

Research Article**“STUDY OF DRUG UTILIZATION IN HOSPITAL PHARMACY & AT ITS INVENTORY CONTROL”**Nitu Kushwaha¹, Charanjeet Singh², Anil Godara³¹ M.Pharm. Research Scholar, Department of Pharmacology, Jaipur College of Pharmacy, Jaipur, Rajasthan, India² Associate Professor, Department of Pharmacology, Jaipur College of Pharmacy, Jaipur, Rajasthan, India³ Lecturer, Department of Pharmacology, Jaipur College of Pharmacy, Jaipur, Rajasthan, India

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ABSTRACT

A study was conducted at Mahatma Gandhi Hospital Pharmacy Jaipur to study the inventory control of drug utilized for patient care, with a special focus on the drug expenditure. ABC, VED and ABC-VED matrix analysis techniques would be utilized to study the drug expenditure at the hospital. In materials management, the ABC analysis (or Selective Inventory Control) is an inventory categorization technique. ABC analysis divides an inventory into three categories- "A items" with very tight control and accurate records, "B items" with less tightly controlled and good records, and "C items" with the simplest controls possible and minimal records. There are no fixed thresholds for each class, different proportion can be applied based on objective and criteria. ABC Analysis is similar to the Pareto principle in that the 'A' items will typically account for a large proportion of the overall value but a small percentage of the number items.

Keywords: Hospital pharmacy, VED analysis, ABC Analysis, Economic Order Quantity**INTRODUCTION:**

'A' items are very important for an organization. Because of the high value of these 'A' items' frequent value analysis is required. In addition to that, an organization needs to choose an appropriate order pattern (e.g. 'Just- in- time') to avoid excess capacity^[2-5] 'B' items are important, but of course less important than 'A' items and more important than 'C' items. Therefore, 'B' items are intergroup items. 'C' items are marginally important.

There are no fixed thresholds for each class, different proportion can be applied based on objective and criteria. ABC Analysis is similar to the Pareto principle in that the 'A' items will typically account for a large proportion of the overall value but a small percentage of the number items.

Examples of ABC class are

- 'A' items – 20% of the items accounts for 70% of the annual consumption value of the items.
- 'B' items - 30% of the items accounts for 25% of the annual consumption value of the items.

- 'C' items - 50% of the items accounts for 5% of the annual consumption value of the items.

Another recommended breakdown of ABC classes:

1. "A" approximately 10% of items or 66.6% of value
2. "B" approximately 20% of items or 23.3% of value
3. "C" approximately 70% of items or 10.1% of value

The ABC analysis provides a mechanism for identifying items that will have a significant impact on overall inventory cost .While also providing a mechanism for identifying different categories of stock that will require different management and controls.

How to calculate ABC Analysis

If too much inventory is kept, the ABC analysis can be performed on a sample. After obtaining the random sample the following steps are carried out for the ABC analysis.

- Step 1: Compute the annual usage value for every item in the sample by multiplying the annual requirements by the cost per unit.
- Step 2: Arrange the items in descending order of the usage value calculated above.
- Step 3: Make a cumulative total of the number of items and the usage value.
- Step 4: Convert the cumulative total of the number of items and usage values into a percentage of their grand totals.

VED Analysis: (Vital, Essential & Desirable)

- VED analysis commonly used in hospital inventory management is based on the criticality of an item. "V" is for vital items without which a hospital cannot function, "E" for essential items without which an institution can function but may affect the quality of the services and "D" stands for desirable items, unavailability of which will not interfere with functioning.
- VED analysis therefore encourages you to divide inventory into three groups: vital items, essential items and desirable items. Vital items are critical to keep your business running; essential items are those without which you can function but the quality, speed or cost of service will be damaged; unavailability of desirable items will not affect the functioning of your business but may incur minor costs or short-term disruption. Though this type of classification will be most useful to manufacturers (especially when setting the appropriate levels for drugs), it can be helpful for any business to think about their stock in these terms.

VED Analysis

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We undertook this economic analysis of drug expenditure in **Mahatma Gandhi Hospital Jaipur**.

The VED criticality analysis of all the listed item was performed by classifying the items into vital

(V), essential (E), and desirable categories. The items critically needed for the survival of the patients and those that must be available at all times were included in the V category. The items with a lower criticality need and those that may be available in the hospital were included in the E group. The remaining items with lowest criticality, the shortage of which would not be detrimental to the health of the patients, were included in the D group. The VED status of each item was discussed with justification by a group comprising of physician, surgeon, pediatrician and pharmacist. In private hospital maximum drugs were used a Vital than other category.

