A proper and effective vap bundle nursing essay

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5. 1 Introduction

The implementation of evidence-based practice strategies and the improvement in clinical care practice standards are two main concerns in ICUs (Soh, Davidson, Leslie & Rahman, 2011). Yet, Hansen and Severinsson (2009) found that a gap still exists between the best evidence and best practice in ICUs. In fact, a gap also exists when coming to which type of the two suction systems to use for the management of the adult, mechanically ventilated patient. According to the IHI (2012a) the key to close the gap between the best practice and common practice is the ability of HCPs and their organisations to rapidly spread innovation and new ideas. In fact, even though from this dissertation it was concluded that there is no significant benefit in using the CSS instead of the OSS as to reduce the incidence of VAP, currently in the international and local contexts the bundling of care practices are recommended, rather than using single interventions alone. However, in the local ICU no VAP bundle is introduced yet, even though certain elements are already incorporated in standard care. The aim of this chapter is to propose realistic evidence-based recommendations for practice, education, policy development, management and further research, which can be disseminated and implemented in the local field of practice and to the development of the knowledge base in critical care nursing.

5. 2 The formation of a proper and effective VAP bundle

Recently, locally a catheter blood stream infection (CBSI) bundle was exclusively implemented. This bundle was based on the formation of an implementation team (IHI, 2011b), staff education, development of audit

tools, a systemic process for data collection, tracking of the outcome and process measures and the development of a team approach to drive and maintain the initiative's control (Evans, 2005; Al-Tawfiq & Abed, 2010). The development of a VAP should be based on the same basis of the CBSI bundle so that the barriers that emerged during the latter bundle would be defeated and the best scientific evidence would be shortly implemented.

5. 3 Barriers to bundles

There are several challenges which occur during the bundle implementation process. According to Ricart, Lorente, Diaz, Kollef and Rello (2003) two prevalent barriers are environment-related and patient-related. Yet, one of the main prevalent obstacles is the resistance to and fear of change from staff. These barriers can be encountered due HCP false beliefs and perceptiveness that the change may interfere with the patient outcomes and induce harmful side-effects, lack of motivation, knowledge and skills (Evans, 2005), ineffective or breakdown of communication between the involved HCPs (IHI, 2006). Various strategies can be utilized to facilitate the alteration in HCP behavioural change as to help in the implementation of care bundles, including constructive feedback and implementation of standardized guidelines among others (Ricart et al., 2003).

5. 3 The formation of an effective implementation team supported with adequate communication and teamwork for the implementation of the VAP bundle

According to O'Keefe-McCarthy, Santiago and Lau (2008), an ICU implementation team is there to promote and facilitate structural and cultural changes to the process of implementing best evidence-based

practices and cluster them into bundles. This ICU implementation team should consist of between 5 and 7 members, including an ICU clinical leaders, practice development nurses, physiotherapists and infection control nurses, as to work together to establish a definite VAP definition and diagnosis criteria and choose the VAP components bundle together (IHI, 2011a). Moreover, there has to be the involvement of stakeholders, including departmental nursing manager on critical care and clinical chairpersons among others, so that they promote change too. Thus, all the necessary information would be committed by consensus and general agreement among all the ICU personnel and subjectivity would be decreased (Rello et al., 2011). Then, an aim statement which includes a clear purpose, a measurable goal, a description of how this will be conducted and a specific framework should be set. This would encourage the team to work for what they want to accomplish, leading to a sense of ownership and support for the outcome. In this way, HCPs feel that they are vital in their decision-making and hence remain motivated, leading to an improved workforce satisfaction and ultimately to an improvement in the patient’s outcome (Lee et al., 2008).

