

# PRESCRIPTION OF FALL-RISK-INCREASING DRUGS IN PATIENTS SUFFERING A FALL WITH MAJOR LESION DURING ADMISSION AT AN INTERMEDIATE CARE CENTRE

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## BACKGROUND

- Falls in older adults increase morbidity, affect quality of life and rise health care cost.
- Several pharmacological groups have been associated with falls, which are grouped as "Fall Risk Increasing Drugs" (FRIDs).
- Despite awareness of the risk, prescription of FRIDs is highly prevalent.

### Fall Risk Increasing Drugs (FRIDs)

<b>Cardiovascular drugs</b>	Digitalics (C01AA), Antypertensives (C02), Beta blockers (C07), Calcium channel blockers (C08), Agents acting on the renine angiotensine system(C09), Alpha adrenoreceptor antagonist (G04CA), Diuretics (C03)
<b>Psychotropics</b>	Sedatives/hypnotics (N05C), Antipsychotics (N05A, except Lithium), Antidepressants (N06A), Anxyolitics (N05B)
<b>Others</b>	Opioids (N02A), NSAIDS (M01A), Antiepileptics (N03A)

## OBJECTIVE

- To assess prescription patterns in patients experiencing a fall with major lesion during admission at an intermediate care centre.
- Determine FRIDs prevalence before and after the fall.

## METHODS

- **Design:** descriptive, observational and retrospective study.
- **Participants:** all patients who experienced a major lesion due to fall during admission in an intermediate care centre. Major lesion was defined as traumatic brain injury, wound requiring stitches, fracture, and other severe wounds.
- **Period:** 3 years period (2015-2017).
- **Setting:** intermediate care centre of 350 beds in an urban area.
- **Methodology:** Patients were identified by the inpatient fall register. Data regarding treatment was collected from the electronic health record.
- **Main outcome:** prescription of FRIDs. Other variables: demographic data (age, sex), type of lesion, number of drugs, and type of drugs (ATC codes) prior to fall and at discharge. FRIDs list was built from literature review and include: 1) cardiovascular drugs (CV), 2) psychotropic and 3) others (NSAIDS, opioids, antiepileptics).

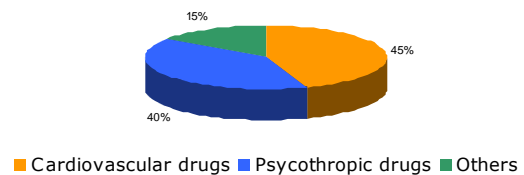
## RESULTS

- 50 patients were included. Mean age  $\pm$  SD was  $81.5 \pm 11.46$  and 54% were men.
- Types of lesion, as a consequence of the fall, were: traumatic brain injury (n:11), wound requiring stitches (n:15), fracture (n:17), others (n:7).

### Use of FRIDs BEFORE the fall

- Prior to fall, average number of total drugs/patient was  $11.10 \pm 3.19$ .
- 96% patients were prescribed at least one FRID (42%  $\geq 4$  FRIDs,  $3.42 \pm 1.85$  FRIDs/patient).
- 171 prescriptions of FRIDs were identified: 44.44% CV drugs, 40.35% psychotropic drugs, 15.20% others.
- 80% of patients received a psychotropic drug (mainly benzodiazepines or quetiapine) prior to the fall.

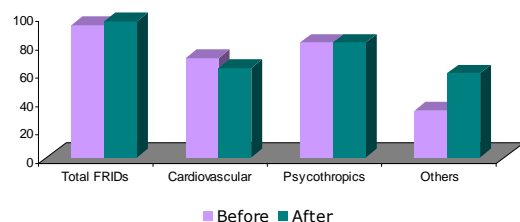
### Type of FRIDs prescribed before the fall



### Use of FRIDs AFTER the fall

- 27 patients (54%) were discharged home or to a long term care facility.
- Of those, 93% patients were receiving a FRID prior to the fall and 96% prior to discharge.
- Only in 8 patients (29%) some FRIDs were stopped (10 FRIDs).
- Conversely, 11 new FRIDs were initiated in 8 patients.

### Prescription of FRIDs before and after a fall (% of patients, n=28)



## CONCLUSIONS

Despite being a well known modifiable risk factor for falls, prescription of FRIDs is highly prevalent among the older adults. Even after a relevant adverse event, withdrawal of FRIDs is not performed.