ABC-VED matrix analysis

The ABC-VED matrix was formulated by cross-tabulating the ABC and VED analysis. From the resultant combination, three categories were classified (I, II and III). Category I was constituted by items belonging to AV, AE, AD, BV and CV subcategories. The BE, CE and BD subcategories constituted category II, and the remaining items in the CD subcategory constituted category III. In these subcategories, the first alphabet denotes its place in the ABC analysis, while the second alphabet stands for its place in the VED analysis.

Method for ABC-VED matrix analysis

- ❖ ABC-VED matrix analysis was done to classify drugs into Category 1, 2 and 3. Category 1 included drugs requiring top managerial control, whereas category 2 and 3 included drugs requiring middle and lower managerial control respectively.
- ❖ The data from ABC and VED analysis would be further used to perform ABC-VED matrix using the MS-Excel worksheet. The drug were further classified into category 1; category 2; category 3; based on their criticality and cost aspects.
- ❖ Category 1; AV+BV+CV+AE+AD
- ❖ Category 2; BE+CE+BD
- ❖ Category 3; CD

Table 1: Formula of ABC-VED MatrixABC-VED matrix table

| | V | E | D |
|---|----|----|----|
| A | AV | AE | AD |
| B | BV | BE | BD |
| C | CV | CE | CD |

RESULT & DISCUSSION

Table 2: List of ABC Analysis

| Sr. No. | Product name | Packing | Per item cost | Consumption in year | Sale Amt. (consumption value) | Percentage of Total Cost | Category |
|---------|---------------------------------|---------|---------------|---------------------|-------------------------------|--------------------------|----------|
| 1 | AMLOVAS-10 MG. TAB. (15 Tabs) | Strip | 71.45 | 86631 | 6189784.95 | 10.92 | A |
| 2 | ALFOO 10 MG. TAB. (30 Tabs) | Strip | 384.79 | 12811 | 4929544.69 | 8.70 | A |
| 3 | AB FLO CAP. (10 CAP) | Strip | 89 | 53624 | 4772536 | 8.42 | A |
| 4 | ACITROM 2 TAB. (30 Tabs) | Strip | 242.67 | 15382 | 3732749.94 | 6.59 | A |
| 5 | ARKAMIN 30 TAB. (30 PCS) | pack | 41.25 | 50149 | 2068646.25 | 3.65 | A |
| 6 | CALCIMAX 500 MG. TAB. (30 Tabs) | Strip | 229 | 9256 | 2119624 | 3.74 | A |
| 7 | CYMGL TAB (10 PCS) | Strip | 4350 | 501 | 2179350 | 3.84 | A |
| 8 | ACITROM 3 MG. TAB. (30 Tabs) | Strip | 285.77 | 6534 | 1867221.18 | 3.29 | A |
| 9 | ACITROM 4 MG. TAB. 30 Tabs | Strip | 302.29 | 4780 | 1444946.2 | 2.55 | A |
| 10 | ADVENT-625 MG. TAB | Strip | 155.07 | 12036 | 1866422.52 | 3.29 | A |
| 11 | AMLOGARD-10 MG. TAB. (30 PCS) | Strip | 212.85 | 8746 | 1861586.1 | 3.28 | A |
| 12 | CARIPILL TAB (15 Tabs) | Strip | 370 | 4438 | 1642060 | 2.90 | A |
| 13 | A TO Z TAB. 15 Tabs | Strip | 73.14 | 15001 | 1097173.14 | 1.94 | B |
| 14 | AMARYL MV-2 MG TAB | Strip | 230 | 4836 | 1112280 | 1.96 | B |
| 15 | CHYMORAL BR TAB (10 Tabs) | Strip | 162.05 | 8743 | 1416803.15 | 2.50 | A |
| 16 | A TO Z GOLD CAP. 15 Tabs | Strip | 97.28 | 5948 | 578621.44 | 1.02 | B |
| 17 | AB PHYLLINE CAP. 10 Tabs | Strip | 93.14 | 3523 | 328132.22 | 0.58 | B |
| 18 | ACITROM 1 MG. TAB. | Strip | 147.29 | 5462 | 804497.98 | 1.42 | B |
| 19 | ALPRAX 0.5 MG. TAB. (15 Tabs) | Strip | 37.46 | 8813 | 330134.98 | 0.58 | B |
| 20 | AMARYL-1 MG. TAB. (30 Tabs) | Strip | 104.9 | 5775 | 605797.5 | 1.07 | B |
| 21 | AMBULAX TAB 15 Tabs(15 Tabs) | Strip | 60 | 5921 | 355260 | 0.63 | B |
| 22 | AMLOVAS-AT TAB. (15 Tabs) | Strip | 65.95 | 4830 | 318538.5 | 0.56 | B |
| 23 | ANGIREX TAB (10 PCS) | pack | 42 | 7524 | 316008 | 0.56 | B |
| 24 | ATIVAN 1 MG. TAB (30 PCS) | Strip | 57.33 | 5177 | 296797.41 | 0.52 | B |

