



A proactive inter-disciplinary CME to improve medication management in the elderly population

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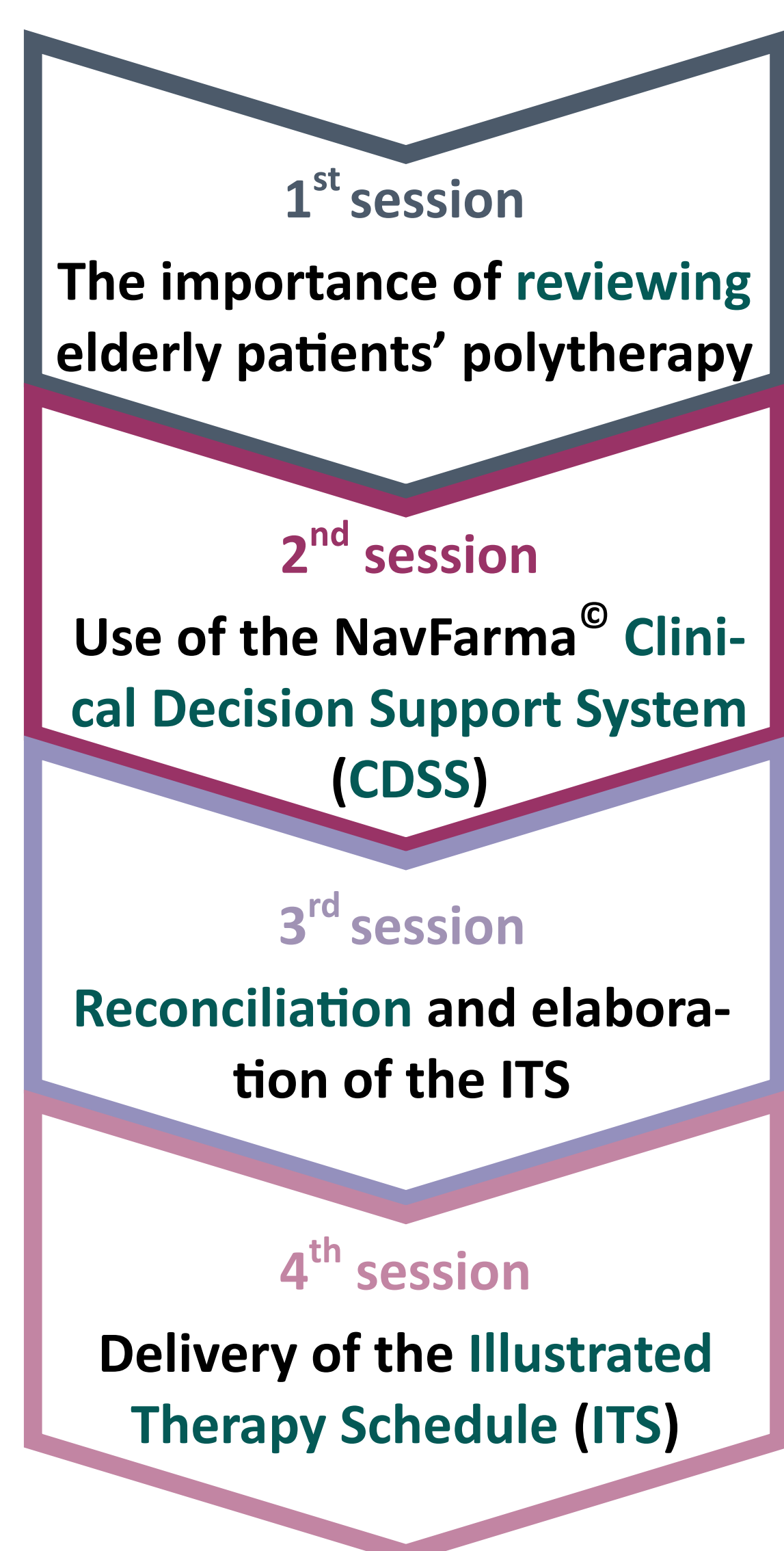
INTRODUCTION

A major concern to healthcare systems in primary care is represented by **medication inappropriateness** and **non-adherent behaviour** in patients with **multi-morbidity** and **polypharmacy**.¹⁻³ A strategy to improve the management of elderly population's polytherapies is the reinforcement of the collaboration between Hospital Pharmacists (HPs) and General Practitioners (GPs) through the participation in a **Continuing Medical Education (CME)**. The CME was organised by HPs from a Territorial Pharmaceutical Centre of Northern Italy in collaboration with the Drug Science and Technology Department (DSTD - UNITO) to support practitioners' engagement and improve quality in health processes.

AIMS OF THE STUDY

- ◆ **STRENGTHEN COLLABORATION BETWEEN HEALTH PROFESSIONALS**
- ◆ **ASSESS PRESCRIPTIONS' APPROPRIATENESS**
- ◆ **IMPROVE MANAGEMENT OF CHRONIC DISEASES' THERAPIES AND DEPRESCRIPTION THROUGH IT-TOOLS**

METHODS



CME was structured in four sessions with the collaboration of HPs and GPs in which different topics were analysed.

