

Polypharmacy and Falls

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Working together for a healthier future

Learning Outcomes



- What is Polypharmacy?
- Why is it important we address it?
- How do we reduce polypharmacy?
- What is STOMP?
- Barriers to addressing polypharmacy.
- The link between medications and falls.
- Which medications cause falls?
- Ways in which we can reduce risks.





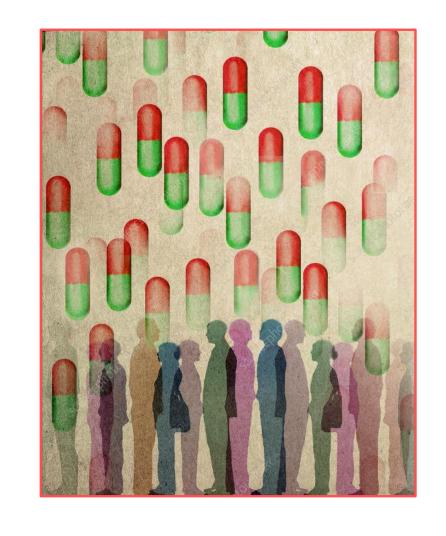


What is Polypharmacy

Polypharmacy refers to the prescribing or taking of too many medicines.

Rather than being associated with a fixed number of medicines e.g. 5 medicines per day, it now relates to prescribing or taking more medicines that are clinically required.

This is sometimes known as "appropriate" and "problematic" polypharmacy.





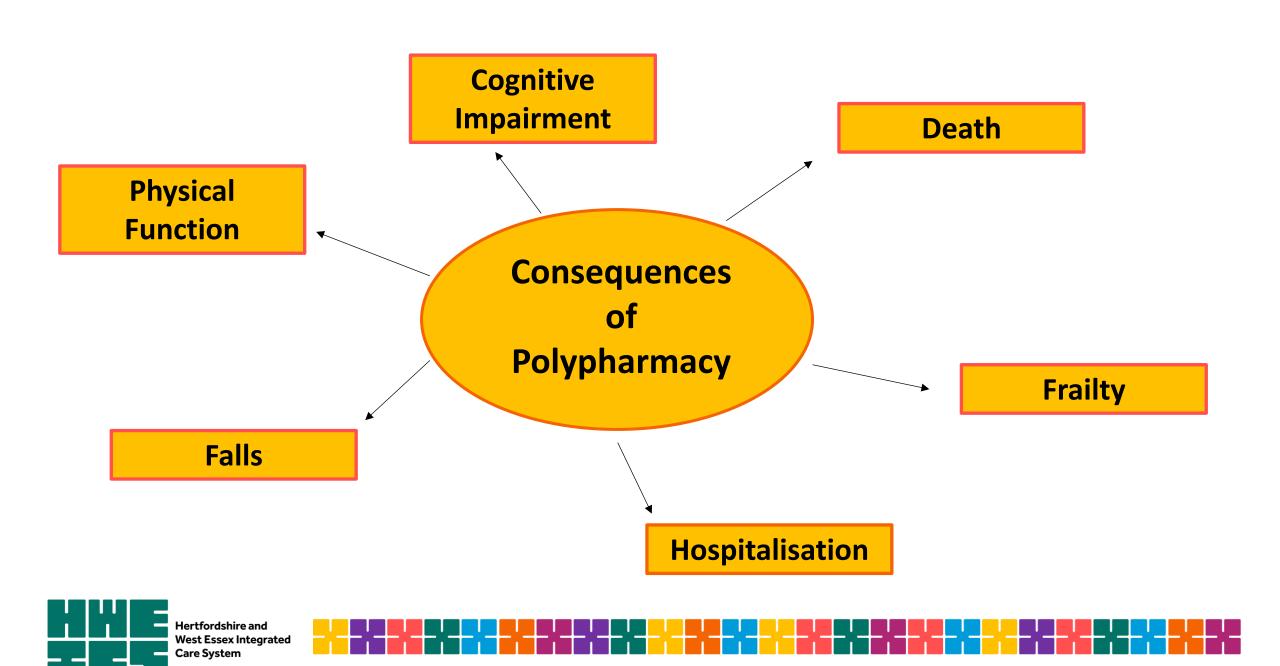
Why address this?

1 in 5 prescriptions for older people living at home may be inappropriate.

A person taking 10 or more medicines is 300% more likely to be admitted to hospital because of an adverse drug reaction.

People living in the most deprived areas are 2.8 times more likely to be taking 8+ medicines.

Up to 50% of medicines for long term conditions are not taken as intended.



Waste



Inappropriate prescribing = waste

Approximately £50 million worth of NHS supplied medicines are disposed of every year by care homes (2010)

Things to consider

Are there non-pharmacological treatment options available? e.g. social prescribing.

It was needed then, but not now.

Is the resident even taking it?

What does the resident want?

Is the resident end of life?























What might we stop





Medication for BP

Addictive medications: opioids; gabapentinoids; benzodiazepines; and Z-drugs.

