

Driving and Dementia: Workshop Module on Communicating Cessation to Drive



Anna Byszewski, MD, MEd, FRCP(C)¹, Barbara Power, MD, FRCP(C)¹, Linda Lee, MD, CCFP^{2,3}, Glara Gaeun Rhee, BHSc⁴, Bob Parson, MEd⁵, Frank Molnar, MD, MSc, FRCP(C)¹

¹Department of Medicine Division of Geriatrics, Faculty of Medicine, The Ottawa Hospital, Ottawa, ON; ²Department of Family Medicine, McMaster University, Hamilton, and ³Centre for Family Medicine Memory Clinic, Kitchener, ON; ⁴Faculty of Health Science, University of Ottawa, Ottawa, ON; ⁵Office of Continuing Professional Development, Faculty of Medicine, University of Ottawa

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ABSTRACT

Background

For persons with dementia (PWD), driving becomes very dangerous. Physicians in Canada are legally responsible to report unfit drivers and then must disclose that decision to their patients. That difficult discussion is fraught with challenges: physicians want to maintain a healthy relationship; patients often lack insight into their cognitive loss and have very strong emotional reactions to the loss of their driving privileges. All of which may stifle the exchange of accurate information. The goal of this project was to develop a multimedia module that would provide strategies and support for health professionals having these difficult conversations.

Methods

Literature search was conducted of Embase and OVID MedLine on available driving and dementia tools, and on websites of online tools for communication strategies on driving cessation. A workshop module was developed with background material, communication strategies, links to resources and two videos demonstrating the “bad” then the “good” ways of managing this emotionally charged discussion.

Results

When the module was tested with internal medicine trainees, results demonstrated that confidence increased significantly ($p < .001$), and comfort and willingness in discussing the subject improved.

Conclusion

This project demonstrated the positive impact of the module on improving health professionals’ attitude and readiness to communicate driving cessation to PWD.

Key words: driving cessation, communication, dementia

INTRODUCTION

Over the past three decades, the increasing trend of a person with dementia (PWD) being behind the wheel has become a major public health concern.⁽¹⁾ In Canada, Hopkins *et al.* indicated that the number of PWD who were driving in 1986 was approximately 15,000 and that this had more than doubled by 2000. They predicted the number of PWD drivers will grow to nearly 100,000 by 2028.⁽²⁾ As the baby boomers age, a similar trend is being observed internationally, including Australia, United Kingdom, and the United States.^(1,3-5) This prediction may even be an underestimation, as some with memory loss will continue to drive even after their licence has been suspended. Indeed, Kennedy *et al.* states more than 30% of cognitively impaired drivers continue to stay on the road.⁽⁶⁾ This has serious public health implications, as cognitive impairment may not only affect memory but also judgment and decision-making on the road. For instance, PWD drivers have an increased risk of driving off the road, driving too slow, failing to recognize traffic lights or signs, or failing to brake properly. Although driving can be seen as crucial for maintaining independence and daily transportation in older adults, the cognitive impairments can affect driving skills and road safety.^(1,7-9)

The increasing number of PWD who drive is not only an important public health concern, it is also a challenging

problem for physicians to address. Given that the cessation of driving in older adults is associated with a loss of one's sense of independence, as well as social isolation, depression, anxiety, and increased risk of being placed in a nursing home, health-care professionals must be vigilant when requesting their patients stop driving.^(1,3,9,10) The recommendation for cessation of driving must be done with sensitivity, considered only after a careful evaluation and discussion with the individual. Several studies suggest that advice from clinicians plays a critical role in a patient's cessation of driving.^(11,12) This puts physicians in a challenging position of balancing their ethical and traditional role as a physician with the legal responsibilities that may come with this issue. Research shows that physicians often face a dilemma between their fear of damaging the doctor-patient relationship and their obligation to report individuals who may be unsafe to drive.^(1,10) Their dilemmas are worsened by a lack of consistent protocols to evaluate fitness of driving and especially lack of education on how to communicate unfitness to drive with PWD.^(1,3,7) Given that the number of PWD drivers has been increasing for the last three decades, it is not surprising that this challenge will continue to increase and affect a greater number of physicians in the near future.

Easily accessible and effective educational supports are essential to approach this challenge for physicians and health professionals. A recent review from Carr *et al.* shows that education interventions for physicians can increase health-care professionals' comfort levels in discussing unfitness to drive with PWD, reporting patients who are unsafe to drive, and understanding of the issues and resources related to driving cessation.⁽¹⁾ An example of an education curriculum implemented for internal medicine residents by Chang *et al.* in managing geriatric syndromes has been shown to improve residents' evaluation, management skills, and care of geriatric patients.⁽¹³⁾ Thus, an education module comprised of information on methods of providing sensitive communication, referral to resources, and follow-up, can be beneficial to facilitating discussions on driving cessation without damaging the doctor-patient relationship.

