

SAFE PRESCRIBING IN ELDERLY – DO'S AND DON'TS

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Safe prescribing is important. As for the GP, they provide the first line of therapy to the elderly and also review elderly with chronic disabilities and those requiring long-term treatment. The elderly also form a large proportion of the patient pool in certain family practises.

Although with newer and better drugs available, the GP may have more treatment options but the flip side would be adverse effects and non-compliance from polypharmacy.

Problems with Drug Therapy in Old Age

1. Compliance and intake

1.1 Patient factors

These would include cognitive impairment, poor vision, hearing and dexterity, difficulty in swallowing and ambulation, multiple co-morbidities resulting in drug-drug and drug-illness interaction, patient's ideas and expectations, denial of illness

1.2 Drug factors

Route, dose and frequency, polypharmacy, side effects of medicine. TCM and OTC drugs, cost and adverse drug reaction [ADR]

1.3 Doctor Factors

Unsuitable packaging and labelling, failure to educate patient, polypharmacy, inappropriate instruction, lack of understanding or familiarity with drugs used.

2. Altered pharmacokinetics in elderly

2.1 Absorption

Aging has little, if any, effect on absorption but it may be influenced by concurrent ingestion of other drugs and food and coexisting diseases

2.2 Metabolism

Liver mass and blood flow decreases with age and so does enzyme production and this results in decreased metabolism of certain drugs

2.3 Excretion

There is decrease in GFR and renal blood flow which results in altered excretion of certain drugs

2.4 Distribution

Serum albumin decreases and thus free drug concentration increases. Also body fat increases and thus water-soluble drug levels would increase.

3. Altered pharmacodynamics

There is altered receptor function and impaired function at target organ resulting in altered effect of the drug in elderly.

4. Adverse drug reaction

This is the most common cause of iatrogenesis. Incidence in hospitalised patients is 10% amongst the patients 40-50 years old and 25% in those >80 years old.

Elderly are more susceptible due to polypharmacy, altered pharmacokinetics and pharmacodynamics and multiple co-morbidities.

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Keep in mind this guide when you prescribe next:

1. Start low and go slow.
2. Have a precise diagnosis and set a therapeutic goal and discontinue the drug when the goal is achieved.
3. Simplify dosing schedule.
4. Minimise concurrent therapy.
5. Try non-pharmacological treatment if possible.
6. Review the drug list regularly.
7. Provide simple instructions for patients and carers.
8. Dispense in accessible containers.
9. Monitor drug compliance.
10. Be familiar with the medications used.
11. Look out for side effects and toxicity.
12. Choose the safest and simplest drug regime.
13. When uncertain, seek further advice.
14. Be sure of the indications for treatment and always do good. Try not to do harm unless a better alternative is not available.
15. Patient should be instructed on what to do when medicine runs out and also on disposal of unwanted medicines.
16. Be consistent as far as possible with the quality of medicines as changes in brand, colour or shape would confuse the elderly.

Questions

1. Diuretics could cause :
 - a. giddiness
 - b. urinary incontinence
 - c. acute confusion
 - d. muscle weakness
 - e. falls
 - f. all of the above.
2. When prescribing in the elderly:
 - a. go slow and start low
 - b. review medications regularly
 - c. give as many as you can to maximise treatment
 - d. educate the patient and the carer.
3. Changes in the elderly include:
 - a. Decrease absorption of all drugs
 - b. Decrease in renal clearance
 - c. Increase concentration of free drug in circulation
 - d. CNS is more sensitive to fat soluble drugs.
4. Which of the following is false
 - a. Long acting sedatives are safer than short acting one in elderly
 - b. Non-pharmacological treatment should be tried before drugs
 - c. Use one drug to treat more than one condition if possible
 - d. Long-acting oral hypoglycaemics are best avoided in the elderly.