PROPOSAL FOR THE IMPLEMENTATION OF PRESCRIPTION INDICATORS IN INTENSIVE CARE UNITS OF A LARGE HOSPITAL IN RIO DE JANEIRO

Carbonetti, M.P.[1] *; Camuzi, R.C.[1,2]

[1]*Residência em Farmácia Hospitalar/ Faculdade de Farmácia / Universidade Federal Fluminense, Rua Dr. Mário Viana, 523, Niterói, RJ, Brasil*

[2]*Departamento de Farmácia e Administração Farmacêutica / Faculdade de Farmácia / Universidade Federal Fluminense, Rua Dr. Mário Viana, 523, Niterói, RJ, Brasil*

**paulacarbonetti@gmail.com*

Introduction

The role of the pharmacist in hospital clinical pharmacy is crucial for enhancing the quality of healthcare services, particularly through the implementation of medication prescription indicators. This study is justified by the need to monitor and prevent adverse events, ensuring safe interventions in pharmacotherapy [1,2]. The presence of clinical pharmacists in intensive care units (ICUs) has been shown to reduce avoidable adverse events by up to 66% [3,4]. Hospital pharmacy plays a fundamental role in preventing medication errors, which are among the leading causes of harm to hospitalized patients [5]. By reviewing prescriptions and identifying drug interactions, pharmacists promote the rational use of medications and patient safety [6,7]. Thus, the implementation of prescription indicators aims to strengthen pharmaceutical practice, optimize care, and rationalize financial resources, establishing a more efficient and secure care model. In this context, this project aims to develop a proposal for the implementation of prescription indicators for the intensive care units of a large hospital in the municipality of Rio de Janeiro.

Material and Methods

This is an experimental development project [8] focused on the selection of medication prescription indicators, based on observed needs and scientific evidence. Process mapping was conducted, leading to the development of a Standard Operating Procedure (SOP) for the systematic collection of indicators. An Indicator Spreadsheet was also created to facilitate the necessary data collection by pharmacists during their daily routines, aiming to evaluate the quality of prescriptions in the Intensive Care Units (ICUs). The development of the project was authorized by the institution through a letter of consent and, as it did not involve human subjects or primary data from individuals, it did not require approval from an ethics research committee.

Results and Discussion

New indicators adapted to the hospital's reality were selected and proposed, including the rate of prescriptions with high-alert medications, the rate of prescriptions involving enteral medication use, the rate of prescriptions with pharmaceutical interventions performed, the rate of prescriptions with accepted pharmaceutical interventions, and the rate of non-standardized prescriptions. These indicators were proposed in addition to the rate of prescriptions with antimicrobials. Technical sheets were developed to define data collection and calculation methodologies for each indicator. Although the rate of prescriptions with high-alert medications is already established, the inclusion of new indicators is essential to meet the current needs of the hospital unit, ensuring alignment with specific requirements. The successful implementation of these indicators will reinforce the commitment to safe and effective practices, promoting a high-quality clinical environment and contributing to excellence in pharmaceutical care.

Conclusion

The implementation of prescription indicators in the ICUs of a large hospital in Rio de Janeiro is fundamental for improving the quality and safety of medication use. The Monitoring Table will enable effective management, identifying areas for improvement and informing strategic decisions. Measures such as defining responsibilities, specific training, and creating an appropriate environment are essential for optimizing this process. It is expected that these actions will enhance patient safety and the efficacy of intensive treatment, with the active collaboration of pharmacists within the medical team, promoting a culture of safety within the hospital. It is crucial to continue monitoring and adjusting these practices to ensure excellence in care.

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Bibliographic References

[1] American Society of Hospital Pharmacists: 'ASHP guidelines on documenting pharmaceutical care in patient medical records', Am. J. Health-Syst. Pharm., 2003, 60, (7), pp. 705–707.

[2] Holland, R. W., Nimmo, C. M.: 'Transitions, part 1: beyond pharmaceutical care', Am. J. Health-Syst. Pharm., 1999, 56, (17), pp. 1758–1764. DOI: 10.1093/ajhp/56.17.1758.

[3] Brilli, R. J., et al.: 'Critical care delivery in the intensive care unit: defining clinical roles and the best practice model', Crit. Care Med., 2001, 29, (10), pp. 2007–2019. DOI: 10.1097/00003246-200110000-00026.

[4] Chuang, L. C., Sutton, J. D., Henderson, G. T.: 'Impact of a clinical pharmacist on cost saving and cost avoidance in drug therapy in an intensive care unit', Hosp. Pharm., 1994, 29, (3), pp. 215–218.

[5] Bates, D. W., et al.: 'Incidence of adverse drug events and potential adverse drug events: implications for prevention', JAMA, 1995, 274, (1), pp. 29–34.

[6] Nuckols, T. K., et al.: 'The effectiveness of computerized order entry at reducing preventable adverse drug events and medication errors in hospital settings: a systematic review and meta-analysis', Syst. Rev., 2014, 3, pp. 56. DOI: 10.1186/2046-4053-3-56.

[7] Schumock, G. T., et al.: 'Evidence of the economic benefit of clinical pharmacy services: 1996-2000', Pharmacotherapy, 2003, 23, (1), pp. 113–132. DOI: 10.1592/phco.23.1.113.31910.

[8] CNPQ. Glossário - Plataforma Lattes - CNPq. Disponível em: <http://lattes.cnpq.br/web/dgp/glossario?p_p_id=54_INSTANCE_QoMcDQ9EVoSc&_54_INSTANCE_QoMcDQ9EVoSc_struts_action=%2Fwiki_display%2Fview&_54_INSTANCE_QoMcDQ9EVoSc_nodeName=Main&_54_INSTANCE_QoMcDQ9EVoSc_title=Pesquisa>. Acesso em: 9/10/2024. CNPq (2024)