

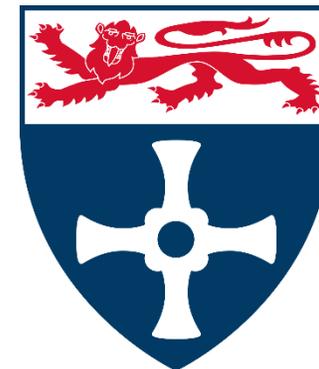
New Kids on the Block? Maximising the use of pharmacy services to promote healthy ageing

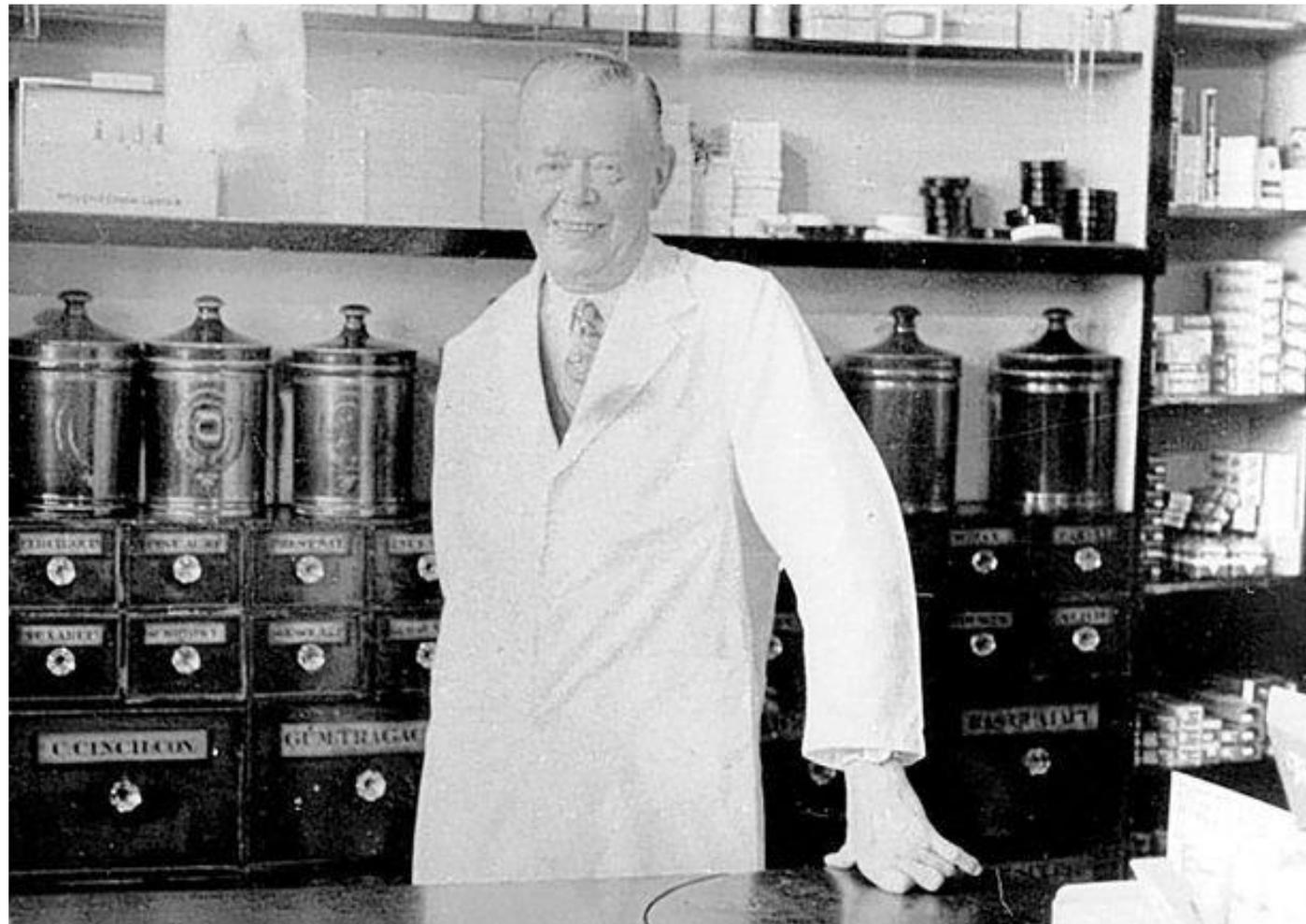
