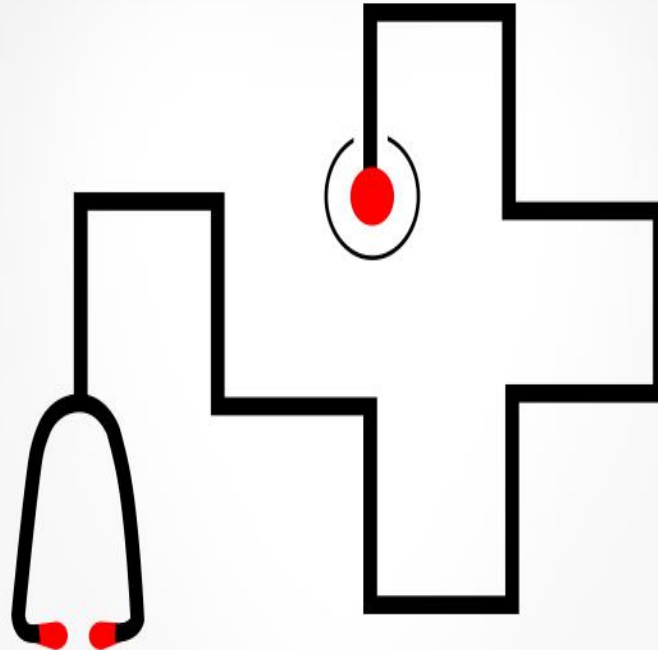




An Analytical study on inventory management of pharmaceutical products in hospital

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Introduction

- Inventory control, a similar term, is the area of inventory management that is concerned with minimizing the total cost of inventory while maximizing the ability to provide customers with product in a timely manner.
- **Objectives of Inventory Control:**
 1. Maximum customer services.
 2. Minimum inventory investment.
 3. Low cost plant operation.

Inventory Control Techniques

- ABC Analysis
- Economic Order Quantity
- Review Of Slow And Non Moving Items
- VED Analysis
- FIFO
- FEFO

Application of Inventory Management in Hospital

- Gives key insights that help eliminating the risk of stock-outs
- Helps in analysing the consumption pattern of medicines
- Minimizes the cost due to rush deliveries during emergencies
- Maintains record of every penny associated to inventory
- Intelligent demand forecasting and purchasing

Objective

- To evaluate present status of demand, consumption pattern and position of pharmaceutical products in stores in order to plan a strategy for optimum utilization of resources.

