

# **Prevalence of inappropriate medication prescribing and PMO for elderly patients in nursing home**

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Inappropriate prescribing in nursing home is a health concern. A considerable proportion of nursing home residents are older than 65 years, and they require several medications to manage their chronic conditions, which make them more prone to inappropriate medication prescribing. The main aims of the study were: assess the studies that inspect the prevalence of inappropriate prescribing in nursing home using STOPP criteria for potentially inappropriate prescriptions (PIPs), START for potentially medication omission (PMO), and Beers criteria for potentially inappropriate medication (PIM). The second aim was to identify the potentially inappropriate prescription in old people's home in Sharjah using Beers and STOPP/START criteria

## **Method**

The systematic review followed PRISMA guideline established by Cochrane collaboration. Data from these studies were collected and summarized independently. The articles that carried out in this search were from 2015 till October 2019.

A cross-sectional analysis of old people recruited from Sharjah old people's home, Sharjah, United Arab Emirates. A data collection form was used. Ethical approval was obtained from the Ethics Committee at University of Sharjah.

## **Results**

Two hundred thirty-nine studies were identified, and 12 studies were retained for review. The included studies were conducted in 148 nursing homes. The average of PIP per resident ranged from 0.4 to 3.84. Studies that used Beers criteria found high inappropriate psycholeptic prescribing rates, while studies that used STOPP found a wider variety of PIM classes, with non-steroidal anti-inflammatory medications and psychotropics being the most prevalent. Calcium and vitamin D supplements were the most frequent omissions according to both versions of START criteria.

The second part of study that was conducted in old people home in Sharjah. According to Beers criteria 2015, 65% PIM detected across the previous 3 years for the residents. The most involved medication classes were antipsychotics (38.6%).

## **Conclusion**

PIMs/PIPs have important clinical, humanistic, and economic impacts. Differences Beers and STOPP/START criteria in their inapplicability and comprehensiveness require further examination. Adapting these criteria for each country might provide more accurate estimates of inappropriate prescribing rate.

PIMs in elderly who are living in old people home should be taken into consideration. Despite the medical services provided by the old people's care home for all times, where the medical staff is always available, it is still occurred with possibility to reduce this PIMs with actively apply the assessment tools.