

# Identification of Drug Related Problems in a sample of Portuguese nursing homes

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### Introduction

The numerous comorbidities associated with ageing often lead to treatment with multiple drugs. Pharmacist-led medication review of polypharmacy patients may play an important role in the detection of Drug Related Problems (DRP), thus contributing to their prevention or solution.

# Objectives

To determine the prevalence of real and potential DRP in polypharmacy elderly residing in nursing homes; and to describe the nature of DRP; and to explore acceptance of pharmacists' reports.

## Methods

Ethical approval

Invitation of nursing homes (n=224)

Application of eligibility criteria
Inclusion: Patients aged ≥ 65; taking ≥ 5 medicines
Exclusion: no record of medical diagnoses

Sample random allocation (n=126)

Intervention
Group (IG)
(n=63)

Control Group (CG) (n=63)

Clinical files analysis to detect, describe and quantify DRP

Safety

Clinically important DRP prioritized and reported to physician and/or nurse with suggestion of therapy changes

Clinical files analysis to detect, describe and quantify DRP

#### II Granada Consensus (1):

**Necessity** DRP 1: untreated condition

DRP 2: unnecessary medicine

**Effectiveness** DRP 3: non-quantitative ineffectiveness

DRP 4: quantitative ineffectiveness DRP 5: non-quantitative unsafety

DRP 6: quantitative unsafety

<u>Statistical Analysis</u>: Univariate. Bivariate: Mann-Whitney, Student's T-Test; Pearson's correlation coefficient. 95% CI.

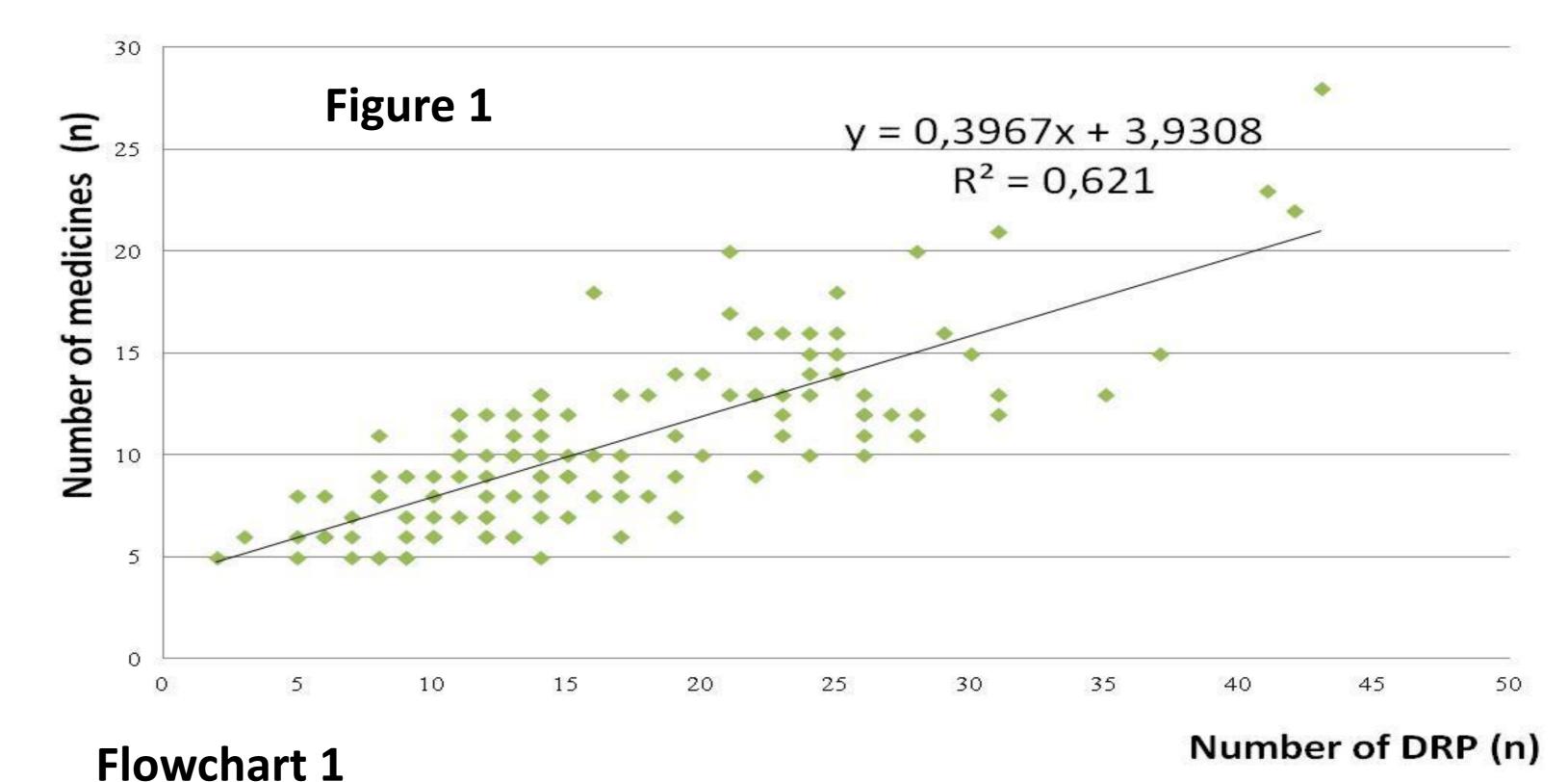
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References

## Results

Table 1 presents the sample main characteristics at baseline. The number of medicines directly correlated with the number of DRP detected (Fig 1). Flowchart 1 summarises interventions made and results obtained.

Table 1	Total	IG	CG	p
Age	126	85, 16 (6, 302)	84, 46 (5, 978)	0,525
Medicines	1332	10, 78 (4, 556)	10, 37 (3, 858)	0,584
DRP	2109	13, 50 (9, 19)	16 (7, 510)	0,252



Identified at baseline Pharmacist intervention

DRP 4 = 18 (40.0%)

Potential DRP = 1001 (100.0% IG)

Real DRP = 29 (31.8% IG)

DRP 5 = 385 (18.7%)
DRP 2 = 277 (13.4%)

62 suggestions of therapy change

Physician's acceptance

Reported= 584 (56.7%)

Interventions accepted = 10/28 (35.7%)
No feedback = 34 (54.8%)

## Discussion/Conclusions

Pharmacist-led medication review proved useful in identifying DRP in elderly polypharmacy patients. The acceptance rate of pharmacist's reports is far from ideal but may be justified by this project's unexpected impact on media coverage, which led to nursing homes being less receptive to admit flaws in their system. Meetings will be held with the facility that withheld information with the purpose of developing stronger bonds between healthcare providers involved.

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