TITLE

"Secular trends in the initiation of therapy in secondary fracture prevention in Europe: a multi-national study including data from Denmark, Spain, and the UK."

AUTHORS

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OBJECTIVES

There is a global gap in the initiation of anti-osteoporosis therapy for secondary fracture prevention. We used population-based data from Spain, Denmark and the United Kingdom (UK) to quantify the treatment gap amongst fractured patients in 2005-2015.

METHODS

Data were extracted from primary care records in Catalonia (SIDIAP) and the UK (CPRD), and from national hospital database from Denmark, linked to pharmacy dispensation/s (prescriptions from CPRD) from 2005 (2007 for SIDIAP) to 2016.

Patients with an incident fracture (any but skull/face/digits) in 2005-2015 and aged over 50 years were eligible. Those with prostate, breast, Paget's or bone cancer were excluded, as were users of anti-osteoporosis therapy in the year before fracturing.

Numbers and % with at least one prescription of anti-osteoporosis treatment in the year following fracture were reported, and treatment gap (those not starting any such therapy) over calendar years depicted. Analyses were stratified by country.

RESULTS

A total of 131959, 284375, and 50290 fracture participants were included from Spain, Denmark, and the UK respectively. Secondary fracture prevention treatment gaps were narrower in the UK (68.1% in 2005, 61.5% in 2015) compared to Spain (89.6% in 2007, 94.7% in 2015) and Denmark (96% in 2005, 97% in 2015). Treatment gaps have increased over time in Spain (89.6% in 2007, 94.7% in 2015), remained stable in Denmark (95.9% in 2005, 96.6% in 2015), and decreased in the UK (68.1% in 2005, 61.5% in 2015).

CONCLUSIONS

Unacceptable treatment gaps remain to exist following a fracture, and have widened in Spain during the study period. The national move towards the implementation of dedicated fracture liaison services in the UK NHS might explain the opposite trend observed in this country, as well as the much narrower gap in comparison to Spain and Denmark. Similar efforts are urgently required in other European countries.