Older people with mild cognitive impairment

Their views about assessing driving safety

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Background

Driving is important for older people to maintain agency, independence and social connectedness. Little research has been conducted into the views of older people with mild cognitive impairment about who decides if they are safe to drive.

Aims

This qualitative study investigates the views of older people with mild cognitive impairment about decision making on driving cessation.

Discussion

Participants value their agency; they wanted to decide when they should stop driving themselves. However, they were also prepared to accept their general practitioner's advice when they became unfit to drive. In the interim, they self regulated the timing and distance of their driving to reduce accident risk.

Keywords

aging; dementia; doctor-patient relations; qualitative research; automobile driving; mild cognitive impairment; patient preference

Driving is important for many older people's mobility, social connectedness, independence and agency.[1–3] Agency refers to an older person's autonomy and perception of control of their life.[4] Previous studies have suggested that older people's driving competence is reduced more by impaired cognition than by physical limitations.[1,5–7]

Progression of cognitive impairment to dementia in some older people will make it necessary for them to eventually stop driving, which often leads to increased isolation and adverse social and psychological consequences.[8,9]

In Australia, a diagnosis of dementia requires conditions to be placed on a driver's licence, with Austroads, the association of Australian and New Zealand road transport and traffic authorities, suggesting that driving be restricted to within a specified radius from home.[10]

Little research has been conducted into the views of cognitively impaired older people with a pre-dementia diagnosis regarding their driving safety.

Methods

This qualitative study was a sub-study of the Ageing in General Practice (AGP) project that investigated the effects of an educational intervention on general practitioner dementia diagnoses and management.[11]

Participants in the AGP study who met any of the following inclusion criteria for that study's 24 month interview, and were able to give informed consent, were invited to participate:

- A score of 81–84 on any of two earlier Cambridge Cognitive Exam (CAMCOG) results, which is taken to signify mild cognitive impairment at the border of dementia
- A score of less than the maximum score of nine on the General Practitioner assessment of Cognition (GPCOG) screening test, which indicates possible cognitive impairment[12]
- Dementia suspected by their GP, but with no formal diagnosis communicated to the participant or their family.

Those with a dementia diagnosis disclosed to the participant or carer by a health professional before the interview for this study were excluded.

Eligible AGP participants were telephoned and invited to join this study by one of the research team (DAJ). If agreeable, they were visited at home, where information in large typeface was provided and written consent obtained before the interview. Participants were then interviewed in their homes by DAJ, many of whom he had previously interviewed for the AGP study. Interviews were audio recorded and transcribed verbatim. The transcripts were analysed independently by the principal investigator (OF) and the research assistant (DAJ) using thematic analysis.[13] To maintain participants' confidentiality, all names used are pseudonyms.

Results

Nine participants in the AGP study were invited to contribute to this study. One was found to be ineligible because he had received a dementia diagnosis, and another declined to participate. Characteristics of the seven participants who were enrolled are shown in *Table 1*. Participants were aged 79–91 years with a mean age of 84.7 years.

Themes

The major theme constructed through data analysis was 'maintaining agency'. This was amplified by subthemes related to this major theme: driving self regulation, deciding to stop driving, and the GP's role in maintaining agency.

Table 1. Characteristics of participants

Participant (names are pseudonyms)	Gender	Age at interview	CAMCOG			Inclusion criterion*	Driving
			Baseline	12 months	24 months		
John	M	79	94	95	90	2	Y
Tim	M	81	85	89	68	2, 3	Y
Rick	M	82	87	93	87	2, 3	Y
Jack	M	84	89	84	Missing	1, 2	Y
Monique	F	87	95	96	90	2	N
Norma	F	89	82	87	83	1	N
Betty	F	91	83	81	87	1	Y

* 1 = CAMCOG 81–84; 2 = GPCOG <9/9; 3 = GP suspects dementia

Maintaining agency

Participants highly valued driving to maintain agency, thus preserving their independence, autonomy, and control over their lives.

'I still like to go and do my shopping on my own. I like to keep my independence. I don't go far away but it is important to keep my independence, not always to be asking somebody.' [Monique, 87 years]

'See at this stage I like to be in control.' [John, 79 years]

Self regulation of driving

Participants maintained agency by self regulating their driving: including driving more slowly, only during daylight hours, avoiding peak hours, or travelling as passengers. Most participants reported self limiting driving to the local area for weekly shopping and regular appointments. Additionally, some participants also reported making social or recreational driving journeys to familiar areas within a 50–75 km radius of their home.

