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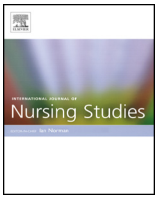

The prevalence of pressure ulcers in community settings: An observational study

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ABSTRACT

Background: Changes in healthcare and ageing populations have led to an increasing emphasis on the provision of healthcare in the community. Quality initiatives in healthcare have led to a focus upon pressure ulcer rates. However, published data on pressure ulcer prevalence in a community setting is currently very limited.
Objective: The objective of this cross-sectional observational study was to determine the prevalence of patients with pressure ulcers in a community setting in the United Kingdom.
Design: A cross-sectional observational study.
Setting: Two community settings in the North of England.
Participants: Patients in the community who were aged 18 years or older at the time of the pressure ulcer prevalence audit were included. There were no exclusion criteria and consent was not a requirement.
Methods: Each site used a different method to collect the data as per their usual method of prevalence data collection. Site 1 assessed all patients on the community nursing caseload: patients in residential homes, rehabilitation units, specialist palliative care units and all nursing homes in the locality, whether they were known to have a pressure ulcer or not. Site 2 assessed only those on the community nursing caseload who were known to have a

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pressure ulcer. Site 1 collected data between 8th February and 2nd April 2010 and site 2 between 12th April and 7th May 2010.

Results: In site 1, 185 patients were assessed as having a pressure ulcer Grade ≥ 1, a prevalence rate of 0.77 per 1000 adults. In Site 2 102 patients were assessed as having a Grade ≥ 1 pressure ulcer, a prevalence rate of 0.40 per 1000 adults. Removing patients in nursing homes from the calculation gives a prevalence of 0.38 per 1000 adults for site 1 and 0.39 per 1000 adults for site 2.

Conclusions: This study provides prevalence data in a community setting which can be used to assess resource allocation and staff training. This study has highlighted that differences in methodology can affect prevalence results, and this should be taken into account in future research.

What is already known about the topic?

- Pressure ulcer prevalence in an acute setting is well documented.
- The prevalence of pressure ulcers is likely to increase in the future.

What this paper adds

- An improved understanding of the location of patients with pressure ulcers in a community population.
- Differences in locality characteristics and the inclusion of nursing home patients may affect prevalence rates.
- Data collection methodology can have an impact on prevalence rates in community settings.

1. Introduction

Pressure ulcers represent a major burden to patients, carers and the healthcare system (Bennett et al., 2004; Gorecki et al., 2009), affecting approximately 1 in 10 hospitals and 1 in 20 community patients (Kaltenthaler et al., 2001). Pressure ulcers are described as ‘an area of localised damage to the skin and underlying tissue caused by sustained mechanical load’ and they range in severity from non-blanchable erythema (Category 1), superficial skin loss (Category 2) to severe ulcers involving fat, muscle and bone (Category 3, 4 or unstageable) (European Pressure Ulcer Advisory Panel, 2009). Pressure ulcers occur when there are high interface pressures exerted on the skin, with the duration of pressure and the intensity of pressure both being important. Ulcers develop when the soft tissues are no longer able to tolerate the sustained mechanical loads that develop between bony prominences in their vicinity, e.g. the sacrum and a mattress (European Pressure Ulcer Advisory Panel, 2009).

Measuring the prevalence of pressure ulcers can help staff to plan patient care more effectively and assess the allocation of resources (Inman and Firth, 1998; Kaltenthaler et al., 2001). However, in the last 30 years and since the first pressure ulcer prevalence study took place in 1977 (Barbenel et al., 1977) there has been little published data on pressure ulcer prevalence in a community setting (Kaltenthaler et al., 2001; Srinivasaiah et al., 2007; Vowden and Vowden, 2009). Previous studies have assessed prevalence in institutions which care for patients outside the hospital setting such as nursing homes and home care institutions (Oot-Giromini, 1993; Bours et al., 2002), and a small number have included data for patients in their own homes, but with varying methods for data collection and a range of prevalence rates found (Inman and Firth, 1998). In healthcare systems worldwide, the emphasis on the provision of healthcare in the community is increasing. Studies have found that countries with strong primary care systems have better health outcomes and lower costs (Starfield and Shi, 2002; Macinko et al., 2003). With an ageing population, more people are likely to be cared for in community settings. Therefore, consistent methods for pressure ulcer prevalence measurement are important for future development and planning.

2. Background

Pressure ulcers have major impacts on quality of life (Spilsbury et al., 2007; Gorecki et al., 2009). A systematic review of the pressure ulcer health-related quality of life literature highlighted that they impact greatly on physical, social and psychological domains resulting from one or more of the following distressing symptoms including pain, exudate and odour, increased care burden, prolonged rehabilitation, requirement for bed-rest, hospitalisation and prolonged work-related sickness absence for those still in employment (Gorecki et al., 2009).

Risk factors for pressure ulcer development include immobility and illness, both of which increase with age. A recent systematic review of pressure ulcer risk factor studies identified the primary risk factor as reduced mobility, with individual patient risk increasing with skin condition and factors affecting skin perfusion (e.g. diabetes), poor nutritional status and skin moisture (Coleman et al., 2013). They are a cross-specialty problem, a complication of serious acute or chronic illness in patient populations characterised by high levels of co-morbidity and mortality (Thomas et al., 1996). As the aged population increases (Watson, 1996) therefore, the numbers of people with pressure ulcers are likely to increase, including people being cared for in community settings.

Pressure ulcers are costly (Dealey, 1994; Bennett et al., 2004; Newton, 2010; Whitehead and Trueman, 2010); it is estimated that the National Health Service (NHS) spends 4% (£1.4–2.1 billion) of its total budget per year on pressure ulcer prevention and treatment (Bennett et al., 2004), due