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Abstract

Older Australians are increasingly reliant on automobiles as their sole form of transport. As our population is ageing and the prevalence of dementia is increasing, it is anticipated that the number of drivers with dementia will rise over time. Much of the literature relating to driving and dementia focuses on safety rather than mobility. The objective of this paper is to highlight several topical ethical issues that pertain to Australian drivers with dementia. It is recommended that future research, policy and practice should centre on the crucial mobility and transport needs of our senior citizens.

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Driving, dementia and Australian physicians: *primum non nocere?*

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Introduction

The prevalence of dementia is increasing globally, and in Australia, the number of individuals with dementia is predicted to expand four-fold, from 266,574 in 2011 to almost one million in 2050.¹ More than one million Australians aged over 70 years are current licence holders.² For a variety of reasons, physicians will be increasingly requested to assess the driving fitness of people with dementia as: (i) our population is ageing; (ii) life expectancy is increasing; and (iii) a greater proportion of older women are driving.³ Thus, there is a clear need for stakeholders (Figure 1) to discuss the topic of driving and dementia whilst simultaneously appreciating the inextricably-linked ethical issues.

Older members of our community increasingly rely upon a private car for their transport needs.^{4,5} Public transport use by older Australian adults is low.⁶ In their study of car dependency in urban Australia, Buys et al. highlight several key determinants of transport usage: convenience; affordability; availability; and health/mobility.⁷ The authors argue that the comparative ease, comfort and privacy afforded by private car use are major barriers to public transport use.⁷

Although older drivers have the lowest number of car accidents per year, they have the highest risk of morbidity and mortality if involved in a crash.⁵ Many drivers aged 65 years or older self-regulate their driving behaviour: they tend to avoid driving at night and often limit their driving to familiar surroundings, good weather and non-peak hours.⁸ Notwithstanding such self-imposed restrictions, there is evidence that older drivers do not engage in self-planning for driving cessation.⁹ Of concern is that individuals who are unaware of their declining capabilities may not take corrective action, thus placing them at higher risk of crashes.

Dementia is most commonly caused by Alzheimer's disease, vascular dementia, Lewy body disease or frontotemporal dementia.¹⁰ Perhaps not surprisingly, the natural history of dementia is variable. Yet, many people with early dementia are capable of driving safely.¹¹⁻¹³ Thus, attempts to apply a uniform approach to all drivers with dementia could prove overly restrictive. It is widely accepted that patients with dementia develop difficulty with planning, judgement and problem solving.^{14,15} In addition, there is evidence that a large majority of drivers with dementia continue to drive despite having had a car accident.¹⁶ Despite such findings, it remains unclear as to when a person with dementia becomes unsafe to drive.^{4,17,18} Most authorities concur that individuals with moderate or severe dementia should not drive.^{11,13,18,19} However, such a consensus does not exist with regard to drivers with mild dementia.^{13,18}

Consequences of driving cessation

Retirement from driving can be a distressing event for older drivers.³ It is associated with an increased risk of: (i) depression;²⁰ (ii) difficulty accessing services;²¹ (iii) difficulty with social integration;²² (iv) transfer to a nursing home.²³ Driving cessation may be viewed by some as a threat to one's self-worth and independence.²⁴ Furthermore, individuals no longer capable of safely driving a motor vehicle may be viewed negatively by others and stigmatised.

Regardless of driving status, carers (e.g. spouse, family member, friend, paid-carer) of people with dementia are at risk of social isolation, psychological morbidity, depression and financial disadvantage.²⁵ Of concern is that the carers of drivers with dementia may not raise the issue of impaired driving skills with health care professionals because: (i) driving cessation may result in a carer becoming housebound;²⁶ (ii) a carer may wish to avoid being seen as responsible for a physician's instruction to stop driving; and (iii) a carer may be cognitively impaired and oblivious to unsafe driving behaviours. Thus, sole reliance upon a carer's account of driving skills/safety is probably unwise.¹⁹

Interestingly, driving cessation may alter family dynamics. A form of role reversal can develop whereby an adult child assumes the role of driver for their parent with dementia.²⁶ People with dementia may become dependent upon their children for their transport needs. Acknowledgement of a loved one's increasing reliance upon others is an uneasy process for some as it can highlight the progressive erosion of an individual's independence by their illness.²⁶

Instructing an individual to stop driving may have a detrimental effect upon a doctor-patient relationship (e.g. loss of trust, poor compliance, failure to attend for review). Occasionally, patients can become upset, irritated or angry during a consultation.¹³ Difficult physician-patient encounters, such as these, can lead to dissatisfaction for patients, physicians and family members.²⁷ As a result, individuals in real need of ongoing care may choose to sever ties with the medical community. Moreover, should older Australians perceive an overly strict approach by physicians towards drivers, it is conceivable that this could deter them from seeking medical review.²⁶

