Nurse Education Today 62 (2018) 91–97

Contents lists available at ScienceDirect

Nurse Education Today

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

Turning education into action: Impact of a collective social education approach to improve nurses' ability to recognize and accurately assess delirium in hospitalized older patients

Catherine Travers[a,*], Amanda Henderson[b], Fred Graham[c], Elizabeth Beattie[d]

[a] Dementia Collaborative Research Centre, School of Nursing, Queensland University of Technology, Victoria Park Road, Kelvin Grove Q 4059, Australia
[b] Nursing Practice Development Unit, Princess Alexandra Hospital, 199 Ipswich Rd, Woolloongabba, Qld 4102, Australia
[c] Dementia and Delirium, Princess Alexandra Hospital, 199 Ipswich Rd, Woolloongabba, Qld 4102, Australia
[d] Dementia Centre for Collaborative (DCRC School of Nursing), Queensland University of Technology (QUT), Level 6, N Block, Victoria Park Rd., Kelvin Grove, Qld 4059, Australia

ARTICLE INFO

Keywords:
Dementia
Delirium
Hospitals
Education
Nursing

ABSTRACT

Background: Although cognitive impairment including dementia and delirium is common in older hospital patients, it is not well recognized or managed by hospital staff, potentially resulting in adverse events. This paper describes, and reports on the impact of a collective social education approach to improving both nurses' knowledge of, and screening for delirium.

Methods: Thirty-four experienced nurses from six hospital wards, became Cognition Champions (CogChamps) to lead their wards in a collective social education process about cognitive impairment and the assessment of delirium. At the outset, the CogChamps were provided with comprehensive education about dementia and delirium from a multidisciplinary team of clinicians. Their knowledge was assessed to ascertain they had the requisite understanding to engage in education as a collective social process, namely, with each other and their local teams. Following this, they developed ward specific Action Plans in collaboration with their teams aimed at educating and evaluating ward nurses' ability to accurately assess and care for patients for delirium. The plans were implemented over five months. The broader nursing teams' knowledge was assessed, together with their ability to accurately assess patients for delirium.

Results: Each ward implemented their Action Plan to varying degrees and key achievements included the education of a majority of ward nurses about delirium and the certification of the majority as competent to assess patients for delirium using the Confusion Assessment Method. Two wards collected pre-and post-audit data that demonstrated a substantial improvement in delirium screening rates.

Conclusion: The education process led by CogChamps and supported by educators and clinical experts provides an example of successfully educating nurses about delirium and improving screening rates of patients for delirium.

Trial Registration: ACTRN 12617000563369.

1. Background

Cognitive impairment (CI) including dementia and delirium is common in older patients admitted to acute care hospitals and patients with these conditions face a disproportionate risk of preventable harm in this environment (Inouye et al., 2014a). Thus, improving the care of these patients when hospitalized and their outcomes has been recognized as a priority issue by leading healthcare organizations including Australia's Commission on Safety and Quality in Healthcare (ACSQHC, 2016). A key issue for ACSQHC is improving staff knowledge that can inform care practices so CI can be identified early. Currently, both dementia and delirium are poorly recognized in hospitals and infrequently documented (Australian Institute of Health and Welfare (AIHW);, 2013; Cummings et al., 2011; Rice et al., 2011), with reports indicating that dementia is not recorded in almost half of all admissions (47% not recorded; Australian Institute of Health and Welfare (AIHW), 2013), while delirium is missed in as many as 75% of cases (Rice et al., 2011). Reasons include the lack of assessment of cognitive functioning,

* Corresponding author.
E-mail addresses: catherine.travers@qut.edu.au (C. Travers), Amanda.Henderson@health.qld.gov.au (A. Henderson), Frederick.Graham@health.qld.gov.au (F. Graham), Elizabeth.Beattie@qut.edu.au (E. Beattie).

https://doi.org/10.1016/j.nedt.2017.12.026
Received 23 July 2017; Received in revised form 20 November 2017; Accepted 20 December 2017

a lack of knowledge amongst staff including poor understanding of the benefits of the early recognition and treatment of delirium, and in distinguishing between these and other conditions that may have similar presentations (e.g. stroke, poly-pharmacy issues affecting cognition, alcohol withdrawal, (Australian Institute of Health and Welfare (AIHW), 2013, p9; Phillips et al., 2011; Teodorczuk et al., 2012). Failure to recognize CI early in the admission means these patients are vulnerable to adverse outcomes including delirium, therefore ensuring nurses are knowledgeable about delirium is essential (Inouye et al., 2014a).

The under-detection of both dementia and delirium (Cummings et al., 2011; Rice et al., 2011), persists despite the availability of several brief screening tools to assess both dementia and delirium in the hospital environment (Jackson et al., 2013; Wong et al., 2010). This is partly because hospital nurses have not received adequate education about dementia and delirium and how to recognize CI (Gandesha et al., 2012; Gladman et al., 2012; Hynninen et al., 2015). While there is a need to educate hospital nurses about recognizing dementia and delirium so care can be appropriately individualized, there is limited evidence regarding the most effective ways of doing so.

