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MAIN NON-STANDARDIZED MEDICINES AND THE FINANCIAL IMPACT ON THEIR PURCHASE IN A TEACHING HOSPITAL IN THE NORTHERN CEARÁ ZONE

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ABSTRACT

Introduction: In the hospital, the pharmacy aims to ensure the safe and rational use of medicines that will be prescribed by the doctor through a planning in the purchase of medicines and hospital materials. Only the products included in the list of standardized drugs are purchased in a programmed manner by the hospital and are available for use. **Materials and methods:** This is a descriptive, observational, exploratory, retrospective study of a quantitative approach. **Results:** It was observed that in both years of our study that non-standardized drugs most consumed are not necessarily the highest financial values. **Discussion:** of the 1,590 prescriptions that arrived at the pharmacy of a teaching hospital in Rio Grande do Norte, 313 were related to non-standard medications. Of these, the same requests of our study were: anti-inflammatory (15.65%), neuroleptic (14.78%), antiepileptic (9.57%), antimycotic (6.96%). **Conclusion:** Among the purchase requests sent to the hospital pharmacy, it was possible to identify that in both years of our study, the most commonly used non-standardized medications are not necessarily the ones with the highest financial values. Taking Linezolina 600 mg in both 2015-2016 and 2016-2017 the highest value drug purchased.

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INTRODUCTION

In the hospital, the pharmacy aims to ensure the safe and rational use of medicines that will be prescribed by the doctor through a planning in the purchase of medicines and hospital materials. Only the products included in the list of standardized drugs are purchased in a programmed manner by the hospital and are available for use (SANTANA, 2014). Drug standardization (DS) is a fundamental instrument in the process of drug use, since it ensures the correct use of medicines, besides providing a better institutional and

economic resolution of resources, without compromising quality (FILHO, 2010). The objective of standardization is to rationalize the use of medicines, to purchase only products with proven therapeutic value, to reduce the number of medications in stock, to increase their control and to expedite the dispensing, to rationalize storage spaces, to enable distribution through the unit dose system (SANTANA, 2014). The benefits generated from PM range from cost reduction in a safe and effective way to rationalization of the number of medicines, facilitating the activities of purchase, storage, planning and control of medicines (CAVALLINI and BISSON, 2002). Standardization along with distribution control is one of the ways that can ensure that the institution survives financially. There is also a need for other tools that

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complement the existing clinical protocols and thus ensure that the participation of the pharmacist in the stage of drug selection will contribute to the safe standardization of medicines (BARBOSA, 2014). With this in mind, the World Health Organization (WHO) establishes and provides annually the National List of Essential Medicines (RENAME), which consists of medicines that meet the health needs of the population. Brazilian policies reinforce that the adoption of Essential Medicines should be understood as a tool to nationalize sanitary actions within the scope of pharmaceutical care (BRAZIL, 2010). RENAME is an important instrument that supports the decision-making of health professionals and managers, in which it contributes to the correct, effective and safe use of the medicine (WANNMACHER, 2010). Therefore, PM has a direct correlation with what is recommended by the Ministry of Health in the institutions linked to the Unified Health System (SUS) (CAVALLINI and BISSON, 2002). The selected drugs need to meet the needs of the population and each hospital in a unique way so that there is a balance between the standardized drugs and the patients' needs (WHO, 2003; BRAZIL, 2011).

MATERIALS AND METHODS

This is a descriptive, observational, exploratory, retrospective study of a quantitative approach. The research was carried out in a Teaching Hospital of the Northern Zone of the State of Ceará (Hospital Santa Casa de Misericórdia de Sobral - HSCMS). This is a sentinel network hospital belonging to the brotherhood of the Holy House of Mercy. It is a teaching hospital, a regional philanthropic hospital, with 92% of its area dedicated to the Unified Health System (SUS). It currently has 411 beds, being a large hospital, performing a current average of 22 thousand hospitalizations. Its geographic coverage covers the demand of 75 municipalities, with around 1,750,000 inhabitants, being a reference center in health for the entire northern region of Ceará (ALBUQUERQUE, 2012). For the present study, the data referring to non-standardized medication purchases at the Hospital were considered in a computerized system, MV 2000i®, of all patients admitted to the HSCMS from March 2015 to March 2017. Data collection was through the Hospital Management Program MV 2000i®, a software for internal use. All data were extracted on-line, with no clinical visits or analysis of medical records.

RESULTS

In the period from 2015 to 2017, the central pharmacy of the Santa Casa de Misericórdia Hospital (HSCMS) received 684 requests for non-standardized medications to purchase them. In the first year of research (2015-2016) were 311 requests and in the second year of research (2016-2017) 373 requests. The results showed that among the requests sent in the two years surveyed, 247 different types of medications were requested. Being 112, in the first year and 135 in the second year. In tables 1 and 2 below we highlight the 15 non-standard medicines requested according to the most relevant financial value. Baclofen 10mg tablet (241 units requested, totaling 8.77%), Depakene 500mg tablet (203 requests analyzed, totaling 7.29%) and Topiramato 25mg tablets were analyzed in the first year (2015-2016) (161 requests totaling 5.78%). However, with regard to the financial value spent, Linezolida 600mg bag 300mL was the one with the highest value, where 55 requests were made with a total cost of 12,448.27.