Adam Todd

Professor of Pharmaceutical Public Health

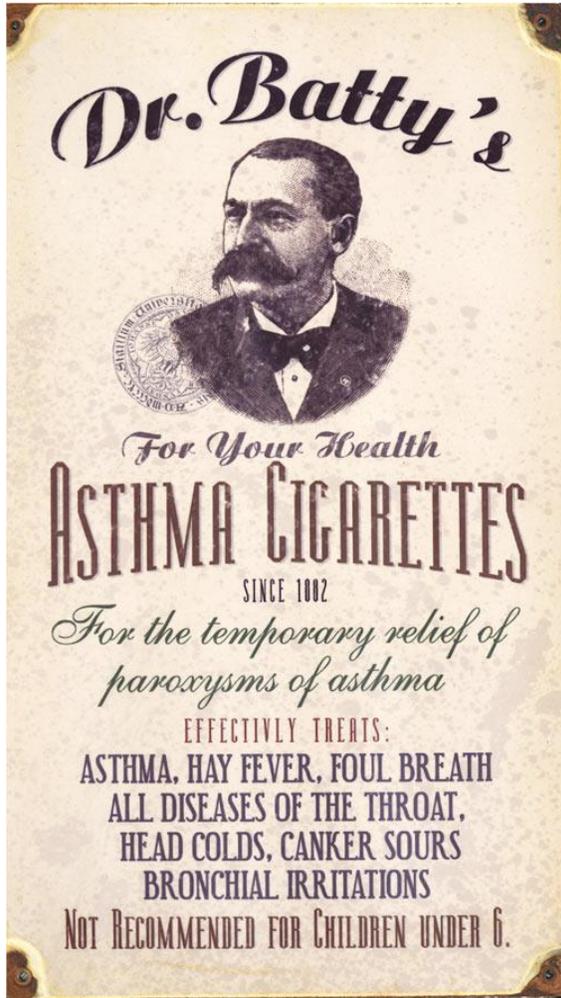
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Pharmacy in the good old days

