# Implementation of the Clinical Pharmacy Service in the ICU of a Municipal Hospital Specialised in Trauma in Rio de Janeiro.

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## Introduction

According to the Brazilian Ministry of Health, the Intensive Care Unit (ICU) is the area in the hospital environment where the most critically ill patients are located, requiring constant monitoring and greater support, both from members of the care team and from instruments and devices [1]. This unit is prepared to deal with complex situations, requiring the participation of a qualified multidisciplinary team to provide integrated and effective care.

Members of this team include doctors, nurses, physiotherapists, nutritionists, psychologists and pharmacists, whose contributions are essential for patients' recovery. In this context, clinical pharmacy has emerged as a key area, especially in ICUs, where the administration of medicines requires close monitoring to ensure therapeutic efficacy and patient safety [2].

Clinical pharmacy, according to CFF Resolution 585/2013, is the "area of Pharmacy, focused on the science and practice of the rational use of medicines, in which pharmacists provide patient care in order to optimize pharmacotherapy, promote health and well-being, and prevent disease" [3]. In the ICU environment, the clinical pharmacist performs various functions, such as reviewing medical prescriptions, monitoring drug plasma levels, identifying and preventing drug interactions and adverse reactions, as well as taking part in multidisciplinary discussions about the patients' therapeutic plan.

One of the main models used by the clinical pharmacist in the ICU is FASTHUG MAIDENS, which refers to a form for rapid and comprehensive assessment of crucial aspects in the care of critically ill patients. It can be used to analyze various factors such as nutrition, analgesia, sedation, thromboprophylaxis, antibiotics, drug interactions and doses. This model helps to standardize care, ensuring that important aspects of drug treatment are regularly reviewed [4].

Therefore, the objective of this work with the implementation of the clinical pharmacy service is an essential strategy to promote patient safety and optimize the use of medicines. This project aims to describe the initial steps needed to structure this service, as well as producing support and consultation materials for the pharmacy professional.

## Methods

The study will be carried out in the Intensive Care Unit (ICU) of a municipal hospital specializing in trauma with an open emergency service. The hospital's ICU has thirteen beds, one of which is in isolation, and has a team of professionals including doctors, nurses, nursing technicians, physiotherapists and nutritionists.

Based on the experience and knowledge gained from participating in the rounds, as well as research reviewing national and international literature, the instruments, the structuring of the routine and the choice of monitoring parameters for the implementation of the service will be produced. The FASTHUG MAIDENS mnemonic [4] will be used as the main theoretical basis.

## Expected results

The structuring of the clinical pharmacy service is expected to guarantee both the quality of patient care and the efficiency of hospital management. Among the main results expected are a reduction in drug-related adverse events, such as dosage errors and drug interactions, as well as the optimisation of pharmacotherapy, which can contribute to reducing the length of stay of patients and, consequently, hospital costs, ensuring that the treatment offered is not only effective, but also economically sustainable.

## Conclusion

Implementing a clinical pharmacy service in the ICU of a specialized trauma hospital is a crucial strategy for optimizing pharmacotherapy and patient safety. The role of the clinical pharmacist, integrated into the multidisciplinary team, allows for fundamental interventions for the correct administration of medicines, prevention of drug interactions and reduction of adverse events.

The application of structured models, such as FASTHUG MAIDENS, is essential to standardize and monitor pharmaceutical care, ensuring that critical aspects are reviewed continuously and effectively. With this, it is hoped not only to improve the quality of patient care, but also to generate economic benefits for the hospital, through reduced drug costs and shorter hospital stays.

With this, the present project contributes to the structuring of a service that aims to improve hospital management and promote safer, more humanized care for critically ill patients, consolidating the importance of the clinical pharmacist in highly complex units.

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