METHODS

The purpose of this project was to develop and evaluate effectiveness of a multimedia information module on communication strategies in the context of a health-care professionals' discussion of driving cessation with PWD and their caregivers. We conducted a search of literature Embase and OVID MedLine and web sources on available driving and dementia tools, as well as websites and videos for communication strategies on cessation of driving. This search confirmed that there is no existing module for the actual format for communicating cessation to drive in the context of cognitive loss. Our first initiative was to develop scripts for two video simulations of driving cessation discussion with input from experts in Geriatric Medicine and Care of the Elderly programs in Ontario, Canada. Two videos were

produced (demonstrating a fictitious less ideal disclosure and an optimal disclosure approach to contrast the two ends of the spectrum), simulating real-life disclosure and management of an emotionally charged discussion that often ensues. They are available in both English and French.

The videos were pilot tested at a local Ottawa, Canada CME event for Family Physicians (The 2014 Geriatric Challenges in Primary Care meeting), using an adapted form of the validated *Calgary Cambridge Communication Observation Guide* (CCCOG)⁽¹⁴⁾ for evaluation of the soundness of communication strategies presented in the two videos and to ensure the content was logical and reasonable. The CCCOG integrates three components: communication skills for gathering information, the process of gathering or giving information, and perceptual skills (e.g., empathy, respect).

A module was subsequently produced with background information, resources, and the two videos. The module was then presented to postgraduate internal medicine trainees at an academic educational half day. A pre- and post-survey was administered to evaluate the effectiveness of the driving cessation communication module. Research ethics approval was obtained from Ottawa Health Science Network Research Ethics Board for the study.

Statistical analysis was performed using Fisher's exact test.

RESULTS

Pilot Phase—Videos

Fifty-eight primary care physicians attending The Geriatric Challenges in Primary Care meeting filled out an evaluation form and unanimously agreed that the two videos would be good teaching tools. Using the adapted Calgary Cambridge Communication Scale, validity of videos was established regarding accurate demonstration of contrasting communication styles of the two videos in the pilot phase of the project. It was also reported by participants that the two videos discriminated the two opposing communication styles. In addition, attendees provided comments and suggestions (Table 1).

Development of Teaching Module

Subsequently a two-hour workshop multimedia module was developed that contains information comprising of:

1. Background material on issues specific to disclosure of unfitness to drive in context of dementia, including regulations.
2. Communication strategies.
3. Links to resources and representative video clips.
4. Links to the Driving and Dementia Toolkit for Health Professionals and Driving and the Dementia Toolkit for Patients and Caregivers.
5. Two videos (one demonstrating fictitious less ideal disclosure and one a more optimal disclosure approach).

TABLE 1.
Comments from primary care physicians

- Painful to watch (video 1/less ideal version)
- Felt patient was more respected and supported (video 2/more ideal version)
- Very helpful to emulate “talking points”
- Should be available on-line/YouTube (including different association sites e.g. Alzheimer Society/Colleges of Physicians/Ministry of Transport etc)
- Provide list of local resources to PWD/caregivers
- Very good sample of how to deal with an angry patient
- Could be used for “Lunch and learn” session
- Could be used by Family Health Teams (FHT)
- Good contrast between the videos – reinforces the better way to present this information
- Great to see “real world” scenarios on this topic
- Good basis for discussion

The multimedia module was presented to internal medicine residents attending the academic half day to evaluate the effectiveness of the module. Of the 34 trainees who attended the Academic half day, 20/34 (59%) had participated in a previous geriatric rotation.

Post-test results demonstrated that Confidence in Communicating (Figure 1(a)) for disclosing unfitnes to drive increased significantly with the delivery of the multimedia module ($p < .001$). There was a trend towards improved Willingness to Discuss (Figure 1(b)) and Comfort in Discussing (Figure 1(c)) (both did not reach statistical significance). Participants provided comments and suggestions (Table 2).

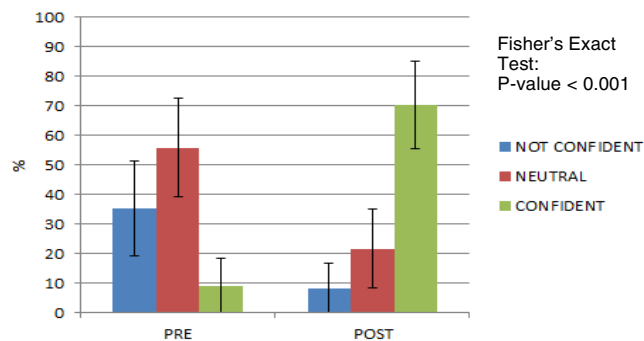
DISCUSSION

For the person with dementia (PWD), the loss of driving privilege can be catastrophic. In some cases the discussion is “rushed” within the context of multiple medical issues, leaving the PWD and caregivers with a lack of information and a strong negative emotional reaction.