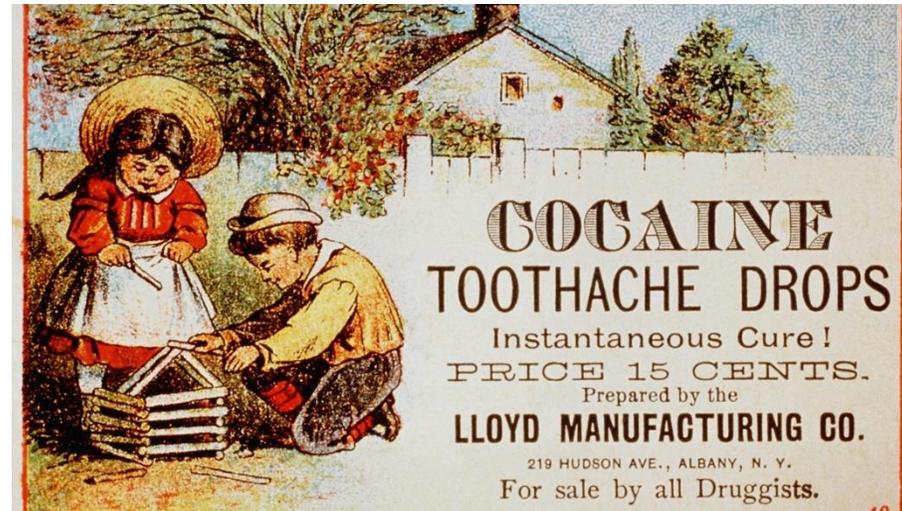


Dr. Batty's



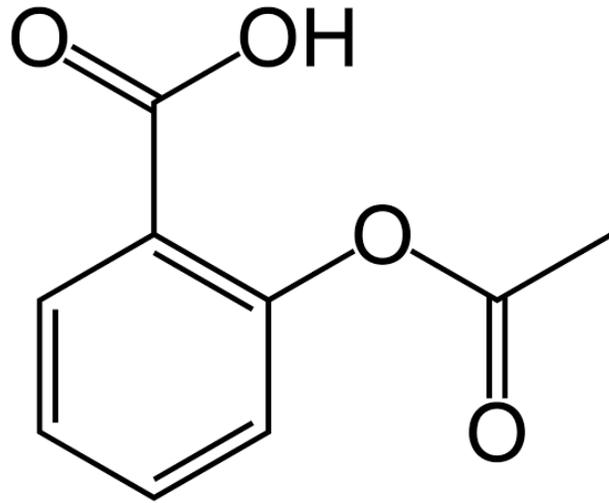
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*For the temporary relief of
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BRONCHIAL IRRITATIONS
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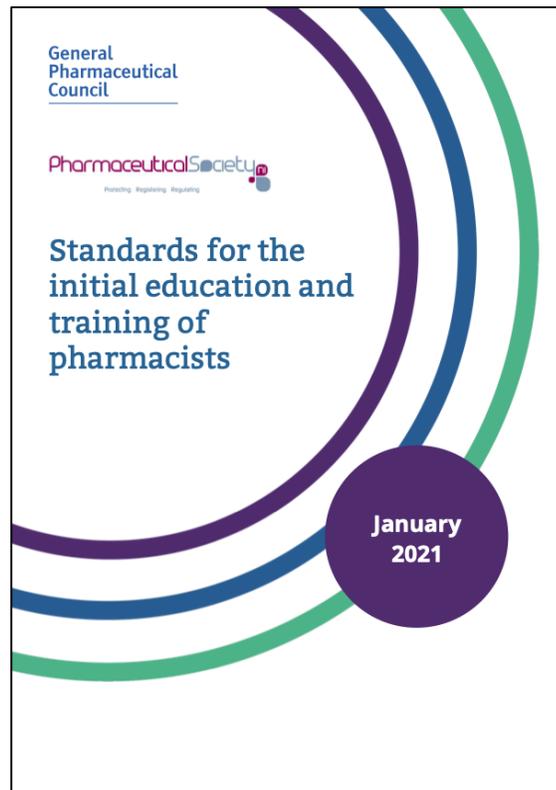


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Pharmacists are experts on medicines



A shift in education and policy



FAQ: reforms to the initial education and training of pharmacists

The new standards, recently approved by the GPhC Council will introduce major reforms that will benefit future pharmacists and patients. The implementation of these standards will transform the education and training of pharmacists, so they are able to play a much greater role in providing clinical care to patients and the public from their first day on the register.

