

EXPLORING ECONOMIC AND QUALITATIVE ASPECTS OF DRUG USE IN A PENITENTIARY INSTITUTE



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BACKGROUND AND IMPORTANCE

Penitentiary institutes contain a population of prisoners or interned who, from the moment they enter the prison, they bring with them their personal experience of discomfort that results in the concentration in a single environment of physical, mental and behavioral diseases. The direct consequence is the use of a large number of drugs. The activities of the hospital pharmacy include the distribution of drugs to penitentiary institute.

AIM AND OBJECTIVES

The objective of the study was to analyse the use of drugs in the prison population strongly influenced by the contingent situation and which has a high demand for health needs.

MATERIAL AND METHODS

A study was conducted to examine data of drugs required from the penitentiary institute in terms of quantity expressed in dosage units and costs from the data consumption of hospital medicines in the three-year period 2019-2021.

RESULTS

Total cost of medicine consumption



2019	103.522,9 €
2020	81.484,31 €
2021	86.525,72 €

ATC 1st level: Highest consumption value

N: Nervous system 

A: Alimentary tract and metabolism 

C: Cardiovascular system 

The total cost of medicine consumption in the penitentiary institution considered is 103.522.9 € in 2019, 81.484.31 € in 2020, down by 21.2% compared to the previous year and 86.525.72 € in 2021 ($\Delta\%$ 21-20 = +5.8). Analyzing the first level of Anatomical Therapeutic Chemical (ATC) classification system, the highest consumption value is related to drugs for the nervous system (N), followed by those active on alimentary tract and metabolism (A) and cardiovascular drugs (C). By analyzing cost, the highest value is observed for the category of drugs for the nervous system, 68% in 2019-2020 of the total cost and 61% in 2021.

Most used substances in three-year period

Valproic Acid

Quetapine



Substances with the greatest cost

Clonazepam

Aripiprazole

Promazine 

Drugs active on alimentary tract and metabolism represents the 7% in 2019 -2020 and 11% in 2021 respectively. The therapeutic category with the highest consumption are psycholeptics, antiepileptics and drugs for disorders related to acid secretion. Among the substances with the greatest cost are clonazepam and aripiprazole in 2019-2020, while in 2021 is promazine. Valproic acid and quetiapine are the most used substances in the three-year period.

Therapeutic category Highest consumption

Psycholeptics

Antiepileptics

Drugs for disorders related to acid secretion

CONCLUSION AND RELEVANCE

The data described the use of drugs in a penitentiary institute emphasized the high pharmacological burden consequence of many pathologies in this population. In fact, psychotropic drugs are the most commonly used substances. This data is related to the presence of neuro-psychiatric disorders in prisoners.