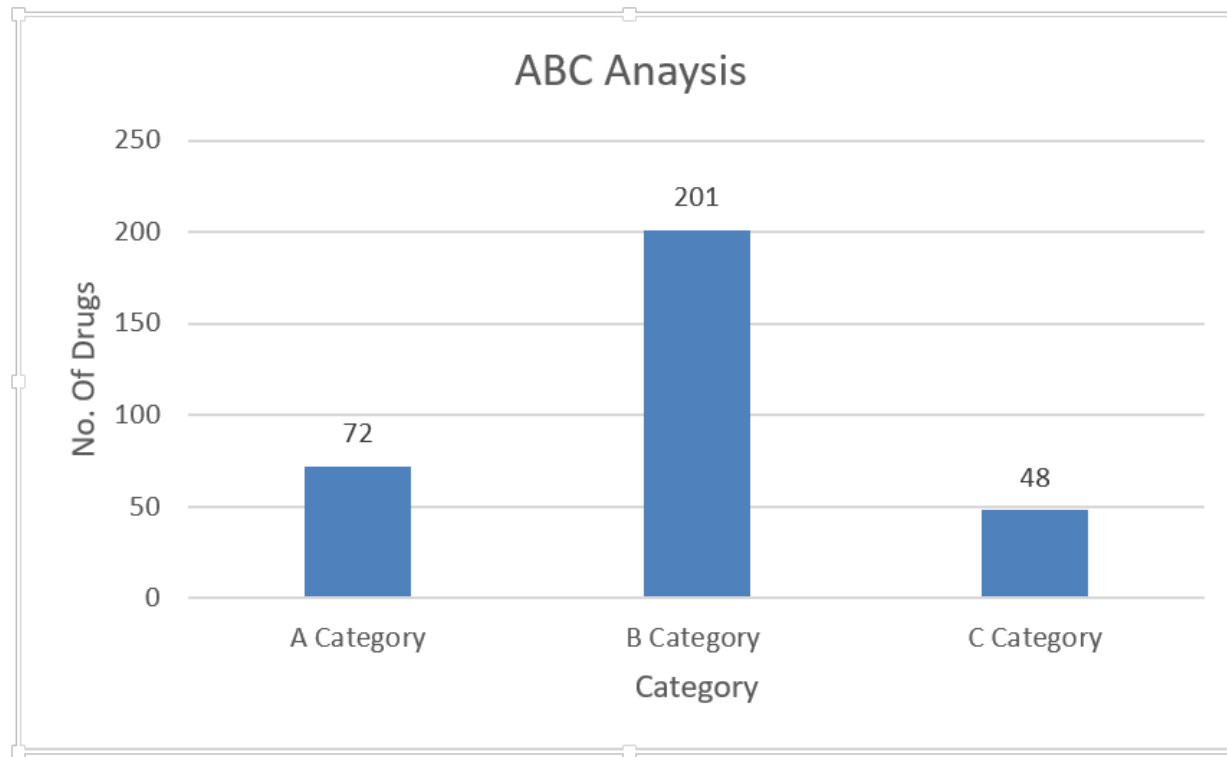
Methodology

S. No.	PARAMETER	DESCRIPTION
1.	Research type	Descriptive Research
2.	Data collection	Secondary
3.	Tools used	•ABC Analysis. •VED Analysis
4.	Sample unit	Material Planning- Deputy Managers
5.	Sampling Technique	Purposive Sampling
6.	Duration	3 Months
7.	Medicines Category	Anti Allergics, Antibiotics, Nutrition, Ayurveda
8.	Analysis of Data	Microsoft Excel

Purpose of the Study

- Inventory control in hospital pharmacy is very essential in a developing country like India. As resources are limited, it is essential that the existing resources be appropriately utilized.
- The purpose of inventory management is to ensure availability of materials in sufficient quantity as and when required and also to minimize investment in inventories.

Data Analysis

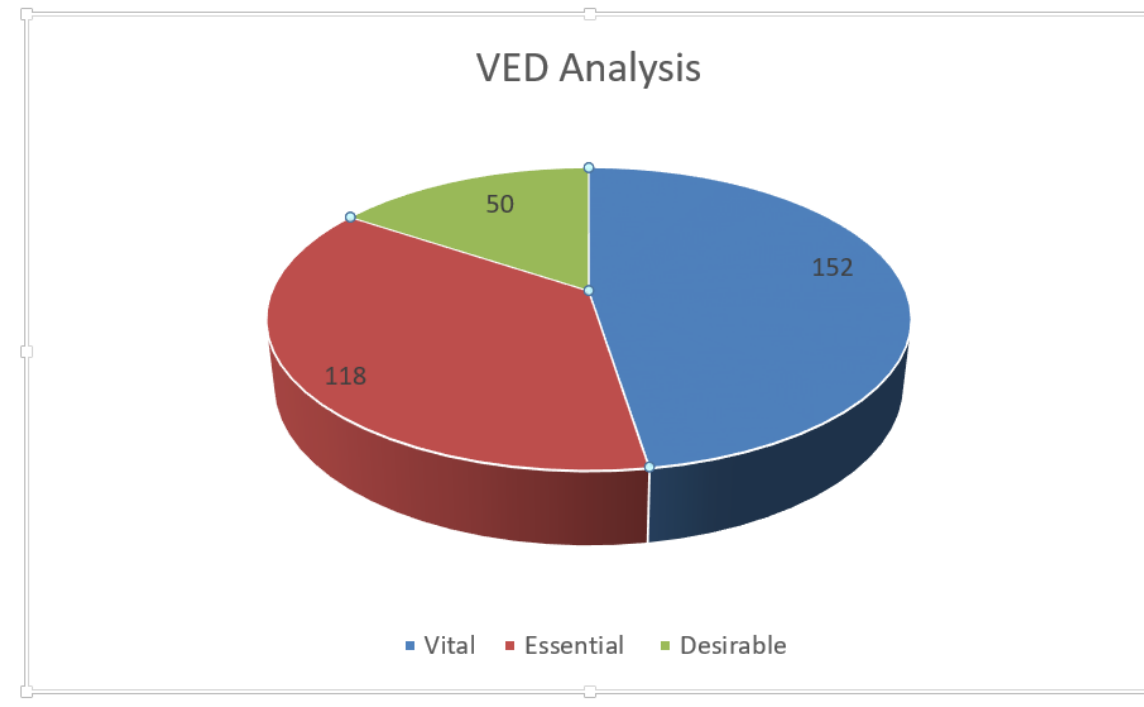


Category A = 72 (22.42%), which includes Anti Allergics, Psychiatry, GIT, Muscle Relaxants, Narcotics drugs

Category B = 201 (62.62%) , which includes Ayurveda, Gynaecology, oncology, Cardiovascular drugs.

Category C = 48 (14.95%), which includes CNS, Endocrine, Respiratory drugs.