Challenges associated with Healthy Ageing

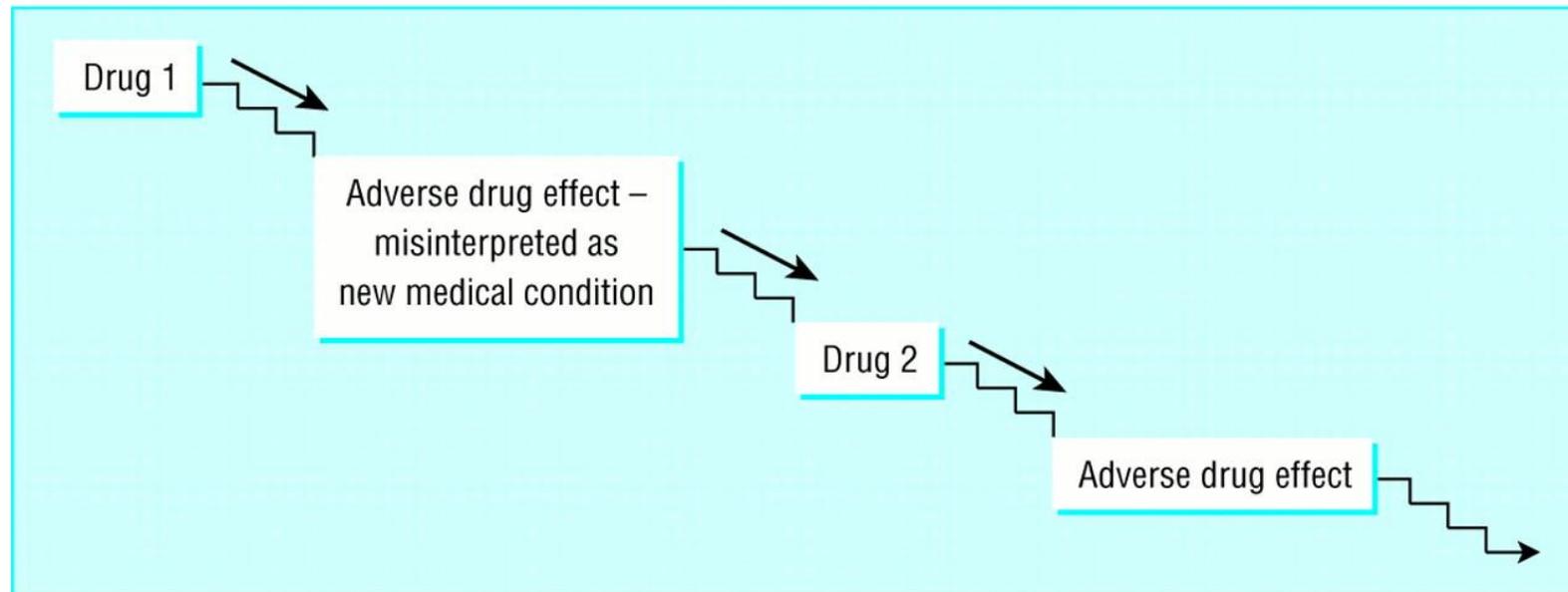
- Hypothetical older patient:
 - High blood pressure
 - Osteoarthritis
 - Type 2 diabetes
 - Depression



Challenges associated with Healthy Ageing

Time	New patient model	Treatment-resistant model	Last-line model
8 am	Amlodipine 5 mg tab Metformin 500 mg tab \pm Sertraline 50 mg tab* Paracetamol 500 mg tabs \times 2	Amlodipine 10 mg tab Metformin 500 mg tab \times 2 Fluoxetine 20 mg caps \times 3 Gliclazide 80 mg tab \times 2 Ramipril 10 mg cap Paracetamol 500 mg tabs \times 2 Ibuprofen gel	Amlodipine 10 mg tab Metformin 500 mg tab \times 2 Fluoxetine 20 mg caps \times 3 Omeprazole 20 mg cap Gliclazide 80 mg tab \times 2 Ramipril 10 mg cap Indapamide 2.5 mg tab Pioglitazone 45 mg tab Atenolol 50 mg tab Paracetamol 500 mg tabs \times 2 Ibuprofen 400 mg tab
1 pm	Metformin 500 mg tab Paracetamol 500 mg tabs \times 2	Metformin 500 mg tab Paracetamol 500 mg tabs \times 2 Ibuprofen gel	Metformin 500 mg tab Paracetamol 500 mg tabs \times 2 Ibuprofen 400 mg tab
6 pm	Metformin 500 mg tab Paracetamol 500 mg tabs \times 2	Metformin 500 mg tab Gliclazide 80 mg tab \times 2 Paracetamol 500 mg tabs \times 2 Ibuprofen gel	Metformin 500 mg tabs Gliclazide 80 mg tabs \times 2 Paracetamol 500 mg tabs \times 2 Ibuprofen 400 mg tab
10 pm	Paracetamol 500 mg tabs \times 2	Paracetamol 500 mg tabs \times 2	Paracetamol 500 mg tabs \times 2 Mirtazapine 15 mg tab [§]

