Purpose and Objectives

Statement of problem:
The purpose of this study was to determine if providing an educational intervention to CNAs could reduce the incidence of pressure ulcer development in a long-term care facility. A pre-test/post-test tool was used to determine the effectiveness of the intervention.

Introduction

The Certified Nursing Assistant (CNA) is often the caregiver who initially identifies the first signs and symptoms of pressure ulcers in the long-term care setting and can have a significant impact in the prevention of pressure ulcers, if appropriately trained. Pressure ulcers account for 503,300 hospitalizations and of those patients, one in 25 die from ulcer complications (Niederhauser et al., 2008). The highest incidence of pressure ulcers occur in the elderly population with around 70% of pressure ulcer incidence occurring in those age 70 or older (Thomas, 2001).

Pressure ulcer development has several severe consequences including increased hospitalizations, increased risk for mortality and financial burden on the patient and health care system. Medicare data found that pressure ulcers account for up to $2.41 billion dollars annually in excess healthcare costs (Niederhauser et al., 2012). By reducing the incidence of pressure ulcers, the quality of life or even the life of the resident can be improved, as well as the cost of healthcare.

Methods

A pre-test/post-test design was utilized for this study to measure the effectiveness of an evidence-based educational intervention utilizing the National Pressure Ulcer Advisory Panel (NPUAP) guidelines for pressure ulcer identification and prevention.

Subjects

CNAs from a rural long-term care facility in North Florida were tested regarding their knowledge of pressure ulcer identification and pressure ulcer prevention techniques. Thirty-three English-speaking or bilingual CNAs who were employed full-time and part-time were included. CNAs were chosen because they are the front-line care providers for long-term care residents and spend the most care time compared to all other long-term care staff. Licensed nurses were excluded from the study as CNAs and licensed nursing personnel function in differing capacities and receive different levels of training. Exclusion criteria were: licensed nurses, non-English speaking CNAs and CNAs who do not work in a direct care capacity.

Setting

This project was conducted in a nursing home located in rural North Florida. The facility has a maximum resident capacity of 60 residents and services residents 55 years of age and older.

Procedure

Data regarding pressure ulcer incidence was collected three months prior to intervention utilizing the quality assurance monthly wound report. Data was also collected regarding percent of short-stay residents (less than 90 days) with pressure ulcer incidence from the quarterly Medicare Nursing Home Compare Quality Measures report for this facility prior to intervention and three months post intervention. Consent to participate was obtained from the CNAs. The CNAs were presented with a pre-test regarding pressure ulcer prevention knowledge utilizing the Pressure Ulcers Toolkit from the Agency for Healthcare Research and Quality. An evidence-based educational intervention was presented via PowerPoint lecture to the CNAs once per shift two times during each shift to allow the CNAs who are working the opportunity to participate. The session was videotaped and during each shift to allow the CNAs who are working the opportunity to participate. The session was videotaped and distributed to other nursing homes in order to reduce the physical, emotional and financial burden of pressure ulcers.

Quarterly 12% for pressure ulcer development

Results

The sample of the demographic survey consisted of 31 CNAs who participated. Thirty-three CNAs completed the pre-test and 18 of those 33 completed the post-test which measured post-intervention knowledge. Of the total sample, CNAs ranged in age from 18 to 65 years of age (Mean =32 years of age). Years of experience as a CNA ranged from 0.5 to 40 years (Mean= 7.7 years, SD=8.1 years). CNA educational programs varied in length from 0.5 to 36 months (Mean=10.7 months). Of the CNAs surveyed, 84% reported receiving training in the classroom regarding pressure ulcer (PU) prevention. Eighty-one percent reported training on the job regarding PU prevention.

Pre-test/Post-test analysis was conducted utilizing a t-test (P value of 0.5387). Pressure ulcer incidence was compared pre-intervention and post-intervention. There was reduction from five total pressure ulcers pre-intervention to zero pressure ulcers post-intervention. The Quality Indicator report, which reflects the incidence of acquired pressure ulcers, showed a reduction from 12.3% in the pre-intervention quarter to 0% in the post-intervention quarter. Turning and repositioning compliance by the CNAs was recorded and compared pre-intervention and post-intervention. There was 100% compliance with turning and repositioning both pre-intervention and post-intervention.

CNAs reporting skin breakdown was measured both pre-intervention and post-intervention. There was a 68% increase in reporting of skin breakdown post-intervention. For skin breakdown, 37.5% reported pre-intervention had already developed into pressure ulcers. None of the skin breakdown reported post-intervention developed into pressure areas.

Implications for Practice

The results of this study can be utilized to improve the quality of life and minimize complications for nursing home residents by reducing pressure ulcer incidence. This data can be disseminated to other nursing homes in order to reduce the physical, emotional and financial burden of pressure ulcers.

This data also can be utilized to develop policy and procedure improvements regarding pressure ulcer prevention. Lastly, this project will improve the knowledge of the CNAs regarding pressure ulcer prevention and the vital role they play in pressure ulcer recognition and prevention.

References