Table 1. Main non-standard drugs requested by special purchase order with greater financial relevance in the first year

Main non-standard drugs requested 2015-2016			
Name of medicines	Amount of request	Unit Value R\$	Amount R\$
Linezolide 600mg 300mL Bag	55	226,33	12.448,27
Nystatin + Zinc Oxide Ointment	49	36,26	1.777,22
Secnidazole 1000mg Tablet	36	8,96	322,88
Ibuprofen 30 ml bottle	21	14,05	295,24
Topiramate 25mg Tablet	161	1,80	290,18
Anidra Caffèine 10mg / mL	17	16,51	280,73
Gabapentin 300mg Capsule	130	2,11	274,67
Revectin 6mg Tablets	46	5,74	264,38
Clopidogrel 75mg Tablet	49	4,58	224,55
Depakene 500mg Tablet	203	1,13	207,03
Baclofen 10mg Tablet	241	0,85	205,62
Noripurum Ampola EV 5mL	18	11,40	205,27
Risperindon 2mg Tablet	45	4,54	204,51
Sabril 500mg Tablets	49	4,16	204,12
Tobrex Eye drops	10	15,33	153,30

Table 2. Main non-standard drugs requested by special purchase order with greater financial relevance in the second year

Main non-standard drugs requested 2016-2017			
Name of medicines	Name of medicines	Name of medicines	Name of medicines
Linezolide 600mg 300mL Bag	107	222,31	23.787,82
Prostin 250mcg /mL Ampoule	23	400,00	9.200,00
Ganciclovir 500mg Bottle Ampoule	88	57,80	5.087,07
Gabapentin 300mg Capsules	403	2,62	1.059,04
Levetiracetam (keppra) susp. 100ml	11	85,35	938,85
Nystatin + Zinc Oxide Ointment	28	32,34	905,75
Sabril 500mg Tablet	198	3,83	758,89
Lamotrigine 50mg Tablets	302	1,99	603,60
Frisium 10mg Tablet	785	0,72	570,30
Noripurum 50mg / mL 30mL Drops	18	31,65	569,84
Baclofen 10mg Tablet	604	0,91	553,08
Clarithromycin 500mg f.a.	9	58,75	528,75
Revectin 6mg Tablets	64	6,85	438,78
Trilepal 6%	601	0,65	395,99
Topiramate 50mg Tablets	119	3,20	381,63

In the second year, the most requested drugs were Frisium 10mg tablet (785 units requested, totaling 11.71%), Baclofen 10mg tablet (604 units requested, totaling 9.01%) and Trilepal 6% (601 units requested, totaling 8, 96%). However, in relation to the financial value spent, Linezolida 600 mg was the one with the highest value, with 107 requests with a total cost of 23,787.82, followed by Prostin 250mcg / mL with 23 requests with a cost of 9,200.00 and Ganciclovir 500mg with 88 requests with a total value of 5,087.07.

DISCUSSION

According to Araújo (2011), of the 1,590 prescriptions that arrived at the pharmacy of a teaching hospital in Rio Grande do Norte, 313 were related to non-standard medications. Of these, the same requests of our study were: anti-inflammatory (15.65%), neuroleptic (14.78%), antiepileptic (9.57%), antimycotic (6.96%). Zuliani (2012), describes that the drugs that have a higher consumption were not as impacting in the budgets of the units as those of greater cost. The highest consumptions occurred for items of lower unit value. Where it was also observed in our study that the most consumed are not necessarily the ones with higher financial values.

Conclusion

The research made it possible to evaluate and compare annually the financial impact of the purchase of non-standard drugs in a Teaching Hospital of the Northern Region of Ceará. The objectives of this study are considered, where the non-standardized medication requests sent by the central pharmacy of the Hospital de Ensino were verified. Through the amounts spent on the purchase of these medicines and the most requested medicines. Among the purchase requests sent to the hospital pharmacy, it was possible to identify that in both years of our study, the most commonly used non-standardized medications are not necessarily the ones with the highest financial values. Taking Linezolina 600 mg in both 2015-2016 and 2016-2017 the highest value drug purchased. Therefore, it is concluded that the standardization of medication for hospital use is of paramount importance, as it results in a reduction of expenses and an improvement in the patient's quality of life. For this to happen it is imperative that a multiprofessional team work in an active and effective manner. The participation of the pharmacist in the Pharmacy and Therapeutics Committee is indispensable for matters related to medicines in the hospital. Therefore, the study showed that it is necessary to standardize the medications found in greater quantity in this research, with consequent reduction of hospital expenses and shorter time for the acquisition of drugs for the treatment of patients. However, this is not sufficient to ensure the reduction of hospital expenses. An update of the current list of standardized medicines by the institution is necessary, so that all the needs and realities existing in the Hospital are taken into account.

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