Background

Medications whose risk of adverse drug events (ADE) exceeds their expected clinical benefit when they are given to elderly persons, and which can be replaced by better-tolerated alternatives, are called potentially inappropriate medications (PIM). The prevalence of PIM might be considered as a quality indicator of prescribing practices in the elderly.

Purpose

To study the prevalence of three PIM for elderly patients in a third level hospital discharge.

Material and Methods

Data were obtained from the pharmacy claims database between the 1st of January 2013 and the 31st of December 2013. Patients over 64 years old who had dispensed in the community pharmacy at least one of the following PIM during 2013 were included:
- fluoxetine (selective serotonin reuptake inhibitors (SSRI)) for the risk of hyponatremia and the central nervous side effects (nausea, insomnia, dizziness, confusion),
- glibenclamide (sulfonylureas) for its high risk of hypoglycaemia,
- metoclopramide (prokinetics) for its extrapyramidal side effects.

The proportion of users of these PIM were calculated and broken down by gender and age.

Results

The percentage of elderly patients who were dispensed one of the selected PIM for the three drug classes is shown in table 1.

Table 1.

<table>
<thead>
<tr>
<th>Potentially inappropriate medication</th>
<th>Drug Class</th>
<th>Percentage of patients</th>
<th>Gender</th>
<th>Mean age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluoxetine</td>
<td>Selective serotonin reuptake inhibitors</td>
<td>7,4 % (26/350)</td>
<td>69,2 % female 30,8 % male</td>
<td>77,6 years</td>
</tr>
<tr>
<td>Glibenclamide</td>
<td>Sulfonylureas</td>
<td>26,5 % (26/98)</td>
<td>46,2% female 53,8 % male</td>
<td>78,5 years</td>
</tr>
<tr>
<td>Metoclopramide</td>
<td>Prokinetics</td>
<td>78,4% (182/232)</td>
<td>59,3 % female 40,7 % male</td>
<td>77,3 years</td>
</tr>
</tbody>
</table>

Conclusion

- Percentage of PIM in elderly patients is still considerable at discharge, at least for the three drugs considered. Stronger efforts in medication review at hospital discharge should be done in order to minimize this fact.