



Nurses' perceptions of using an evidence-based care bundle for initial emergency nursing management of patients with severe traumatic brain injury: A qualitative study

Jintana Damkliang RN, PhD (Lecturer)^{a,b,*}, Julie Considine RN, PhD, FACN (Professor in Nursing)^c, Bridie Kent PhD, BSc (Hons), RN (Professor in Leadership in Nursing)^d, Maryann Street PhD, BSc (Hons), Grad Dip Drug Eval, Pharm Sci (Research Fellow)^c

^a School of Nursing and Midwifery, Deakin University, Burwood, Victoria, Australia

^b Faculty of Nursing, Prince of Songkla University, Songkhla, Thailand

^c Eastern Health, Midwifery Research Centre, Centre for Quality and Patient Safety Research, Deakin University Nursing, Burwood, Victoria, Australia

^d School of Nursing and Midwifery, University of Plymouth, Plymouth, UK

ARTICLE INFO

Article history:

Received 14 December 2014

Received in revised form 13 April 2015

Accepted 27 April 2015

Keywords:

Emergency nursing
Brain injury
Trauma
Neurotrauma
Evidence-based practice
Care bundle
Thailand

ABSTRACT

Evidence to guide initial emergency nursing care of patients with severe traumatic brain injury (TBI) in Thailand is currently not available in a useable form. A care bundle was used to summarise an evidence-based approach to the initial emergency nursing management of patients with severe TBI and was implemented in one Thai emergency department. The aim of this study was to describe Thai emergency nurses' perceptions of care bundle use. A descriptive qualitative study was used to describe emergency nurses' perceptions of care bundle use during the implementation phase (Phase-One) and then post-implementation (Phase-Two). Ten emergency nurses participated in Phase-One, while 12 nurses participated in Phase-Two. In Phase-One, there were five important factors identified in relation to use of the care bundle including quality of care, competing priorities, inadequate equipment, agitated patients, and teamwork. In Phase Two, participants perceived that using the care bundle helped them to improve quality of care, increased nurses' knowledge, skills, and confidence. Care bundles are one strategy to increase integration of research evidence into clinical practice and facilitate healthcare providers to deliver optimal patient care in busy environments with limited resources.

© 2015 Elsevier Ltd. All rights reserved.

1. Introduction

Care bundles are one solution to introduce evidence into clinical practice and optimise the care provided by healthcare providers (Resar et al., 2012). A care bundle is defined as "a small set of evidence-based interventions for a defined patient segment/population and care setting that, when implemented together, will result in significantly better outcomes than when implemented individually" (Resar et al., 2012, p. 2). The care bundle approach has been developed and used more widely in Western countries, particularly in intensive care units (Litch, 2007; Morris et al., 2011; Rello et al., 2010; Sedwick et al., 2012). Use of care bundles in intensive care not only improved clinical outcomes (Litch, 2007; Morris et al., 2011; Sedwick et al., 2012), decreased the length of hospital stay (Litch, 2007; Rello et al., 2010), and reduced the healthcare costs

(Sedwick et al., 2012), but also increased knowledge among healthcare providers (Dumont and Wakeman, 2010; Subramanian et al., 2013).

Care bundles are being used in emergency care to improve the care of patients with stroke and transient ischaemic attack (NICS, 2009; Weeraratne et al., 2010), sepsis (Kuan et al., 2013; Nguyen et al., 2011; Tromp et al., 2010), cardiac arrest (Nolan and Soar, 2008), chronic obstructive pulmonary disease (McCarthy et al., 2013), and acute asthma (McCreanor et al., 2012). Implementation of care bundles in emergency care has been shown to improve clinical outcomes (McCarthy et al., 2013; Tromp et al., 2010; Weeraratne et al., 2010). Although the development and implementation of care bundles in Western countries have been shown to improve patient outcomes and reduce healthcare costs, care bundle use in low-income and middle-income countries, where backgrounds, facilities, and resources are very different, is just beginning to occur (Apisarnthanarak et al., 2010; Liu et al., 2013; Subramanian et al., 2013; Unahalekhaka et al., 2007; Wu et al., 2012). In this paper, the particular focus will be on the use of a care bundle approach for management of patients with severe TBI in the Thai context.

* Corresponding author. Faculty of Nursing, Prince of Songkla University, 15 Kanchanavanit Road, Hat Yai, Songkhla 90112, Thailand. Tel.: +66 74 286513; fax: +66 74 212901.

E-mail address: jintana.d@psu.ac.th (J. Damkliang).