

Non-Steroidal Anti-Inflammatory Drug Use Does Not Adhere To Prescribing Guidelines For Older Men Or Women With Dementia

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Results: 1. Detailed drug utilization of NSAID use by NSSPBD over period of 1 April 2010 to 31 March 2015

NSAID	Total NSSPBD	Men	Women
Total Rx dispensed	37,916	10,049 (26.5%)	25,244 (66.6%)
NSSPBD receiving at least one Rx	6,119 (21.1%)	1,850 (30.2%)	3,741 (61.1%)
Age at diagnosis (years (SD))	79.4 (7.7)	77.2 (7.2)	80.3 (7.8)
Age at first NSAID Rx (years (SD))	80.0 (7.6)	78.0 (6.9)	81.3 (7.7)
Duration (days (SD))	207.7 (360.4)	186.7 (334.2)	220.0 (372.4)

Introduction: A drug utilization review and a sex-based analysis of NSAID use in older adults with dementia in Nova Scotia, Canada

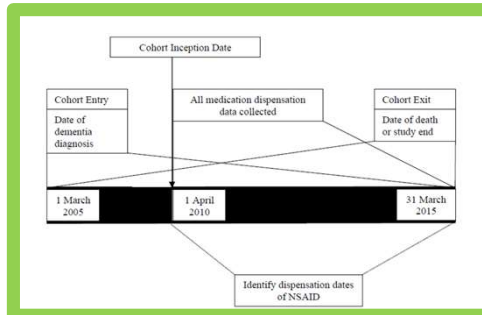
1. Avoid chronic NSAID use¹

2. Avoid indomethacin use due to increased risk of gastrointestinal bleeding¹

3. Duplicate drug use from NSAID class²

Methods: NSAID use in a cohort of Nova Scotia Seniors' Pharmacare Beneficiaries with dementia. Prescription data examined from April 1, 2010 to March 31, 2015. Concordance with prescribing guidelines^{1,2} was compared for men and women using descriptive statistics. Analyses included; t-tests for pairwise comparisons and unadjusted odds ratios for associations.

Cohort entry was from the date of first occurrence of any of the ICD 9/10 codes that identify dementia from the MSI or DAD databases.



1. Duration of use was longer in women than in men (220.0 days versus 186.7 days, $p=0.0006$), though notably the mean duration of use for both men and women exceeded the recommendation for less than 90 days. NSAID use exceeding 90 days occurred in 2,170 NSSPBD (35.5% of NSAID users).

2. Indomethacin was used by 521 older adults with dementia in the cohort (1.7%) with higher use in males (OR 0.46, 95% CI [0.38-0.56]).

3. There was concurrent use of NSAIDs in 317 NSSPBD. Overlap varied in duration from 1-419 days with a mean of 32.4 days. As short periods of overlap may represent switching, limiting overlap to more than 30 days identified 101 cases of NSAID duplication with an average period of duplication of 75.6 days. Common drug duplicate pairs included celecoxib with naproxen, celecoxib with diclofenac, or diclofenac with naproxen. Duplicate NSAID use showed no sex difference (OR 1.01, 95% CI [0.66-1.55]).

Conclusions: NSAID use by older adults with dementia does not adhere to prescribing guidelines.

The data (or portions of the data) used in this report were made available by Health Data Nova Scotia of Dalhousie University. Although this research is based on data obtained from the Nova Scotia Department of Health and Wellness, the observations and opinions expressed are those of the authors and do not represent those of either Health Data Nova Scotia or the Department of Health and Wellness.

References

1. *J Am Geriatr Soc* 2019; 00:1–21.
2. *Age Ageing*. 2015 Mar; 44(2): 213–218.