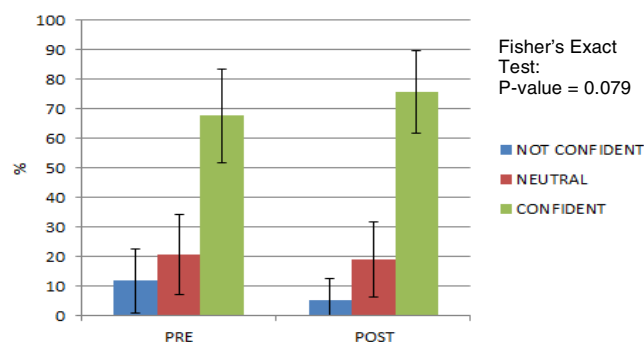
Physicians are often placed in a position where they are responsible to address driving safety and report findings suggesting unfitnes to drive. Skills such as empathy, clear communication, referral to resources, and follow up are vital to performing this critical societal role in an empathic and humane fashion.

In this study we have demonstrated that a comprehensive module with proper communication strategies, using an empathic approach and utilizing appropriate resources, may mitigate the negative impact of this essential and complex dialogue. Trainee confidence to conduct the cessation to drive

(a) Confidence in communicating medical fitness to drive



(b) Willingness to discuss driving



(c) Comfort in discussing driving

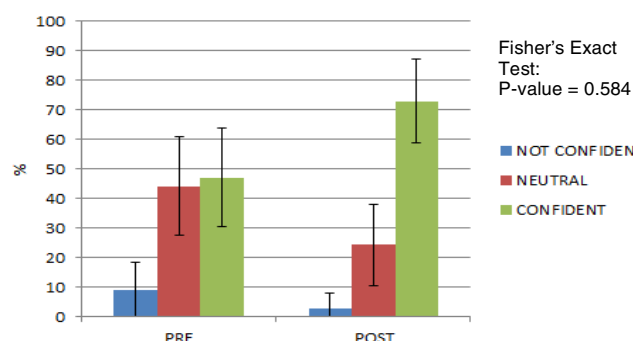


FIGURE 1. Driving cessation conversation module results

discussion improved significantly following participation in the module. The module also demonstrates that comfort and willingness to conduct this type of conversation improved to some extent. This limitation may relate to low sample size (e.g., Type II or Beta error), suggesting a need for further research with larger sample size. It is also possible that obtaining more information and experience might have moderated the discomfort many health professionals experience when conducting a cessation to drive discussion. However, the number of trainees not willing to discuss and not comfortable in discussing driving cessation also decreased after the module was administered, suggesting an impact on their attitude for this clinical skill. Overall, all three measures consistently are trending in a positive direction.

TABLE 2.
Trainee comments and suggestions following the
workshop module

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- The module identified resources and evidence to support these discussions
 - A one page summary of driving restrictions/fact sheet with driving restrictions for common and uncommon medical contexts
 - Helpful to know what to expect and challenges
 - This gave us tools how to talk to patients
 - Provided good phrases I could use
 - It highlighted the impact of such a decision on patients and addressed effective communication skills
 - Good review of multiple patient emotions experienced by patient
 - Need more information how to make the decision and what forms to use in reporting
 - Nice to get practical examples of things to do and not to do
 - I now understand need to start discussion early, warn the patient.
 - Good ways of explaining to patient especially when they insist they are good drivers
 - Going through an example of a reporting form, filling it out
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The driving cessation conversation ideally should start early in the journey of dementia care, to prepare for alternate transportation and supports.⁽¹⁰⁾ Providing tools for holding a disclosure conversation can assist in what many consider as one of the most challenging aspects of dementia care.

CONCLUSIONS

This multimedia module may be utilized in workshops by health-care workers and physicians involved in the care of patients with cognitive loss and dementia, including primary care physicians (including models such as the Primary Care Memory Clinics established in Ontario, Canada⁽¹⁵⁾), geriatricians, Care of the Elderly physicians, neurologists, internists, physiatrists, and psychiatrists.

Future directions will include development of an accredited online self-learning module, with the goal of educating physicians in communication strategies when conducting similar discussions with PWD and their caregivers. Further evaluation of this tool for effectiveness in the disclosure of driving cessation will need to be conducted after the module is more widely implemented, with PWD and caregiver viewpoint evaluation. This will help establish validity of the module and ongoing refinements.

KEY POINTS

- With increasing aging of the population, there will be a growing number of drivers with cognitive loss who will require a conversation around safety driving.
- The discussion that ensues often results in strong emotional reactions, thus requiring skills to manage the conversation in an informative yet sensitive and empathic manner.
- Workshop module with resources and demonstrative videos can improve the willingness, comfort and confidence of conducting these discussions.

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CONFLICT OF INTEREST DISCLOSURES

The authors declare that no conflicts of interest exist.

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Correspondence to: Dr. Anna Byszewski, MD, MEd, FRCP(C),
Department of Medicine Division of Geriatrics, Faculty of
Medicine, The Ottawa Hospital, Civic Campus, 1053 Carling
Ave., Ottawa, ON K1Y 4E9
E-mail: abyszewski@ottawahospital.on.ca