



PHARMACEUTICAL INVENTORY EXPENDITURE ANALYSIS USING ABC-VEN
MATRIX: THE CASE OF EKA KOTEBE GENERAL HOSPITAL, ADDIS ABABA ETHIOPIA

BY

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Declaration

I, the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously in its entirety or in part submitted at any university for a degree.

Signature: _____

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Acronyms and Abbreviations

LIST OF ABBREVIATIONS

ABC ABC Classification on basis of consumption value of item

ADE Annual Drug Expenditure

AHE Annual Hospital Expenditure

EDRS Electronic Drug Record System

EML Essential Medicines List

EOQ Economic Order Quantity

HTC Hospital Therapeutic Committee

MSD Medical Stores Department

NSAID Non-Steroidal Anti-Inflammatory Drugs

TPE Total Pharmaceutical Expenditures

VEN Vital, Essential, Nonessential

VED Vital, Essential, Desirable

WHO World Health Organization

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ABSTRACT

Objective: This study was aimed to analyze Eka kotebe Hospital inventories by using ABC-VED matrix analysis and to identify the medicines requiring strict management control.

Method: The ABC, VEN and ABC-VEN matrix analysis of the medicines used by Eka kotebe Hospital, adis ababa, Ethiopia for the year 2022-2023.

Results: The medicine store inventory of Eka kotebel Hospital consisted of a total of 218 products. The total annual drug expenditure of the store on products issued in 2013-2015 was found to be 259049.4 USD. In the year 2015-2017, 15.14%, 22.47% and 62.39% items were placed into A, B and C category medicines respectively, costing to 70.08 %, 19.87% and 10.05 % of drug expenditure. On VED analysis, 31.19%, 67.43% and 1.38% products were placed into the vital, essential and non-essential categories and the hospital had spent 45.05%, 52.62% and 2.33% of drug expenditure respectively.

On ABC-VEN reconciliation analysis, 39.91%, 59.17% and 0.92% medicines were in group I, II and III respectively and amounting for 80.86%, 18.79% and 0.35% of drug expenditure respectively. **Conclusion:** The study showed that medicines belonging to category I need strict inventory control, also medicines belonging to categories II and III which need control by middle and lower managerial level respectively. ABC-VEN techniques should be applied for efficient use of resources and taking away of wastage and out-of-stock in the secondary level health care facility.

Key words: ABC analysis, ABC-VEN analysis, Pharmacy store, VED analysis.