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|----|-------------------------------------|--------|--------|------|-----------|------|---|
| 25 | BETALOC 50 MG. TAB (30 Tabs) | Strip | 147.48 | 2803 | 413386.44 | 0.73 | B |
| 26 | CARDACE 5 MG. TAB. (10 Tabs) | Strip | 74.7 | 4202 | 313889.4 | 0.55 | B |
| 27 | CARDIVAS 12.5 MG. TAB. (10 Tabs) | Strip | 68.41 | 4687 | 320637.67 | 0.57 | B |
| 28 | CELEX- OD TAB (5 PCS) | Strip | 397 | 1184 | 470048 | 0.83 | B |
| 29 | DESVAL ER 500 MG. TAB. (10 Tabs) | Strip | 105.26 | 3504 | 368831.04 | 0.65 | B |
| 30 | DYNAPRES 0.4 MG CAP (30 Tabs) | Strip | 258.13 | 2175 | 561432.75 | 0.99 | B |
| 31 | ECOBION CAP. (10 CAP) | Strip | 98.54 | 3102 | 305671.08 | 0.54 | B |
| 32 | EMBETA XR 50 MG. TAB. (15 Tabs) | Strip | 116.67 | 5462 | 637251.54 | 1.12 | B |
| 33 | EPILIVE 750 MG TAB (10 Tabs) | Strip | 167.62 | 1850 | 310097 | 0.55 | B |
| 34 | ESOMAC -L CAP (10 PCS) | Strip | 180 | 4562 | 821160 | 1.45 | B |
| 35 | ETOVA MR 400 MG. TAB. (10 Tabs) | Strip | 169.67 | 2986 | 506634.62 | 0.89 | B |
| 36 | EZACT 90 MG. TAB. (10 Tabs) | Strip | 99.07 | 3525 | 349221.75 | 0.62 | B |
| 37 | HYOCIMAX MF TAB. (10 Tabs) | Strip | 95 | 4608 | 437760 | 0.77 | B |
| 38 | A TO Z 200ML SYP. (200 ml) | Bottle | 100 | 150 | 15000 | 0.03 | C |
| 39 | A TO Z DROP (15 ml) | Bottle | 32 | 1082 | 34624 | 0.06 | C |
| 40 | AB PHYLLINE SR 200 MG. TAB. 10 Tabs | Strip | 145.05 | 1515 | 219750.75 | 0.39 | C |
| 41 | AB-FLO SR TAB (10 PCS) | Strip | 135 | 11 | 1485 | 0.00 | C |
| 42 | ABSOLUT 3G CAP. 10 CAP | Strip | 142.06 | 1003 | 142486.18 | 0.25 | C |
| 43 | ABSOLUTE CAP. (10 Tabs) | Strip | 105 | 250 | 26250 | 0.05 | C |
| 44 | ABSOLUTE WOMAN TAB. (10 Tabs) | Strip | 135 | 350 | 47250 | 0.08 | C |
| 45 | ABZORB PWD. (75 gm) | Bottle | 99.22 | 3 | 297.66 | 0.00 | C |
| 46 | ACE PROXYVON TAB 10 Tabs | Strip | 57.58 | 1512 | 87060.96 | 0.15 | C |

