

SITUATIONAL DIAGNOSIS OF MEDICATION PACKAGING IN A MEDIUM-SIZED HOSPITAL IN RIO DE JANEIRO, IN THE INPATIENT UNITS, FROM THE PERSPECTIVE OF LEAN PHILOSOPHY

Dias, T.L.G¹; Oliveira, L.D.²; Nogueira, C.R.R.³; Nogueira, TA

¹Universidade Federal Fluminense, Hospital Federal Cardoso Fontes, Rio de Janeiro, Riode Janeiro, Brazil

²Universidade Federal Fluminense, Hospital Federal Cardoso Fontes, Rio de Janeiro, Riode Janeiro, Brazil

³Ministério da Saúde, Hospital Federal Cardoso Fontes, Rio de Janeiro, Riode Janeiro, Brazil

Universidade Federal Fluminense, Rio de Janeiro, Riode Janeiro, Brazil

thamiresluisse@gmail.com

Introduction

Public health sector budgetary challenges, population growth, longevity, low per capita investments, and a drop in the population's standard of living are some parameters that require optimization in resource management, including the use of medicines. Such actions aim to guarantee the sustainability of the health system and equitable access for all (Piola, SF., et al, 2013)¹(Cobaito & Cobaito, 2022)². However, the quality of the medicine must also be preserved. Temperature, moisture, light, contamination, expired expiration dates, and damaged packaging can compromise the quality of these products, resulting in therapeutic losses and potential risks to the care (ANVISA, 2019)³(Raduenz, 2010)⁴. In this context, Lean Healthcare has been widely adopted as a strategy to improve healthcare processes. (Kumar et al., 2022)⁵. In the case of medication management, Lean can assist in identifying and eliminating activities that do not add value to work processes, such as excessive movement of medicines, failures in identification and location, delays in distribution, and waste of human resources. Therefore, this summary aims to analyze the packaging and conservation of medicines in the Inpatient Care Units of a large hospital in Rio de Janeiro.

(Henrique, 2014;⁶ Ramos; Spiegel; Assad, 2018;⁷ Cordeiro, 2022)⁸.

Material and Methods

This expanded summary is a prospective descriptive observational study prepared based on a situational diagnosis in Inpatient Units of a Large General Hospital in Rio de Janeiro.

The situational diagnosis was carried out through direct observation in the Inpatient Care Units: Severe Patients, Emergency, Clinical and Surgical Wards, Hemodialysis and Peritoneal Dialysis, Intensive Care Unit 1 Clinical and Surgical Intensive Care Unit, Pediatrics and Pediatric ICU.

Data collection was divided into two stages, in which the first stage was carried out with the aid of an inspection script, subsidized by RDC n° 210/2003 of ANVISA, in the period from March 15 to 17, 2023 by 8 Resident Pharmacists divided in pairs. The second stage occurred through quantitative and qualitative assessment of the conditions of pharmaceutical inputs under the caution of the sectors.

The compartments intended for storing control medications were inspected by special provisions present in Ordinance N° 344/98, Potentially Dangerous Medicines (MPP), medicines multidose, level of team collaboration, ready-to-use conditions, physical facilities Inpatient Units (IU), packaging of heat-labile medications and monitoring of refrigerator temperature.

Results and Discussion

There were medicines controlled by Ordinance n° 344/1998 in almost all sectors evaluated, except in hemodialysis. Situations were found such as the absence of an opening date for multi-dose medicines, unmarked tablets, similar ampoules in the same compartment, broken ampoules, and packaging drawers

with the presence of pests. Medicines with expired expiration dates were identified except for Pediatrics and Pediatric ICU, totaling 24 expired or poorly packaged medications, the sum of which resulted in one value of R\$1,042.82, depending on the acquisition cost of these products.

The results obtained with the situational diagnosis provided support to improve practices related to the distribution and packaging of medicines in Inpatient Units.

The rationalization of the process of packaging and use of medicines is necessary when auditing the practice experienced in the Health Institution.

Conclusion

A better understanding of the current situation allows us to identify weaknesses in work processes, thus as opportunities for improvement, allowing efforts to promote changes necessary to make processes more efficient. Such measures may not only promote safer and better quality for patients, but also reduce waste associated with the loss of medicines due to expiration date or poor conservation, optimize the use of resources, and provide more sustainability to the system.

Acknowledgments

I would like to thank the Ministry of Health for its support

Bibliographic References

- [1] PIOLA, SF., et al. Estruturas de financiamento e gasto do sistema público de saúde. FUNDAÇÃO OSWALDO CRUZ. A saúde no Brasil em 2030 - prospecção estratégica do sistema de saúde brasileiro: estrutura do financiamento e do gasto setorial [online]. Rio de Janeiro: Fiocruz/Ipea/Ministério da Saúde/Secretaria de Assuntos Estratégicos da Presidência da República, 2013. Vol. 4. pp. 19-70. ISBN 978-85-8110-018-0.
- [2] COBAITO, Francisco Carlos; COBAITO, Victor Quintães. SUS—Sistema Único de Saúde: A Gênese, Contemporaneidade, e os desafios do amanhã. Inova Saúde, v. 12, n. 1, p. 160-177, 2022.
- [3] BRASIL. Diretoria Colegiada da Agência Nacional de Vigilância Sanitária (ANVISA), Resolução nº 318, de 6 de novembro de 2019. Estabelece Critérios para Estudos de Estabilidade de insumos farmacêuticos ativos e medicamentos.
- [4] RADUENZ, Anna Carolina et al. Cuidados de enfermagem e segurança do paciente: visualizando a organização, acondicionamento e distribuição de medicamentos com método de pesquisa fotográfica. Revista Latino-Americana de Enfermagem, v. 18, p. 1045-1054, 2010.
- [5] KUMAR, Naveen, et al. Lean manufacturing techniques and its implementation: A review. Materials Today: Proceedings, v. 4, p. 1188-1192, 2022.
- [6] HENRIQUE, Daniel Barberato. Modelo de mapeamento de fluxo de valor para implantações de lean em ambientes hospitalares: proposta e aplicação. 2014. Tese de Doutorado. Universidade de São Paulo.
- [7] RAMOS, Luana Carolina Farias; SPIEGEL, Thais; ASSAD, Daniel Bouzon Nagem. Gestão de materiais hospitalares: uma proposta de melhoria de processos aplicada em hospital universitário. Revista de Administração em Saúde, v. 18, n. 70, 2018.
- [8] CORDEIRO, Alfredo Merlos Akinaga. Lean healthcare é uma das bases para viabilizar sistemas de saúde baseados em valor?. 2022. Tese de Doutorado.