

Nursing Physical Assessment: Current Practice Requires a Paradigm Shift Back to Basics

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Review Article

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Abstract

Nurse ongoing surveillance is a core principle of nursing practice that involves a specific patient observation process, physical assessment, continuous patient monitoring, recognition of patient status changes, interpretation of clinical data, and decision-making. Twenty-four-hour presence, including a core responsibility of gathering baseline data through systems-based physical assessment and ongoing surveillance, gives nursing the strategic advantage and obligation to identify and intervene early when a patient's condition deteriorates. Current evidence suggests nurses perform a limited number of assessment skills on their patients, most of which are vital signs. Utilizing a systems-based physical assessment in daily practice allows nurses to think holistically about their patients' current health status. Subsequent early and most often subtle signs of deterioration can then be quickly detected and acted upon. Early recognition of a change in patient condition stemming from a systems-based physical assessment is the pre-requisite to the 24-hour surveillance solution to keeping patient's safe and preventing adverse patient events.

INTRODUCTION

Many patients do not realize that their health outcomes are primarily dependent upon the quality of nursing care they receive during their hospitalization. Although patients expect they will remain safe and receive the best care possible, many are unaware that the extent of their nurse's missed care and surveillance throughout their hospitalization will be a significant risk factor for developing an adverse outcome. There is evidence, albeit sparse, that suboptimal care exists in the acute care (non-critical) patient population due to inadequate physical assessment and monitoring^[1]. Nurse on-going surveillance is a core principle of nursing practice that involves a specific patient observation process, physical assessment, continuous patient monitoring, recognition of patient status changes, interpretation of clinical data, and decision-making^[1]. Nursing care is the fabric of a 24-hour patient care surveillance system. Therefore early recognition and interpretation of physiologic abnormalities are primarily nurse responsibilities^[2]. As the only healthcare providers who are with patients around the clock, nurses are uniquely accountable for the continuous surveillance needed for hospitalized patients. It stands to reason, when there are missed patient assessments and a lack of on-going surveillance, patients are at risk for experiencing adverse outcomes and even Serious Adverse Events (SAEs) such as cardiac arrest, unplanned Intensive Care Unit (ICU) admissions, and death. The aim of this manuscript is to discuss the importance of nurses conducting a Systems-based Physical Assessment (SPA) early in their shift as a standard nursing practice to prevent delayed recognition of patient deterioration and subsequent adverse outcomes.

DISCUSSION

Intertwining Florence Nightingale wrote that the primary responsibility of a hospital was that it should 'do the sick no harm'^[3]. However, studies show that SAEs are often iatrogenic and preventable in many cases, as they are commonly preceded by documented evidence of physiological instability (hypotension, tachycardia, tachypnea, etc.), at times up to 24 hours before the event^[4]. De Meester and colleagues^[5] showed that out of 63 acute care patients with preceding clinical evidence of deterioration ending in death, 49% of these deaths were preventable. Delayed recognition of deterioration or Failure to Recognize (FTR) was a significant factor in their deaths. These FTR events are notably complex and have multifactorial causes. However, research clearly demonstrates that hospitalized patients in the acute care setting are highly vulnerable to clinical deterioration and even death as a direct result of nursing's lack of SPA, continued surveillance, and timely intervention^[6]. The human body is internally programmed to preserve homeostasis by actively adjusting biological variables such as oxygen concentration and transport, arterial and micro vascular blood flow, pH, heart rate and blood pressure, etc. in order to maintain hemodynamic stability^[7]. When the body is no longer able to compensate for an insult (e.g., sepsis, heart failure, respiratory insufficiency, etc.), overt signs of deterioration

