

Giving up driving was associated with an increase in depressive symptoms among older adults

Marottoli RA, Mendes de Leon CF, Glass TA, et al. *Driving cessation and increased depressive symptoms: prospective evidence from the New Haven EPESE*. *J Am Geriatr Soc* 1997 Feb;45:202–6.

Objective

To determine whether an association exists between giving up driving and increased depressive symptoms among older adults.

Design

Cohort study.

Setting

Urban, community based study in New Haven, Connecticut, USA.

Participants

1316 non-institutionalised men and women ≥ 65 years of age drawn from the cohort of the Established Populations for Epidemiologic Studies of the Elderly programme who were alive at the seventh annual follow up interview in 1989.

Assessment of risk factors

In the 1989 follow up interview, participants were asked if they were still driving a car or if they had ever driven, but stopped. Participants who had given up driving were asked when this occurred. Interviewers were blinded to the purpose of the study. Factors other than giving up driving that could affect the outcome were also assessed (age, sex, education level, housing type, marital status, cognitive status, visual and hearing problems, and performance of the basic activities of daily living). Medical conditions were updated yearly.

Main outcome measures

Depressive symptoms assessed using the Center for Epidemiologic Studies-Depression (CES-D) scale, scored from 0 (fewer

depressive features) to 60 (more depressive features) ascertained during home interviews in 1982, 1985, and 1988.

Main results

Of the 1316 participants, 502 (38%) were active drivers as of 1988, 92 (7%) had given up driving between 1982 and 1987, and 722 (55%) had either never driven or had given up driving before 1982. An overall increase in depressive symptoms was seen for each group over the 6 year interval. The active drivers group had the lowest mean CES-D scores at all 3 interviews, whereas those who had given up driving had intermediate CES-D scores at baseline and had the highest mean depressive symptoms at the end of follow up. In a repeated measures multivariate analysis, adjusting for sociodemographic and health related factors, giving up driving was independently associated with an increase in depressive symptoms ($p = 0.001$).

Conclusion

Giving up driving was associated with an increase in depressive symptoms among older non-institutionalised adults.

Sources of funding: Claude D Pepper Older Americans Independence Center and in part, National Institute on Aging.

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Adapted from an abstract published in ACP Journal Club 1997 Sep-Oct 127:44.

Commentary

While previous research has examined the factors that contribute to giving up driving among older drivers, this cohort study by Marottoli *et al* investigated a potential consequence of that decision. Giving up driving was shown to be among the strongest predictors of increased depressive symptoms. This result is not surprising as many older adults consider “losing the ability to drive is as dramatic as losing the ability to walk”.¹ Giving up driving signals an end to independence for many seniors.

This study is timely, as more older drivers, who form an increasing segment of the driving population, will face this difficult decision. Although this study was done in an urban setting, surprisingly, rural seniors do not report more problems with transportation than urban seniors.²

Community nurses are well positioned to assist older adults and their families in

preventing or alleviating depressive symptoms after giving up driving. The use of public transportation and alternative options such as volunteer car pools, subsidised taxis for certain target groups, and the use of school buses outside school hours should be explored. If these services are not available, then nurses should advocate for safe, convenient, and affordable transportation systems for seniors. Additionally, design changes to crossings and road signs and the proper maintenance of pavements and bus stops to improve safety for older adults may be required.

Although approximately 13% of the elderly (aged ≥ 85 years) living in the community have some degree of depression, it is often underdiagnosed and undertreated.³ Primary health care providers should monitor older adults who have given up driving, recognising that

they often do not wish to admit to being depressed, but prefer to talk about being anxious, having a physical problem, or having difficulty remembering things or concentrating. The elderly also tend to refuse psychiatric services because of the stigma attached.² This study provides direction for community health nurses in assisting older adults who must limit or stop driving.

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- 1 Shua-Haim JR, Gross JS. The “co-pilot” drive syndrome. *J Am Geriatr Soc* 1996;44:815–7.
- 2 National Advisory Council on Aging. A country sampler. *Expression* 1993;9:4.
- 3 *The NACA Position on Canada’s oldest seniors: maintaining the quality of their lives*. Ottawa: National Advisory Council on Aging; 1992.