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Objective :

Chronic polypharmacy in elderly patients has been published as potentially inappropriate due to several adverse events. According to Beers and Laroche criteria and the new recommendations of the management of high blood pressure in elderly patients, we have aimed to realize a practice review.^{1,2}

Method :

Three reviews were conducted on 2010, 2011 and 2014 using each time, the same assessment methodology on 50 prescriptions, in hospitalized elderly patients. Based on a HAS (*Haute Autorité de Santé*) form for preventing drugs-inducing-falls prescription (including anti-psychotics, benzodiazepines (BZD), anticholinergics)^{3,4} three new criteria were added in 2014 :

- No more than 1 diuretic (D)
- No more than 3 anti hypertensive agents (AH)
- No central anti-hypertensive drug (CAH)⁵.

DATA COLLECTION

Department : Date : Collection number :

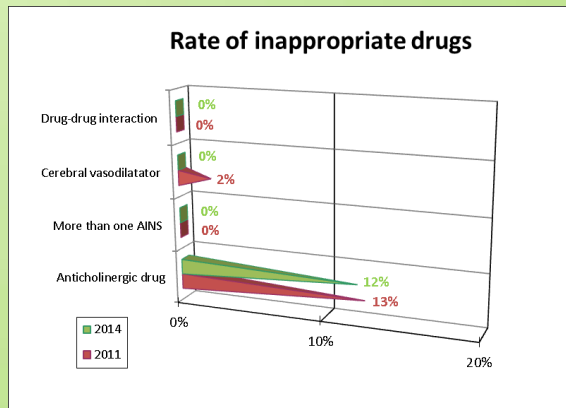
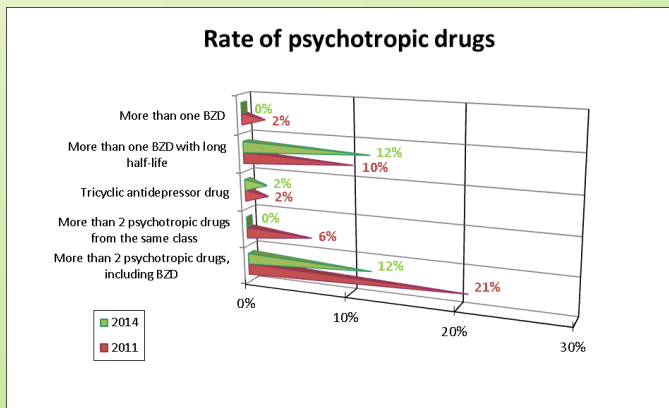
Last and first name patients : Gender : Male Female Age :

Number of oral drugs :
 Number of injectable drugs :
 Total number of drugs :

Prescription	yes	no	NA	comments
1 No more than 3 psychotropic drugs, including BZD				
2 No more than 2 psychotropic drugs from the same class				
3 No more than one BZD				
4 No more than one BZD with long half-life				
5 No tricyclic antidepressor drug				
6 No anticholinergic drug				
7 No more than one AINS				
8 No cerebral vasodilator				
9 No more than 3 antihypertensive drugs				
10 No central antihypertensive drug				
11 No more than one diuretic				
12 No drug-drug interaction				

Results :

The mean age of patients was 84±6 years. The average number of drugs prescribed per patient was 12±4 drugs. In 2014 the ratio of inappropriate drugs prescriptions was 12% and the prescriptions containing more than 2 psychotropic drugs also 12%. Benzodiazepines with long half-life were prescribed in 12% and they were used as antiepileptic in 66%. Drugs with anticholinergic properties were prescribed in 12%. Only 2 patients exhibited inappropriate prescription with D, AH and CAH drugs.



Management of high blood pressure	Rate in 2014
More than 3 antihypertensive drugs	2%
Central antihypertensive drug	0%
More than one diuretic	2%

Conclusion :

The inappropriate drugs prescriptions decreased in 2014 in comparison to 2011 (22%) and 2010 (18%). Our 2014 practice review teaches us that the chronic polypharmacy is still a real challenge in elderly patients. A handy booklet entitled "Memo of best practice of medicinal prescription at the elderly person" has been created and shared with the medical team.

1- M.H. Beers *et al.* Explicit criteria for determining inappropriate medication use in nursing home residents. *UCLA Division of Geriatric Medicine. Arch Intern Med*, 1991, 151, 1825-32
 2- M.L. Laroche *et al.* Médicaments potentiellement inappropriés aux personnes âgées : intérêt d'une liste adaptée à la pratique médicale française. *La Revue de Médecine Interne* 2009, 30, 592-601
 3- Evaluation des Pratiques Professionnelles « Prescription médicamenteuse chez le sujet âgé » Haute Autorité de Santé, France 2005
 4- J.L. Rudolph *et al.* The Anticholinergic Risk Scale and Anticholinergic Adverse Effects in Older Persons. *Arch. Intern.Med*, 2008, 168(5), 508-513.
 5- Haute Autorité de Santé, France, October 2012