

CRITICAL ANALYSIS OF THE INFORMATION AND COMMUNICATION TECHNOLOGIES' TOOLS MOST USED IN CLINICAL PRACTICE BY THE PHARMACIST

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Background

The information and communication technologies' (ICT) tools are the instruments that allow the pharmacist to evaluate quickly and easily the patient's therapy identifying potential drug interaction (DI) and medical errors, in order to lead a medication reconciliation (MR).



Purpose

Identify the perfect-matching ICT tool to lead a MR for patients with chronic kidney disease

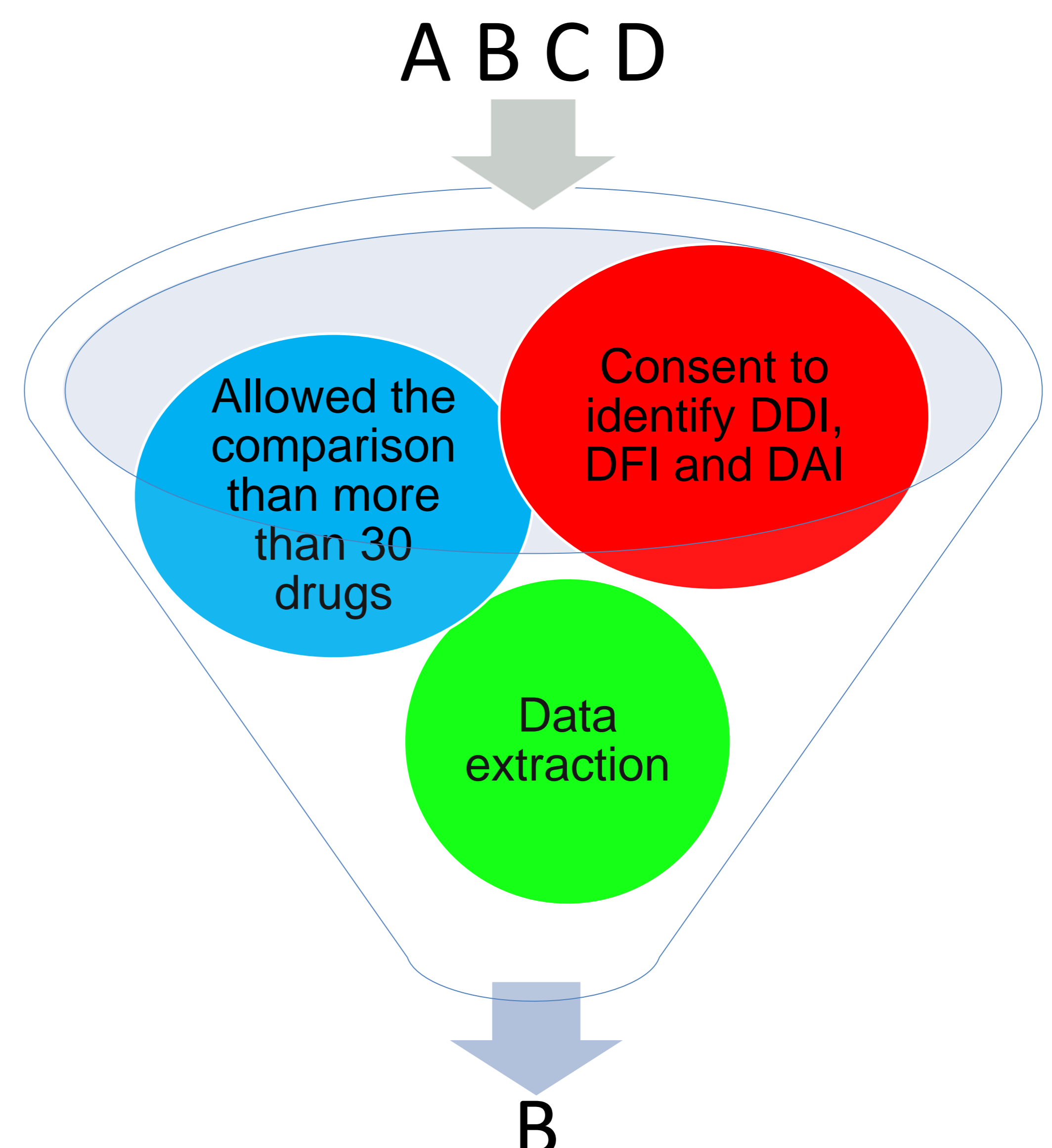
Methods

The three patients selected (pill burden >10 therapeutic units) were analysed with A, B, C and D pre-selected ICT tools and compared, based on:

- number of drugs that were allowed to be inserted;
- kind and number of DI, such as drug-drug (DDI), drug-food (DFI) and drug-alcohol (DAI);
- differences between software.

Results

- A excluded: limit of up to 10 drugs that can be confronted and does not use data from an international database.
- B, C and D : allowed the comparison between more than 30 drugs.
- C excluded: consented to identify just DDI, instead with tools B and D DDI and DFI were funded.
- No tool identified DAI.
- B and D consented to save the therapy and interaction data sheet, but only tool B allowed the extraction of the data.



Discussions and conclusions

The chosen software was B because is the only tool that include an alert with information regarding the dosage over that there is a DDI, that was important for patients with chronic kidney disease. Besides no tool consented to calculate DI based on the used dosage.

The choice of the accurate ICT tool based on the study population is the first fundamental step to start and quickly implement an efficient and appropriate medication reconciliation process.