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|----|--|--------|--------|------|-----------|------|---|
| 47 | ACE REVELOL 25/2.5 TAB. (10 PCS) | Strip | 120 | 1523 | 182760 | 0.32 | C |
| 48 | ACE REVELOL 50/5 TAB. | Strip | 190 | 1201 | 228190 | 0.40 | C |
| 49 | ACECLO PLUS TAB. | Strip | 59.19 | 23 | 1361.37 | 0.00 | C |
| 50 | ACECLO SR TAB. | Strip | 49.74 | 15 | 746.1 | 0.00 | C |
| 51 | ACEPHAR T4 TAB | pack | 100 | 15 | 1500 | 0.00 | C |
| 52 | ACILOC 150 MG. TAB. | Strip | 51.18 | 2500 | 127950 | 0.23 | C |
| 53 | ACITROM 0.5 MG. TAB. | Strip | 37.11 | 5018 | 186217.98 | 0.33 | C |
| 54 | ACIVIR CREAM (5 gm) | pack | 58.88 | 136 | 8007.68 | 0.01 | C |
| 55 | ACIVIR DT 200 MG. TAB. 10 Tabs | Strip | 83.04 | 1244 | 103301.76 | 0.18 | C |
| 56 | ACIVIR- DT 400 MG. TAB. (5 Tabs) | Strip | 59.12 | 1811 | 107066.32 | 0.19 | C |
| 57 | ACIVIR DT 800 MG. TAB. 5 Tabs | Strip | 152.05 | 1087 | 165278.35 | 0.29 | C |
| 58 | ACPAS- P TAB (10 Tabs) | Strip | 53 | 4542 | 240726 | 0.42 | C |
| 59 | ACTIGUT CAP. (10 TAB) | Strip | 110.27 | 200 | 22054 | 0.04 | C |
| 60 | ACTIVE- D TAB. (10 Tabs) | Strip | 94.2 | 651 | 61324.2 | 0.11 | C |
| 61 | ACUCAL TAB (10 PCS) | Strip | 51.19 | 250 | 12797.5 | 0.02 | C |
| 62 | ACUCLAV 625 MG. TAB. (6 Tabs) | Strip | 75.01 | 1200 | 90012 | 0.16 | C |
| 63 | AD-100 MG. CAP. | Strip | 82.64 | 2000 | 165280 | 0.29 | C |
| 64 | ADCOB CF CAP. 10 Tabs | Strip | 73 | 37 | 2701 | 0.00 | C |
| 65 | ADESAM 200 MG TAB (10 Tabs) | Strip | 260.47 | 50 | 13023.5 | 0.02 | C |
| 66 | ADESAM 400 MG TAB (10 Tabs) | Strip | 431.37 | 78 | 33646.86 | 0.06 | C |
| 67 | ADIZA 10 MG TAB (10 Tabs) | strip | 101.72 | 179 | 18207.88 | 0.03 | C |
| 68 | ADVENT SYP (60 ML) | Bottle | 129.31 | 83 | 10732.73 | 0.02 | C |
| 69 | ADVENT SYP. (30 ml) | Bottle | 129.31 | 158 | 20430.98 | 0.04 | C |

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|----|---------------------------------|-------|--------|------|-----------|------|---|
| 70 | AEROCORT FORTE R/Cap (30 CAP.) | strip | 54.56 | 46 | 2509.76 | 0.00 | C |
| 71 | AEROCORT R/Cap (30 CAP.) | Strip | 60 | 14 | 840 | 0.00 | C |
| 72 | AIRTEC-FB 200 MG. CAP. | Strip | 171.24 | 4 | 684.96 | 0.00 | C |
| 73 | AIRTEC SF 250 CAP. 30 Tabs | Strip | 239.72 | 25 | 5993 | 0.01 | C |
| 74 | AKURIT 3 TAB. (6 PCS) | Strip | 34 | 150 | 5100 | 0.01 | C |
| 75 | AKURIT 4 TAB. 10 Tabs | Strip | 46.06 | 153 | 7047.18 | 0.01 | C |
| 76 | ALAMIN- M FORTE 20 CAP. | Strip | 164.32 | 10 | 1643.2 | 0.00 | C |
| 77 | ALDACTONE-100 MG. TAB (15 Tabs) | Strip | 126.78 | 1023 | 129695.94 | 0.23 | C |
| 78 | ALDACTONE-25 MG. TAB (15 Tabs) | Strip | 27.79 | 1308 | 36349.32 | 0.06 | C |
| 79 | ALDACTONE-50 MG. TAB (15 Tabs) | Strip | 62.84 | 2505 | 157414.2 | 0.28 | C |
| 80 | ALERID TAB. 10 Tabs | Strip | 19.8 | 336 | 6652.8 | 0.01 | C |
| 81 | ALEX LOZENGES (10 PCS) | Strip | 71.5 | 592 | 42328 | 0.07 | C |
| 82 | ALFUSIN 10 MG. TAB. (15 Tabs) | Strip | 164.61 | 385 | 63374.85 | 0.11 | C |
| 83 | ALFUSIN D TAB. 10 Tabs | Strip | 200 | 20 | 4000 | 0.01 | C |
| 84 | ALLEGRA 120 MG. TAB. 10 Tabs | Strip | 126.18 | 738 | 93120.84 | 0.16 | C |
| 85 | ALLEGRA 180 MG. TAB. 10 Tabs | Strip | 139.55 | 786 | 109686.3 | 0.19 | C |
| 86 | ALLEGRA M TAB 10 TAB | Strip | 137.49 | 822 | 113016.78 | 0.20 | C |
| 87 | ALLERCET COLD TAB (10 PCS) | Strip | 53 | 390 | 20670 | 0.04 | C |
| 88 | ALTRADAY CAPS (10 PCS) | Strip | 80 | 1194 | 95520 | 0.17 | C |
| 89 | ALPHA- D3 0.25 MG TAB (10 Tabs) | Strip | 245 | 214 | 52430 | 0.09 | C |
| 90 | ALTRADAY CAPS (10 PCS) | Strip | 80 | 1308 | 104640 | 0.18 | C |

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|-----|-----------------------------------|-------|--------|------|-----------|------|---|
| 91 | ALTHROCIN 250 MG. TAB. (10 Tabs) | Strip | 28.82 | 345 | 9942.9 | 0.02 | C |
| 92 | AMARYL- MP 2 MG TAB (15 PCS) | Strip | 240 | 144 | 34560 | 0.06 | C |
| 93 | AMARYL-2 MG. TAB. (10 Tabs) | Strip | 95 | 11 | 1045 | 0.00 | C |
| 94 | AMARYL-3 MG TAB (10 Tabs) | Strip | 142.06 | 30 | 4261.8 | 0.01 | C |
| 95 | AMARYL-M 1 MG. TAB. (10 Tabs) | Strip | 130.34 | 21 | 2737.14 | 0.00 | C |
| 96 | AMARYL-M FORTE 1 MG TAB | Strip | 94.59 | 502 | 47484.18 | 0.08 | C |
| 97 | AMARYL-M FORTE 2 MG TAB | Strip | 153.99 | 204 | 31413.96 | 0.06 | C |
| 98 | AMBRODIL- XP CAP. (10 Tabs) | Strip | 51.99 | 2433 | 126491.67 | 0.22 | C |
| 99 | AMIFRU 40 MG. TAB. 10 Tabs | Strip | 6.19 | 5560 | 34416.4 | 0.06 | C |
| 100 | AMLOKIND-L TAB (10 PCS) | Strip | 34 | 69 | 2346 | 0.00 | C |
| 101 | AMLOPRES-L TAB. (15 Tabs) | Strip | 109.56 | 122 | 13366.32 | 0.02 | C |
| 102 | AMLOZ 5 MG. TAB. 10 Tabs(10 Tabs) | Strip | 31.46 | 1432 | 45050.72 | 0.08 | C |
| 103 | AMODEP AT TAB 14 Tabs(14 Tabs) | Strip | 19.4 | 156 | 3026.4 | 0.01 | C |
| 104 | AMTAS 5 MG. TAB. 15 Tabs | Strip | 47.71 | 264 | 12595.44 | 0.02 | C |
| 105 | ANAFORTAN TAB (15 PCS) | pack | 79 | 2112 | 166848 | 0.29 | C |
| 106 | APHYREN CAP (10 PCS) | pack | 65 | 2 | 130 | 0.00 | C |
| 107 | ARTE PLUS CD TAB. (6 Tabs) | Strip | 129.99 | 790 | 102692.1 | 0.18 | C |
| 108 | ASCAZIN CAP. (10 PCS) | Strip | 49.4 | 300 | 14820 | 0.03 | C |
| 109 | ATARAX 25 MG. TAB 15 Tabs | Strip | 45.59 | 3978 | 181357.02 | 0.32 | C |
| 110 | ATEN 50 MG. TAB. 14 Tabs | Strip | 32.98 | 583 | 19227.34 | 0.03 | C |
| 111 | AZEE-250 MG. TAB. (6 Tabs) | Strip | 69.27 | 270 | 18702.9 | 0.03 | C |

