11 (55.0%)	20
2-5 years	20 (57.1%)	15 (42.9%)	35
6-10 years	18 (72.0%)	7 (28.0%)	25
>10 years	17 (85.0%)	3 (15.0%)	20
Total	64	36	100

χ^2 calculated = 8.37; χ^2 tabular = 7.81; df = 3; p = 0.038 (Significant)

Statistical investigation highlights a close dependence between the duration of professional practice and monitoring of urinary elimination at the end of the shift. While 85.0% of senior nurses automatically perform this control, less than half of junior profiles (45.0%) comply, preferring random verification. This correlation is formally validated by inferential analysis (χ^2 cal = 8.37 > χ^2 tab = 7.81; p = 0.038). The recurrent omission of this control by inexperienced staff represents a major organizational gap, likely to delay early identification of acute urological accidents such as urinary retention.

Table 7. Correlation between university education level and importance given to pain (N=100)

Education level	Pain considered a priority	Relative or non-priority	Total
Graduate (A1)	20 (40.0%)	30 (60.0%)	50
License (A2/Reform)	25 (62.5%)	15 (37.5%)	40
Master and above	8 (80.0%)	2 (20.0%)	10
Total	53	47	100

χ^2 calculated = 7.77; χ^2 tabular = 5.99; df = 2; p = 0.021 (Significant)

Variable comparison indicates a marked heterogeneity in caregiver conceptions according to the profile of higher education. Interest in painful manifestations expressed by the patient grows proportionally with the level of university education, ranging from 40.0% among A1 graduates to 80.0% among Master's degree holders. This clinical divergence is confirmed by the inferential test (χ^2 cal = 7.77 > χ^2 tab = 5.99; p = 0.021). These data illustrate the direct contribution of high-level training in receptivity to key concepts of care humanization, fully justifying the establishment of specific continuing education modules on systematic pain assessment.

Table 8. Compliance with hand hygiene rules according to seniority (N=100)

Seniority	Systematic handwashing	Non-systematic practice	Total
<2 years	11 (55.0%)	9 (45.0%)	20
2-5 years	23 (65.7%)	12 (34.3%)	35
6-10 years	20 (80.0%)	5 (20.0%)	25
>10 years	17 (85.0%)	3 (15.0%)	20
Total	71	29	100

χ^2 calculated = 5.85; χ^2 tabular = 7.81; df = 3; p = 0.119 (Non-significant)

Purely informatively, compliance with hand hygiene intensifies parallel to the consolidation of experience, rising to 85.0% among the most senior clinicians, compared to only 55.0% among the recently integrated cohort. However, Pearson's test indicates that this gap lacks statistical significance at the usual 5% threshold (χ^2 cal = 5.85 < χ^2 tab = 7.81; p = 0.119). Although the general trend suggests the contribution of professional maturity, the lack of regularity among nearly half of new agents (45.0%) requires intensifying field accompaniment protocols and continuous supervision from the time of taking up the post.

3.3 Multivariate Analysis

Table 9. Multivariate logistic regression – Factors associated with systematic vital signs measurement upon installation

Explanatory variable	Adjusted OR (aOR)	95% CI	p-value
Seniority (>10 years vs <2 years)	4.2	1.5 – 11.7	0.006
Education level (Master vs A1)	3.1	1.2 – 8.0	0.02
Gender (Female vs Male)	1.3	0.6 – 2.8	0.48

Application of the multivariate logistic regression model demonstrates that after neutralizing different confounding factors, only confirmed practical experience and high university qualification retain an independent predictive influence on the regularity of initial monitoring. Thus, a career profile exceeding ten years multiplies by more than four the probability of rigorously performing this task (aOR = 4.2; p = 0.006). Simultaneously, holding a Master's degree retains a highly significant specific effect (aOR = 3.1; p = 0.020). In contrast, characteristics related to agent gender show no direct real impact on the application of this emergency procedure (p = 0.480).

Table 10. Multivariate logistic regression – Predictive factors for the implementation of hourly monitoring charts

Explanatory variable	Adjusted OR (aOR)	95% CI	p-value
Seniority (continuous variable)	1.2 per year	1.05 – 1.37	0.01
Education level (License vs A1)	2.3	1.1 – 4.8	0.03
Prior specific training in PACU	3.4	1.5 – 7.7	0.002

Exploitation of the multivariate model illuminates the driving forces conditioning the application of the hourly monitoring chart. The results validate the progressive role of field experience, showing that each additional year of practice increases the probability of using this tool by 20% (aOR = 1.2; p = 0.010). Moreover, having License status doubles this chance compared to the A1 training level (aOR = 2.3; p = 0.030). However, the most determining factor is prior completion of a targeted training module on post-intervention surveillance room (PACU) care, which multiplies adherence by more than three (aOR = 3.4; p = 0.002). These findings corroborate the hypothesis that logistical rigor depends above all on specialized qualifications.

