

## Poster presentations

### 112 CHANGING BEHAVIOURS: A SYSTEMATIC LITERATURE REVIEW OF DEPRESCRIBING INTERVENTIONS IN OLDER PEOPLE

Christina Raae-Hansen<sup>1</sup>, Denis O'Mahony<sup>2,3</sup>, Patricia M. Kearney<sup>4</sup>, Laura J. Sahn<sup>1,5</sup>, Shane Cullinan<sup>6</sup>, Anne W. S. Rutjes<sup>7</sup>, Sven Streit<sup>8</sup>, Wilma Knol<sup>9</sup>, Anne Spinewine<sup>10</sup>, Nicolas Rodondi<sup>8,11</sup>, Stephen Byrne<sup>1</sup>

<sup>1</sup>School of Pharmacy, University College Cork, Cork, Ireland

<sup>2</sup>Department of Medicine, University College Cork, Cork, Ireland

<sup>3</sup>Department of Geriatric Medicine, Cork University Hospital, Cork, Ireland

<sup>4</sup>Department of Epidemiology and Public Health, University College Cork, Cork, Ireland

<sup>5</sup>Mercy University Hospital, Cork, Ireland

<sup>6</sup>School of Pharmacy, Royal College of Surgeons in Ireland, Dublin, Ireland

<sup>7</sup>University of Chieti-Pescara, Chieti Pescara, Italy

<sup>8</sup>Institute of Primary Health Care (BIHAM), University of Bern, Bern, Switzerland

<sup>9</sup>Department of Geriatric Medicine and Expertise Centre Pharmacotherapy in Old Persons, University Medical Centre Utrecht, Utrecht, The Netherlands

<sup>10</sup>Louvain Drug Research Institute, Université Catholique de Louvain, Louvain, Belgium

<sup>11</sup>Department of General Internal Medicine, Inselspital, Bern University Hospital, Bern, Switzerland

**Background:** While there is evidence to suggest the positive effect of deprescribing on clinical outcomes in older people, the best way to engage prescribers in deprescribing

interventions remains unclear. This systematic review aimed to examine the characteristics and effects of deprescribing interventions on medication use. This current study reports on the preliminary findings in a narrative synthesis.

**Methods:** A systematic search of the literature to identify studies examining the effects of deprescribing interventions, and a narrative synthesis of the evidence. Randomised controlled studies were included if they reported on interventions in people aged  $\geq 65$  years to encourage the discontinuation of existing drug prescriptions, reduction of dosages, or targeting prescribing appropriateness. Study selection, data extraction and risk of bias assessment was done by at least two researchers independently. This review was conducted according to the PRISMA guidelines for systematic reviews and meta-analyses.

**Results:** 1,541 records identified from a systematic search and 24 papers included in the review. Risk of bias was rated low in at least 3/7 parameters. Studies were set in hospital ( $n = 6$ ), ambulatory clinics ( $n = 3$ ), residential care ( $n = 5$ ) or primary care ( $n = 10$ ). Intervention components were medication reviews ( $n = 18$ ), education ( $n = 3$ ), electronic alerts ( $n = 1$ ), or a combination of components ( $n = 2$ ). Interventions were delivered by multidisciplinary or investigator teams, and pharmacists or physicians alone. Studies reported significant reductions in number of medicines ( $n = 4$ ), number of potentially inappropriate prescriptions (PIPs,  $n = 2$ ), number of subjects with PIPs ( $n = 3$ ), and Medication Appropriateness Index score (MAI,  $n = 6$ ).

**Conclusions:** This review showed that deprescribing interventions using various intervention components, and delivered by a range of healthcare professionals in different settings can have significant positive impacts on polypharmacy and medication appropriateness among older people. Future work is planned to examine the prescribing behaviour change components in deprescribing interventions to suggest research objectives for future interventions.