The Prescribing Cascade



Polypharmacy



The literature around polypharmacy is complex

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Review Article

Adverse Outcomes of Polypharmacy in Older People: Systematic Review of Reviews



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RESEARCH

Open Access



Are there socioeconomic inequalities in polypharmacy among older people? A systematic review and meta-analysis

Anum Iqbal^{1*}, Charlotte Richardson², Zain Iqbal³, Hannah O'Keefe⁴, Barbara Hanratty⁵, Fiona E. Matthews⁵ and Adam Todd²

Results Fifty-four articles from 13,412 hits screened met the inclusion criteria. The measure of SES used were education (50 studies), income (18 studies), wealth (6 studies), occupation (4 studies), employment (7 studies), social class (5 studies), SES categories (2 studies) and deprivation (1 study). Thirteen studies were excluded from the meta-analysis.

Lower SES was associated with higher polypharmacy usage: individuals of lower educational backgrounds displayed 21% higher odds to be in receipt of polypharmacy when compared to those of higher education backgrounds. Similar findings were shown for occupation, income, social class, and socioeconomic categories.

Take control of your health:

Supporting falls prevention

Thirty percent of people aged 65 and over will fall at least once a year. For those aged 80 and over it is 50%.

1 Falls are the number one reason older people are taken to the emergency department in a hospital

2 In around **5%** of cases a fall leads to a fracture and hospitalisation

3 Unaddressed fall hazards in the home are estimated to cost the NHS in England **£435 million**

All adults should undertake muscle strengthening activity, such as



yoga



exercising with weights



carrying heavy shopping

at least **2 days a week**

Minimise the amount of time spent sedentary (sitting) for extended periods



Adults (19 to 64) should aim for at least

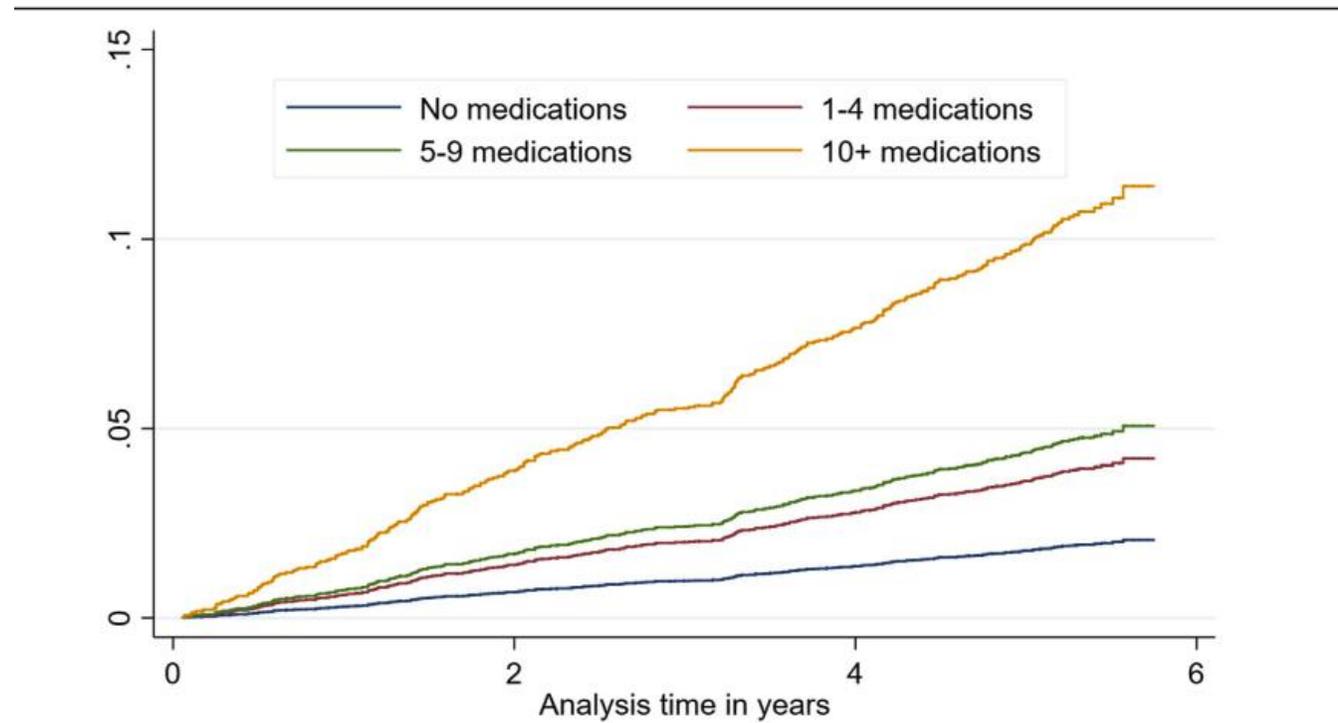
150 minutes

of moderate intensity activity, in bouts of 10 minutes or more, each week



This can also be achieved by 75 minutes of vigorous activity across the week or a mixture of moderate and vigorous activity

Falls risk



Which medications increase the risk of falls?

Opioid painkillers: 10% increased risk

Anti-inflammatory drugs: 21% increased risk

Blood pressure medication: 24% increased risk

Sleeping pills: 47-57% increased risk

Antipsychotics: 59% increased risk

Antidepressants: 68% increased risk

Being connected with other people matters for your health

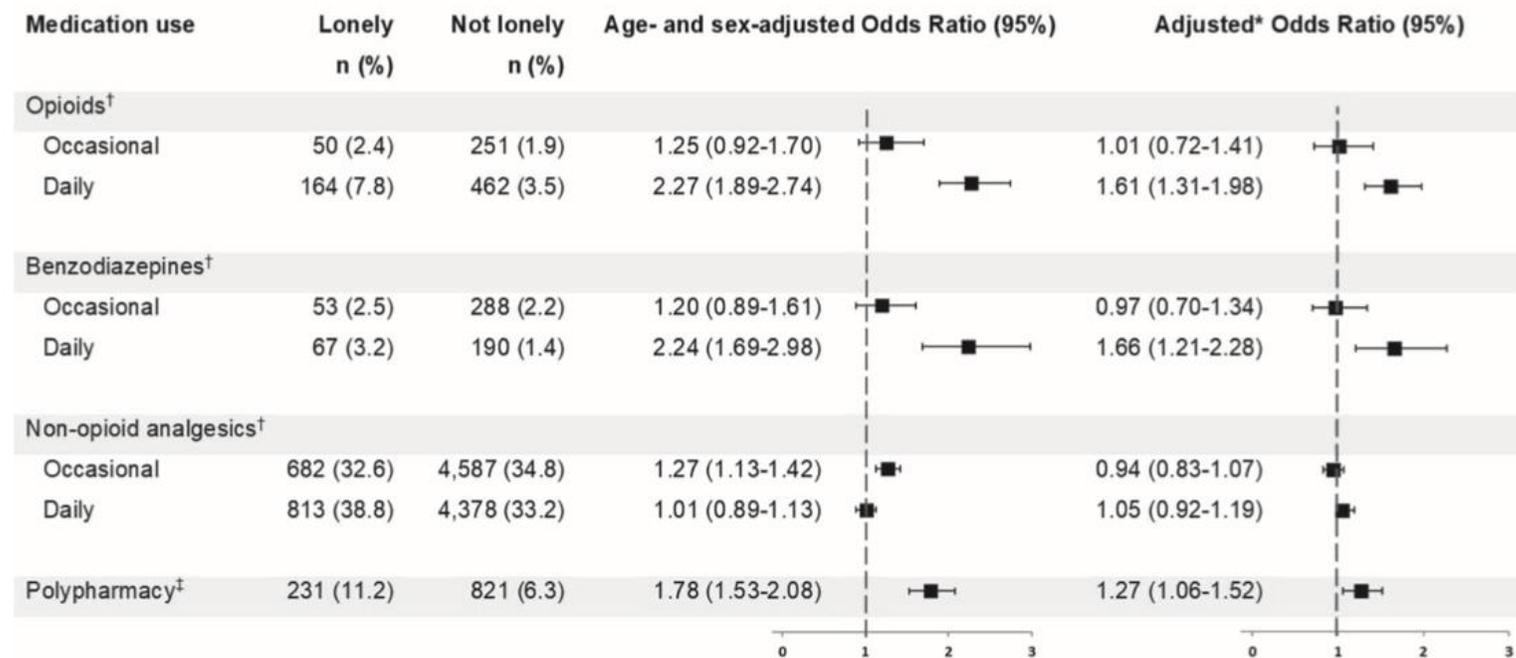
Research shows that **lacking social connections** is bad for our mental and physical health



