

before and 24 months after their admission. The data was analysed to identify persistence rates of patients prescribed osteoporosis therapy after discharge. Results were compared to the findings of a similar study carried out in an urban teaching hospital in Dublin - St. James's Hospital<sup>1</sup>.

**Results:** Pre fracture treatment increased in SGH from 15.15% in 2005 to 16.54% by 2008 while postfracture prescribing increased from 31.31% in 2005 to 43.31% in 2008. In comparison prefracture treatment in St. James's Hospital increased from 2.6% in 2005 to 10.6% by 2008 while postfracture prescribing increased from 11% in 2005 to 47% in 2008. The persistence with medications postfracture in those prescribed therapy was 64.9% at 6 months and 24.7% at 12 months in the urban group and 64.8% at 6 months and 50% at 12 months in the rural group. In the urban group 28.6% of hip fracture patients were persistent at 12 months in contrast to the rural group where 50% continued to be persistent at 12 months.

**Conclusion(s):** The proportion of patients discharged on anti-osteoporotic medications post fragility fracture increased between 2005-2008 in both patient groups. There is a marked variation between the two groups in persistence rates at 12 months. The reasons for this will require further investigation.

**References:** 1.B McGowan, K Bennett, J Marry, JB Walsh, MC Casey. *Eur J Clin Pharmacol* 2011;67:301.

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### BONE DECADE ACTIONS: ARE PRACTICAL RESULTS MEASURABLE YET? AGE SPECIFIC INCIDENCE RATES OF OSTEOPOROTIC HIP FRACTURES IN PORTUGAL

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**Objective(s):** The aim of this work is report temporal trend in hip fracture incidence, in Portugal.

**Material & Methods:** Osteoporotic hip fractures (820.x ICD 9-CM, caused by low impact, aged 49+) from 2000-2008 were collected from National Hospital Discharge Database, mandatory for all Portuguese public hospitals, containing information such as: sex, age, causes of admission

and diagnosis. Cases of bone cancer, readmissions or complications after-care were excluded. Portuguese population, 2001 census, was the standard to calculate direct age standardized incidence rates (ASIR) (100,000 inhabitants). Linear regression was used to evaluate temporal trends of age specific rates (AR), by gender and Joinpoint regression to determine points of inflection in trends.

**Results:** During the period 77,083 hip fractures were identified (22.6% of male). Mean age at admission was 78.3 (SD 10.1) and 81.05 (SD 8.5) years old, men and women, respectively. A decreasing temporal linear trend was identified in ASIR in women (p-value 0.026), the relative estimated variation -10.63%. The AR in male patients showed fluctuating for all ages groups, with positive and negative absolute variation, none of the trends were statistical significant. However, in female patients all age groups presented a negative absolute variation, except the oldest (85+); in the age groups of 65-70, 70-75 and 75-80 the decreasing temporal trend was statistical significant (p-value 0.08, 0.02 and 0.02, respectively) and the relative estimated variation in the period was -23%, -29% and -15%, respectively. The year 2003 was identified as a turning point in temporal trend for hip incidence rate in women aged 65-70.

**Conclusion(s):** Statistically significant decreasing trends were identified only in female patients at intermediate age groups, this fact seems compatible with hormonal pharmacological intervention actions (beginning before the 2003 turning point). Among younger women (50-59 years old) no significant reduction was observed and one possible explanation is the fact that osteoporotic fractures tend to have severe medical reasons in younger groups and therefore the actions for osteoporosis prevention have lower impact. On the other hand, among the oldest group the effective intervention should be fall prevention, which is almost inexistent in Portugal.

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### A COMPARISON OF BONE DENSITY AND BONE MORPHOLOGY IN THOSE PRESENTING WITH EITHER HIP FRACTURES, SPINAL FRACTURES OR A COMBINATION OF THE TWO

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**Objective(s):** In hip fractures the relative contribution of trauma and osteoporosis is hard to determine. Who to treat