

THOUGHTS ON THE NEED FOR MANAGERS' AND NURSES' LEADERSHIP TO IMPROVE PREVENTION AND MANAGEMENT OF DELIRIUM IN CRITICAL CARE

Karine Bérubé, RN, BSc, Critical Care Nurse, Centre intégré de santé et de services sociaux du Bas-St-Laurent, Rivière-du-Loup, QC; Mélanie Guillemette, RN, BScN Candidate, Université du Québec à Rimouski, Rimouski, QC and Assistant Supervisor in Geriatric Medicine, Centre intégré de santé et de services sociaux du Bas-St-Laurent Rivière-du-Loup, QC; Dave A. Bergeron, RN, MSc, Lecturer, Université du Québec à Rimouski, Rimouski, QC and Clinical Sciences Ph.D. Candidate, Faculté de médecine et des sciences de la santé, Université de Sherbrooke, Sherbrooke, QC.

Corresponding Author: Dave A. Bergeron, RN, MSc, Department of Nursing, Université du Québec à Rimouski, Bureau régional du KRTB, 78 rue Frontenac, local A-015, Rivière-du-Loup, QC G5R 1R1, Email: dave.bergeron@uqar.ca

ABSTRACT

The onset of delirium in older adults, especially in critical care units, is a major factor in increasing the length of hospital stays, with multiple significant consequences. Although it is common, delirium frequently manifests as a result of modifiable precipitating factors. Sadly, the current nursing approaches to delirium are often sub-optimal, although guidelines and protocols are available to enable them to intervene quickly, to reduce the incidence and consequences of delirium. A supportive environment is needed in order to introduce new practices into critical care settings, and leadership by managers and nurses is necessary to create an environment conducive to implementation of new practices.

Keywords: nursing, leadership, critical care, delirium detection, delirium assessment.

Delirium is an organic syndrome, usually of a transient and reversible nature. It can manifest at any age, but is particularly frequent among older adults (Kergoat & Brazeau, 2011). According to the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*, delirium is a disturbance in attention, awareness and cognition, with a rapid onset, a change from baseline and fluctuation over time that cannot be explained by other neurocognitive

disorders (American Psychiatric Association, 2013).

Between 10% and 30% of all older adults suffer from delirium on admission to the emergency room, while 25% to 60% will develop delirium while hospitalized (McCusker et al., 2001; Svenningsen & Tønnesen, 2011). Patients who are aged 65 years of age and older account for 42% to 52% of those admitted to intensive care (McNicoll et al., 2003; Pisani, McNicoll, & Inouye, 2003). A review of the literature shows that simply being hospitalized raises the risk of developing delirium to over 70% (McNicoll et al., 2003).

ETIOLOGY AND CONSEQUENCES OF DELIRIUM

Delirium has a multi-factorial etiology (Hogan & McCabe, 2006) and predisposing and precipitating factors contribute to its occurrence in hospitalized patients. Predisposing factors (vulnerability to delirium development) include advanced age, gender, presence of dementia or cognitive impairment, and hearing or vision problems (Inouye & Charpentier, 1996; Voyer, Richard, Doucet, & Carmichael, 2009). On the other hand, precipitating factors such as polypharmacy (especially psychoactive drugs), infections, pain, dehydration, malnutrition, and environmental disruption (use of physical restraints, noise, overstimulation, lack of time frame, lack of sleep, lighting and the absence of windows in the room) act as insults that may precipitate development of delirium (Inouye & Charpentier, 1996; Voyer, Richard, Doucet, Cyr, & Carmichael, 2011; Zaal et al., 2013).

