



Development of Risk Score to Hospitalized Patients for Clinical Pharmacy Rationalization in a High Complexity Hospital

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SUMMARY. The aim of the present research was to build a tool to classify patients according to drug therapy risk so as to rationalize the use of clinical pharmaceutical resources in hospital settings. Risk factors selected in the literature available were carefully revised to be included in the score. The selected factors were submitted to univariate and then to multivariate analysis. The significant results were included in the final score model, which divided the hospitalized patients into three groups: low risk, moderate risk and high risk. After that, the score was applied in the hospital and a “risk classification” map was created of the various sectors of the Hospital de Clínicas de Porto Alegre. The score was applied to 1442 patients in nine different areas of the hospital, with 398 (27.6 %) of them presenting high risk, 612 (42.4 %) moderate risk and 432 (29.9 %) low risk. The high risk units were: Pediatric Oncology, the Intensive Care Unit (ICU) for adults and the Pediatric Intensive Care Unit (PICU). The clinical and surgical units, the Protected Environment Unit (PEU) and the Neonatal Intensive Care Unit (NICU) were classified as moderate risk and the pediatric hospitalization unit as low risk. Considering the patients with renal and/or hepatic problems, cardiac and/or pulmonary problems and immunosuppression and/or immuno deficiency, 50.2 %, 61.5 % and 52.6 %, respectively, presented high score, with all of them taking at least one risk drug. Regarding the number of drugs prescribed, the use of 0-5 drugs was verified in 68.8 % of the patients with low score and the use of 11-15 drugs in 63.1 % of the patients with high score. The score developed in this study showed a significant correlation between the risk groups and the profile of the patients hospitalized in the analyzed areas. This tool will be validated to optimize pharmaceutical care resources.

KEY WORDS: Clinical pharmacy, Rationalization hospitalized patients, Risk score.

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