Somerville *et al.* argued that much of the responsibility for assessing fitness to drive in Australia has been 'shifted' from driver licensing authorities to doctors.²⁸ This leads to a conflict of interest for clinicians and can jeopardise doctor-patient relationships. Furthermore, the ethical principles of justice and beneficence can be subverted: (i) doctors may feel coerced into certifying unsafe drivers;²⁸ (ii) patients may visit several doctors until certified; and (iii) patients may not disclose symptoms to physicians so as to ensure certification is provided. Although Somerville *et al.* focused upon seizures/epilepsy specifically,²⁸ many of the points raised are applicable to other conditions (e.g. dementia, syncope, severe peripheral neuropathy, narcolepsy).

Current guidelines

In 2005, Beran proposed that, with regard to driving safety, dementia 'is a growing and serious consideration'.²⁹ He argued that the Austroads national guidelines³⁰ should

allocate the theme of dementia a more in depth appraisal. The updated Austroads guidelines, which came into effect in March 2012, stipulate that individuals with dementia are precluded from holding an unconditional licence.³¹ However, a driver licensing authority may award a conditional private licence following consideration of the: (i) nature of the driving task; (ii) information provided by the ‘treating doctor’; and (iii) results of a practical driver assessment if required. Austroads suggests that the ‘treating doctor’ provide information regarding the level of impairment and the likely impact on driving ability of any of the following: visuospatial perception; insight; judgement; attention; reaction time; and memory. Furthermore, annual medical review is recommended.

In 2010, the Australian and New Zealand Society for Geriatric Medicine (ANZSGM) released a position paper addressing driving and dementia.¹¹ ANZSGM proposes that some people with mild dementia may drive safely for a limited time but require medical review, at least, every six months. Although physicians should remain cognisant of the negative consequences of licence cancellation, ‘public interests must remain paramount’. Consequently, should a physician harbour ‘reasonable doubts’ about an individual’s road safety then a ‘breach of clinical confidentiality’ is legitimate. Following a systematic review of the relevant literature, the American Academy of Neurology published a practice parameter on the evaluation and management of driving risk in dementia.¹⁹ The authors established that ‘there is no test result or historical feature that accurately quantifies driving risk’. In addition, there was ‘insufficient evidence to support or refute a benefit of interventional strategies’ (e.g. modified licence, driver training). This report echoed the ANZSGM call for six-monthly review.

In 2008, the Australian Medical Association (AMA) issued a position statement on the role of medical practitioners in determining fitness to drive.³² A sample of several key points is provided in tabular form (Table 1). Although the AMA acknowledges that independent transport is highly valued by Australians, it highlights that ‘the possession of a licence to drive is a privilege, not a right’. It is the role of the State to decide whether an individual can hold a licence. If treating doctors are expected to serve as ‘decision-makers’, an ‘unacceptable ethical conflict’ arises whereby the doctor-patient relationship is threatened. This is particularly important in relation to commercial vehicle drivers (e.g. taxi, bus, truck).

Local and international legislative perspectives

Australian physician reporting requirements are not uniform in all states and territories (Table 2).³¹ Health professionals (e.g. occupational therapists, optometrists, physicians, physiotherapists) in South Australia and the Northern Territory are obliged to report all unsafe drivers to their local driver licensing authority. Such legislative requirements do not apply elsewhere in Australia where reporting of unsafe drivers is entirely at the discretion of individual health professionals. Of concern is that many physicians and patients are unaware of local regulations.³⁶

The juxtaposition of discordant legislation within a nation is not unique to Australia. Snyder highlighted an ethical (and legislative) dichotomy that exists in the United States: physicians who report a driver with dementia in New York can face legal action for

actions such as breach of patient confidentiality while physicians who fail to report a driver with dementia in California can face criminal misconduct charges.²⁴ Curiously, physicians in California and Oregon are obliged to report all drivers with dementia.³⁷

Potential solutions

In the absence of explicit national or international guidelines, how can Australian physicians balance patient need, public safety and the doctor-patient relationship in a judicious manner? Measures worthy of consideration include:

- Increased awareness by physicians of the updated Austroads national guidelines³¹ and of local legislative requirements (Table 2);
- Open, direct and early discussion of a diagnosis of dementia with patients and their families should be considered. This would allow management strategies to be put in place promptly and enable patients and their families to plan for the future;^{13,25}
- The current Austroads guidelines³¹ should be amended to fall in line with both the ANZSGM position statement¹¹ and the AAN practice parameter¹⁹: all drivers with dementia should undergo medical review every 6 months;^{38,39}
- A variable state and territory approach to older driver assessment and reporting requirements is not ideal and warrants review. A consistent national standard is needed.
- Mandatory reporting requirements should be abolished in all states and territories and indemnity from civil liability should be afforded to health professionals nationally (including the Northern Territory);³²

- Beran & Devereux proposed that Australian driver licences should display a ‘bold and unequivocal notice’ advising drivers of their responsibility to report any medical conditions that may affect their capacity to drive safely;⁴⁰
- Federal government funding of occupational therapy on-road driver assessments would remove an important barrier to assessment; and
- Future research efforts could be directed towards solving the unmet mobility and transport needs of older Australians.

