

Practices of Nurses In Preventing Nosocomial Infections in Maimbung District Hospital**Temmy A. Hadjirul, RN¹ Agaton Manuel T. Alzate Jr.²**<https://orcid.or//0009-0000-4711-4361>¹St. Bernadette of Lourdes College.^{1,2}thadjirul@sbllc.edu.ph¹ nalzate@sbllc.edu.ph²**ABSTRACT**

This study examined the practices of nurses in preventing nosocomial infections in Maimbung District Hospital. Specifically, it assessed nurses' infection prevention practices in hand hygiene, use of personal protective equipment (PPE), sterilization and disinfection, waste management, and patient isolation. It also determined whether significant relationships existed between nurses' demographic characteristics and their infection prevention practices. A quantitative descriptive-correlational research design was employed using a validated researcher-made questionnaire administered to registered nurses through purposive sampling. Data were analyzed using frequency, percentage, mean, standard deviation, and Pearson correlation coefficient. Findings revealed that nurses consistently demonstrated a very high level of infection prevention practices across all dimensions. Correlation analysis showed that selected demographic variables had minimal influence on infection prevention practices, indicating consistent adherence to hospital infection control protocols. The findings emphasize the importance of continuous education, policy implementation, and competency-based training in strengthening infection prevention and ensuring patient safety.

Keywords: Nosocomial infections, infection prevention, nurses, hand hygiene, patient safety

INTRODUCTION

Nosocomial infections remain a challenge in healthcare facilities because they can affect patient recovery and safety. Nurses play an important role in preventing these infections through proper hand hygiene, use of PPE, and compliance with infection control practices. This study aims to assess the practices of nurses in preventing nosocomial infections at Maimbung District Hospital and determine factors that may influence their infection prevention practices. The findings may help strengthen infection control measures and promote safer patient care.

Statement of the Problem

This study aimed to determine the practices of nurses in preventing nosocomial infections in Maimbung District Hospital. Specifically, it sought to answer the following questions:

1. What is the demographic profile of the respondents?
2. What is the level of nurses' practices in preventing nosocomial infections?
3. Is there a significant relationship between the respondents' demographic profile and their infection prevention practices?
4. What challenges do nurses encounter in implementing infection prevention and control practices?
5. What infection prevention enhancement program may be proposed based on the findings?

Scope and Delimitations

This study examined the practices of nurses in preventing nosocomial infections at Maimbung District Hospital. It focuses on their demographic profile, infection prevention practices, compliance with infection control protocols, and factors influencing compliance. The participants are registered nurses actively involved in patient care during the data collection period. The study is limited to Maimbung District Hospital and is based on data collected through self-administered questionnaires. The findings are specific to the study setting and may serve as a reference for similar healthcare institutions.

Review of Related Literature

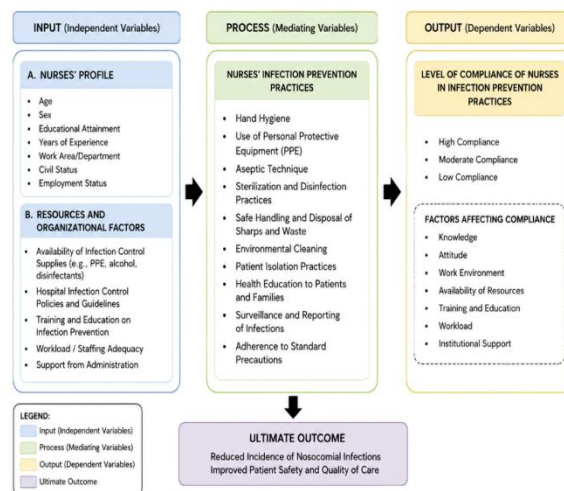
Nosocomial or healthcare-associated infections remain a major challenge in healthcare systems because they increase patient morbidity, mortality, and healthcare costs. The World Health Organization (WHO, 2022) emphasizes that effective infection prevention and control (IPC) programs, particularly proper hand hygiene, use of personal protective equipment (PPE), environmental sanitation, and waste management, are essential in reducing hospital-acquired infections and ensuring patient safety.