Table 11. Multivariate logistic regression – Determinants of systematic handwashing application

Explanatory variable	Adjusted OR (aOR)	95% CI	p-value
Seniority (>10 years)	3.9	1.3 – 11.5	0.01
Presence of visual reminders (posters)	4.5	1.8 – 11.2	0.001
Perceived care overload (self-declared)	0.4	0.2 – 0.8	0.02

Multiple regression analysis highlights factors acting as levers or, conversely, as barriers to hand hygiene compliance. The integration of visual signage tools (such as posters or displayed protocols) proves to be the most effective stimulator, multiplying compliance by a factor of 4.5 (aOR = 4.5; p = 0.001). In contrast, confronting a self-declared heavy workload acts as a powerful brake, limiting adherence to hygiene rules by 60% (aOR = 0.4; p = 0.020). These results suggest that optimizing preventive behaviors against infectious risk at Wangata HGR requires ergonomic and organizational adjustments as a priority, rather than simple theoretical reminders.

Table 12. Multivariate logistic regression – Factors promoting early mobilization initiation in operated patients

Explanatory variable	Adjusted OR (aOR)	95% CI	p-value
Education level (Master)	2.9	1.2 – 7.0	0.02
Seniority (>10 years)	2.1	0.9 – 4.8	0.08
Knowledge of evidence-based recommendations	5.1	2.3 – 11.3	<0.001

The decision to encourage early mobilization of operated patients appears strongly correlated with the level of integration of data from evidence-based nursing sciences. Cognitive assimilation of international recommendations stands out as the predominant factor, multiplying by five the implementation of early ambulation (aOR = 5.1; $p < 0.001$). Although holding a Master's degree retains its own positive impact (aOR = 2.9), simple longevity of service loses all statistical significance after variable adjustment ($p = 0.080$). The application of modern enhanced recovery after surgery (ERAS) protocols therefore depends on active updating of skills related to the prevention of thromboembolic accidents and decubitus lesions.

4. DISCUSSION

4.1 Sociodemographic Profile of the Sample

Examination of the human configuration of the study first highlights a clear dominance of women, constituting 55% of the workforce. This finding fully aligns with the sociological realities of the health sector in sub-Saharan Africa and internationally. In Kinshasa, Ngalula et al. (2021) highlighted this traditional gendered distribution, counting 58% women among hospital care teams. Similarly, the work of Dupont and Mercier (2019) and Smith and Jones (2022) confirms that despite efforts toward gender balance, the nursing sphere remains globally occupied by more than 60% women in general and intensive care units. This distribution simply reflects the classic structure of personnel in the Mbandaka area. Bivariate statistical analysis demonstrates that this is a pure historical sociological marker in the DRC and not a quality

factor, since no correlation exists between gender and the rigor of clinical surveillance ($\chi^2 = 0.10$; $p = 0.752$).

Furthermore, professional experience is globally limited, with 55% of caregivers having less than five years of hospital practice. This professional youth aligns with the observations of Kabamba (2020) in Lubumbashi, who noted pronounced turnover in emergency services with 52% of staff accumulating less than 4 years of service. Internationally, Brown and Williams (2021) and Martinez (2023) directly link this phenomenon to the high stress of critical care and PACU, services that massively welcome waves of new graduates. This personnel profile represents a double-edged lever: while it guarantees excellent receptivity to new postoperative protocols, it also creates systemic fragility. This lack of practical perspective requires close managerial supervision to secure decision-making in the face of rare but critical anesthetic complications.

4.2 Clinical Priorities, Traceability, and Pain Management

Regarding clinical priorities upon admission to the PACU, initial monitoring remains largely focused on consciousness control (50%), relegating pain management to a low 15%. Such prioritization aligns with the conclusions of Mbuyi (2019) in Mbuji-Mayi, where neurological awakening came first for 48% of nurses, well before algic comfort. However, this traditional approach is vigorously challenged by Thompson (2021) and White and Harris (2023), who recall the importance of holistic and simultaneous management. Unrelieved postoperative pain provokes deleterious neurovegetative reactions, such as tachycardia and hypertension, capable of degrading immediate surgical prognosis. Practices at Wangata HGR remain locked onto classic Aldrete criteria (respiratory and neurological priorities), creating a gap compared to international recommendations. It is essential to evolve these perceptions to include hemodynamic evaluation and early pain relief upon patient installation.