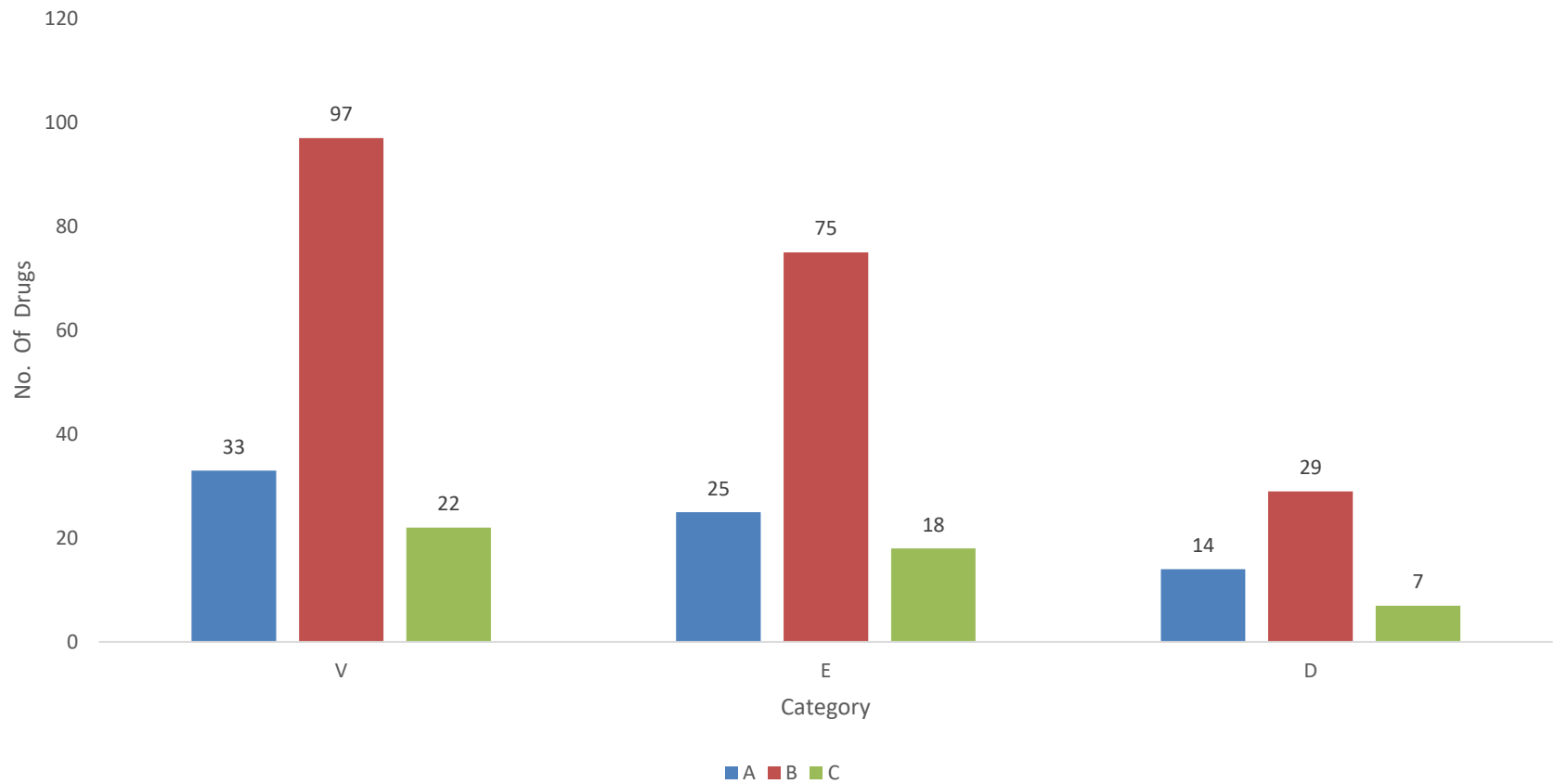
VED Analysis



The findings of the VED analysis of the present study were 152 (47.5%), 118 (36.87%) and 50 (15.62%) items were found to be V, E and D category items, respectively

ABC-VED MATRIX

ABC- VED Matrix Analysis



- In ABC-VED matrix analysis nine different subcategories (AV, AE, AD, BV, BE, BD, CV, CE and CD) were studied using this analysis. These nine were further grouped into three main categories, categories I, II and III. There were 191 (59.68%) items in category I, 122 (38.12%) items in category II and 7 (2.18%) items in category III

Key Findings

- According to ABC analysis **22.43%** of drugs falls under **category A** , **62.62%** of drugs falls in the **category B** followed by **14.95 %** of drugs in **category C**.
- According to VED analysis **47.35%** of drugs comes under **vital category** followed by **36.76% in essential** and **15.58% in desirable** category. Majority of injection comes under vital category.
- **ABC-VED matrix** analysis of the inventory reveals that only **191 (59.68%)** items out of an inventory of 320 drugs belonging to category- I will require maximum attention.

Recommendations

- Drugs belonging to vital category require continuous availability and reasonable safety stock with zero tolerance for stock-out options, whereas Essential items can be adjusted to reduced service level with availability of alternative drugs. Desirable group of items require little managerial control over its availability and stocking decisions.
- Proper Vendor Analysis should be done before placing the order to prevent stockouts
- They should adopt selective inventory control techniques to increase effectiveness and efficiency in management of the medical stores, scientific approach in decision making for purchase, storage and distribution of specific items

Limitations

- It consumes lots of time, needs expenditure
- It is based on secondary data only.
- The Quality of the inventory is not compared in analysis.
- The analysis is based on the internal data which is provided by the organization.

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Thank
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