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|-----|---------------------------------|-------|--------|------|-----------|------|---|
| 112 | B LONG TAB. (30 Tabs) | Strip | 85.97 | 2883 | 247851.51 | 0.44 | C |
| 113 | BACLOF OD 30 TAB (10 Tabs) | Strip | 230 | 250 | 57500 | 0.10 | C |
| 114 | BECOSULES CAP (20 CAP) | Strip | 27.58 | 1925 | 53091.5 | 0.09 | C |
| 115 | BECOZINC CAP. (20 PCS) | pack | 18.91 | 5438 | 102832.58 | 0.18 | C |
| 116 | BECOZYM C FORTE TAB. (15 Tabs) | Strip | 14.47 | 1834 | 26537.98 | 0.05 | C |
| 117 | BENADON 40 MG. TAB. (10 Tabs) | Strip | 14.15 | 1534 | 21706.1 | 0.04 | C |
| 118 | BENALGIS 100 MG. TAB. (10 Tabs) | Strip | 67.54 | 1412 | 95366.48 | 0.17 | C |
| 119 | BENEFICIALE CAP. (15 Tabs) | Strip | 135.92 | 50 | 6796 | 0.01 | C |
| 120 | BENFOMET PLUS TAB. (10 Tabs) | Strip | 143.45 | 5 | 717.25 | 0.00 | C |
| 121 | BENZ CAP. (12 CAP) | Strip | 77.75 | 2681 | 208447.75 | 0.37 | C |
| 122 | BETACAP 10 MG. TAB. (10 Tabs) | Strip | 10.74 | 1042 | 11191.08 | 0.02 | C |
| 123 | BETACARD-25MG TAB (14 PCS) | pack | 35 | 15 | 525 | 0.00 | C |
| 124 | BETAMORE -G CAP (60 PCS) | pack | 260 | 180 | 46800 | 0.08 | B |
| 125 | BETAVERT 16 MG. TAB. (10 Tabs) | Strip | 92.73 | 494 | 45808.62 | 0.08 | C |
| 126 | BETNESOL TAB. (20 Tabs) | Strip | 7.5 | 1232 | 9240 | 0.02 | C |
| 127 | BEVON CAP. 15 Tabs(15 Tabs) | Strip | 72.44 | 1905 | 137998.2 | 0.24 | C |
| 128 | BEXOL DT 50 MG TAB (50 Tabs) | Strip | 55 | 36 | 1980 | 0.00 | C |
| 129 | BIFILAC CAP. (10 CAP) | Strip | 95.12 | 1406 | 133738.72 | 0.24 | C |
| 130 | BILOVAS TAB. (10 Tabs) | Strip | 148.14 | 1302 | 192878.28 | 0.34 | C |
| 131 | BIO D 3 CAP. (10 Tabs) | Strip | 132.92 | 310 | 41205.2 | 0.07 | C |
| 132 | BIODIC TAB. (10 Tabs) | Strip | 28.72 | 1432 | 41127.04 | 0.07 | C |