RESULTS

Characteristics of the population

Data	N	%	Average (±SD)
Enrolled General Practitioners	19		
Active General Practitioners	13	68.4	
Total patients enrolled	227		
Patients included	215	94.7	
Exclusion criteria:			
change of GP, under 65 years old	3		
deaths	5		
transplant	1		
dialysis	1		
hospitalization	1		
cancer	1		
Males	118	54.9	
Females	97	45.1	
Age			76.4 (6.4)
Drugs per day			8.1 (2.4)
Dosage units per patient			9.8 (3.3)
Changes	98		
Patients questionnaires	56		
GPs questionnaires	13		

Evaluation of the CME proposed

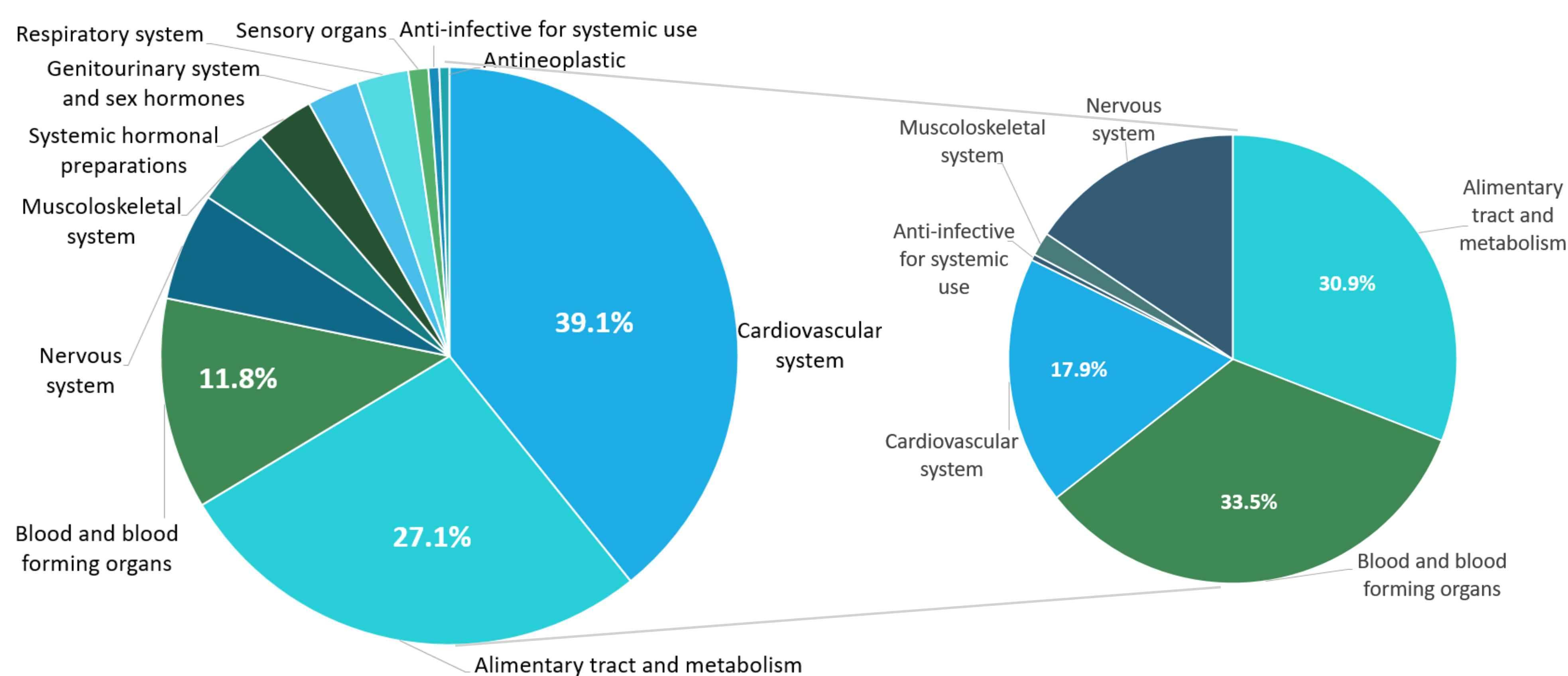
GPs were administered questionnaires on CME's level of satisfaction, focusing on:

- ◆ selection methods applied;
- ◆ multi-disciplinary approach;
- ◆ use of the Infologic CDSS;
- ◆ patients' response to the program proposed.

All results obtained show **positive outcomes on the study (range from 80 to 100%)**, even if some difficulties were encountered in the use of the IT-tool mostly due to low technology aptitude.

Elderly prescriptions' appropriateness

Graph on the left shows the total prescriptions distribution according to ATC classes; on the right, most frequent Potentially Inappropriate Prescriptions (PIPs)⁴ were reported in accordance with data of the first chart.



Most frequent DDIs detected were⁵: **aspirin-metformin**, **aspirin-furosemide** and **allopurinol-warfarin**, counting for **45.1%** of patients enrolled in the study (54, 33 and 10 patients respectively).

Out of the total DDIs encountered (449), **12.9%** (52 major and 6 contraindicate) were **solved** through the process of review and reconciliation.

CONCLUSIONS

- This project embodies a possible solution to **reassess elderly polytherapies** through a CME.
- Increasing awareness of the opportunities provided by a **multi-disciplinary approach** to a multifaceted problem.
- This study highlights the strengths and limits of the co-work within doctors and pharmacists, supported by a **CDSS**.

Acknowledgments

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Literature cited

¹ Nielsen CR, Halling A, Andersen-Ranberg K. Disparities in multimorbidity across Europe – Findings from the SHARE Survey. *Eur Geriatric Med.* 2017;8(1):16-21

² Violan C, Foguet-Boreu Q, Flores-Mateo G, et al. Prevalence, determinant and patterns of multimorbidity in primary care: a systematic review of observational studies. *PLoS One.* 2014;90(7):e102149

³ Kim S, Bennett K, Wallace E et al. Measuring medication adherence in older community-dwelling patients with multimorbidity. *European Journal of Clinical Pharmacology.* 2018;74:357–364

⁴ 2019 AGS BEERS CRITERIA® UPDATE EXPERT PANEL. *JAGS* APRIL 2019;67:4

⁵ Micromedex® online database. IBM Watson Health, Greenwood Village, Colorado, USA. Available at: <https://www.Micromedexsolutions.com/>