

Optimising medications in geriatric patients: insights from the ASPIRE randomised controlled trial on pharmacist-led medication reviews



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BACKGROUND & IMPORTANCE

AIM & OBJECTIVES

MATERIAL & METHODS

High-risk geriatric inpatients: complex balance between medication benefits and harms

ASPIRE RCT: impact of clinical pharmacy intervention on unplanned hospital revisits in geriatric inpatients at six months

To analyze recommendations from medication reviews

To evaluate intervention duration

Acute geriatric wards UZ Leuven

Descriptive statistics for type and number of pharmacist recommendations, acceptance rate, ATC classification and duration



More details on intervention components

RESULTS

Population & setting

ASPIRE^{*}: The effect of a trAnSitional Pharmacist Intervention in geRiatric inpatients on hospital visits after discharge



Overall patient population	825 patients
Mean age	86.3 (\pm 5.9) years
Intervention group	415 patients
Median number of medications	10 [7-12]

Intervention duration: mean (\pm SD)

Overall intervention

1 hour 26 minutes

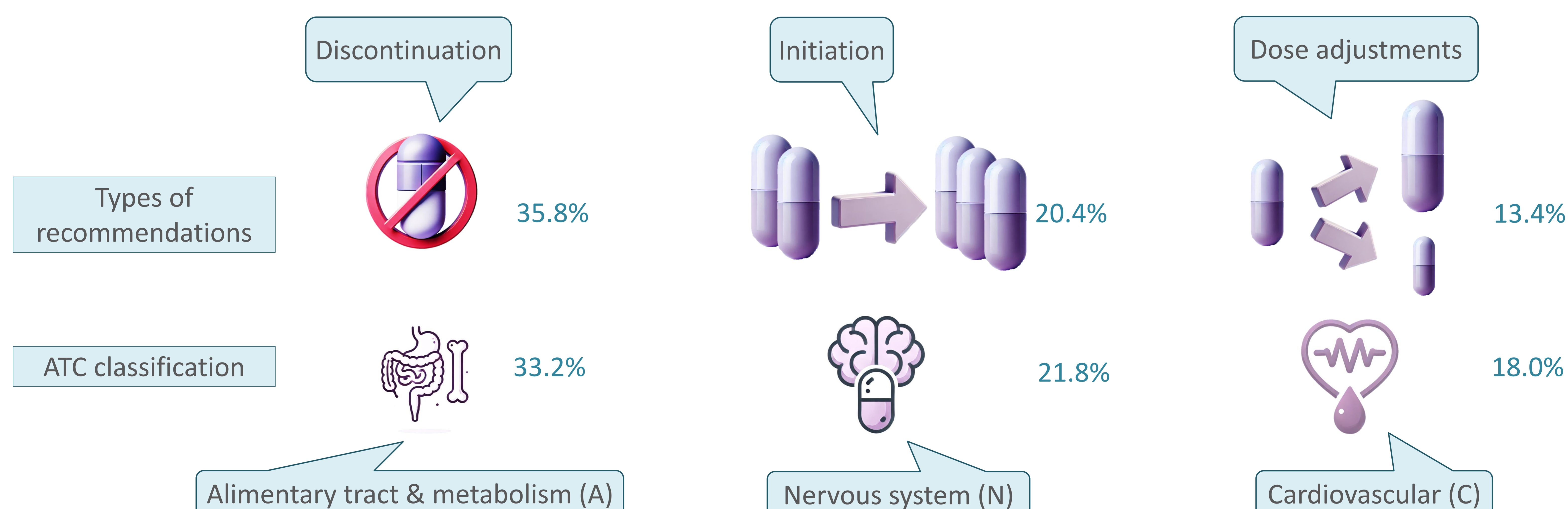
Medication reconciliation (admission)	11.1 (\pm 7.1) minutes
Medication review	30.8 (\pm 16.1) minutes
Medication reconciliation (discharge)	9.4 (\pm 6.5) minutes
Contact with health professionals	9.0 (\pm 6.9) minutes
Patient counseling	20.0 (\pm 10.3) minutes
Follow-up calls	5.9 (\pm 4.4) minutes

Medication review process

Total of 1160 pharmacist recommendations in 414 medication reviews

At least one recommendation for 91.6% intervention patients at discharge

Average of 3.1 [SD 1.7] recommendations per patient with 89.7% accepted by treating physician



CONCLUSION & RELEVANCE

Even among this very old patient group, **underuse** was **effectively captured** by trained pharmacists

About a fifth of all recommendations focused on **cardiovascular drugs**, a commonly neglected part of the medication review for pharmacists.

It is **feasible to adjust** medication during hospital stay

* Hias J, Hellemans L, Laenen A, Walgraeve K, Liesenborghs A, De Geest S, Luyten J, Spriet I, Flamaing J, Van der Linden L, Tournoy J. The effect of a trAnSitional Pharmacist Intervention in geRiatric inpatients on hospital visits after discharge (ASPIRE): Protocol for a randomized controlled trial. Contemp Clin Trials. 2022 Aug;119:106853. doi: 10.1016/j.cct.2022.106853. Epub 2022 Jul 14. PMID: 35842106. SD: Standard Deviation; ATC: Anatomical Therapeutic Chemical Classification