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|-----|--------------------------------|--------|--------|------|-----------|------|---|
| 133 | BIOPEN 40 MG TAB. (10 Tabs) | Strip | 65 | 1342 | 87230 | 0.15 | C |
| 134 | BIOPREG F TAB. (10 Tabs) | Strip | 62.15 | 1284 | 79800.6 | 0.14 | C |
| 135 | BISPEC 10 MG. TAB (15 Tabs) | Strip | 522.74 | 189 | 98797.86 | 0.17 | C |
| 136 | BRILINTA 90 MG TAB (14 Tabs) | Strip | 666.66 | 89 | 59332.74 | 0.10 | C |
| 137 | BUDECORT 400 R/C (30 CAP) | Bottle | 97.84 | 12 | 1174.08 | 0.00 | C |
| 138 | BUDETROL 100 R/C (30 CAP) | Bottle | 105 | 45 | 4725 | 0.01 | C |
| 139 | BUSCOGAST TAB (10 Tabs) | Strip | 27.07 | 4625 | 125198.75 | 0.22 | C |
| 140 | BUTA PROXYVON CAP (10 CAP.) | Strip | 27.07 | 968 | 26203.76 | 0.05 | C |
| 141 | CALAPTIN 80 MG. TAB. (10 Tabs) | Strip | 14.22 | 160 | 2275.2 | 0.00 | C |
| 142 | CALCITAB (15 PCS) | Strip | 74 | 1346 | 99604 | 0.18 | C |
| 143 | CALPOL 500 MG TAB. (15 Tabs) | Strip | 12.86 | 1350 | 17361 | 0.03 | C |
| 144 | CALRADO PLUS CAP (10 Tabs) | Strip | 185 | 650 | 120250 | 0.21 | C |
| 145 | CALSHINE-D TAB (10 PCS) | Strip | 73 | 120 | 8760 | 0.02 | C |
| 146 | CALTUF TAB (10 PCS) | Strip | 117 | 452 | 52884 | 0.09 | C |
| 147 | CANDIFORCE-200MG CAP (4 PCS) | pack | 85 | 16 | 1360 | 0.00 | C |
| 148 | CARCA 3.125 MG. TAB. (15 Tabs) | Strip | 35 | 3651 | 127785 | 0.23 | C |
| 149 | CARDIBETA XR-25MG TAB (10 PCS) | Strip | 35 | 634 | 22190 | 0.04 | C |
| 150 | CEFTUM 500 MG. TAB. (4 Tabs) | Strip | 323.28 | 279 | 90195.12 | 0.16 | C |
| 151 | CETZINE TAB. (10 Tabs) | Strip | 15.91 | 3377 | 53728.07 | 0.09 | C |
| 152 | CILACAR 10 MG. TAB. (10 Tabs) | Strip | 67.28 | 1451 | 97623.28 | 0.17 | C |
| 153 | CIPLOX TZ TAB. (10 Tabs) | Strip | 96.4 | 495 | 47718 | 0.08 | C |

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|-----|-----------------------------------|-------|--------|------|-----------|------|---|
| 154 | CLAVIX-75 MG. TAB. (15 Tabs) | Strip | 87.99 | 1667 | 146679.33 | 0.26 | C |
| 155 | CLINDATEC 300 MG CAP (8 PCS) | pack | 174 | 76 | 13224 | 0.02 | C |
| 156 | CLINDATIME 300 MG. CAP. (10 Tabs) | Strip | 127.02 | 91 | 11558.82 | 0.02 | C |
| 157 | CLIP MF TAB. (6 Tabs) | Strip | 96.1 | 121 | 11628.1 | 0.02 | C |
| 158 | CLONAFIT 0.50 MD TAB (10 PCS) | Strip | 29 | 70 | 2030 | 0.00 | C |
| 159 | CLONAFIT BETA TAB. (10 Tabs) | Strip | 36.57 | 5227 | 191151.39 | 0.34 | C |
| 160 | CLONOTRIL 0.5 MG. TAB (15 Tabs) | Strip | 42.68 | 112 | 4780.16 | 0.01 | C |
| 161 | COLIMEX TAB (10 PCS) | Strip | 20 | 1707 | 34140 | 0.06 | C |
| 162 | COLINOL TAB. (10 Tabs) | Strip | 29.7 | 1034 | 30709.8 | 0.05 | C |
| 163 | COMBIFLAM TAB. (15 Tabs) | Strip | 25.28 | 57 | 1440.96 | 0.00 | C |
| 164 | CYNOMYCIN 50 MG TAB (6 PCS) | Strip | 155 | 120 | 18600 | 0.03 | C |
| 165 | DAFLON 500 MG. TAB. (10 Tabs) | Strip | 98.53 | 107 | 10542.71 | 0.02 | C |
| 166 | DALACIN C 150 MG. CAP (10 Tabs) | Strip | 127.73 | 636 | 81236.28 | 0.14 | C |
| 167 | DAZIT M TAB (10 PCS) | Strip | 135 | 165 | 22275 | 0.04 | C |
| 168 | DEFCORT 12 MG TAB. (6 Tabs) | Strip | 100 | 30 | 3000 | 0.01 | C |
| 169 | DEPRAN-H TAB (10 PCS) | pack | 90 | 140 | 12600 | 0.02 | C |
| 170 | DEPSONIL 25 MG. TAB. (10 Tabs) | Strip | 8.3 | 359 | 2979.7 | 0.01 | C |
| 171 | DERIPHYLLIN RETARD TAB (30 PCS) | pack | 26 | 751 | 19526 | 0.03 | C |
| 172 | DEXAM 4MG TAB (4 PCS) | pack | 15 | 160 | 2400 | 0.00 | C |
| 173 | DIBETA- SR 1 GM TAB (10 PCS) | pack | 42 | 130 | 5460 | 0.01 | C |

