THE MOST PRESCRIBED HIGH-ALERT MEDICATIONS IN A PEDIATRIC INTENSIVE CARE UNIT IN RIO DE JANEIRO

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Introduction

High alert medications (HAM) are those that have a heightened risk of causing significant patient harm as a result of a failure in the process of your utilization. The errors that can occur with these HAMs are more severe and complex in a hospital than the ambulatorial, especially in an Intensive Care Unit (ICU). The ICU patient depends on more complex therapeutic processes that demand more attention from professionals to minimize errors and adverse events.^{1,2.}

The adverse events of medications are responsible for a bad impact on the hospital because these problems happen with frequency increasing the patient's hospitalization time, hospital cost, mortality, in addition to generating changes in emotional aspects in the health team and reflecting on the institution's credibility in society.³ The objective of this work was to identify the HAM more prescribed in a pediatric ICU, analyzing the prescription profile of the team with the HAMs.

Material and Methods

This was a retrospective cross-study, developed in a pediatric ICU, with the analysis of electronic medical prescriptions for 6 months, between January 1, 2020 until June 30, 2020 and some requirements were established so that patient could be approved in the study, such as the outcome between discharge or death, it requires the used at least two medications during the hospital stay and remained in the hospital for more than twenty-four hours.

From a comparative analysis of the hospital medications with the updated list of HAMs from the Institute for Safe Medications Practices (ISMP), it is possible to create a list of HAMs in the pediatric ICU. To describe the prescriptions profile, it utilized a database with information of each patient available in a hospital system named MV 2000[®], only during the study. The HAMs were classified according to the Anatomic Therapeutic Chemical (ATC) and AHFS-Pharmacologic (American Hospital Formulary) (CAAE: 36514820.6.0000.5264).

Results and Discussion

One hundred and two (102) patients were admitted, and there were prescribed one hundred fortyseven (147) different medications, 41 of these were HAMs, 27.9 % of the medication total. At least, 87% of the patients received one HAM in their prescriptions. The average was $3.73 (\pm 2.89)$ HAMs for patients. Just thirteen of the one hundred and two patients, did not use any HAM, 12.7%.

It was noticed, after analyzing the prescriptions, that the five most prescribed HAMs were Potassium Chloride 10%, seventy-seven (77) patients were exposed (75.5%); Sodium Chloride 20%, sixty-seven (67) patients were exposed (65.7%); Fentanyl, thirty-five (35) patients were exposed (34.3%); Midazolam,

thirty-five (35) patients were exposed (34.3%); and Phenobarbital, twenty-two (22) patients were exposed (21.6%).

After analyzing these numbers, the importance of creating measures and protocols to minimize errors and create a safer environment for the entire team of health professionals and the patient using HAMs.

Conclusion

With the particularities and physiological vulnerabilities of pediatric patients, it is necessary to establish protocols and more severe monitoring in the use of HAM for a safer pediatric environment. This study contributed to the identification of the most prescribed HAM in this pediatric ICU, it helps the entire multidisciplinary team involved in drug management to work more safely and to create strategies and manuals to realize safer medications management for the patients.

Acknowledgments

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