



Factors related to the development of pressure ulcers among new recipients of home care services in Taiwan: A questionnaire study

Yi-Chen Tsai^a, Shu-Yuan Lin^b, Yi Liu^b, Ruey-Hsia Wang^{b,*}

^a Department of Nursing, Chi Mei Medical Center, Liouying, Taiwan

^b College of Nursing, Kaohsiung Medical University, Kaohsiung, Taiwan

ARTICLE INFO

Article history:

Received 27 September 2011

Received in revised form 18 June 2012

Accepted 25 June 2012

Keywords:

Pressure ulcers

Home care recipients

Primary caregivers

Prevention care of pressure ulcers

ABSTRACT

Background: The development of pressure ulcers (PUs) impacts quality of life among home care (HC) recipients and increases overall healthcare costs.

Objective: To understand associated factors for the development of PUs in new HC recipients who received HC services for 4–6 weeks.

Methods: This was a cross sectional study with retrospective medical record review to establish the incidence of pressure ulcers in the HC setting. A total of 220 pairs of caregivers and HC recipients were recruited from five HC agencies in Tainan, Southern Taiwan. A structured questionnaire was used to collect information about HC recipients' demographics, clinical characteristics, risk level of developing PUs, and PUs. We also collected information about the primary caregivers' demographics, caregiving characteristics, prevention care of PUs, and self-efficacy for PUs prevention care. Stepwise logistic regression was used to identify important explanatory factors for the development of PUs among HC recipients after receiving HC services.

Results: The incidence of PUs among new recipients of HC services for 4–6 weeks was 14.3%. A decrease of developing PUs was associated with: better PUs prevention care of primary caregivers (OR = 0.107); being educated about preventing PUs of primary caregivers during HC recipients' hospitalization (OR = 0.366); and higher scores of the Braden scale among HC recipients (OR = 0.759).

Conclusions: To decrease the development of developing pressure ulcers in new HC recipients, nurses should educate primary caregivers regarding strategies for preventing PUs during potential HC recipient hospitalization. HC nurses should assess PU prevention care of primary caregivers, in addition to assessing the risk of developing PUs by the Braden scale.

© 2012 Elsevier Ltd. All rights reserved.

What is already known about the topic?

- Pressure ulcers are one of the most common nursing problems in home care.
- Impaired sensory perception, immobility, concurrence of friction and shear force, skin dampness, and

malnutrition are associated with the development of pressure ulcers.

What this paper adds

- Pressure ulcer prevention care provided by the primary caregiver is an important factor that is associated with the development of pressure ulcers among home care recipients.
- Primary caregivers should be educated about the prevention of pressure ulcers while home care recipients are still in the hospital, regardless of caregiver's experience in caring for pressure ulcers.

* Corresponding author at: College of Nursing, Kaohsiung Medical University, No. 100, Shih-Chuan 1st Road, Kaohsiung City 807, Taiwan. Tel.: +886 7 3121101x2641; fax: +886 7 3218364.

E-mail addresses: clh3003@mail.chimei.org.tw (Y.-C. Tsai), m845008@kmu.edu.tw (S.-Y. Lin), gn94yliu@kmu.edu.tw (Y. Liu), wrhsia@kmu.edu.tw (R.-H. Wang).

1. Introduction

Home care (HC) is the provision of technical nursing services in a patient's home. In Taiwan, HC services have been provided since 1987 (Yeh et al., 2000). There are approximately 516 HC agencies, providing 698,495 HC services every year in Taiwan (Department of Health, 2011). HC services are one of the most important parts of the long-term care system in Taiwan.

Pressure ulcers (PUs) are one of the most common nursing problems in HC settings (Langemo and Baranoski, 2003). A PU is 'localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear' (European PUs Advisory Panel and National PUs Advising Panel, 2010, p. 7). HC recipients frequently suffer from PUs due to a combination of complicated health problems and disability (Ferrel et al., 2000). Caring for a patient with PUs increases required nursing hours by more than 50%, putting a significant burden on the healthcare system (Clarke et al., 2005). Furthermore, the presence of PU decreases the quality of life among HC recipients (Bergquist, 2003). Because most PUs are preventable, their presence provides an important indicator of care quality (Van den Heede et al., 2007). HC providers have therefore focused on reducing the incidence of PUs.