Several studies have shown that nurses play a significant role in preventing nosocomial infections through strict compliance with infection control protocols. Allegranzi et al. (2020) reported that consistent hand hygiene remains the most effective strategy in reducing healthcare-associated infections, while Pittet et al. (2022) emphasized that continuous education and competency-based training improve nurses' compliance with infection prevention standards. These findings support the need for ongoing professional development and institutional support to strengthen infection prevention practices.

Theoretical Framework -

This study is anchored on Florence Nightingale's Environmental Theory, which emphasizes that maintaining a clean and safe healthcare environment is essential in preventing disease and promoting patient recovery. The theory highlights the importance of proper hygiene, sanitation, and infection control practices in reducing the spread of infections. It provides the theoretical basis for assessing nurses' practices in preventing nosocomial infections within the hospital setting.

Conceptual Framework



METHODOLOGY

This study employed a **quantitative descriptive-correlational research design** to determine nurses' practices in preventing nosocomial infections and to examine the relationship between selected demographic characteristics and infection prevention practices.

Research Design

A quantitative descriptive-correlational design was used to assess nurses' infection prevention practices and determine whether significant relationships existed between demographic characteristics and compliance with infection control measures.

Research Steps

The study began with a review of related literature, followed by the validation of the research instrument, data collection, statistical analysis, interpretation of findings, and the development of a proposed enhancement program.

Data Collection and Sample Selection

Purposive sampling was used to select registered nurses from Maimbung District Hospital. Data were gathered using a validated researcher-made questionnaire measuring hand hygiene, use of PPE, sterilization and disinfection, waste management, and patient isolation practices.

Data Analysis Methods

Frequency, percentage, mean, and standard deviation were used to describe the respondents' profile and level of infection prevention practices. Pearson Product-Moment Correlation was employed to determine the relationship between demographic variables and infection prevention practices.

Research Hypotheses and Validation

The study tested the null hypothesis that there is no significant relationship between the respondents' demographic profile and their practices in preventing nosocomial infections. The research instrument underwent expert validation and reliability testing before its administration.

Study Limitations and Ethical Considerations

Ethical principles were observed by obtaining informed consent from all respondents, ensuring confidentiality and anonymity, and allowing participants to withdraw voluntarily. The study was limited to registered nurses assigned to Maimbung District Hospital

RESULTS AND DISCUSSION

SOP 1. What is the level of nurses' compliance with infection prevention and control protocols?

The study revealed that nurses consistently demonstrated a high level of compliance with infection prevention and control protocols. Safe waste disposal obtained the highest rating, followed by the use of personal protective equipment, hand hygiene practices, and equipment and environmental sanitation. Furthermore, demographic characteristics and organizational factors were not significantly associated with nurses' compliance, indicating that adherence to

infection prevention protocols was consistently maintained regardless of age, sex, years of clinical experience, or workplace conditions.

SUMMARY

The study found that nurses consistently demonstrated a high level of compliance with infection prevention and control protocols, particularly in safe waste disposal, use of personal protective equipment, hand hygiene, and environmental sanitation. The findings also revealed that demographic characteristics and organizational factors were not significantly associated with or predictive of nurses' compliance, indicating a consistent commitment to infection prevention and patient safety.

CONCLUSIONS

The study concluded that nurses consistently adhered to infection prevention and control protocols regardless of their demographic characteristics or organizational conditions. The findings suggest that professional responsibility, adherence to institutional policies, and commitment to quality patient care contribute significantly to maintaining high compliance with infection prevention standards.

RECOMMENDATIONS

Based on the findings and conclusions of the study, the following recommendations are suggested:

- Hospital administrators should continue strengthening infection prevention and control programs through regular monitoring and adequate resource provision.
- Nursing managers should provide continuous training and competency assessments to sustain compliance with infection prevention protocols.
- Future researchers should investigate additional factors that may influence nurses' compliance using larger samples and multiple healthcare institutions.

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AI DECLARATION STATEMENT

AI-supported tools helped with grammar and structure in creating this article. No AI tools were used to collect, analyze, or interpret data; all authors are credited for their academic contributions.

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