

SYNOPSIS

TITLE

Evaluating Hospital-Acquired Infections and Their Impact on Inpatient Morbidity and Mortality in Paras Hospital: A Retrospective Study

1. INTRODUCTION

Hospital-acquired infections (HAIs) are a significant public health concern, contributing to increased morbidity, mortality, and healthcare costs. HAIs, such as catheter-associated urinary tract infections (CAUTI), surgical site infections (SSI), ventilator-associated pneumonia (VAP), and bloodstream infections (BSI), pose challenges to patient safety and hospital quality standards. The World Health Organization (WHO) and the Centres for Disease Control and Prevention (CDC) emphasize the need for robust surveillance and prevention strategies.

This study aims to analyse the burden of HAIs at Paras Hospital, evaluate their impact on inpatient morbidity and mortality, and identify potential areas for improvement in infection control practices. The use of ICD-10 coding will enable a structured retrospective assessment of HAI cases over a defined period.

2. RESEARCH QUESTION

What is the prevalence of hospital-acquired infections at Paras Hospital and how do HAIs impact inpatient morbidity and mortality rates?

3. OBJECTIVES

1. To determine the incidence rate of HAIs in different hospital departments.
2. To assess the impact of HAIs on inpatient morbidity and mortality.
3. To identify common risk factors associated with HAIs.
4. To evaluate the adherence to infection control protocols and their effectiveness in reducing HAIs.

4. MATERIAL AND METHODS

STUDY DESIGN:

Descriptive cross-sectional record-based review study

SETTING:

The study will be conducted at Paras Hospital, a multispecialty tertiary care hospital.

STUDY POPULATION:

Inclusion Criteria:

Patients admitted for at least 72 hours.

Patients diagnosed with an HAI

Exclusion Criteria:

Patients with infections present on admission.

DURATION OF STUDY:

6 months

SAMPLE SIZE:

All patients diagnosed with HAI in 6 months(1068 Patients)

DATA COLLECTION PROCEDURE:

Review of patient records to assess morbidity, mortality, length of stay, and risk factors.

OPERATIONAL DEFINITIONS:

Hospital-Acquired Infection (HAI): Any infection acquired after 72 hours of hospital admission

Morbidity: Complications or prolonged hospitalization due to HAIs.

Mortality: Death occurring due to or associated with an HAI.

5. DATA ANALYSIS PLAN

Software: Microsoft Excel.

6. ETHICAL CONSIDERATIONS

Informed consent waiver for retrospective data analysis.

Data confidentiality and anonymization to protect patient privacy.

7. IMPLICATIONS OF RESEARCH

Identifying high-risk areas for HAIs to enhance infection control strategies.

Reducing inpatient morbidity and mortality through targeted interventions.

Providing data-driven insights for hospital quality improvement.

8.REFERENCES

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