

The Pareto Method - A Beneficial Management Method for Increasing Profitability in the Drugs Market

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Abstract

The management methods represent the multitude of means and procedures with the help of which the management influences the approach to the elements of the driven system in order to obtain the established objectives. Contemporary organizations management can no longer be achieved without the use of scientific methods that allow the appreciation and efficient use of objective economic laws, the efficient and rational use of resources, the stimulation and use of creativity of employees and managers and the correct appreciation of results. Pareto analysis is a modern management method, very valuable to increase the profitability of companies and increase the efficiency of an organization. This paper aims to select the best ranked pharmaceuticals using Pareto analysis. The paper studies the values from 10 different community pharmacies in the city of Constanta, over a period of 12

months. In respect to the localization criteria, the pharmacies were selected from all regions of the city, from the center to the more external neighbourhoods. We highlighted the importance of the Pareto method in the selection of the most valuable preparations in the community pharmacies in Constanta. The obtained results indicate that the Pareto analysis is an important tool that can be used with great effect by the pharmacy manager.

Keywords: Pareto method, management, drugs market

Introduction

Management methods represent the multitude of means and procedures with the help of which the management influences the elements approach of the driven system in order to obtain the established objectives. Contemporary organizations management can no longer be achieved without the use of scientific methods that allow the appreciation and efficient use of objective economic laws, efficient and rational use of resources, stimulating and using the creativity of employees and managers and correct appreciation of results [1]. The first part of the paper shows the Pareto analysis, which is a modern management method, very valuable in order to increase the profitability of companies and increase the efficiency of the organization in question. Decision-making aspects are also improved, as they are crucial elements of management, with decisions developed and implemented being an important basis for the quality level of management [2]. This paper aims to select the best valued preparations with the help of the Pareto analysis.

The Pareto method was used to establish the most vital medicines released from the pharmacy in terms of sales made and in the process of supplying community pharmacies. The importance of applying the Pareto method to the process was highlighted by selecting the most important prescriptions and elaborations of pharmacy preparations. Modern management methods have been applied to improve the system and reduce errors in the community pharmacy.

Pharmaceutical management activities

Management is given a special place in any organization or company. In many cases, a pharmacy operates on principles similar to those of an ordinary company. Thus, the pharmaceutical management has the following roles:

- An important role in decision making and establishing the pharmacy policy is the setting of objectives by the manager, in order to streamline all the processors that will follow. The manager must set a group of main, basic goals that have a rather philosophical role, and then he must set a group of specialized, well-defined goals, such as achieving a certain turnover, on a

certain period of time. The manager must continuously check and improve objectives, and must be adaptable to market alterations.

- Human and material resources largely depend on goal setting. In the case of pharmacies, it is often the case that the same person performs both functions at the same time, which is not feasible in the long run and leads to a decrease in efficiency. Management aims to establish organizational structures and coordinate them in order to increase workplace efficiency as much as possible.
- Planning and controlling the current and upcoming activities is very important. The manager devotes a large part of his time from one day to the control of daily activities, this often leading to altering the time allocated for future activities. In this regard, routine activities should be delegated to other people, so that managers are allowed a better allocation of their own time.

Pareto analysis

Pareto analysis, also known as the Pareto law or the 80/20 rule, is one of the modern methods of management. This allows users to choose the important elements of a business or activity. This model was discovered by Vilfredo Pareto, an Italian economist, in 1897, which is where the name of this analysis comes from. From this analysis it was concluded that 80% of the effects or results come from 20% of causes or sometimes from a much smaller portion of strong forces [3].

Rule 80/20 is not a strict formula and shows us that in any activity, some things are probably more important than others. In some cases the ratio of 70/30 between results and causes is much more plausible than the 80/20, but in very few cases 50% of cases lead to 50% results [4]. The 80/20 analysis can show us that a minority of causes generate in most cases a majority of results.

Pareto analysis is used in most cases to alter the relationships they approach in order to use them in a higher percentage.

Company management is constantly facing many difficulties that must be solved in the shortest possible time and at the best possible cost. A crucial element of management is the decision, which is influenced by various methods used. The use of a modern method is usually due to the high complexity of the problems encountered, the novelty of the problems, the time required to solve the problems, etc. [5].

Research regarding the value of community pharmacies preparations from Constanta, Romania

The paper studies the values from 10 different community pharmacies from the city Constanta, over a period of 12 months. The materials studied were taken from the 10 community pharmacies preparation books, from 01.05.2021-01.05.2022. In order to respect the localization criteria, the pharmacies were selected from all regions of the city, from the center to the more external neighbourhoods.

For every pharmacy included in the study, the following data has been taken into consideration: the date, the compounding act number, the preparation, its value and its price in RON (lei) [6, 7].

Table 1 below shows the preparation values from the 10 pharmacies taken into the study, referred to F1 to F10.

From the results of Table 1 it can be noticed that the total number of preparations taken into this study was 10. The total values in RON vary a lot from 20548 to 1296 lei. Three formulations can be highlighted that appear in all the pharmacies, the oxygenated water, the Petrini paste and the rivanol solution. Other preparations that are also present in most pharmacies are diluted alcohol, borax glycerine, tincture of iodine and ichtiol ointment. A classification of the total value of the preparations has been made (Table 2).

Table 1. The preparations values in RON, from the 10 pharmacies, in the period 01.05.2021 – 01.05.2022

No	Preparations	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
1	Boricated Alcohol 4%	125	-	-	-	330	26	383	-	-	-
2	Borax Glycerine 10%	1980	22	-	122	313	178	414	77	98	49
3	Menthol Mixture	1780	-	580	-	878	212	1038	77	49	277
4	Rivanol Solution 1‰	2660	543	490	467	980	260	980	55	88	244
5	Ichtiol Ointment 10%	760	-	160	243	150	88	150	14	113	123
6	Salicylic Ointment 5%	-	-	-	-	-	55	-	24	-	-
7	Petrini Paste	8900	480	880	1450	9800	1655	1713	440	650	4210
8	Tincture of Iodine 2%	513	-	388	855	-	88	180	-	66	513
9	Oxygenated Water 3%	2800	488	513	330	980	177	1090	22	133	190

10	Diluted Alcohol	1030	680	-	880	-	390	855	113	99	590
	Total	20548	2213	3011	4347	13431	3129	6803	822	1296	6196

Table 2. Total classification of the total value in RON and the percentage from the total value of the formulations

No.	Preparations	Total value of the preparations in RON	% of the total value of the preparations
1	Boricated Alcohol 4%	864	1.39
2	Borax Glycerine 10%	3253	5.26
3	Menthol Mixture	4891	7.91
4	Rivanol Solution 1‰	6767	10.95
5	Ichtiol Ointment 10%	1801	2.91
6	Salicylic Ointment 5%	79	0.12
7	Petrini Paste	30178	48.83
8	Tincture of Iodine 2%	2603	4.21
9	Oxygenated Water 3%	6723	10.87
10	Diluted Alcohol	4637	7.5
	Total	61796	100

From Table 2 there can be observed that the Petrini Paste represents the most valuable preparation with 48.83% from the total value of the formulations.

Conclusions

The study has been conducted on 10 community pharmacies from Constanta, in a period of 12 months, from 01.05.2021 to 01.05.2022.

We highlighted the importance of the Pareto method in selecting the most valuable preparations in community pharmacies in the city of Constanta. The results obtained validates the Pareto method, 5 of the 10 formulations taken into the study gave an approximately 80% of the total value of the pharmaceutical formulations.

The obtained results indicate the fact that the Pareto analysis represents an important tool that can be used to great effect by the pharmacy manager.

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