A research roundup of recent papers relevant to wound care

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This section brings together information found online and published in other journals about wound healing research. The aim of this roundup is to provide an overview, rather than a detailed summary and critique of the papers selected.

A PROSPECTIVE, DESCRIPTIVE STUDY TO DETERMINE THE RATE AND CHARACTERISTICS OF AND RISK FACTORS FOR THE DEVELOPMENT OF MEDICAL DEVICE RELATED PRESSURE ULCERS IN INTENSIVE CARE UNITS

Hanonu S, Karadag A (2016) *Ostomy Wound Manage* 62(2):12–22

Preventing pressure ulcers (PUs) is high on the NHS agenda. The article reviews the literature and currently published data in relation to this issue. With prevalence depending on device relating from 5–35% (the lower figure relates to one study of pulse oximetry and the higher looking at incidence of PU in patient wearing cervical collars and in elderly patients). Specifically it explores the reasons for development specifically under medical devices that exert pressure on the tissue and mucous membranes overlying soft tissue. The study was conducted from December 2013 to March 2014 the aim was to determine the prevalence, risk factors and characteristics amongst all patients in 6 adult intensive care units (ITUs) (n=175) covering all specialities; however, following expert opinion neurology, general surgery and coronary ITU were excluded from the study. They cite a previously published point prevalence of 15%. Patients were assessed on admission and then at 48 hour intervals. Demographic data, Braden score location and grade of PU were recorded and analysed. Of the cohort 27 patients developed non-device related PUs and 70 medical-device-related PUs. Medical-device-related PUs occurred most frequently in patients with an endotracheal tube, the most frequent harm was category 2 damage, and these were observed amongst the internal medicine ITU patients. Interestingly, patients who already had a non-device related PU were 6.6 times more likely to develop a device-related PU. Enteral feeding tube were third most commonly caused damage, the risk of developing damage in these patients was 2.12 times higher and was linked to an increase in Braden score from low to high risk perhaps due to the nutrition element of the scoring tool. The most common sites were—unsurprisingly, given that they were associated with an ET tube — the nose and lips. The researchers point out that there are no current studies that determine the impact of individual or collective risk factors in relation to relevance when determining risk status of patients. The study acknowledges that the findings may not be relevant to all ITU settings. Prevention strategies are not discussed. The finding suggest that further studies are needed to better understand the risk factors associated with medical-device-related ulceration, not just in ITU populations but across the health economy. In addition, we need to focus on prevention strategies that can be employed to reduce the prevalence and incidence of these harms to patients in our care.

Implications for Practice

Nurses should be aware of the greater rate of medical-device-related pressure ulcer developing in patients treated in internal medicine, neurosurgical, and chest disease ITUs; especially in those patients who exhibit high Braden risk values, who are enterally fed, who develop non-device related pressure ulcers, and who stay in hospital for a greater number of days. WUK

INVESTIGATING STAFF KNOWLEDGE OF SAFEGUARDING AND PRESSURE ULCERS IN CARE HOMES

Ousey K, Kaye V, McCormick K, Stephenson J (2016) *J Wound Care* 25(1):46–55

This study set out to investigate whether nursing/care home staff regard pressure ulceration as a safeguarding issue; and to explore reporting mechanisms for pressure ulcers (PUs) in nursing/care homes. Questionnaires were completed by 65 nurses from 50 care homes within one clinical

commissioning group. The questionnaire focused on assessing the nurse experience of avoidable and unavoidable PUs, grading systems, as well as the systems in place for referral to safeguarding teams. Understanding of safeguarding was assessed in depth by interviews with 11 staff members. Staff observed an average of 2.72 PUs in their workplaces over the previous 12 months and judged 45.6% to be avoidable harms. Only a minority of respondents reported knowledge of a grading system (mostly the EPUAP/NPUAP system). Most respondents would refer PUs to the safeguarding team: knowledge and use of a grading system, or guidance, appeared to increase the likelihood that the patient would be referred. Safeguarding was considered a priority in most homes; interviewees were familiar with the term, but some confusion over its meaning was apparent. Quality of written and verbal communication received before residents returned from hospital was highlighted as an issue for respondents; they expressed concern over lack of information regarding skin integrity. Most staff had received education regarding ulcer prevention or wound management during training, but none reported post-registration training or formal education programmes; reliance was placed on advice of district nurses or tissue viability specialists. The authors recommend that national education programmes are needed to develop knowledge and skills to promote patient health-related quality of life, and to reduce the healthcare costs of pressure damage. The researchers suggest that further investigation is warranted to understand both, knowledge and skills of nursing/care home staff concerning PU prevention and development.

Implications for Practice

Safeguarding will become increasingly necessary, as levels of the older population who may require assisted living continue to rise if we fail to address the education needs of those providing the care to enable them to implement preventative strategies, along with enabling fair and consistent reporting and equipping staff to complete thorough investigations that lead to lessons being learnt from incidents when improvements can be made. WUK

PRESSURE ULCER AND WOUNDS REPORTING IN NHS HOSPITALS IN ENGLAND PART 1: AUDIT OF MONITORING SYSTEMS

Smith I, Nixon J, Brown S, Wilson L, Coleman S (2016) *J Tissue Viability* 25(1): 3–15

This study examines pressure ulcer (PU) monitoring systems that have been introduced across NHS in-patient facilities in England in relation to the accuracy and consistency of data collection. Data from Safety Thermometer (STh) (prevalence), Incident Reporting Systems (IRS) and the Strategic Executive Information System (STEIS) for serious incidents were triangulated across NHS in-patient facilities in England and compared to a Wound Audit (PUWA).The PUWA was undertaken in line with 'gold-standard' PU prevalence methods. The stratified sample was obtained from acute NHS Trusts. Initially, 34 trusts were invited to participate, of this 24 (72.7%) did so, from which 121 randomly selected wards and 2239 patients agreed to participate. The results show the prevalence of existing PUs for each of the reporting systems: The PUWA identified 160 (7.1%) patients with an existing PU, compared to 105 (4.7%) on STh, which equates to underreporting of 2.4%. When looking at existing/healed PUs the PUWA audit identified 189 (8.4%) patients with an existing/healed PU compared to 135 (6.0%) on IRS, suggestive of 2.4% underreporting to the incident reporting system. In addition, 83 patients had one or more potentially serious PU on PUWA and 8 (9.6%) of these patients were reported on STEIS.

Implications for Practice

The results of the PUWA highlight a number of issues important to the challenges of data capture using clinical staff to inform monitoring systems and the completeness of clinical records for one adverse event, PUs. This study adds to the wider debate about the use of adverse event metrics data to assess improvement in patient safety and reduction in harm. There is also a wider political agenda to utilise routine clinical data to support improvements in healthcare provision and research. WUK