Nursing staff use early warning score

The focus of this article is how nurses, especially ward-based staff nurses use an Early Warning Score to package physiological deterioration efficiently to ensure successful referral to doctors. This article highlights that the nurses' responsibility to identify early signs in predicting haemodynamic instability. The aim of the study is to consider the practical problems confronted by the nurses in detecting physiological deterioration. The data is gained from interviewing 44 participants who ranged from nurses, doctors and healthcare support workers. However some of the limitations were that if theoretical sampling had been carried out in other clinical areas then it is possible that the emerging categories could have been elaborated further. The author acknowledges that the nursing diagnosis of deterioration relies on subjective and subtle indicators. Tom Andrews et al suggest that the Early Warning Score enhances communication, increases their confidence when reporting about patient deterioration and to train the nurses to use medical language. The authors summarise the article by stating that nurses play an important role in the multidisciplinary assessment of a patients' deterioration along with the Early Warning Score leading to a successful referral to doctors. This article informs nurses to update their knowledge as it will assist them to detect the early signs of deterioration.

ARTICLE 2 (see appendix 2)

Beaumont K et al (2008) Deterioration in hospital patients: early signs and appropriate actions. Nursing Standard. 23, 1, 43-48.

The focus of this article addresses about identifying clinical deterioration in hospitalised patients early as it may prevent and reduce mortality rates and the factors that may contribute to patient deterioration not being recognised.

The author discusses understanding the care process which might result in the failure to recognise patient deterioration, and how healthcare staff could help their colleagues/employees to act more sufficiently which would result in patient safety. The authors' data is gained through the work undertaken by the National Patient Safety Agency and guidelines produced by the National Institute for Health and Clinical Excellence. These data enables to analyse and interpret information which may be used to identify risks and ways in which patient safety can be improved. The authors make useful suggestion on identifying the most common factors contributing to incidents such as semi-structured interviews with clinicians, aggregate root cause analysis, ethnographic analysis and many more. However the main limitation on this article was the interpretation of National Reporting and Learning System (NRLS) data, because data are subject to bias. The author concludes the article by saying that nurses are at the front line and need to make patients their highest priority and be responsible and provide leadership to highlight the importance in monitoring.

ARTICLE 3 (see appendix 3)

Johnstone CC; Rattray J; Myers L (2007). Physiological risk factors, early warning scoring systems and organizational changes. Nursing in Critical Care . 12(5): 219-24 (40 ref)

This article emphasise the importance of using early warning scoring systems in conjunction with the intuitive practice enables to detect a deteriorating patient in critical care. According to the article (Scottish Executive 2005), there has been an increase number of short stay surgery supported by pre-admission assessment which resulted in a reduction in the

number of acute beds within the health services. The author emphasises on the predictors of deterioration/risk factors, early warning score systems and organisational changes which leads to evidence of many cases of acute deterioration being missed by doctors and nurses. Moreover it is also discussed that the Early Warning Score are not always used to their full potential, raising question of their impact. To compose this article the authors used research taken from the databases including CINHAL (1997-2007), Medline, Blackwell Synergy and Science Direct. Moreover (Smith et al, 2002) proposes that short courses of 1-2 days e. g. ALERT™ to be arranged to develop appropriate skills. The article is summarised by making two points. Firstly, nurses are at the front line and need to make patient safety their highest priority and be responsible and provide leadership to highlight the importance in monitoring. Secondly, intuition and early warning scoring must be viewed as a decision-making tool and must not replace clinical judgement. This article alerts nurses to be trained adequately in order to use EWS efficiently.

ARTICLE 4 (see appendix 4)

Odell M., Victorc. & Oliver D. (2009) Nurses' role in detecting deterioration in ward patients: systematic literature review. Journal of Advanced Nursing 65(10), 1992-2006.

These authors completed a complex literature review to attempt to recognise and evaluate research investigating nurses' role in detecting deterioration in ward patients. The focus of this article addresses identifying clinical deterioration in hospitalised patients early, as it may prevent and reduce mortality rates. The aim is to identify and summarise nurse's

observation practice with priority of patient's sick condition and do develop the ability of rapid response system. The authors have gained data from journal articles found on CINAHL, Medline and using library searches, therefore taking on the limitations of other research along with the limitations that they created in using broad search topics (i. e.: nursing observations, physiological deterioration. Research done in many places (Australia, USA, and UK) showing that patient deterioration is becoming unnoticed due to lack of knowledge, supervision, negligence and failure to report in time. The author concludes by stating that the deterioration of patients relies upon working culture; inter professional relationship, experience and education of the bedside nurses. The authors make several useful suggestions to improve early detection of deteriorating patients in the ward by training the ward nurses to enhance advanced assessment skills that include the monitoring and analysis of subjective as well as objective data.

