

Risk factors identified to predict harm in older cognitive patients

February 1, 2007

Toronto, ON - Researchers at Sunnybrook have identified areas of neuropsychological function that can help family doctors to accurately predict harm due to self-neglect in cognitively impaired seniors who live alone.

"With an increasing prevalence of older people with cognitive impairment who live alone, there is a growing concern for their safety as they may begin to show signs of self-neglect or disorientation," says Dr. Mary Tierney, principal investigator of a new study and director of the Geriatric Research Unit at Sunnybrook Health Sciences Centre.

Physicians are often asked to make judgments about individuals' freedom to stay at home when their behaviours suggest they are at risk for harm. Impairments in thinking skills that are important for everyday functioning have been proposed as critical in making valid judgments about placement decisions.

"Identification of the cognitive areas most responsible for self-neglect may help caregivers to assist those individuals at greatest risk and provide important direction in the development of tools and intervention strategies for harm prevention for those providing care to this vulnerable population - the primary care physician," says Dr. Tierney, also a Professor in the Department of Family and Community Medicine at University of Toronto. "This will also be an important first step in understanding the potential causes of self-neglect, a poorly understood and understudied area."

Self neglect is defined as the result of an adult's inability - due to diminished capacity - to perform essential self-care tasks including: providing essential food, clothing, shelter, and medical care; obtaining good and services necessary to maintain physical health, mental health, emotional well-being and general safety; and/or to manage financial affairs. Disorientation is defined in the standard manner as disorientation to person, place or time.

Impairments in three neuropsychological areas were found to be independent risk factors or predictors of harm due to self-neglect:

- **verbal recognition memory** - impairments here can lead to a failure to be guided by cues and prompts in the environment;
- **executive function** - impairments here lead to problems with planning, organization and mental flexibility; and
- **conceptualization** - impairments can lead to problems in reasoning.

Poor performance in the testing of these three areas predicts the degree of risk and thereby suggests the need for extra vigilance to protect the person from harm. There were significant differences in these areas between those who experienced harm and those who did not on test scores.

The authors suggest that strategies for harm reduction in high-risk patients may require more than the provision of reminders and cues in their home - such as notes for example - but rather they may require more direct involvement such as frequent visits to the home by family members or staff trained to identify problems associated with conditions such as poor nutritional intake, noncompliance with assistive devices or medication, and poor hygiene.

The three-year study, published in the February 2007 issue of *The American Journal of Geriatric Psychiatry*, included a total of 139 participants. The sample was limited to participants aged 65 and older, who lived alone and were cognitively impaired. Informants (relatives, friends or professional caregivers) and primary care physicians provided information about harm that occurred to the participants during an 18-month follow-up period. The study focused on events resulting in physical injury to self or other, or damage to or loss of property, which occurred as a consequence of self-neglect or disorientation, and required intervention by emergency community services. Twenty-one per cent of participants experienced an incident of harm during the 18-month follow-up period.

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