Principles of Prescribing for Elderly People

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The challenge for the general practitioner is to balance an incomplete evidence base for efficacy in frail, older people against the problems related to adverse drug reactions without denying older people potentially valuable pharmacotherapeutic interventions¹ The key principle when prescribing for elderly people is to consider quality of life as the most relevant outcome and:

- Treat the disease process rather than symptoms
- Be cautious about adding new medication
- 'Start low, go slow'
- Monitor closely for adverse effects
- Manage the whole of the patients treatment regimen

Treat the disease process rather than symptoms

Try to establish a diagnosis first. For example, treat the cause of pain rather than just the pain. Remember to consider whether any new symptoms and signs could come from drugs the patient is already on, to avoid a prescribing cascade.^{2,3}

Be cautious about adding new medication

The decision to prescribe any drug is a complex one, especially in elderly people. Before we reach for the script pad or click the 'new script' icon, the following factors need consideration:

- Consider what you as the prescriber are trying to achieve for the patient and also if it is what the patient wants. Autonomy is often overlooked in prescribing guidelines.⁴ Many older patients may be more concerned about the number of drugs they are on and the side effects of these, than whether "their disease or risk factor is managed according to the latest published guidelines".¹
- Non-drug interventions such as lifestyle, activity, and mobility aids should be discussed with the patient and in some cases this will enable medication to be avoided.
- Check for the use of over the counter (OTC) and alternative medication.

- Regularly review long term medication to check that the indications for ongoing use are still appropriate and that they have achieved the desired effect.
- Optimise current drug therapies before adding a new drug.

Prescribing -'start low, go slow'

Once agreement is reached between prescriber and patient to initiate a new medication, the trusted advice 'start low, go slow' remains relevant and useful. This dosing axiom however, is not based on clinical trial data but on pharmacokinetics and the potential for adverse reactions.⁵ Broad dosage guidelines which take into account age related pharmacokinetics may be available but individual titration will be required. As a general guide, "older people need 50–75% of the optimal dose for younger people."⁶

Monitoring for adverse effects is vital

Monitoring for problems requires consideration of the increased risk of doing harm in elderly people from altered pharmacokinetics, comorbidity and polypharmacy. Some drugs, when used in elderly people, are more likely to be associated with an increased risk of adverse events.

Assessing each individual patient for problems will generally mean knowing age, weight, general well being, cognitive function, use of OTC and complementary medications, specific renal and hepatic function, likely compliance, and an accurate understanding of the patient's other conditions and medications.

Serum levels for specific drugs, especially those with a narrow therapeutic index (eg. lithium, digoxin, warfarin, anticonvulsants) can help guide dosing.

Monitoring is required particularly when any new medication is started, with at least one follow up visit to check on response and look for adverse effects. Long term medications also need review because changes in

Ethical principles can be used to guide prescribing for elderly people.

The ethical principles that underpin many of our clinical decisions form the basis for appropriate prescribing principles in elderly people.

Beneficence —'what is the likely benefit for this patient?'

Nonmaleficence —'what harm could I do with this medication?'

Autonomy —'what does this elderly person want?'

Justice —'what is fair and just for the whole community?'

Many symptoms can be caused by medication. The common ones are:

- Falls
- Confusion or altered cognition
- Decrease in functional ability
- Dizziness
- Constipation
- Incontinence
- Unexplained tiredness
- Depression
- Tremor



the medical status of the patient over time can result in the medications becoming ineffective or unsafe.⁶

Many older people will be able to be titrated off medications that are no longer required. This should be discussed at yearly reviews.

Medication reviews are therefore recommended:

- on an annual basis
- with new medication
- after discharge from hospital
- after any change in condition of the patient (both exacerbations and improvements)

The assistance of a pharmacist can be very helpful for patients with complex regimens.

Manage the whole of a patient's treatment regimen

"Ideally a single GP should take overall responsibility for managing and coordinating the medication regimen for a patient."⁷

If you don't take charge, who will?

GPs are ideally placed to be able to manage all medications used by their patients. Never assume you are the only prescriber or that the patient is taking what you prescribed. There is evidence that elderly people visit multiple GPs and new medication may be prescribed at discharge from hospital, outpatient clinics, after hours clinics and emergency department visits.

Sharing of information is vital. Accurate knowledge can only be acquired with good patient-doctor communication and relies heavily on effective communication between primary and secondary care. Situations when patients are most at risk can become opportunities for taking control of a medication regimen

The key task is to identify those patients at risk. There are many risk factors likely to cause drug related problems in elderly people including;

- Recent discharge from hospital
- Use of multiple drugs
- Multiple prescribers
- Impaired cognitive status and/or communication problems
- Use of drugs with a narrow therapeutic index
- Use of drugs commonly associated with adverse drug effects
- Initiation of any new medicine
- Use of OTC or complementary medications
- A change in the condition of the patient

A 'brown bag review' can be the first step in regaining control

Once those at risk are identified, a useful initial tool is the "brown bag review".⁸ As the name implies this is simply getting your patient to bring in all their medication in a bag –something GPs have been doing for years. GPs or practice nurses can then get an accurate understanding of all the medications the patients are currently on (and often many that they are not taking, but still have on hand).

Asking simple questions about what, why and how patients take their medication, can help reveal gaps in understanding and offer opportunities for patient education and improve compliance and outcome. Be prepared to stop unnecessary or inappropriate medication if it does not appear to be working or has the potential to do harm. Discontinuing medication prescribed by others can raise uncomfortable feelings for the GP, but this should be balanced by the knowledge that you are likely to have the most complete picture of your patient's circumstances. Involving your patient in the decision will help overcome any resistance to change.

A "brown bag review" may uncover problems that require a more formal review. This review may involve GP, practice nurse and pharmacist in a team approach. Don't forget to complete an up-to-date medication card.

The overall goal when prescribing for elderly people should be appropriate monitored medication use that will "enhance functional ability and life expectancy and result in improved quality of life".⁸

Best practice tip

A Christchurch GP offers us his best practice tip for taking control of treatment for his elderly patients.

"After elderly patients are discharged from hospital for a non-routine event, they are phoned by my practice nurse and invited to make an appointment for a 'debriefing session' with me.

I review their medication and discuss what events and procedures took place at hospital and what, if any, problems were encountered.

This enables me to take control of my patients' overall treatment and facilitate understanding and communication flow."

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