

# PHARMACIST EDUCATIONAL INTERVENTIONS PROGRAM TO OUTPATIENTS WITH CHRONIC HEART FAILURE

# **GRP022**

Florit, M.; Barrantes, M.; Luque, S.; Berenguer, N.; Comín-Colet, J.; Carmona, A.; Salas, E. Pharmacy Department, Hospital del Mar, Parc de Salut Mar, Barcelona, Spain.

## BACKGROUND

Patients with chronic heart failure (CHF) take several medications and frequently have inappropriate medication management. In our hospital, a post-discharge pharmacist educational interventions program (PEIP) has been implemented as a part of a multidisciplinary CHF disease management program.

## **PURPOSE**

- To describe the CHF patient's profile, adherence, treatment knowledge and detection of drug-related problems (DRP) through these PEIP.
- To asses the relation between detected DRP and CHF patient's characteristics.

#### **METHODS**

Prospective observational study in a third level hospital including all CHF patients attending the PEIP from May 2010-August 2011. Data: demographics; New York Heart Association (NYHA) class; mean ejection fraction (EF); cardiovascular risk factors (CRF); selfadministration of medication (SA); self-reported adherence to diet(AD) and medication (AM) and motivation (M) (Modified Morisky Scale); knowledge of CHF medications: %dose (D),frequency (F) and indication (I); contraindicated drugs (CID) and DRP (DRP1:not used a medicine needed; DRP2:used a medicine not needed; DRP3: ineffective treatment; DRP4:infradose; DRP5:overdose; DRP6:adverse reaction) and acute descompensations.

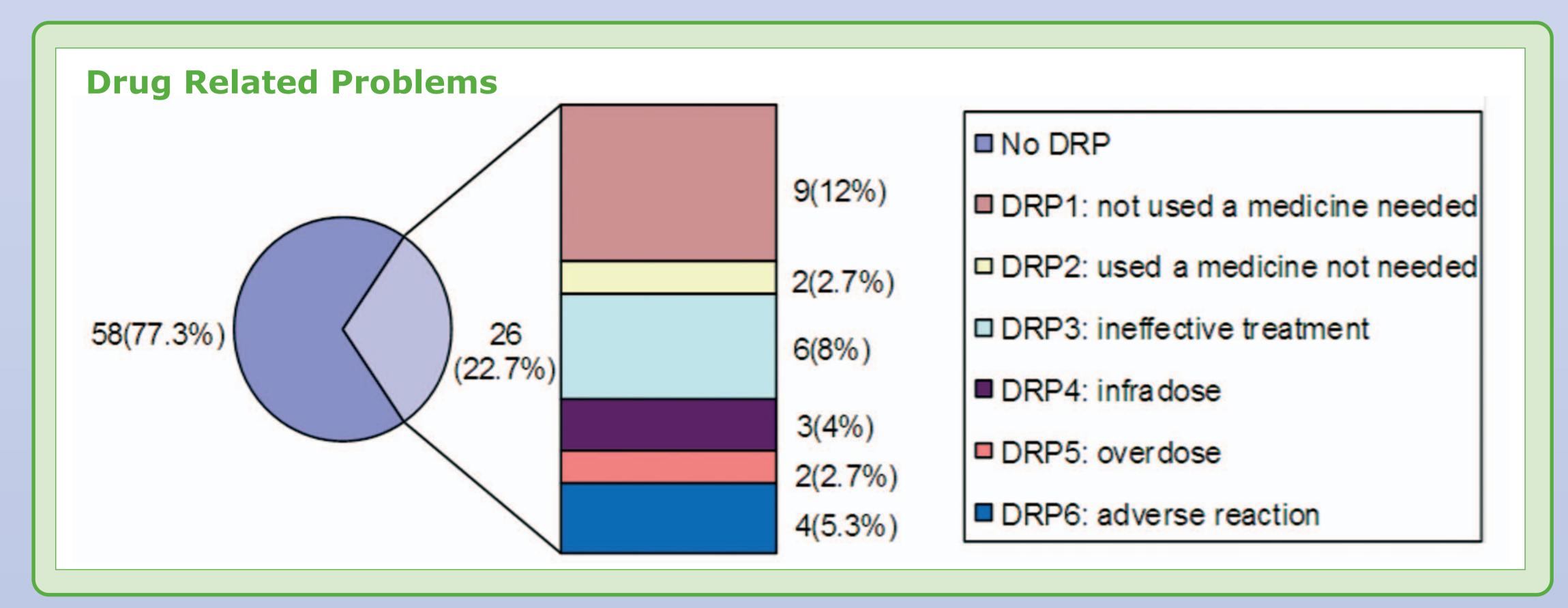
**Statistical test:** Chi-Square and Fischer exact test for dichotomic variables and t-test for continuous variables.

#### RESULTS

Patient profile	n (%)
Total Patients	75
Male	54 (72%)
Age (CI 95%)	71.8 (69.2-74.4)
NYHA I	2 (2.7%)
NYHA II	58 (77.3%)
NYHA III	14 (18.7%)
NYHA IV	1 (1.3%)
EF< 45%	42 (56%)
Smokers	20 (26.7%)
Alcohol consumption	17 (22.7%)

Adherence	n (%)
Self-reported adherence to medication	75 (100%)
Self-reported adherence to diet	56 (74.7%)
Self-administration of medication	41 (54.7%)
Motivation (Modified Morisky Scale)	61 (81.3%)

Knowledge of medication	
Knowledge of CHF medication	n (CI 95%)
% Dose/ Frequency/ Indication	29.7 (21.8-37.6)
% Dose/ Frequency 47.8 (37.2-58	
Contraindicated drug knowledge n (%)	12 (16%)



	DRP n=17 (22.7%)	Not DRP n=58 (77.33%)	p
Descompensated n=11 (14.7%)	5 (29.4%)	12 (70.6%)	0.05
Self-administration n=41 (54.7%)	6 (10.3%)	29 (50%)	0.134

#### CONCLUSIONS

- The PEIP evaluated the adherence and knowledge of the treatment in CHF patients and allowed us to detect DRP in about 23% of the patients.
- The presence of any DRP was only correlated with acute descompensation and self-administration of drugs, suggesting the importance of an appropriate CHF treatment self-management.