One participant spoke of relinquishing her driving responsibility if family or friends were available to drive on an outing.

'... normally I let the girls drive if we are going anywhere.' [Betty, 91 years]

Stopping driving: Who should decide the older person isn't safe to drive?

Consistent with the major theme of maintaining agency, most participants wanted to decide when they should stop driving themselves.

'I would know if I wasn't safe to drive. I would have to give it up I suppose.' [Jack, 84 years]

'I myself if I don't have the confidence any more I will give up.' [Monique, 87 years]

This is consistent with the desire that older people want to retain their agency. They do, however, look to external authorities for direction in deciding to stop driving, particularly their GP.

When it is no longer safe to drive: The GP's role in maintaining an older person's agency

Most participants were prepared to surrender their autonomy and accept their GP's direction about limiting their driving or stopping altogether. Participants expected their GP to advise them when they were no longer fit to drive and most said they would respect their GP's advice.

'No, I try not to drive at night because the doctor said to me, "Oh well, probably best if you don't", but it wasn't because of my eyes or anything.' [Rick, 82 years]

'I've got nothing against our GP. He could be my son age wise, I've got full respect for him and he knows a fair bit about me, we've been there about 30–40 years, and if he would tell me, "Look it's not safe for you to go on", then I would respect that because that is just a fact of life.' [John, 79 years]

One woman had proactively sought advice from her GP.

'The doctor didn't approach me to give it up. I approached him. I said to him that I was thinking about it and he said: "It wouldn't hurt. You have to think of other people". That's exactly what he said. Yes, I would hate to have an accident and hurt anyone, let alone children.' [Norma, 89 years]

She had voluntarily relinquished her driver's licence at her 89th birthday after discussing the issue with her GP and considering the possible impact on the wider community if she continued driving.

Most participants, while valuing driving, were willing to yield and heed direction about their fitness to drive. Most wanted their GP to be the one to advise them of their driving fitness.

Practical driving assessment

Some participants considered an on-road driving test to be warranted given the difficult issues around relinquishing their driver's licence. One woman, over 90 years of age, who was still driving locally, deliberated whether she should take the initiative in seeking driver testing.

'I was thinking one day if I should go into the police station and say: "Here I am. I am 91! Do you think you should test me?" ' [Betty, 91 years]

Another man with both a strong relationship with his GP and a strong attachment to driving considered that on-road driving assessment would help resolve the dilemma this posed.

'... It's pretty hard to ask me to answer that question I think, but I would be quite happy if someone said, "well I want you to go for a drive around the block".' [Rick, 82 years]

Receiving feedback on actual driving performance was considered to assist these older people to accept the need to stop driving.

The anticipated impact of stopping driving

While all participants highly valued driving for the independence, mobility and the social contact provided, most accepted the need to stop driving at some stage. Two men strongly resisted the idea of stopping driving in the future. One man vividly imagined the day he could no longer drive.

> 'Ohh oh! It would be like chopping my right arm off to take the car away from me I would hate that to happen.' [Rick, 82 years]

The same man when asked:

> 'So do you think that's an important part of your role as a husband, as a man, is being able to drive?' [Interviewer]
>
> 'Yeah! Very much so because my wife doesn't drive and she never has …' [Rick, 82 years]

The thought of losing his driving privilege was seen as a threat to his very self and masculine identity. This important symbolic aspect to possession of a driver's licence is often overlooked.[14]

Another man also felt strongly about the prospect of losing his driving privilege for more pragmatic reasons.

> 'If I lost my licence now I'd be in real trouble because virtually just to go to the shops I've got to have a car to do any damn thing!' [Jack, 84 years]

Simply getting to the shops required a means of transport because of his mobility issues.

Mobility

Mobility was raised by several participants as an issue. The presence of comorbid chronic health conditions made getting around without a car problematic.

> '... (I have) heart and lung problems and (trouble) breathing ... but to walk from here up to shop it's quite [a] steep pitch up there and just to go shopping I use the car. I have got to!' [Jack, 84 years]

The woman who had voluntarily stopped driving permanently was now struggling with her decision, partly because of her trouble walking and because the friend she had relied on to drive her had died.