become evident, such as vital sign (VS) abnormalities and altered mental status. In other words, patients typically do not have a sudden acute deterioration in their clinical status but usually deteriorate over a period of hours with subtle changes in VSs. Early recognition of these subtle physiologic changes theoretically gives nurses ample opportunity to intervene and prevent further adverse outcomes^[8]. Rapid Response Teams (RRTs) and electronic early warning systems (EWS) have been developed over the past two decades in the hopes of successfully addressing the FTR crisis. Although these strategies have had some success, they fail to address the core issue of early recognition and intervention in patients with impending instability. In fact, nurses largely ignore alerts generated from EWSs which signal early decompensating in part, due to alarm fatigue^[8,9]. As a result, RRT activation is often delayed until overt signs of deterioration are well under way. And notably, there is limited to no quality nursing research investigating nursing's role in early recognition and patient deterioration intervention. Without question, hospitalized patients in the acute care environment are more complex with higher acuity levels than ever before due to influences such as advanced age, greater comorbidities, advances in implanted medical devices, and complex surgical procedures, including organ transplantation. Technology such as electronic documentation and automated VS devices, have improved healthcare delivery accuracy and efficiency. However, nothing can replace the eyes, ears, and touch of a nurse, nor their shrewd instinct^[10]. Research shows that the more time nurses spend providing direct patient care, the fewer reported adverse outcomes^[11,12]. Unfortunately, nurses are spending less of their workday hours providing direct patient care. Only an estimated 7% of nursing work time is spent on patient assessment and reviewing VSs; the majority of nurses' time (35%) is spent on documentation^[13]. With such limited time devoted to patient assessment, it is easy to infer nursing's lack of holistic patient knowledge and surveillance could be a primary cause of FTR events. As the most trusted profession in the United States^[14]. Nursing's high ethical and practice standards began with Florence Nightingale and have continued to modern-day. Nightingale believed that patient assessment was at the core of nursing practice and that all other nursing actions that followed were based upon what was assessed^[3]. Even though healthcare has evolved significantly since Nightingale's time, nursing's historical legacy has transcended time to distinguish nursing from other licensed and non-licensed healthcare providers. Therefore, nursing cannot allow core responsibilities essential to our value as a profession to be abandoned. Twenty-four-hour presence, including a core responsibility of gathering baseline data through SPA and on-going surveillance, gives nursing the strategic advantage and obligation to identify and intervene early when a patient's condition deteriorates^[15]. By mitigating adverse outcomes, patients receive the level of care they expect, deserve, and trust they will receive. Evidence suggests that a comprehensive SPA is undervalued and lacking in today's nursing practice^[16,17]. Osborn S and colleagues^[17] reported only 7.5% of the 133 core systems-based nursing assessment skills are conducted in nursing's daily practice, and the majority of these were VSs. Current practice suggests that less than 80% of nurses conduct a SPA on their patients yet document SPA results in the EHR^[18]. A structured, systems-based (head-to-toe, including VSs) rather than a focused physical assessment (related to a specific problem or system), completed and documented in the electronic health record (EHR) within the first few hours of a nurse's shift fosters early patient knowledge and therefore, enhances a nurse's ability to recognize early subtle changes in a patient's condition^[2,19]. Nurses report several perceived barriers to conducting a SPA including reliance on technology, lack of time and interruptions, lack of confidence, lack of influence on patient care and specialty area^[20]. Consequently, current nursing practice is more focused on collecting and reporting on minimal data (i.e., VSs) which serves only to detect late patient deterioration^[17]. RRTs and EWSs have enabled a lack of SPA in today's nursing practice by relying on nurses collecting and reporting on predefined parameters (i.e., VSs) rather than assessing the patient's complete (or overall) health status^[17]. Nurses should be reminded, through education and skills validation, of the purpose of each component of the SPA, which is to identify physical sign variations that deviate from what, is typically expected^[21]. For example, a nurse who performs only a focused abdominal assessment on a postoperative appendectomy patient with a history of congestive heart failure would miss important signs of early deterioration. Specifically, the nurse would miss the early signs of impaired peripheral perfusion (cool, mottled extremities with extended capillary refill time), which occur well before VS changes if the patient's skin and extremities were not included in the assessment^[4]. At the very least, a nurse's initial physical examination should establish a systems-based physiologic baseline that is comprehensive enough to detect early changes in a patient's condition. At the heart of nursing remains a steadfast focus on delivering holistic, patient-centred care, which always begins with assessing the patient^[22,23]. Holistic care includes a SPA, which is incomplete if a thorough pathophysiologic understanding of the patient is not clear due to missed care (omission of detailed physical assessment) to which nursing decisions are being made^[18]. By assessing patients' biological, physical, and behavioural needs, nurses integrate objective and subjective data to make informed patient care decisions leading to optimal patient care and outcomes^[24]. Nurses are providing suboptimal care when a SPA is not completed. Further, by doing a focused assessment (i.e., listening to heart and lung sounds only), nurses make important patient care decisions on a limited representation of the holistic patient and their status. Therefore, nursing is called upon to re-examine our core patient care priorities and ensure practice is congruent with our professional standards and national guidelines.

CONCLUSION

Utilizing SPA skills in daily practice allows nurses to think holistically about their patients' health status. Nurses learn to discern key pieces of holistic information in order to gain an understanding of the patient's current state of health. Any variations that arise from current understanding can then be quickly interpreted and acted upon. Early recognition of a change in patient condition stemming from a SPA is the pre-requisite to the 24-hour surveillance solution to keeping patient's safe and preventing adverse patient events. Currently, nurses are relying on technology (i.e., automated VSs, EWS) to assist them in recognizing patient deterioration, ostensibly to save time. This reliance on technology further alienates nurses from direct patient observation and promotes late stage recognition of deterioration. In fact, the time needed to conduct a SPA is minimal once a standardized

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process is consistently followed. It is concerning that nurse's report a lack of confidence in conducting a SPA. Lack of confidence is a direct result of a deficit in structured training, organizational expectations and daily SPA practice at the bedside. More importantly, if nursing leaders do not value SPA as a core patient care priority, nurses will continue to lack the support and encouragement needed to change their practice and patients will continue to suffer. Nursing requires a paradigm shift back to our core values and priorities. Nursing can no longer allow missed care, technology, and perceived but unsubstantiated barriers to dilute our value as the most trusted professionals. Hospitalized patients are highly vulnerable to clinical deterioration. As the 24-hour caregivers, nurses have a responsibility to conduct a SPA on their patients at the beginning of their shift and continue surveillance throughout their shift. Changes from a patient's normal status are more easily determined when a SPA has been performed. Patients typically do not have an acute decompensating but rather a gradual, subtle decline over several hours. This gives nurses the opportunity to recognize these subtle changes in a patient's condition early and intervene appropriately in order to prevent devastating adverse outcomes.

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