Novel approach

A promising avenue for future research may lie in the application of novel decision-making techniques to the driving and dementia dilemma. A recent survey of hospital-based doctors established that 90% would find a client-centred booklet about driving and dementia useful.⁴¹ Our research group has field-tested a patient-centred booklet tailored for drivers with dementia. This Decision Aid provides a simple outline of the benefits and risks of driving for people with dementia. It encourages and facilitates clarification of values, promotes planning for early retirement from driving and directs the reader to speak with their doctor. This resource has been developed in line with the International Patient Decision Aids Standards (IPDAS) collaboration guidelines⁴² and will be modified to suit Australian drivers. The final content and presentation will be moulded by client feedback.

Conclusion

Driving retirement can have a negative impact upon older drivers, carers, family members and doctor-patient relationships. Empowering older drivers with dementia to plan for driving retirement aligns with the ethical principles of autonomy, beneficence and non-maleficence. Early planning for retirement can facilitate the arrangement of alternative forms of transport. Such an approach could negate the need for clinicians to insist upon abrupt cessation of driving when a patient becomes clearly unsafe. Adopting a sensitive approach to a potentially difficult physician-patient encounter is also helpful.²⁷

Although driving and dementia may represent a Gordian knot for some physicians, viable solutions do exist (see above). For now, the ethical principle of *primum non nocere* (above all, do no harm) could serve as a useful guide for day-to-day practice. Although not appropriate for all clinical scenarios, this Latin aphorism attributed to the famous English physician, Thomas Sydenham (1624-1689), is a useful reminder of the need to avoid inflicting harm. However, this principal does not only apply to physicians: unsafe drivers should also be expected to do no harm to themselves or other members of society. While some drivers may lack the necessary insight to meet such expectations, there exists an opportunity to engage in Advanced Care Planning with individuals with early dementia to ease their transition to driving retirement.

Perhaps the time has come to focus upon enhancing older drivers' transport options rather than curtailing them.⁴³⁻⁴⁵ To this end, it is hoped that future research, policy and practice will centre upon the crucial mobility and transport needs of our senior citizens.

Resources

<http://www.fightdementia.org.au/>

<http://www.austroads.com.au/>

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Figure Legends

Figure 1 Relevant stakeholders for drivers with dementia

Tables

Table 1 Selection of points from the AMA Position Statement 2008 ³²

'The role of the medical practitioner in determining fitness to drive'

1. Identify drivers impaired by their medical conditions
 2. Determine the degree of impairment (when possible)
 3. Advise a patient that he/she is unsafe to drive
 4. Subject to patient consent, inform a licensing authority on request
 5. Mandatory reporting is not acceptable
 6. Doctors should be protected in law whether they report an unsafe driver or not
 7. Some patients may lack insight or withhold information in order to obtain a licence
-

Table 2 International comparison of private vehicle driver assessment regulatory frameworks ^{31,33-35}

	Australia	New Zealand	United States	Singapore
Mandatory reporting by doctors of unsafe drivers	Yes (NT & SA) No (all other states and territories)	Yes (if a physician suspects that an individual 'is likely to drive against medical advice')	Yes (varied forms of mandatory reporting exist in eight states: California; Delaware; Georgia; Maine; Nevada; New Jersey; Oregon; Pennsylvania)	No
Option for modified licence (e.g. not to drive at night)	Yes	Yes	Yes (some states)	No
Indemnity/protection for doctors against civil liability upon reporting unsafe driver	No (NT) Yes (all other states & territories)	Yes	Yes (30 states only)	No
Age-dependent medical review for all drivers	No (NT & VIC) Yes (SA from age 70; ACT, NSW, QLD, TAS from age 75; WA from age 80)	Yes (age 75, 80 and biennial thereafter)	No (most states)	Yes (age 65 and triennial thereafter)
Age-dependent on-road driving assessment for all drivers	Yes (NSW†, SA & WA from age 85) No (all other states and territories)	No	No (most states)	No

ACT, Australian Capital Territory; NSW, New South Wales; NT, Northern Territory; QLD, Queensland; SA, South Australia; TAS, Tasmania; VIC, Victoria; WA, Western Australia. †NSW drivers aged 85 years do not have to undergo an on-road assessment and may opt instead for a modified licence.

Figure 1 Relevant stakeholders for drivers with dementia