> 'I had Jim so I didn't have to worry like I am now. I can't get out anywhere. If I was short of anything I can't get out anywhere, because the supermarket is too far. I have bad legs ... I wouldn't have given it up if I knew he was going to die ... But now that he has died I am sort of stuck. No, I am not stuck, I have the council and domiciliary looking after me, but I can't think I am nearly out of milk and just nip down to the supermarket and get some. I can't because I have no licence.' [Norma, 89 years]

The difficulty of getting around was compounded when living alone without close family support. She did have alternative transport options through the local council, but this required remembering to bring another form of identification. Her transition to life without driving was thus complicated by her cognitive impairment.

Social connectedness

Driving is considered important for maintaining social connections. The following participant gave a typical answer when asked how stopping driving would impact his life.

> 'It would make it very difficult. I have a friend, a lady friend who I see that lives down in the suburbs and so forth. To go to see her I have got to drive. Well you could get the train into town, the bus to her, but it would be a hopeless bloody business.' [Jack, 84 years]

Driving was considered vital for maintaining participants' social connections.

Discussion

Our findings were consistent with those of previous studies that found that driving is important for maintaining older people's agency, mobility, social connectedness and sense of self.[1,2,4]

Participants wanted to decide to stop driving themselves and self regulated their driving to reduce accident risk. Most were also prepared to accept their GP's direction when they became unfit to drive. Some wanted a practical driving assessment to settle the issue.

Gender differences were identified in this study, with some male participants less likely to contemplate stopping driving. Some men in this study perhaps had a stronger identity attachment to driving than most women participants. It may be that these men link driving ability with their masculinity and for that reason, struggled to consider a future without driving.[2] One woman's GP persuaded her to stop driving by asking her to ponder the possible impact on others, particularly children, of her continuing to drive.

This study differed from previous studies in exploring the views about driving of community dwelling older people with cognitive impairment, but without diagnosed dementia.

Participants were interviewed in the relaxed setting of their own homes, rather than in potentially stressful clinical settings such as memory clinics, as had been done in previous studies.

One limitation of the study was that the purposive sample was more cognitively heterogeneous than planned in the study design (ie. CAMCOG score between 84–81). The intent was to capture the views of older people on the borderline of dementia but without a dementia diagnosis. However, as *Table 1* demonstrates, longitudinal CAMCOG test results fluctuate reflecting the realities of cognitive impairment.[15] Some older people with mild cognitive impairment will improve, others remain stable, and yet others deteriorate to dementia.[16] One participant was diagnosed with Alzheimer disease within a week of being interviewed and yet was able to give informed consent and demonstrated insight in the interviewer's judgement. This highlights the variability of cognitive impairment and the dementing process.

These are preliminary findings from a small qualitative study that may not be typical of the larger population. Possible directions for future research include studying older people's symbolic attachment to their driver's licence, asking what it represents to them, and asking how they would like their GP to approach them about their driving safety.

A 'maintaining mobility' package including driving management may help older people continue safe driving for longer, and assist them in the transition to using alternative means of transport.

Implications for general practice

Our findings are consistent with previous studies that suggest that older drivers voluntarily self regulate their driving behaviour, thus reducing their risk of causing accidents.[17–19] We also found that older people want to make the decision to stop driving themselves.[20] They are, however, willing to consult with their GP in

making this decision. Involving older people in the decision that it is no longer safe for them to drive is likely to reduce depressive symptoms through maintaining a sense of control and lead to better health outcomes.[21]

Some older men seem to strongly associate their driver's licence with attaining adult male status. Acknowledging this symbolic importance may help them relinquish their driving privilege when it is no longer safe for them to drive.

Older people's diminished agency associated with stopping driving must be balanced against the risk of physical harm to them and the wider community. With growing evidence that medical, cognitive, and driving testing of older people does not reduce the road toll, caution needs to be exercised in advocating increased cognitive surveillance and mandatory driving testing in this population.[9,22,23] The current position of the Australian and New Zealand Society for Geriatric Medicine is that some people in mild stages of dementia may drive safely, at least for a limited time after disease onset, which has been suggested to be up to 3 years.[24]

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