ARTICLE 5 (see appendix 5)

Steen C (2010), Prevention of deterioration in acutely ill patients in hospitals. Nursing Standard , 24(49): 49-58 (39 ref)

Steen C focuses on the importance of prevention of deterioration in acutely ill patients in hospitals and dependency rates affecting mortality and the morbidity rates, he also states that effective education/training and appropriate knowledge and skills are needed to assist in the identifying deteriorating patients. A tool that the author suggests using is the ABCDE mnemonic, to assess acutely ill patients. Each letter of the ABCDE mnemonic represents a step in assessing the patient's condition. A= Airway, B=

Breathing, C= Circulation, D= Disability and E= Exposure. The author makes a useful suggestion in saying that each letter should be approached using the look, listen and feel method of assessment, followed by intervention. He states that this systematic process is easy to remember and ensures that no obvious issues that may affect the patient's survival maybe skipped/missed. In addition, following the mnemonic before calling for further assistance would provide the answer to majority of questions that will be asked. NICE 2007 states the according to the track and trigger tools should be used to grade the condition of the patients e. g. low, medium and high situations. Steen C concludes the article by stating that timed, early and thorough detection of a deteriorating patient and appropriate systematic approach can aid to stabilise the patient's condition and benefit when it comes to recovery. Moreover it will reduce the chances of organ dysfunction and further deterioration.

ESSAY:

Early detection and prevention of patient deterioration is a key aspect of a patient's multidisciplinary assessment (Steen, 2010). Nurses are expected to have skills to enable them to assess precisely the severity of deterioration, as nurses are the first to encounter the patients (Beaumont 2008).

The authors /researchers of these articles researched, make many useful suggestions on how nurses should assess patient deterioration. (Odell M., Victorc. & Oliver D. 2009) claims on improving the knowledge of ward nurses by training them to monitor and analyse various data's. For example educational programs like Acute Life-threatening Events-Recognition and Treatment course (ALERT™) (Smith et al 2002). Development of outreach

team and medical emergency teams, with ongoing education for nurses along with the best working climate would enable the nurses to use medical language in an articulate and confident manner.

A generic way to assess acutely ill patients is using the ABCDE mnemonic, which is widely used in many areas of nursing. The mnemonic works as each letter is a step in the assessment process, making it easier for the nurse to remember all areas of the patient assessment. ABCDE stands for: A= Airway, ensuring the airway is clear of any obstruction, B= Breathing, a patient's breathing needs to be assessed to exclude a number of possible complications, C= Circulation, circulation problems arise as a result of shock e. g. cardiogenic shock, D= Disability, causes neurological dysfunctions are split into 2 categories: primary and secondary injuries. Lastly E= Exposure, ' complete inspection of the patient is performed to support or reveal symptoms that may support a diagnosis' (Steen C 2010). The author states that using this tool will help the nurses not to skip any vital abnormalities.

Checking the vital signs is the most important element of the assessment. The National Institute of Health and Clinical Excellence (NICE) (2007) state that, baseline observations including Glascow coma scale should be done on initial assessment. Baseline observations are respiratory rate, heart rate, blood pressure, and temperature and oxygen saturation. Following the initial assessment frequency and range of observation should be made. To detect the early warning signs it would be beneficial for the nurses to use the track and trigger system as it will put the patient in a graded response category: low, medium and high grade. For example low grade group should have the

frequency of observation increased and it should be notified to the nurse in-charge, whilst high grade group to be assessed by medical emergency team.

Psychological support to the family is necessary. Families are a vital source of information and studies have shown that they may also assist the nurse to detect and alert nurses of the patient deterioration.

In conclusion, the majority of authors have recommended that nurses do not use an individual and independent approach to detecting deterioration , instead some tool or method should be used to ensure that nothing is overlooked that may result in a missed diagnosis or a delay in treatment. The findings suggest that nurses are the key players in detecting deterioration of patients (Hogan 2006). However some predictors of deterioration and risk factors are failure of organisation, lack of knowledge, lack of expertise, failure to seek advice, lack of supervision, medical staff availability, and failure of equipment, non-availability and fatigue (McQuillan et al 1998). All of these factors increase the risk of deterioration of patients' condition.

References:

Andrews T; Waterman H. (2005) Packaging: a grounded theory of how to report physiological deterioration effectively. Journal of Advanced Nursing, 52(5): 473-81 (41 ref)

Beaumont K et al (2008) Deterioration in hospital patients: early signs and appropriate actions. Nursing Standard. 23, 1, 43-48.

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Appendix 1

Andrews T; Waterman H. (2005) Packaging: a grounded theory of how to report physiological deterioration effectively. Journal of Advanced Nursing, 52(5): 473-81 (41 ref)

Appendix 2

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Appendix 3

Johnstone CC; Rattray J; Myers L (2007). Physiological risk factors, early warning scoring systems and organizational changes. Nursing in Critical Care . 12(5): 219-24 (40 ref)

Appendix 4

Odell M., Victorc. & Oliver D. (2009) Nurses' role in detecting deterioration in ward patients: systematic literature review. Journal of Advanced Nursing 65(10), 1992-2006.