Delirium decreases functional independence and alters cognitive abilities (Hopkins & Jackson, 2009). Research also indicates that physical and cognitive after-effects can last for several months when delirium is not dealt with expeditiously and thoroughly (Pisani, Murphy, Araujo, & Van Ness, 2010; Salluh et al., 2015). Following resolution of an episode of delirium, the rate of readmission for older adults is over 27%, and their hospitalization time is greatly increased (Kennedy et al. 2014). Delirium extends the duration of hospitalization in intensive care units (Girard, Pandharipande, & Ely, 2008; Salluh et al., 2015). It also puts patients at risk of self-extubation, and is associated with longer periods of mechanical ventilation (Girard et al., 2008). These negative outcomes compromise the patient's chances of recovery (Andrew, Freter, & Rockwood, 2005; Girard et al., 2008), resulting in a high mortality rate of 10% to 30% (Leentjens & van der Mast, 2005; McCusker, Cole, Dendukuri, & Belzile, 2003). Studies show that 6% of patients diagnosed with delirium die within 30 days of admission to intensive care (Kennedy et al., 2014).

The hospitalization of patients with delirium costs two and half times more per day compared with average daily costs (Kergoat & Brazeau, 2011), which means that delirium is partly responsible for both the increased workload of nurses (Mc Donnell & Timmins, 2012) and the rising costs of health care (Awissi, Bégin, Moisan, Lachaine, & Skrobik, 2012; Hogan & McCabe, 2006).

CURRENT CHALLENGES REGARDING DELIRIUM DETECTION AND MANAGEMENT

Managers, nurses and other health professionals have a major role in delirium prevention, detection, assessment and treatment, and could minimize its impact and improve patients' outcomes (Girard et al., 2008; Hogan & McCabe, 2006). Guidelines for health professionals' interventions aim to avoid the impact, the after-effects and related costs of delirium (Hogan & McCabe, 2006).

For more than a decade, detection tools and guidelines or protocols promoting interdisciplinary management have been available to improve delirium management; however, an important gap remains between current and ideal practices (Collinsworth et al., 2016; Reade & Finfer, 2014). Health professionals recognize the importance of applying best practices in delirium detection and management (Cole & Stark, 2016) but achieving the implementation of best practices is challenging (Trogrlić et al., 2015). This process usually creates resistance and tension among health professionals (Collinsworth et al., 2016; Trogrlić et al., 2015), resulting in poor adherence to those best practices (Collinsworth et al., 2016; Devlin et al., 2008).

It is therefore necessary to identify ways to optimize the implementation of best practices in delirium detection and management (Cole & Stark, 2016; Côté et al., 2012). The context and culture of the unit where best practices are implemented are some elements that must be taken into account in this process (Collinsworth et al., 2016; Trogrlić et al., 2015; Wassenaar et al., 2017). It is also necessary to have effective communication and collaboration (with common goals and vision) among professionals involved in delirium detection and management (Reade & Finfer, 2014; Singh, 2015; Trogrlić et al., 2015) in order to give them a greater sense of control over the implementation process (Côté et al., 2012). Given the complexity of critical care and in order to achieve optimal change, managers need to be flexible and to involve nurses in change process (Cohn, 2013). How, however, can managers and nurses reconcile the various elements that will ultimately enable better implementation of best practices?

IMPORTANCE OF MANAGERS' AND NURSES' LEADERSHIP

Leadership from managers and nurses is an essential element to develop a supportive environment for optimal implementation of guidelines (Cohn, 2013; Wong, Cummings, & Ducharme, 2013) such as those related to delirium detection and management. Leadership, however, is a broad concept encompassing two main themes and approaches: task-oriented leadership and relational-oriented leadership (Wong et al., 2013).

Relational-oriented leadership positively impacts various elements during the process of change, such as the development of staff expertise, effective communication, collaboration and clear expectations regarding changes. Relational-oriented leadership also significantly impacts patient outcomes, including reduction of adverse effects and mortality (Singh, 2015; Wong et al., 2013). The leadership of managers and nurses is complementary and necessary. The first is more centered on management, strategic decisions, aiming to influence and valorise nursing practice; while the second focuses on nursing decision-making and improving the quality of care delivered directly to patients (Harvath et al., 2008; Wong et al., 2013).

