

Synopsis

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TITLE -: Utilization of operating theatre and the most common causes of delays in planned operations.

Objectives:

- Calculate and determine the utilization rate of the operating theatre in Bokaro General Hospital.
- Understand the most common cause of delay in surgery.
- Suggestions for maximizing the use of the Operating Theatre according to the findings

1. INTRODUCTION:

Operating theatres (OTs) are critical components of hospital infrastructure and play a key role in patient care. These are specialized facilities designed to perform surgical procedures under sterile conditions, equipped with modern medical equipment and staffed by qualified medical professionals. The importance of OT in a hospital spans multiple dimensions, including patient outcomes, hospital efficiency, and overall health care delivery.

Effective use of operating theatres(OTs) is critical to optimal hospital performance, affecting patient outcomes, staff satisfaction, and overall healthcare costs. This study aims to investigate the various factors influencing the use of OT and identify the most common causes of delays.

2. RESEARCH QUESTION:

How can the use of the operating theatre be optimized and what are the most common causes of delays in surgical procedures in the hospital environment.

3. HYPOTHESIS:

Implementing advanced scheduling systems, improving communication protocols, and ensuring adequate staffing levels will significantly increase operating room utilization and reduce the frequency of surgical delays in the hospital environment.

4. DESIGN OF THE STUDY:

The study design used is a Observational Prospective study conducted at Bokaro General Hospital.

5. STUDIED POPULATION:

The study includes OT events on weekdays, i.e., Monday through Saturday, 8:00 a.m. to 6:00 p.m., excluding Sundays. A random sampling method was used for this study.

6. LENGTH OF STUDY: 3-4 weeks

7. SAMPLE SIZE: 100-150

8. DATA ANALYSIS: Data analysis was done using Microsoft Excel.

9. ETHICAL CONSIDERATIONS:

- Obtain permission from the Hospital Ethics Committee
- Ensure informed consent and confidentiality of all participants.

10. IMPLICATIONS OF THE RESEARCH:

- Improving operational efficiency
- Better allocation of resources
- Training and development
- Technological integration
- Patient satisfaction and trust

11. REFERENCES:

- Feeny, D., & Welch, H.G. (1993). "The Role of Process Factors in Improving the Efficiency of Hospital Operating Rooms." *Medical Care*, 31(6), 561-572.
- Macario, A. (2010). "What is one minute of operating room time worth?" *Journal of Clinical Anesthesia*, 22(4), 233-236.
- Harders, M., Malangoni, M.A., Weight, S., & Sidhu, T. (2006). "Improving Operating Room Efficiency Through Process Reengineering." *Surgery*, 140(4), 509-516.