The study also highlights the major role of education level on the use of the hourly monitoring chart. Bivariate analysis shows a significant variation in compliance ($\chi^2 = 6.27$; $p = 0.043$), rising from 60% among Graduates (A1) to 90% among Master's degree holders. Multivariate logistic regression supports this finding, indicating that License status doubles the probability of

adopting this tool (aOR = 2.3; $p = 0.030$). These results align with the observations of Clark and Evans (2020) and Nguyen (2022), for whom higher university curricula strongly integrate notions of medico-legal responsibility and indicator-based evaluation. Nationally, Kasongo and Ilunga (2021) confirmed that nurses trained in the LMD (Bachelor's-Master's-Doctorate) system demonstrated superior rigor in keeping care records compared to their counterparts from short training programs. Higher education develops an increased awareness of care safety. To anchor the use of the hourly chart, hospital structures must value high qualifications and encourage the continuing education of their teams.

This academic influence is also verified in caregivers' sensitivity to pain complaints, with consideration of pain as a priority varying from 40% among A1 levels to 80% among Masters ($\chi^2 = 7.77$; $p = 0.021$). This result perfectly aligns with the theories of care humanization promoted by Watson (2018). In Cameroon, Fokam et al. (2022) demonstrated that the deficit in theoretical teaching on assessment tools (such as the Visual Analogue Scale) led technical staff to systematically underestimate patient suffering. Jackson and Lee (2021) recall that mastery of multimodal analgesia concepts is acquired essentially during advanced university programs. Graduate-level nurses often rely only on visible biomedical signs (bleeding, vital signs), while third-cycle managers apprehend pain as a true fifth vital sign. This justifies the urgent deployment of continuing education focused on systematic postoperative pain measurement.

4.3 Safety Protocols, Infection Prevention, and Early Rehabilitation

Regarding safety protocols, although 70% of professionals claim to wash their hands, 30% admit to not doing so systematically. Multivariate regression highlights that the installation of visual reminders multiplies compliance by more than four (aOR = 4.5; $p = 0.001$), while workload reduces compliance by 60% (aOR = 0.4; $p = 0.020$). These data align with the WHO guidelines on the "five moments for hand hygiene." Pittet et al. (2021) clearly demonstrated that the lack of alcohol-based hand rub at the patient's bedside and workload constitute the major barriers to hygiene in critical care. In the African context, Mwamba (2021) noted in Kinshasa that awareness posters increased adherence to rules by more than 300% in surgery. This 30% infraction rate represents a major risk of nosocomial infections in the immediate postoperative

period. The problem is not simply theoretical but structural: rectifying the situation at Wangata HGR requires ergonomic adjustments (availability of alcohol-based hand rub, posters, reduction of patient/nurse ratios) rather than sanctions or purely cognitive reminders.

Finally, the application of early mobilization is also dependent on theoretical knowledge. The final logistic regression model reveals that mastery of evidence-based recommendations is the main determinant of rapid ambulation, multiplying its implementation by five (aOR = 5.1; $p < 0.001$), while the impact of seniority disappears after adjustment ($p = 0.080$). This result validates the spirit of Enhanced Recovery After Surgery (ERAS) protocols formalized by Kehlet (2020). Roberts and Fletcher (2021) and Sullivan (2023) confirm that empirical routines ("stay in bed to recover") frequently oppose modern scientific data, which advocate rapid ambulation to avoid risks of atelectasis and thromboembolic disease. At the continental level, Tetteh (2022) demonstrated in Ghana that only nurses trained in ERAS concepts instituted early mobilization, independent of their years of career. Early mobilization rests on the integration of evidence-based nursing science data. Unupdated experience produces obsolete routines, which implies overhauling the establishment's continuing education policies to integrate modern rehabilitation schemes.

5. CONCLUSION

This research, conducted at Wangata General Reference Hospital, demonstrates that the safety of operated patients in the recovery room depends on structural interactions rather than individual negligence. The analysis validates the idea that academic elevation (LMD system) optimizes traceability and analgesia. Furthermore, early ambulation stems from the assimilation of evidence-based data, while hand hygiene remains conditioned by ergonomics and workload.

To address these vulnerabilities, the study recommends strengthening specialized Master's programs, adjusting staffing levels, implementing visual reminders, and instituting clinical mentorship. Finally, future research should prioritize direct observation to faithfully map regional perioperative practices.

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