Of all relational-oriented leadership approaches, authentic leadership is an emergent approach that encourages transparent and ethical professional practice, information sharing, team participation in decision-making and ongoing feedback (Wong et al., 2013; Wong & Laschinger, 2013). This relatively new vision of leadership stimulates interactions, respectful debate and relational transparency between managers and nurses around evidence-based practices in order to find "creative solutions to problems" (Nichols & Erakovich, 2013). It creates hope, trust and optimism; increases motivation which generates a healthier work environment and influences positively teams' attitudes and behaviours (Nichols & Erakovich, 2013; Wong & Laschinger, 2013). This approach facilitates interprofessional engagement in change processes and promotes better patient outcomes (Wong et al., 2013). The principles of this leadership approach should be considered in the best practices implementation process, in relation to delirium detection and management in critical care.

HOW TO DEMONSTRATE AUTHENTIC LEADERSHIP IN DELIRIUM DETECTION AND MANAGEMENT

For managers, it is essential to have a global vision and understanding of the episode of patient care, in order to understand better the various elements influencing

the process of care and patients' outcome (Wong et al., 2013). To initiate the change process, including in response to particular episodes, partnership based on two-way communication between nurses and other health professionals must first be established (McTeer, 2013; Ryan et al., 2015; Vanderboom et al., 2016; Wong et al., 2013). This will enable the process of change, with managers intervening to promote adoption of these changes in practice (Ryan et al., 2015). Nurses and other health professionals must also be involved early, to develop common goals and expectations facing the changes needed, and to try to adapt best practices to units' specificities and routine (Collinsworth et al., 2016; Trogrlic et al., 2015; Vanderboom et al., 2016). These elements are the basis to optimize delirium prevention, detection, assessment and management in critical care (American Geriatrics Society Expert Panel, 2015).

Education and training is also a major aspect to which managers must allocate sufficient resources to train all health professionals adequately (McDonnell & Timmins, 2012; Ryan et al., 2015). In order to optimize education, it is necessary to associate it with positive reinforcements, exchange sessions, peer support and frequent feedback (American Geriatrics Society Expert Panel, 2015; McDonnell & Timmins, 2012; Ryan et al., 2015). Managers together with health professionals should periodically evaluate the implementation process, in order to identify promptly any problematic elements to be modified. During the assessment process, it is important for managers to remain open to new suggestions from health professionals that may help to achieve their common goals (Cohn, 2013).

Practice change requires collaboration. Managers cannot implement best practices alone, and nurses must involve themselves and use their leadership in different ways (Ryan et al., 2015). First, nurses must be proactive in early stages of a best practices implementation process by engaging in respectful dialogue with managers and other health professionals (McDonnell & Timmins, 2012; Ryan et al., 2015; Wong et al., 2013); participating actively in the training process (McDonnell & Timmins, 2012); and giving regular feedback on the implementation process to managers and other professionals involved (Vanderboom et al., 2016; Wong & Lasching, 2013).

In the application of best practices, nurses must use their clinical judgement to identify delirium predisposing and precipitating factors that their patients may be experiencing (Voyer, Mercier, & Roy, 2014; Zaal et al., 2013), perform (using validated tools) adequate delirium detection and assessment, and communicate these results to their colleagues in the interdisciplinary team (American Geriatrics Society Expert Panel, 2015). Always in collaboration with the interdisciplinary team, they

must also implement non-pharmacological interventions to prevent or treat delirium, and evaluate interventions outcome on patients (American Geriatrics Society Expert Panel, 2015; McCormick, 2015). In the application of best practices, nurses must also act as a point of reference and offer support in ways that empower their colleagues (Ryan et al., 2015). Finally, nurses must actively involve patients' family members because they represent an important source of information that can help the interdisciplinary team in the prevention and identification of delirium. Nurses must also explain and teach family members what delirium is and how it can be prevented and treated (Keyser, Buchanan, & Edge, 2011).

IMPLICATIONS FOR GERONTOLOGICAL NURSING

For gerontological nursing, this article highlights the importance and impact of managers' and nurses' leadership in delirium detection and management. It also identifies different strategies for managers and nurses, for better application of best practices to delirium detection and management.

CONCLUSION

Delirium prevention can significantly improve patient outcomes (Wong et al., 2013). Managers' and nurses' leadership are complementary and essential to change practices related to delirium and their leadership must be an integral part of this process. In this way, it will be possible to reduce significantly the negative consequences of delirium for patients hospitalized in critical care units, and ultimately enable their optimal recovery.

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