5. 4 Staff education

Prior the implementation of the VAP bundle components, the implementation team has to establish a standard suctioning technique among all HCPs, VAP definition and diagnostic criteria. Then, the staff would be provided by education, accomplished by multiple techniques regarding the importance of the VAP bundle components with reference to infection control measures, and if required encourage the ICU personnel to implement a protocol about

certain elements of the bundle (e. g. sedation vacation) (Al-Tawfiq & Abed, 2010). In fact, since from literature it was found that a potential benefit of the CSS is to reduce cross-contamination or infection with multidrug resistant organisms among patients (Vonberg et al., 2008; Peter et al., 2007 & Siempos et al., 2008), locally a protocol regarding this issue still has to be implemented. Educational sessions to nurses and physiotherapists could be delivered by the professional development nurse whereas for physicians by the clinical leader. These sessions have to be mandatory, so as all HCPs would be well-informed about the bundle components and there would be adherence to the bundle components, leading to a reduction in VAP incidence and thus recovery in the training costs invested on HCP learning. Meanwhile, after one year experience working in an adult ICU, staff should be given the opportunity for a certificate programme as part of the continuous professional development (CPD) education learning, which helps qualified nurses who are already working in ICU to further develop their knowledge and clinical skills of their field of practice. This CPD should also include a practical component, which will be held during normal working hours (University of Malta, 2012). On the other hand, newly qualified nurses should be provided with induction programmes and also for the first month or so the practice development nurse would assist them during the nursing care. The Faculty of Health Sciences also seeks to promote undergraduate students with elective modules and certificates in a wide range of specialities including critical care (Sammut, 2013). Hence, students also have the opportunity to be allocated to supportive clinical learning environments, where HCP can transmit evidence-based knowledge. Among the multiple

techniques used as to promote VAP care evidence-based practices and alter behavioural changes one can use local conferences and educational material, like presentations on VAP, charts and posters next to each bedside, information on the iSoft system, memos, e-mails, meetings and formal and informal training as to analyse the practice of nurses, and then award nurses with competency certification (Gillespie, 2009).

5. 3. 3 Development of audit tools, data collection, results tracking and outcome reporting

During educational sessions, HCP should be monitored and provided with feedback on compliance and non-compliance elements of the bundle (Cocanour et al., 2006; Al-Tawfiq & Abed, 2010). Those aspects with which the nurses did not adhere would be communicated to each ICU staff with the aim for quality care improvement (Al-Tawfiq & Abed, 2010). This could be enhanced by audit tools, like a checklist, in which compliance could be observed and assessed on a broad period of time. While on placement it was observed that even though no VAP bundle is implemented yet, there is neither a daily goals checklist so as to help in the assessment of the individual strategies performed during the standard nursing care. An example of a VAP care bundle checklist is in Appendix B. According to Evans (2005) weekly audits by infection control nurses, practice development nurse, clinical leader and other relevant HCPs should be carried out. When data is gathered, analyze and report the findings graphically to visually reinforce the staff’s efforts. Data should also be compared to VAP rates along time, with other hospitals and countries (Patient safety first, 2008). Re-

education and reinforcement of VAP noncompliant components would be adjusted as necessary. Constructive feedback of audits should be provided.

5. 4 Dissemination and implementation of findings

To conduct RCTs, preferably multi-centred, in an already developed hospitals which are up to standard in infection control and where there is an established criteria for the diagnosis of VAP, case definition for VAP and protocols so that an evaluation for the effectiveness of the two suction systems in reducing VAP could be made. Ethical considerations are to be well considered. Furthermore, a study where a small number of patients who are managed by a VAP care bundle can be split in two groups, where one group would be managed by the OSS and the other group with the CSS. Then, the rates for VAP would be studied. Develop and implement a patient daily goal sheet incorporating VAP bundle components, as to help in prioritising care delivery issues addressed at daily ward rounds. This daily goal sheet would be designed to target immediate patient needs, facilitate patient’s progress, encourage rapid response to patient problems, and ensure that pertinent issues are addressed on a consistent basis (Evans, 2005). Moreover, spot checks as part of the daily rounds should be made (Patient safety first, 2008). In addition, maintain a weekly schedule for team meetings, in-depth interviews, focus groups and surveys amongst ICU personnel involved. This will help in participation and open communication among all HCP which have to do with the VAP care bundle, leading to collaborative management and decision making. Lastly, give feedback as required and use to keep the focus on goals, track progress throughout the initiative, and celebrate the staff’s hard work and success (Evans, 2005).