The HC setting differs from the inpatient environment in several important ways. HC services are largely provided by intermittent nursing visits. Physicians and allied healthcare professionals provide collaborative care as needed. Compared with the inpatient setting, HC services provide less frequent monitoring. Furthermore, HC recipients have less access to advanced technical equipment, medications and supplies. Factors contributing to the development of PUs in HC recipients may be different from those in the inpatient setting. Many HC recipients are elderly and have chronic or terminal illnesses, increasing the risk of developing PUs at home. Surprisingly, few studies have examined associated factors for the development of PUs in the HC setting. Research into these associated factors can provide an evidence-based rationale for the design and implementation of effective PU prevention programs in the HC setting.

2. Background

The incidence of PUs among HC recipients in Western countries has been reported from 0% to 17% (Lyder, 2003; Niezgodna and Mendez-Eastman, 2006). No data on the incidence of PUs among HC recipients in Taiwan have been reported. Admission to long-term care facilities is a crucial period of developing PUs (Baumgarten et al., 2004). Up to 50% of HC recipients develop PUs within 24 days of receiving HC services (Bergquist and Frantz, 2001). The 4-week period is a commonly used time period for the assessment of the development of PUs (Chan et al., 1997; Defloor et al., 2005).

Previous studies have demonstrated that demographic and clinical characteristics of patients contribute to the development of PUs. The factors include sex being male, older age, the presence of medical comorbidities, and

previous history of PUs (Anthony et al., 2004; Ferrel et al., 2000; Fisher et al., 2004). The use of pressure-relieving devices can redistribute pressure over the bony prominences. An intervention review indicated that people using higher-specification foam mattresses were less likely to get PUs than those using ordinary foam mattresses (McInnes et al., 2011).

Some factors such as impaired sensory perception, immobility, friction/shear force, skin wetness, and malnutrition are associated with the development of PUs (Braden and Maklebust, 2005). Baumgarten et al. (2004) found that patients having better function in daily activities were less likely to have PUs than those with worse functioning. Patients with impaired mobility were 5.30 times more likely to develop a PU compared to inpatients with normal mobility (Fisher et al., 2004). Impaired sensory perception is associated with a 34.4-fold increased risk of developing PUs (Fisher et al., 2004). Compared with inpatients without incontinence, those with incontinence were 5.2 times more likely to develop PUs. Malnourished HC recipients had a 2.29-fold increase in the risk of developing PUs (Iizaka et al., 2010). Therefore, the more risk factors HC recipients have, the more likely they will develop PUs (Kottner et al., 2009).

Strategies such as repositioning, improving tissue tolerance, avoiding shear force and friction on the body surface, using pressure-relieving assistive devices, providing adequate nutrition and fluid intake, and keeping skin clean are commonly recommended for the prevention of PUs (Arnold, 2003; Frantz, 2004; Romanelli et al., 2006). Primary caregivers take most responsibility for the care of HC recipients. PU prevention care provided by primary caregivers is essential for preventing the development of PUs in HC recipients. However, few studies have examined the relationship between PU prevention care of primary caregivers and the development of PUs among HC recipients.

Demographic and caring characteristics of primary caregivers may influence the development of PUs in HC recipients. Older primary caregivers may provide worse PU prevention care (Hsieh, 2007). Primary caregivers with higher education levels have better problem-solving skills and may provide better PU prevention care (Steffen et al., 2002). Bergquist (2003) found that elderly HC recipients taken care of by their adult children were 5.4 times more likely to develop PUs compared to those who were taken care of by their spouses. Caregivers' hours of care were significantly associated with their caregiving burden (Pinquart and Sorensen, 2003), which may impact the ability to provide effective PU prevention care. Hsieh (2007) found that when caregivers were taught about preventing PUs, they performed better care than those who had not been taught.

According to social learning theory (Bandura, 1997), self-efficacy is the belief that one can successfully execute the behavior required for a given outcome. A previous study for spinal cord injury patients has shown that a greater self-efficacy in preventive skin care among primary caregivers is associated with better preventive skin care (King et al., 2008). Primary caregivers with experience caring for PUs had better self-efficacy for pressure sore care

Download English Version:

<https://daneshyari.com/en/article/1076501>

Download Persian Version:

<https://daneshyari.com/article/1076501>

[Daneshyari.com](https://daneshyari.com)