Antipsychotics and antidepressants

Medications causing problematic side effects

PRN Medications no longer required Statins







Prescribing Cascade



- Elderly people can be the victim of a harmful "Prescribing Cascade".
- This happened when an adverse drug effect is misinterpreted as a new medical condition, for which another drug is then prescribed, and this new medication in turn have adverse effects that result in further prescribing.
- It adds an unnecessary burden to the patient's already complicated medication regimen.



Question: Where can we look to find information about medication side effects?





STOMP

STOMP is a national project that was launched in 2016 and stands for stopping over medication of people with a learning disability, autism, or both with psychotropic medicines.

Psychotropic medicines can cause problems when people ta them for too long, at a high a dose or for the wrong reason.

Side effects like putting on weight feeling tired or 'drugged userious problems with physical health.



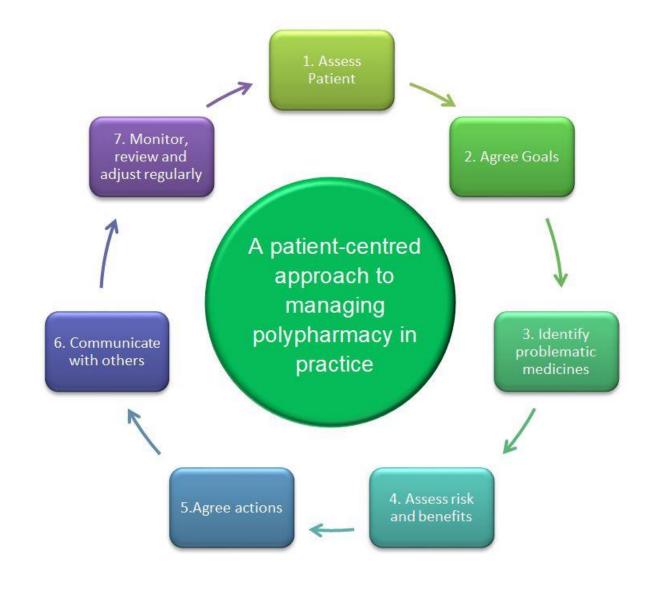
Structural Medication Review



Comprehensive and clinical review of a patient's medicines and detailed aspects of their health.

Undertaking SMRs in primary care will reduce the number of people who are overprescribed medication, reducing the risk of an adverse drug reaction, hospitalisation or addiction to prescription medicines.

Person Centred Approach to Polypharmacy





Deprescribing Approaches

Stepwise' approach: Tapering the dose helps reduce the likelihood of an adverse withdrawal event for some medicines.

All at once Useful if the patient is unwell as a result of likely drug side effects.

Mixed approach In practice, often several drugs can be stopped or reduced at once with little chance of harm. However, certain drugs (e.g. antidepressant and antipsychotic drugs) will need to be withdrawn more cautiously.



Barriers to Stopping Medications



Issues

- Patient expectations, damage to relationship
- Culture of prescribing
- Uncertainty
- Accountability for adverse outcomes
- Insufficient research, education, training and collaboration
- Meds prescribed by specialists





Falls

Older adults living in care homes are three times more likely to fall than those living in their own home and these falls tend to be more serious.

Falls have negative effects on functional independence and the quality of life. In addition, falls are associated with increased morbidity, mortality, and health related costs.

Question: Which factors contribute to a falls risk?



Question: Can you think which medications may cause falls?





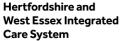
Which medications increase the risk of falls?

Diuretics: 36% increased risk Sleeping pills (benzodiazepines): 42% increased risk Antipsychotics: 54% increased risk **Antiepileptics: 55% increased risk** Antidepressants: 57% increased risk Opioid painkillers: 60% increased risk Polypharmacy*: 75% increased risk

*In this analysis, the most commonly used definition for polypharmacy was 4 or more medications.

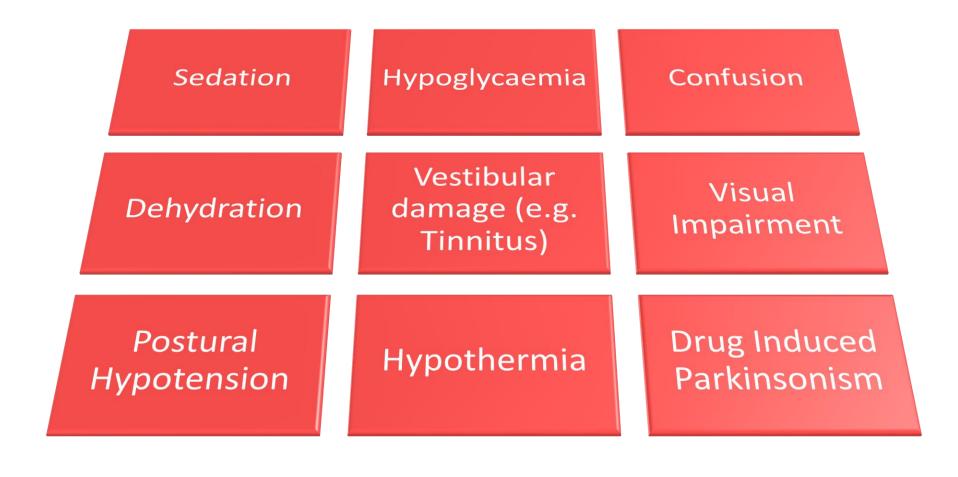
Sources: de Vries M et al. 2018, Seppala LJ et al. 2018, Seppala LJ et al. 2018







