







EVALUATION OF THE CLINICAL SIGNIFICANCE AND VALUE OF A CLINICAL PHARMACY SERVICE AT A TEACHING HOSPITAL

D. Mueller¹, M. Pichler¹, G. Kaiser¹, W. Brozek², K. Kirchdorfer¹, E. Zwettler³, A.E. Weidmann⁴

¹Hanusch-Hospital, Pharmacy Department, Vienna, Austria; ²Ludwig Boltzmann Institute of Osteology, Hanusch Hospital of WGKK and Trauma Centre Meidling of AUVA, Vienna, Austria; ³Hanusch-Hospital, 1st Medical Department, Vienna, Austria; ⁴Robert Gordon University, School of Pharmacy and Life Sciences, Aberdeen, United Kingdom.

Background

Clinical pharmacy services (CPS) have been shown to provide significant clinical benefits on patient care. The paucity of literature reports within the Austrian healthcare system highlights that studies showing the evidence for CPS are urgently needed.

Purpose

To assess the clinical significance and value of the CPS by determining the number, type and clinical significance of identified drug-related problems (DRPs), the acceptance rate of suggested interventions and their benefit to inpatient care.

Methods

Two-phase mixed method:

- 1) Prospective descriptive study of number and type of identified DRPs, suggested interventions and their acceptance rate based on a validated classification-system¹
- 2) Independent expert panel rating of the clinical significance of identified DRPs and the clinical value of suggested interventions based on a reliable rating-method²

Setting:

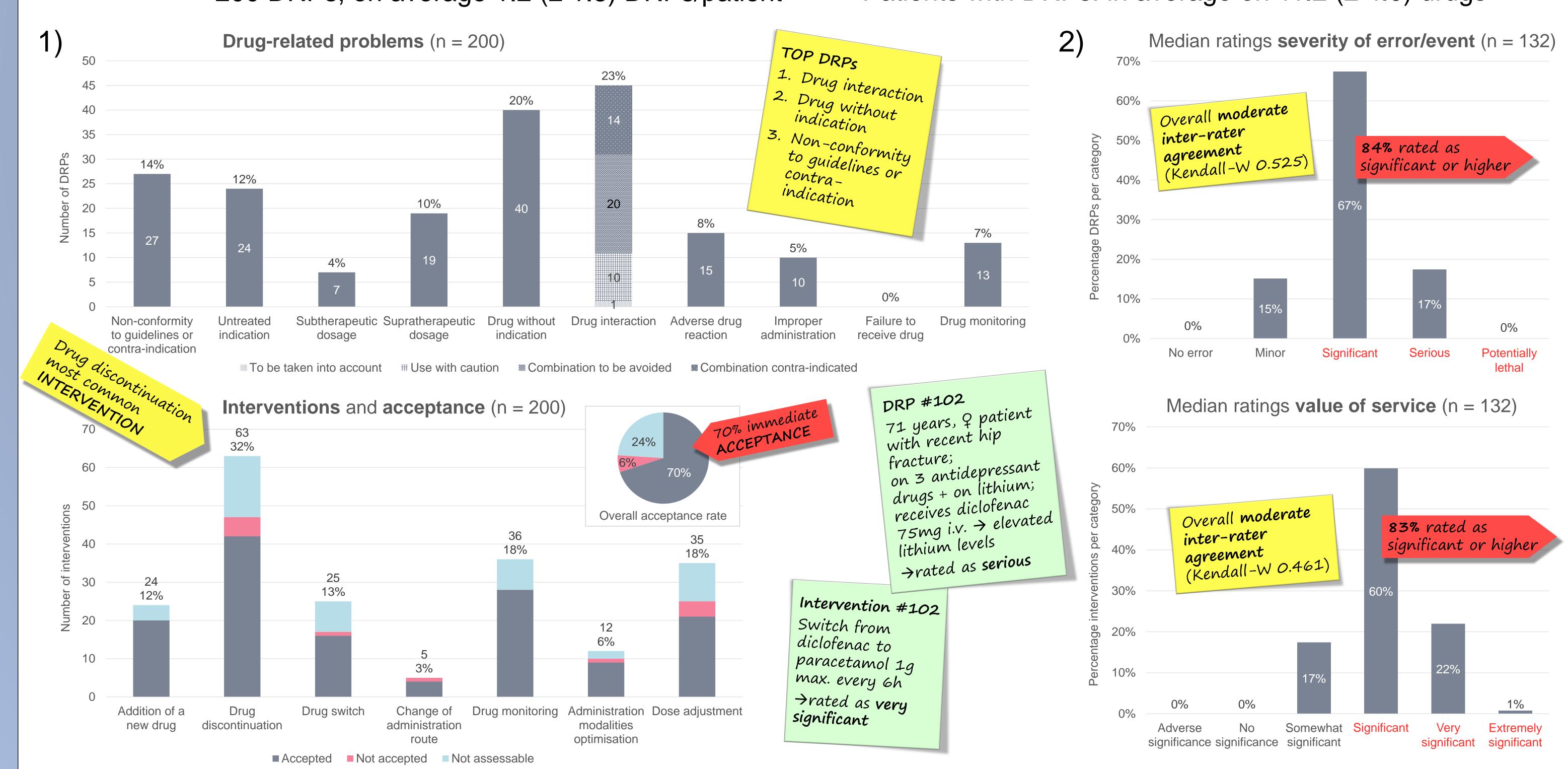
455-bed teaching hospital in Vienna; CPS across two surgical, two trauma, one cardiology and two internal medicine wards.

Sampling:

- All patients receiving the CPS during a 4-week data collection period
- Expert panel assessment carried out on randomly selected representative sample (confidence-level 95%)

Results

- 250 medication reviews in 162 patients (54% ♀)
- 200 DRPs, on average 1.2 (± 1.8) DRPs/patient
- 54% of patients at least one DRP
- Patients with DRPs: in average on 11.2 (± 4.0) drugs



Conclusion

The expert panel assessed the CPS to be of great clinical significance and of high clinical value to inpatient care. The prevalence of identified DRPs and the high rate of accepted interventions reflect the contribution of the service to the reduction and prevention of adverse drug events, treatment failure and the achievement of therapy goals. This suggests that the CPS is a valuable contribution to improve patient safety and patient care.

Acknowledgements

Many thanks to the expert panel members for thei invaluable contribution!











Senior consultant Senior consultant Clinical pharmacist Clinical pharmacist Clinical pharmacologist

1 Hanusch-Hospital, 1st Medical Department, Vienna, Austria; 2 University Hospital of Salzburg, Pharmacy Department, Salzburg, Austria; 3 Vienna General Hospital, Pharmacy Department, Vienna, Austria; 4 Department of Clinical Pharmacology, Medical University of Vienna, Vienna, Austria.

