Australasian Emergency Nursing Journal (2016) 19, 118—126

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/aenj

RESEARCH PAPER

Characteristics of older people with cognitive impairment attending emergency departments: A descriptive study

Linda M. Schnitker, PhD [a,b,*]
Elizabeth R.A. Beattie, PhD [a]
Melinda Martin-Khan, PhD [b,c]
Ellen Burkett, MBBS [b,d]
Leonard C. Gray, MD, PhD [b,c]

[a] *School of Nursing, Queensland University of Technology, Brisbane, Australia*
[b] *The Centre for Research in Geriatric Medicine, The University of Queensland, Brisbane, Australia*
[c] *Centre for Online Health, The University of Queensland, Brisbane, Australia*
[d] *Department of Emergency Medicine, Princess Alexandra Hospital, Brisbane, Australia*

Received 11 December 2015; received in revised form 10 April 2016; accepted 11 April 2016

KEYWORDS
Aged;
Cognitive impairment;
Emergency service;
Hospital;
Emergency nursing;
Dementia

Summary
Objective: The objective of this paper is to describe the profile of older people with cognitive impairment (CI) presenting to emergency departments (EDs).
Methods: This was a multi-centre ($n = 8$) observational study of a convenience sample of older (≥70 y) ED patients ($n = 579$). Participants were prospectively assessed for CI and surveyed for the duration of their ED stay ($n = 191$). A picture of patients' health status and ED responses to care needs was obtained through application of standardised assessment tools. Additionally, observations of care processes in ED were undertaken. Demographic data were collected through both ED's information system and survey. Outcome data were collected 28 days post-ED visit using follow-up telephone interviews.
Results: Of 579 older persons, 191 (33%) persons met criteria for CI. The majority of older ED patients with CI in ED lived in the community (157/177, 88.7%), arrived by ambulance (116/172, 67%), were accompanied by a support person (94/149, 63%), were triaged as urgent to semi-urgent (157/191, 82%), and were hospitalised (108/172, 57%). The median ED length of stay was 6 h. In ED, 53% of the sample experienced pain (92/173). Older ED patients with CI pose the following characteristics: prior hospital admissions (43/129, 33%), incontinence (61/178, 34%),

* Corresponding author at: School of Nursing, Queensland University of Technology, Brisbane, Australia. Tel.: +61 731383840.
E-mail address: linda.schnitker@qut.edu.au (L.M. Schnitker).

http://dx.doi.org/10.1016/j.aenj.2016.04.002

dependence in activities in daily living (81/190, 43%), issues in nutrition (73/182, 40%), vision and hearing impairment (93% (160/172) and 26% (44/171) respectively).
Conclusion: Increased understanding of these presenting characteristics and their impacts on patient risk facilitates tailoring the quality of emergency care to better suit the needs and improve outcomes of this increasing ED population.

What is known

- There is little known about the older ED population with CI.

What this paper adds?

- We examined the characteristics of this population while in ED.
- We found that this population has several risk factors for adverse events and outcomes.
- Understanding of these characteristics allows tailoring care that suits their needs.

Introduction

The care of older people in emergency departments (EDs) has had greater attention in recent years.[1–5] Older ED patients have worse health outcomes and are at increased risk of adverse events during their ED stay, including undertriage of illness severity, lack of recognition of geriatric syndromes, and adverse medication related events.[6] Compared with older ED patients without cognitive issues, there is evidence that those with cognitive impairment (CI) are at further increased risk of negative outcomes and adverse events when presenting to EDs.[7–10] As the population ages there will be ongoing and increasing use of the ED by older adults. Therefore it is timely that consideration is given to those older people with CI who are seeking care in EDs.

Three literature reviews each found a paucity of research specific to the cognitively impaired older ED population.[11–13] Several recommendations, targeting ED's physical layout, modifications of care delivery, and staff education, have been reported to improve the ED experience and outcomes of seniors with CI and their families.[3,11,14]

Establishing or refining specific ED services and robust care delivery protocols relevant to the clinical care of this at-risk ED population first requires a good understanding of their presenting features and needs. Yet there is little knowledge regarding the characteristics of older ED patients with CI. A parent study 'developing a suite of quality indicators to support quality of care for older people with cognitive impairment in EDs'[15–17] created the opportunity to outline the characteristics of older persons with CI presenting to EDs. A significant phase in this parent study was to collect data on initially established quality indicators for the care of older persons in ED targeting a range of clinical care domains. Thus the objective of this sub-study is a secondary analysis using variables collected in the parent study to describe profiles of older people with CI in EDs (e.g. demographics, comorbidities, reason for ED presentation, outcomes).

Methods

Study design and setting

This was a multi-centre descriptive cohort sub-study. Persons aged 70 years and over who presented to the EDs of eight Australian hospitals in the time period between May 2012 and February 2013 were recruited and surveyed over the duration of their ED stay. The hospitals included four teaching hospitals (i.e. major trauma services) and four major community hospitals (i.e. regional trauma services). Hospitals were based in two eastern Australian states (five hospitals in Queensland, two hospitals in Victoria) and one Australian territory (one hospital in Australian Capital Territory). Data obtained from those older people identified prospectively by researchers as having CI were analysed in this sub-study.

Ethical approval

Prior to commencement, ethical approval was obtained from the ethics committee of The University of Queensland (approval no. 2012000631) and from each hospital's Human Research Ethics Committee.

Selection of participants

All patients aged 70 years and over who presented to one of the participating ED sites during working hours (Monday to Friday 8 am to 5 pm) and did not meet any of the exclusion criteria were eligible for enrolment in the main study. The hours of enrolment were chosen on convenience basis due to availability of research nurses at this time. Informed written consent was gained either from the individual or the person legally responsible for the patient's health matters. Patients were excluded if:

1. They were present in the ED for two or more hours prior to a research nurse being available. Data needed to be collected measuring the health status of the patients for the duration of the ED episode and if the patient had been already been in ED for more than 2 h prior to consent the health status may have changed significantly over this time (e.g. pain, delirium),