Ways in which medicines can cause a fall:



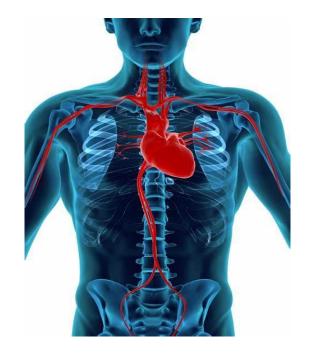








Older people are more vulnerable to the effects of these medications because of age related changes to the liver, kidney, heart, and central nervous system.







Hypoglycaemia

Hypoglycaemia: an abnormally low level of glucose in the blood can lead to a fall.

Residents who are diabetic should have a clear care plan in place on the management of hypoglycaemia and antidiabetic medication should be regularly reviewed for their appropriateness.





Hypotension

Hypotension is low blood pressure which can cause symptoms such as dizziness, light-headedness, fainting or a feeling of nausea.

People with a **BP reading under 90/60 millimetres of mercury (mm Hg)** are usually regarded as having a low BP.

Postural hypotension can be reversed with non-pharmacological methods such as ensuring the resident avoids sudden head-up postural change when waking up, hunger, dehydration, excessive heat or straining when passing stools.



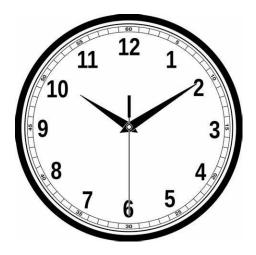


Parkinson's disease:

Puts residents at an increased risk of falls due to the condition itself and the medication used to manage it, therefore an individualised falls risk assessment for these residents is essential.

Remember doses are **TIME SPECIFIC**









Psychotropic Medication



These include antidepressants, anxiolytics and antipsychotic medications.

If psychotropics are used in the management of Behavioural and Psychological Symptoms of Dementia (BPSD), they should be reserved for severely distressed residents or where there is an immediate risk of harm to the resident or others. Treatment should be reviewed every 6 weeks as a minimum.

Question: Can you name some antipsychotics?





Sedation

Antihistamines
Z drugs
Opioids
Antidepressants
Antiepileptics

Why does Resident A take this antihistamine everyday, what is it for?

Resident B has not had a seizure in 10 years why is she on so many antiepileptics?

Resident C is on a Z drug to help them sleep, They have been on this for years.





Other factors to consider

Dehydration: is a common cause of falls, therefore ensuring residents stay well hydrated is essential. Medications such as laxatives can lead to dehydration important to review them regularly.





Medication Timing: always administer medicines as instructed on the dispensing label. The time a medication is taken can affect risk of falls.

Other factors to consider

Alcohol: when taken with some medications it can increase the risk of falls.

Blood thinning medication: If a resident has a fall, resulting in a cut, swollen or bruised area, or you suspect they have hit their head and they take a blood thinning medication (e.g. Warfarin, Edoxaban, or Apixaban) seek medical advice immediately.



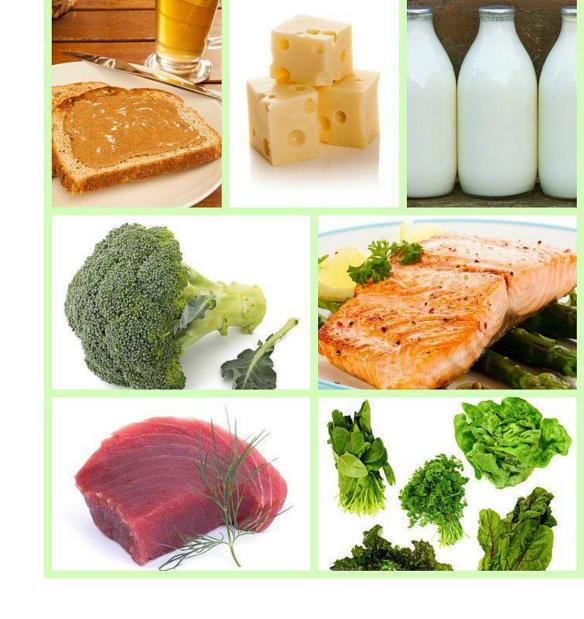


Bone Health

Vitamin D is essential for healthy bones.

People living in care homes should consider taking vitamin D **10 microgram** nutritional supplements all year round as part of meeting their nutritional requirements and self-care.

The care home should have processes in place to discuss vitamin D with residents and to support residents to take vitamin D nutritional supplements where they wish to do so.





Any Questions?

