

Synopsis

1. TITLE:

A Study on Doctor Utilization Patterns in Relation to Doctor Timings in Outpatient Services at a Level 6B Kenyan Hospital

2. INTRODUCTION:

The Outpatient Department (OPD) is a critical component of hospital operations, significantly influencing patient satisfaction, workflow efficiency, and hospital revenue. Despite improvements in administrative processes and patient flow, the time management of doctors remains an underexplored aspect. In resource-constrained settings like Kenya, with diverse healthcare needs and uneven access, OPD efficiency becomes vital. This study seeks to analyze doctor utilization patterns relative to their scheduled and actual service timings in a high-volume Level 6B hospital in Nairobi. The results aim to inform scheduling and performance evaluation strategies to enhance care delivery without financial strain, aligning with Universal Health Coverage (UHC) goals.

3. RESEARCH QUESTION:

Does a delay in doctor arrival influence their overall utilization in OPD settings, and can departure flexibility compensate for lost time?

4. OBJECTIVES:

- To measure the arrival and departure delay patterns of doctors.
- To calculate the utilization rate of doctors based on patient consultations and time present.
- To analyze the correlation between timing deviations and utilization outcomes.

5. HYPOTHESIS:

H1: Delay in doctor arrival is associated with reduced doctor utilization.

6. MATERIAL AND METHODS:

STUDY DESIGN: Descriptive and analytical research design using quantitative data collection and correlation analysis.

SETTING: OPD Specialty wing of a Level 6B tertiary care hospital in Nairobi, Kenya.

STUDY POPULATION: All OPD doctors and patients seen by them during May 2025.

Inclusion Criteria: OPD records with complete time-stamped entries.

Exclusion Criteria: Records with missing timestamps or patient count.

STUDY TOOLS: Hospital OPD attendance and service records.

DURATION OF STUDY: Full month of May 2025.

SAMPLE SIZE: All available OPD service records for May 2025 (total enumeration).

SAMPLING TECHNIQUE: Total enumeration sampling technique.

DATA COLLECTION PROCEDURE: Real-time data from OPD attendance logs and patient consultation counts.

OPERATIONAL DEFINITIONS:

- **Doctor Utilization:** Ratio of time spent consulting patients to total presence time in OPD.
- **Arrival Delay:** Time difference between scheduled and actual arrival.
- **Departure Deviation:** Time difference between scheduled and actual departure.

7. DATA ANALYSIS PLAN:

Analysis will include descriptive statistics for arrival delay, departure deviation, consultation time, and utilization. Scatter plots and regression will assess correlations between doctor timing deviations and utilization. Software used will include Microsoft Excel and IBM SPSS.

8. ETHICAL CONSIDERATIONS:

Informed consent will be obtained. Patient and doctor identities will be anonymized. Data will be stored securely with restricted access to maintain privacy and confidentiality.

9. IMPLICATIONS OF RESEARCH:

This study will help identify timing-related inefficiencies in OPD doctor utilization. It will inform scheduling policies and performance evaluation criteria, improving hospital efficiency, patient satisfaction, and optimal staff deployment in resource-limited settings.

10. REFERENCE:

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