

ASSESSMENT OF PHARMACEUTICAL INTERVENTIONS IN AN INTENSIVE CARE UNIT AFTER COMPUTERISED PHYSICIAN ORDER ENTRY SYSTEM IMPLEMENTATION

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Background and importance

Critical care pharmacists have demonstrated their contribution to drug therapy management and impact on patient and medication safety. Traditionally, clinical pharmacist functions in the intensive care unit (ICU) of our hospital were based on pharmaceutical interventions (PIs) concerning parenteral nutrition (PN). Currently, a computerized physician order entry (CPOE) system has been implemented. This system reduces the incidence of medication errors and it allows pharmaceutical validation.

Aim and objectives

To analyse the evolution in the number of PIs before and after CPOE implementation. To describe the type of PIs carried out by clinical pharmacists after CPOE implementation. To assess the degree of acceptance by ICU physicians.

Material and methods

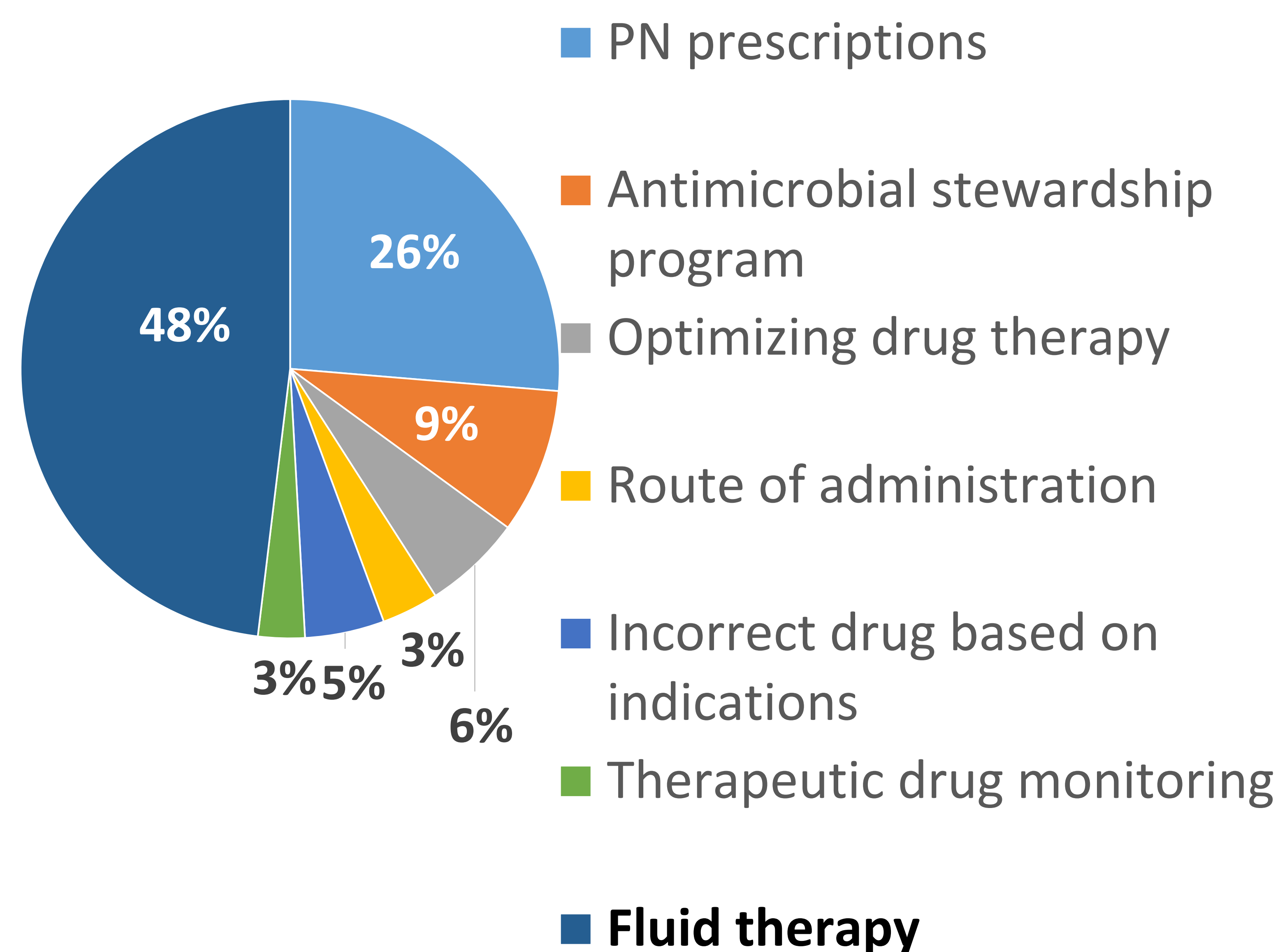
A two-month descriptive and prospective study was conducted between 1st January and 28th February 2020 in an 18-bed ICU of a tertiary teaching hospital, 3 months after CPOE implementation. Every type of PI and degree of acceptance were recorded. Total PIs recorded were compared with those recorded in the same period of time before the CPOE implementation (between 1st July and 31st August 2020).

Results

During the current study period, **227 patients** were admitted to ICU, and a total of **366 PIs** were recorded.

It means **IPs increased by 173%**, compared to the previous study period before the implementation of CPOE (232 patients, 134 PIs).

Regarding the number of PIs during the current study period:



91% of PIs were accepted by the ICU staff.

Conclusion and relevance

CPOE in ICU promoted the pharmacist's participation in **improving the safety** of medical prescription by increasing the number of accepted IPs. The high number of **interventions** related to the **fluid therapy** stands out extremely. We consider it necessary to start up corrective measures regarding this aspect such as preparation of prescription protocols, training talks, etc.

