

5PSQ-008 A DIGITAL ASSISTANT TO SUPPORT PATIENTS IN PREPARING MEDICATION RECONCILIATION: PATIENT EXPERIENCES

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Background and Importance Medication reconciliation has become standard care to obtain a complete overview of the current medication of a patient. However, it is time-consuming and labour-intensive. Studies have shown promising results for online medication reconciliation preparation done by patients. Nonetheless, there is a need for enhanced patient support to make this process as simple and effective as possible.

Aim and Objectives To ascertain the experiences of patients using a digital assistant for pre-visit online medication reconciliation.

Material and Methods This study followed a qualitative, descriptive design. In May 2022, rheumatology and neurology outpatients were approached face-to-face by a rheumatologist/neurologist during their visit, if considered capable to participate. They received an information letter explaining the study. Participation was voluntary. After written consent, patients were instructed to use a digital assistant for verifying and complementing their home medication online, after which semi-structured individual interviews were conducted, audio recorded with the participant's permission. Interview data were anonymised and evaluated using inductive thematic analysis according to the method of Braun and Clarke. A waiver was obtained from the regional Medical Ethics Review Committee.

Results Eleven patients were included. The study population comprised 2 men and 9 women with a median age of 64.0 years (interquartile range [IQR] 50.0-70.0). The main themes identified amongst patient experiences were related to usability, method of input, layout, safety, communication, perception and necessity. Advantages patients mentioned were place and time independence, efficiency and increased awareness of their medication use. Limited information technology (IT) skills among elderly was the most frequently mentioned barrier for using the digital assistant. Suggestions for improvement were related to usability of the digital assistant (e.g. larger font style and ascertain that texts fit the device), layout (e.g. provide overview of given answers) and safety (e.g. integrate digital assistant in online hospital environment and explicitly state that patient data are saved in a secure environment), amongst others. The majority of the patients preferred the digital assistant over a medication reconciliation conversation with a pharmacy technician.

Conclusion and Relevance Overall experiences of patients using a digital assistant for medication reconciliation were positive, demonstrating there is potential for the use of a digital assistant in clinical practice.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest

5PSQ-010 DIGOXIN ADJUSTMENT: COMPARATIVE ANALYSIS OF THREE PHARMACOKINETIC SOFTWARE

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Background and Importance Digoxin is a drug with a narrow therapeutic index (0.8-1.2 ng/mL). Therapeutic drug monitoring is an important tool to improve therapeutic safety and efficacy, especially in elderly patients.

Aim and Objectives To estimate the accuracy and precision of three pharmacokinetic software to analyse serum digoxin concentrations (SDC).

Material and Methods Retrospective observational study in elderly patients admitted to a tertiary hospital and treated with digoxin in 2020. We excluded patients over 80 years-old. Variables recorded: sex, age, body mass index (BMI), SDC, creatinine clearance evaluated by the Cockcroft-Gault equation (CrCl), and concomitant treatment: proton pump inhibitors (PPIs) and non-steroidal anti-inflammatory drugs (NSAIDs).

SDC were estimated with three pharmacokinetic software: Mediware, PKS and NONMEM.

Accuracy and precision were assessed using Sheiner and Beal's prediction error theory. Accuracy with the mean prediction error (MPE) and precision with the mean absolute prediction error (MPAE) and the square root of the root mean square prediction error (RMSE).

Two subgroups were analysed: renal impairment patients (CrCl<60mL/min) and patients with two or more SDC.

Results 53 patients with 130 SDC, 31 women (58.5%), median age 75.5 years-old (66.5-80.7). 64% on concomitant treatment with PPIs and 41.5% with NSAIDs.

Accuracy: MPE 0.002, -0.011, -0.081, for Mediware, PKS and NONMEM respectively.

Precision: MPAE 0.193, 0.201, 0.243; RMSE 0.331, 0.345, 0.328 for Mediware, PKS and NONMEM.

Renal impairment: 32 patients with 64 levels.

Accuracy: MPE -0.052, -0.028, -0.106 for Mediware, PKS and NONMEM.

Precision: MPAE 0.192, 0.246, 0.275; RMSE 0.330, 0.416, 0.363 for Mediware, PKS and NONMEM.

≥2 levels: 36 patients

Accuracy: MPE 0.003, -0.010, -0.080 for Mediware, PKS and NONMEM.

Precision: MPAE 0.205, 0.211, 0.235; RMSE 0.347, 0.360, 0.312 for Mediware, PKS and NONMEM.

Conclusion and Relevance The three software showed similar accuracy and precision for analysing SDC.

Mediware is the best tool for daily clinical practice in terms of ease of use.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest