NUGGETS of KNOWLEDGE provides succinct summaries of pharmaceutical evidence about

treatment of common conditions presenting in primary care and possible adverse drug reactions.

## NUGGETS OF KNOWLEDGE

# Discontinuing medicines in the older person

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### Medicines in our ageing population

Older people are a heterogeneous population. Chronological age does not necessarily correlate with physical or mental age, and other factors such as comorbidities—are important. The elderly are particularly susceptible to adverse drug events. It has been estimated that 5–15% of hospital admissions for older people are drug-related.<sup>1</sup> Adverse effects are often non-specific, subtle, and likely to go unnoticed as they may mimic underlying disease processes or are incorrectly attributed to inevitable 'ageing' processes.

One of the problems with prescribing or not prescribing for the aged person is the conflicting messages you receive. 'You must follow guidelines for every medical condition to avoid ageism' versus 'multiple medicines are bad and we need to decrease polypharmacy in the elderly because of adverse effects and limited long-term benefit'.

### **Discontinuing medicines**

Reducing the pill burden is the most consistent and evidence-based method of helping adherence and reducing adverse effects in the elderly. Discontinuation of targeted medicine results in 75–80% of the medicines remaining discontinued, with no adverse clinical consequences and with a potential reduction in risk of mortality (21% compared to 45%) and acute care referrals (12% compared to 30%).<sup>2-4</sup>

There are a number of guides on stopping medicines in the elderly, but all take a similar approach. $^{5-8}$ 

### Principles

- Annual structured medication review
- Shared decision-making
- Advance care planning—including advanced directives that are discussed annually
- Give patients permission to stop medicines/opt out of taking medicines
- Assure patients that medicines can be restarted if they wish—discontinuation is a trial to see whether their now older body is better with or without the medicine
- Consider when geriatric care becomes palliative care

### At the medication review

PLEASED Do is a useful acronym.

- **P**atient or family views? What do they want?
- Long-term benefits? Balanced against life expectancy
- Evidence of benefit—for the medicine in this age group, with this level of disability/frailty
- Adverse effects present? Especially CNS, falls, gastrointestinal, which may be subtle and mistaken for 'ageing'
- Symptom control? Is there still an indication?
- Excessive dosage? There is less need for tight glycaemic and blood pressure (BP) control in the very elderly
- Discontinuation feasible? If so, howtaper dose or stop abruptly?
- **Do**cument, plan, share, monitor.

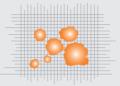
## **KEY POINTS**

- Adverse effects are often non-specific in the elderly and may mimic underlying disease processes.
- Reducing the pill burden is the most consistent and evidence-based method of assisting adherence and reducing adverse effects.
- Consider stopping rather than adding medicines in the elderly in the context of unexplained falls, weight loss, nausea, incontinence, or cognitive impairment.

J PRIM HEALTH CARE 2013;5(3):255–256.

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#### Medicines to consider stopping

**Blood pressure–lowering medicines**—less tight BP control is required in the elderly. Success rate for discontinuation is 80 to 90%.<sup>3</sup> Blood pressure–lowering medicines can be stopped abruptly, except for ß-blockers, which should be *titrated down over one month or so.* 

**Nitrates**—if there are no symptoms, consider a trial discontinuation. This reduces the risk of postural hypotension. *Titrate down over one month.* 

**Furosemide**—especially in summer. If heart failure is not symptomatic, trial a reduced dose. *Can stop abruptly.* 

**Potassium**—one or two potassium tablets daily can usually be replaced by dietary intake (banana, tomatoes, oranges). *Can stop abruptly.* 

**Aspirin**—the risks outweigh benefits in primary prevention.<sup>9,10</sup> *Can stop abruptly.* 

**Statins**—consider the long-term benefits versus potentially subtle adverse effects, such as cognitive impairment, muscles aches, muscle weakness/reduced exercise ability. *Can stop abruptly.* 

**Hypoglycaemic medicines**—less tight glycaemic control is acceptable in the very elderly e.g. HbA1c up to 64 mmol/ mol (8%). *Can stop abruptly.* 

**Gastric acid suppressants**. Need to titrate down over one to three months to avoid rebound hypersecretion.

**Benzodiazepines**—Not only is there an increased falls risk, but there is also an increased risk of impaired psychomotor function and cognition, and increased drowsiness in the elderly. *Titrate down very slowly.* 

**Antipsychotics**—There is no evidence of benefit for restlessness, wandering, calling out, anxiety and insominia, but there is evidence of increased harm and mortality.<sup>11,12</sup> Falls may increase by up to 70%. *Titrate down slowly. May be over months.* 

Antidepressants. Titrate down slowly. May be over months.

**Anticholinergics** such as oxybutynin and tricyclic antidepressants have adverse effects including:

- dry mouth, dry nose, decreased mucociliary clearance
- reduced gut motility, gastric secretions *(constipation)*
- bladder hypertonia (urinary retention/overflow)
- reduced cognition (confusion, memory impairment)
- postural hypotension (instability, falls)
- blurred vision (falls, loss of independence)
- sedation, delirium, restlessness, irritability

**NSAIDs**—ensure that regular paracetamol is used as an NSAID-sparing medicine.

**Bisphosphonates** after five years' therapy. *Can stop abruptly.* 

Iron, vitamins, calcium. Can stop abruptly.

Also consider discontinuing any medicine that is of little or no (long-term) benefit and may cause harm. Consider the possibility of adverse effects of medicines and of stopping rather than adding medicines in the elderly patient in the context of unexplained falls, weight loss, nausea, incontinence, or cognitive impairment.

**Polypharmacy** is the addition of one or more drugs to an existing regimen which provides no additional therapeutic benefit and/or causes drug related harm.<sup>13</sup>

# When does geriatric care become palliative care?

This needs to be an active and conscious decision, and influences the annual medication review.

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# Building clinical research capacity in the Pacific Islands

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ontextualised clinical research evidence is essential for an informed health system and achieving Millennium Development Goals in developing countries; yet there has been minimal reproductive health research conducted in the Pacific Islands in the past 12 years.<sup>1</sup> All Pacific Island countries lack robust health research systems to varying degrees,<sup>2</sup> which includes the lack of research governance policies and processes, infrastructure, and personnel.

In 2007, the Pacific Society for Reproductive Health (PSRH) Charitable Trust (membership of doctors, midwives and nurses) declared clinical research and audit as a measureable outcome for its members. The evidence gap has the potential to close if every clinician becomes a researcher. A systematic review of interventions to build research capacity amongst clinicians in developing countries found only four papers, none of them for an intervention longer than a week.<sup>3</sup> A researcher development programme for general practitioners funded federally in Australia failed because, amongst the many barriers encountered, the programme failed to change the thinking processes of clinicians.<sup>4</sup>

The BRRACAP study was designed to pilot a series of interventions to Build Reproductive health Research and Audit Capacity and Activity in six Pacific Islands. A collaborative effort with funders and the Ministries of Health in Vanuatu, Samoa, Tonga, Solomon Islands, Cook Islands, and the Fiji National University (FNU) resulted in 28 clinicians and academics with diverse experience and educational backgrounds attending a week-long research workshop in Auckland in March 2013. The workshop covered an array of topics confirmed from a survey undertaken by the participants and stakeholders as comprising the research needs of Pacific clinicians. Most of the presenters at the workshop were researchers from the Faculty of Medicine and Health Sciences (FMHS) of The University of Auckland who were either Pacific or had research experience in the Pacific. The feedback from the clinicians was that they found the workshop mostly relevant to their research needs, a thoroughly enjoyable learning experience, and that they were enthused by the workshop to start a research or audit project. They reported being motivated by the words of Professor Andrew Hill



VAIKOLOA

Pacific Primary Health Care Treasures

Vai (water) is a symbol of 'life-source' and koloa (treasures) to share

J PRIM HEALTH CARE 2013;5(3):257-258.

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