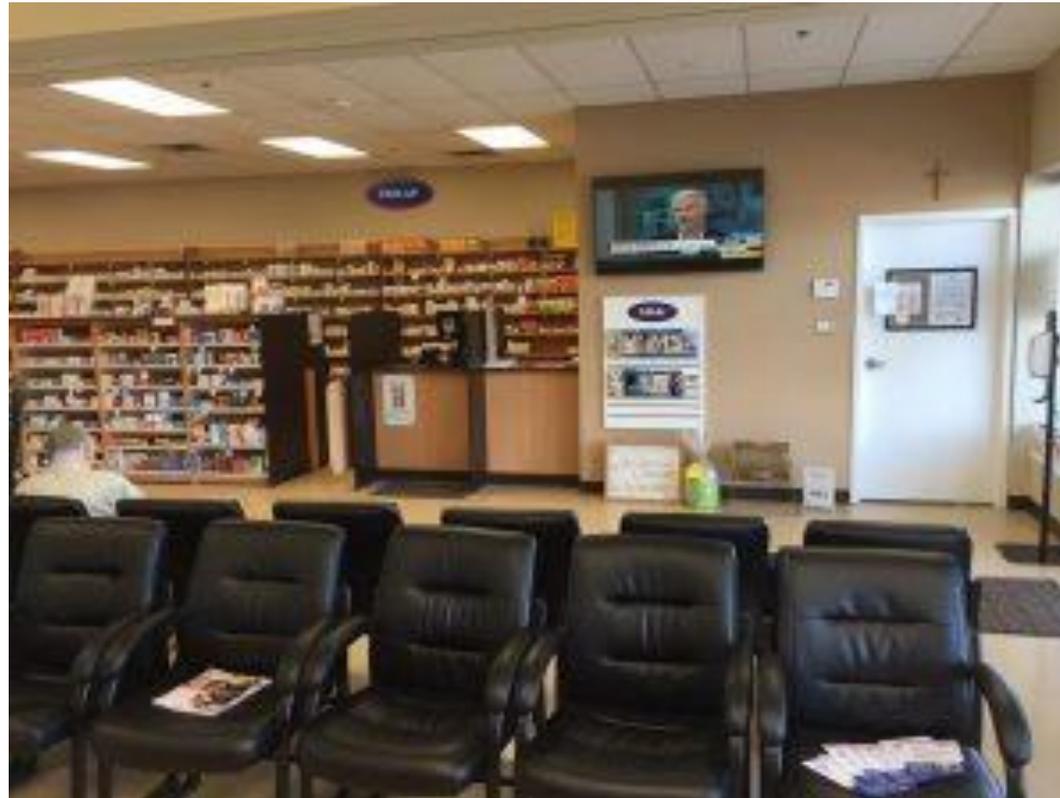
Loneliness increases the likelihood of premature mortality

by **26%**

Loneliness and polypharmacy



Having a pharmacy 'hub' for the local community



Other things pharmacy teams could (potentially) contribute to ...

- Dementia friendly pharmacy
- Improving physical activity
- Reduced malnutrition and undernutrition
- Helping to improve mental public health

Summary

- The role of the pharmacist is changing, with increasing focus being placed on people
- Many opportunities for pharmacy teams to get involved in promoting healthy ageing
- Reviewing medication and supporting appropriate prescribing is a key aspect of this agenda
- Important for pharmacy teams to work with other stakeholders to maximize this potential

Questions?