Treatment adherence is a very important issue to ensure the correct effectiveness of treatments, and it is often compromised in older patients. To assess and improve patients’ treatment adherence is an important role of clinical pharmacists, and knowing which factors are usually associated to a lack of adherence could help to enhance this task.

The aim was to estimate the prevalence of lack of treatment adherence in older adults admitted to an Acute Geriatric Unit, and assess associated factors.

**METHODS**

**DESIGN:** Cross-sectional observational study of over 75 years old patients consecutively admitted to an Acute Geriatric Unit in a third level hospital.

**DATA COLLECTION:** clinical pharmacist performed a semi-structured clinical interview with the patients and their families, including the 4-items Morisky-Green test.

Socio-demographic and clinical characteristics of included participants were registered from medical records and patient interview.

**ANALYSIS:** Multivariate logistic regression was used to identify predictors of lack of adherence.

250 patients were included

Female: 150 (60.0%)

Mean age: 87.6 years (SD 4.6)

Important lack of adherence: 55 (22.0%, 95%CI 16.83-27.17)

Weekly pillbox to organize their medications: 48 (19.2%)

MCA: 32 (12.8%)

Recent change in medication: 52 (20.8%)

Dependent for taking their medications: 168 (67.2%)

Visual deficiency: 39 (15.6%)

Hearing deficiency: 71 (28.4%)

Between older adults admitted to an acute geriatric unit, men and patients who can handle their own medications are more likely to present worse adherence to their medications. Hospital pharmacists in this setting should pay special attention to this population to focus their interventions addressing the lack of adherence in very old adults.

**RESULTS**

The following factors were included in the analysis:

- Age
- Sex
- Polypharmacy (≥5 chronic medications)
- Comorbidities (age-ad. Charlson Comorbidity Index)
- Functional impairment (Barthel Index)
- Cognitive impairment (degree of impairment: ✓ None ✓ Mild ✓ Moderate ✓ Severe
- Dependence for taking medications
- Use of weekly pillbox
- Multi-compartment compliance aid (MCA)
- Visual and hearing deficiency
- Changes in treatment in the last 3 months

Two factors were (inversely) associated with lack of adherence

<table>
<thead>
<tr>
<th>Female sex</th>
<th>OR: 0.50</th>
<th>95%CI 0.255-0.974</th>
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<tbody>
<tr>
<td>Dependence for taking medications</td>
<td>OR: 0.26</td>
<td>95%CI 0.109-0.630</td>
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</tbody>
</table>

Between older adults admitted to an acute geriatric unit, men and patients who can handle their own medications are more likely to present worse adherence to their medications. Hospital pharmacists in this setting should pay special attention to this population to focus their interventions addressing the lack of adherence in very old adults.