The simple provision of guidelines and education of staff about delirium detection is generally insufficient to result in practice change (Wand, 2011; Young and George, 2003), indicating the need for a different approach. One approach that has been shown to be conducive to learning and improvement in schools is 'Distributed Leadership' (DL; Bolden, 2011), and while it has been predominantly studied in the field of school education, DL is increasingly being studied within healthcare. DL can be conceived of as a collective social process that involves individuals pooling and sharing their skills and expertise such that the result is greater than the sum of their parts (Bolden, 2011, p252). Thus, in this project, the approach adopted to educate hospital nurses about dementia and delirium and increase screening for delirium early in patients' admissions was a collective social process involving academics (the Research Team), nurse consultants, and the nursing teams delivering care. Responsibility for education was distributed across the different levels of clinical nurses, and the nurses working with their specific teams, thereby engendering a collective responsibility for nursing staff to engage with the learning (Ritchie and Woods, 2007). The approach also recognizes that nurses prefer to access evidence based knowledge socially by engaging with local clinical experts rather than with online guidelines and text (Estabrooks et al., 2005; Marshall et al., 2011). In this project the Cognitive Champions took the leading role, assumed responsibility, and responded specifically to emerging needs in their wards to tailor and organize learning with their colleagues to ensure the provision of delirium education was timely and relevant. This use of a collective social process as a medium to educate nurses was part of a larger study that targeted education and practice change aimed at increasing the uptake of best practices for delirium prevention, management and treatment (Travers et al., 2017).

This paper reports on the processes surrounding the educational component of the intervention only and the impact on nurses' knowledge. Other aspects of the intervention including patient outcomes and qualitative evidence regarding barriers and factors that facilitated the project's implementation are discussed in greater detail in a companion article.

2. Methods

The effectiveness of the collective social education process and its impact on nurses' knowledge of delirium was evaluated by:

- the percentage of staff that engaged in the in-service educational sessions about delirium,
- increased nurses' performance on knowledge tests for the accurate identification of delirium, and
- improvements in timely and accurate assessments of at-risk patients for delirium.

2.1. Distributed Leadership Approach

Experienced nurses (with more than two years clinical experience), and (a) a specific interest in CI, or (b) leadership skills, were identified to become Cognition Champions (CogChamps). They were provided with comprehensive dementia and delirium education and training (Workshop One) and the distributed leadership approach to guide in-service sessions in their clinical areas (Workshop Two), through two full days of Workshops conducted six weeks apart. An important component of Workshop One was the assessment of delirium using the short Confusion Assessment Method (CAM; Inouye et al., 1990, 2014b). The session included a demonstration of the CAM by the hospital's dementia and delirium specialist (FG: Clinical Nurse Consultant — Dementia and delirium), practice using the CAM in pairs and supervised live practice by the CogChamps on their home ward. This was consolidated by a second live observation by an expert (CT) of the CogChamps performing a CAM assessment on their ward. This occurred in the month following Workshop One and CogChamps were assessed by an expert clinician/researcher for their ability to both administer and interpret the CAM. If necessary, the observation was repeated until the CogChamp was deemed to be competent in both domains. Establishing the lead nurses' ability to perform these assessments accurately was essential to ensuring that they had the requisite knowledge and understanding of delirium. The collective social process (DL approach) was based on the development of ward specific Action Plans led by the CogChamps, thus ensuring the action items reflected each ward's priorities and requirements. Each plan included specific actions for nurse education with measurable outcomes and associated timeframes.

Initially, there were approximately six CogChamps for each of six wards. One or more CogChamp(s) from each ward met (face to face and/email) on a regular basis (weekly) to refine the education initiatives in collaboration with the Research team. The research team also supported the CogChamps throughout the five month implementation by assisting them with providing education sessions, sourcing resources, providing feedback and providing a data analytic service to assist the CogChamps analyze any data they collected.

The collective social education process also involved the nomination of a CogChamp as leader for each ward, the development of sound communication processes to communicate amongst themselves about the project (e.g. use of a communications book and email to schedule meetings and send updates), and the education activities. The project was also included as an agenda item at their regular ward meetings to involve all staff in the progress, and to address issues of sustainability. Educational resources to support the efforts (e.g. leaflets, lanyards with the CAM printed, and posters) were also sourced and distributed to nurses, and posters were displayed in prominent locations around the ward. The actions implemented by each ward are summarized in Table 1.

2.2. Setting

The education process was conducted across six wards (4 medical, 2 surgical) of a large tertiary referral hospital in South-East Queensland, Australia. The education initiative had the support of the hospital executive and key hospital staff including the Nurse Unit Managers of the wards.

3. Ethics

Ethics approvals were obtained from the relevant Human Research Ethics Committees responsible for the participating hospital. As no personally identifying information was recorded by the nurses (they were asked to use a personally meaningful alias on questionnaires for identification purposes), obtaining individual informed consent from