| | | | | | | | |
|--------|-----------------------------------|-------|--------|------|-------------|------|---|
| 174 | DICLORAN- A TAB. (10 Tabs) | Strip | 41.11 | 3392 | 139445.12 | 0.25 | C |
| 175 | DILZEM 30 MG. TAB. (15 PCS) | Strip | 30 | 8653 | 259590 | 0.46 | C |
| 176 | DIVALGRESS 250 MG TAB (10 PCS) | pack | 51 | 2658 | 135558 | 0.24 | C |
| 177 | DOLO 650 MG. TAB. (15 Tabs) | Strip | 24.93 | 1505 | 37519.65 | 0.07 | C |
| 178 | DOM DT 20 MG. TAB. (10 Tabs) | Strip | 56.19 | 2734 | 153623.46 | 0.27 | C |
| 179 | ECOSPRIN 150 MG. TAB. 14 Tabs | Strip | 7.44 | 5895 | 43858.8 | 0.08 | C |
| 180 | EIDO TAB. (10 Tabs) | Strip | 52.8 | 60 | 3168 | 0.01 | C |
| 181 | FAROBACT 200 MG. TAB. (6 Tabs) | Strip | 386.78 | 300 | 116034 | 0.20 | C |
| 182 | FOL 123 CAP (15 Tabs) | Strip | 110.84 | 162 | 17956.08 | 0.03 | C |
| 183 | FRUSELAC TAB. (10 Tabs) | Strip | 27.44 | 296 | 8122.24 | 0.01 | C |
| 184 | GARDENAL 60 MG.TAB (30 Tabs) | Strip | 80 | 300 | 24000 | 0.04 | C |
| 185 | HATRIC 3 MG. TAB. 10 Tabs | Strip | 30.75 | 500 | 15375 | 0.03 | C |
| 186 | L CIN OZ TAB. (10 Tabs) | Strip | 65.74 | 61 | 4010.14 | 0.01 | C |
| 187 | LANZOL JUNIOR 15 MG. TAB. | Strip | 6.99 | 50 | 349.5 | 0.00 | C |
| 188 | LASIX 40 MG. TAB. 15 Tabs | Strip | 6.99 | 3 | 20.97 | 0.00 | A |
| 189 | LCZ 5 MG. TAB. 10 Tabs | Strip | 16.62 | 72 | 1200 | 0.00 | C |
| 190 | AZTOR-20 MG. TAB. (10 Tabs) | Strip | 122.24 | 241 | 29459.84 | 0.05 | C |
| 191 | AIRTEC FB 400 R/C (30CAP) | Strip | 200 | 43 | 8600 | 0.02 | C |
| Total= | | | | | 56684679.42 | 100% | |

CALCULATION:

- Total drugs were used 191 remaining drugs which cumulative cost was a 0.00 or its less than these were not used.
- Total consumption value = 56684679.42
- Total drugs were found in category A = 14 (7.32%) Total consumption on A category = 36091295.95 (63.67% of total consumption).

- Total drugs were found in category B = 12 (6.28%)
- Total consumption on B category = 12006362.46 (6.28%).
- Total drugs were found in category C = 165 (86.38%) Total consumption on C category = 8587020.99 (15.14%).

Table 3: Calculation of ABC Analysis

| CATEGORY | NUMBER OF ITEM | CONSUMPTION VALUE | PERCENTAGE CONSUMPTION | PERCENTAGE OF ITEM |
|----------|----------------|-------------------|------------------------|--------------------|
| A | 14 | 36091295.95 | 63.67% | 7.32% |
| B | 12 | 12006362.46 | 21.19% | 6.28% |
| C | 165 | 8587020.99 | 15.14% | 86.38% |

ABC Analysis: Out of the 191 drugs listed. Around 7.32% of the drug were found of category A (14 drugs).

In B category 6.28% drugs were found (12 drugs), while the remaining 86.38% of the drug (165 drug) were a C category.

7.32% of drugs accounted for 63.67% of consumption.(14 drugs) 6.28% of drugs accounted for 21.19% of drug of consumption (12 drug) and the remaining drugs i.e 86.38% of drugs were responsible for only 15.14% of total consumption (165drugs).

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