Guest Editorial

Driving and the Promotion of Safe Mobility in Older Populations

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It is well known that the aging of the population has increased both the number and the percentage of older drivers on roadways in the United States and other countries (1). The status of drivers aged 65 years and older has proven to be a controversial topic with all the markings of a classic public policy debate. On the one hand, driving a car, the most common form of travel among older people in many countries (2), improves access to goods and services, contact with friends and relatives, and opportunities for employment and volunteer activities. It has also become a symbol of independence and competence. Not surprisingly, there is evidence from longitudinal studies that cessation of driving is associated with incident depression (3,4). On the other hand, there is concern that age-related limitations and disabilities increase the risk of motor vehicle crashes and injuries, and, thus, adversely affect public health and safety. There is evidence, in fact, that older drivers, especially those aged 75 years and older, are at elevated risk for crashes and associated disabilities and death, especially after account is taken of the number of miles they have driven (5).

In an attempt to resolve this dilemma, there have been calls for effective and efficient strategies to extend the years of “safe driving” for older populations. The excellent study, conducted by Richard Marottoli and his colleagues and reported in this issue of the Journal (6), enhances our understanding of this important topic and provides a hopeful message regarding the prospects for extending safe driving among older people. The essential message, like many in aging research, is that, to some degree, “safe driving” is a mutable behavior and is correlated but not caused by aging. Marottoli and colleagues’ research suggests that an educational program that includes both classroom and on-road instruction can improve knowledge and enhance driving skills in this growing segment of the population. A number of points should be highlighted about this study. In addition to a strong randomized design, the participants aged 70 and older were recruited from a variety of settings, including clinic and community sites, thus suggesting strong external validity to the findings. The curriculum was also based on the correction of common errors made by older drivers, including not maintaining safe following distances, problems backing up, poor left turns, sudden lane changes, and speed regulation. This suggests ease of wider dissemination of the program.

Although this is an impressive study, unanswered questions remain, a point readily acknowledged by the authors. It is not possible, for example, to determine to what extent the benefits obtained from this program are derived from the classroom and to what extent from the road. Addressing the essential elements of the program, a topic for future research, may improve its efficacy. It also will be important to evaluate the effectiveness and efficacy of the program among different groups of older people and the length of time that the skills are maintained. The success of the program may vary by older drivers’ levels of health and functioning. At what point, for example, do impaired levels of physical and cognitive functioning reduce the effectiveness of an educational program of this kind? With the growing racial and ethnic diversity of the aging population in the U.S., it is also important to consider the program among older people with different language skills and cultural traditions. Programmatic effectiveness and efficiency also may be moderated by variations in driving conditions, such as differences in street design as well as traffic and pedestrian volume. Finally, it is important to consider and assess the factors that may affect the adoption of the program by different organizations as well as factors (barriers and enhancements) that affect the older driver’s access to a program of this kind. Again, the simplicity and brevity of the intervention bodes well for wider dissemination.

The extension of safe driving can be achieved in a variety of ways. In addition to educational programs, other strategies to extend safe driving have been identified. First, improvement of health and functioning may extend safe driving. Health problems, including poor vision and reduced cognitive function, are associated with the decision to reduce or avoid driving. To the extent that health and functioning can be improved, older people are better able to drive. Second, when the capacity and skills of the driver cannot be sufficiently enhanced, the driving environment can be adapted to be less challenging. Safe driving can be extended by improvements in vehicle and roadway design. Poor vision, including problems with glare and judging distance, is one of the most common barriers to safe driving and one of the leading reasons why older drivers limit or avoid driving (7). Improvements in vehicle design (which enhance “wayfinding”), such as glare reduction, night vision capability, and distance assessment, would help to extend the safe driving period in older populations (8).
Improvements in roadway design and signage, including improvements to increase the time for making decisions to change lanes and to exit and enter roads, also would be more conducive to safe driving. Finally, modifications of driving policies could extend periods of safe driving. Presently, graduated licensing, that is, the systematic expansion of driving independence and privileges based on increased experience and demonstrated skills, is confined largely to the early years of driving. The new driver, in most cases, a young person, can only drive a car in the company of an experienced driver and, later, only on specific roads and at particular times. There is no reason why the same policy could not be enacted for older drivers nearing the end of their safe driving years. As driving skills become less precise over time, the terms of licensure may require that older people only drive at particular times on specific roads, and that they be accompanied by an experienced driver with demonstrated skills and a safe driving record. Of course, assessments of this kind should be based on “functional age” and not “chronological age.” There is evidence to suggest that the presence of a second person in the car, perhaps serving as a co-pilot, is associated with a reduction in the risk of crashes among older drivers (9).

Although safe driving can be extended in a variety of ways, at some point, in spite of our best efforts, driving becomes very difficult for many older people. At that point, what are the options? To consider those options, we need to keep in mind that the important issue is not just the extension of safe driving, but rather the enhancement and extension of safe mobility. In the future, we need to build on the research, conducted by Marottoli and his colleagues, and consider points of intersection between research on safe driving with research to understand and stimulate walking and the use of public transportation in older populations. Research should be conducted on the extension of safe mobility. For example, it is worth considering whether the problem-based curriculum, described in the Marottoli article, could be expanded to include instruction in the availability, timing, and use of alternative modes of transportation, for example, walking and public transportation. We also must work to ensure that those alternatives are, in fact, available. With the aging of the population, there should be a range of transportation options. The alternative to safe driving should not be isolation. In the end, safe driving, walking, and public transportation should represent integrated approaches to safe mobility.

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REFERENCES