Background

Portuguese population is double-aging, with a current aging index of 129.4%, the 5th highest in Europe. Old age is often associated with a high comorbidity index, polymedication and various DRPs, including adherence problems and potentially inappropriate medications (PIMs). Pharmacists have a role in medicines review of these patients and several tools have been developed to assist them in such task.

Aims

• To develop a university-based programme where students actively engage in managing the medication of elderly patients.
• To test the feasibility of such approach.
• To evaluate the impact of medication review on patient outcomes (clinical and humanistic).

Methods

Multicentred trial

Residential facilities
Day Care Centres
Community Pharmacies

Patients’ inclusion criteria

Age ≥ 65 y.o.
Taking ≥ 5 meds

Study design

RCT

Quasi-experimental

Interventions

1) Identification of DRPs
2) Identification of PIMs and Potentially Omit Medicines (POMs)

Patient follow-up=3 months

Outcome measures: adherence (pill-count and MMAS-4); PIMs detected and removed; POMs detected and added; proxy measures when appropriate (e.g. Glycemia, B.P.)

Results

Changes have been made according to difficulties encountered so far, e.g. Recruitment sites and patients age.

Invited to participate

4 Residential facilities
3 Day Care Centres
28 Community Pharmacies

Accepted to participate

4 Residential facilities
0 Day Care Centres
12 Community Pharmacies

Total # patients = 226

Services offered are provided by sociologists (n=2)
Too many research projects (n=1)
Control (n=5)
Intervention (n=7)

Short of staff (n=3)
Waiting for decision (n=13)

Table 1: Baseline characteristics of residential patients (3 facilities)

<table>
<thead>
<tr>
<th></th>
<th>Intervention</th>
<th>Control</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (female)</td>
<td>31 (48.4%)</td>
<td>33 (51.6%)</td>
<td>0.547</td>
</tr>
<tr>
<td>Age</td>
<td>M (50)</td>
<td>M (50)</td>
<td>0.409</td>
</tr>
<tr>
<td>Comorbidities</td>
<td>4.09 (1.998)</td>
<td>4.45 (2.050)</td>
<td>0.409</td>
</tr>
<tr>
<td>Number of medicines</td>
<td>9.89 (4.877)</td>
<td>9.67 (3.797)</td>
<td>0.816</td>
</tr>
<tr>
<td>Daily dosages</td>
<td>11.39 (7.268)</td>
<td>11.70 (4.998)</td>
<td>0.819</td>
</tr>
</tbody>
</table>

Discussion

While the interventions designed were planned to be theoretically more useful for patients living alone, the difficulty found in recruitment sites is shifting the focus from home medicines review to residential medicines review. Students are motivated with this project and have offered to become active parts in site recruitment.

References

2. Comité de Consenso GIAF-UGR, GIAF-USE, GIG-UGR. Third Consensus of Granada on Drug Related Problems (DRP) and Negative Outcomes associated with Medication (NOM). Ars Pharm 2007; 48 (1): 5-17

Working Symposium of the Pharmaceutical Care Network Europe (PCNE), Malta, 14-15 March 2014.