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Driving and our aging population

The Canadian Medical Association has prepared and published a handbook to help physicians determine whether their patients are medically fit to drive.[1,2] By 2024, it is expected that 1 in 4 Canadians will be older than 65. With the growing number of elderly people who drive, physicians are increasingly being called upon to assess the driving skills of their older patients, some of whom have cognitive deficits.

In the section on identifying patients with progressive dementia, the guide indicates that "individuals showing a score of less than 24 on this test [the Mini-Mental State Examination] are ineligible to hold a driver licence of any class pending complete neurological assessment."

Use of a specific score as a cut-off for this examination has never been validated because it is only a screening instrument with a specificity and sensitivity in the range of 85%. As the authors of the guide state, the test can be affected by language difficulties, lack of education and an age of more than 85 years.

In the current format, with the above explicit statements, are physicians liable legally if their patients with a score of 23 are responsible for an accident? The guide is also not clear on what is meant by a complete neurological assessment. Does it mean that all patients with a score of less than 24 need to be referred to a neurologist? This guideline seems not only scientifically unsupported but also legally charged.

With the greying of Canada, we urgently need a scientifically sound and well-validated assessment tool to evaluate fairly the increasing number of Canadians with cognitive deficits who may be at risk, and may be putting others at risk, while driving.

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[The Chair of the Project Advisory Group responds:]

Anna Byszewski and William Dalziel call for a scientifically sound and well-validated assessment tool to screen drivers for dangerous cognitive deficits. We echo that call. We acknowledge that the Mini-Mental State Examination has been criticized as a tool to effectively identify individuals who perform poorly on a road test[1] and that widespread consensus is lacking regarding the use of cut-off scores on this examination.[2]

However, it is impractical to suggest to physicians that all patients with suspected cognitive difficulty be referred for a standardized on-road, or even simulated, evaluation. Doctors in clinical practice need a screening tool to assist decision-making. Despite the above-mentioned concerns, the Mini-Mental State Examination has been shown to correlate with on-road driving test results,[3] and poor performance on parts of the Mini-Mental State Examination correlates with the risk of adverse driving events.[4] Decisions concerning driving aptitude must often be made on uncertain grounds. It should be noted that the statement referenced by Byszewski and Dalziel is a direct quotation from the standards found in the National Safety Code[5] developed by the medical consultants for the provincial and territorial driver licensing authorities. Extracted from the context of the National Safety Code quotation, the statement quoted by Byszewski and Dalziel on the Mini-Mental State Examination test scores reads as a hard-and-fast rule; the CMA guide[6] specifically mentions that physicians should consider the impact of education and language on test results.

As noted in the CMA guide,[6] liability can result when physicians fail to report potentially medically unfit patients if these patients subsequently have an accident and cause harm to others. The Mini-Mental State Examination is one tool for identifying potential unfitness to drive. Physicians, *especially where there is a mandatory reporting system*, should err on the side of caution and report potentially medically unfit drivers.[6] A physician could deem a patient potentially unfit even without the administration of the Mini-Mental State Examination. It is only one tool to assist physicians in determining medical fitness to drive.

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Determining Medical Fitness to Drive: a Guide for Physicians
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Dancing through time

The excellent article by Erica Weir on dance raves[1] was devoid of any mention of their historical counterparts — the medieval dancing manias. There are numerous parallels. Participants in both activities engaged in prolonged dancing to music and in behaviour deemed as nonconformist or bizarre (but not necessarily pathological) by those outside the subculture. Dancing mania participants typically ingested wine while dancing to achieve ecstatic states; their modern counterparts often take hallucinogenic or mood-altering substances, including the drug ecstasy.

Sigerist contends that St. Vitus' dance was similar to ancient Greek orgiastic rites that had been outlawed by Christian authorities but were secretly practised. (It should be noted that although St. Vitus' dance has entered the medical lexicon as an alternative term for Sydenham's chorea, few modern-day researchers claim that participants in dancing manias were literally suffering from chorea.) Eventually the dancing manias grew more open when authorities realized they could not suppress them.[2] Modern raves began as clandestine gatherings at secret venues with the location revealed just hours before the event to deter law enforcement surveillance. Six hundred and fifty years ago German magistrates paid musicians to perform for participants and to serve as dancing companions. This was designed to reduce injuries and mischief during their procession to the nearby St. Vitus' chapel.[3] Today, volunteer groups attend raves to offer safety advice; some government agencies, including those in Canada, sanction supervised raves. These measures are intended to prevent these gatherings from spiralling out of control and to reduce harm to participants.

Contrary to popular psychiatric portrayals of medieval dancing manias, women were not overrepresented among participants and episodes were not spontaneous but highly structured, and they involved sects engaging in strange or unfamiliar customs.[4,5] Modern ravers are male and female adolescents and young adults who espouse counterculture values.

Participants in medieval dancing manias and tarantism worshipped in a discernible pattern. They would typically begin dancing at sunrise, stop at midday to sleep, sweat and bathe and then dance until evening when they would sleep and sweat, eat a light meal and then sleep until sunrise. This ritual was typically repeated over 4 or 5 days, and sometimes over weeks.[6] Today, a prominent harm-reduction strategy at supervised raves includes taking breaks from dancing and drinking plenty of fluids.

Modern-day raves resemble the dancing manias within a different historical and cultural context, fulfilling similar social and psychological needs.

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Corrections

A recent Heart & Soul article stated incorrectly that Captain James Cook spent the 4 summers following 1767 surveying the coast of Newfoundland.[1] In fact, Cook spent the 4 summers before 1767 conducting his survey.

Reference

1. Ryan B. MD explores hidden history of Captain Cook's journey to Newfoundland. *CMAJ* 2000; 163(5):684.

The health status data were presented incorrectly in Fig. 2 of a recent article by Kue Young and colleagues[1] owing to an editing error. The correct figure appears below.

Reference

1. Young TK, Reading J, Elias B, O'Neil JD. Type 2 diabetes mellitus in Canada's First Nations: status of an epidemic in progress. *CMAJ* 2000; 163(5):561-6.