Pressure Ulcer Prevention Attitudes and Beliefs among Home Health Aides

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PURPOSE:
Pressure ulcers, colloquially referred to as “bed sores,” are preventable when standards of practice are followed (Olshansky, 2005). The Centers for Medicare and Medicaid recently announced that they would no longer reimburse hospitals and nursing homes for pressure ulcers that form after admittance because they represent one of eight “reasonably preventable” conditions (Landro, 2007). “Healthy People 2010” specifically targeted a reduction in incidence and sequelae of pressure ulcers as an important public health objective. Targeting pressure ulcer incidence reduction in long-term care environments therefore represents a vital public health concern for the United States health care system. Few elderly receive care in nursing homes (3.6%); even among the population of “oldest old,” those over 85, the numbers in nursing homes declined from 21% to 14% over the 20 year period from 1985-2004 (Alexich, 2006). A large number of elderly are therefore receiving care in homes. In addition, it is reasonable to expect that many non-elderly immobile or partially mobile clients receive care in homebound settings. 30% of the individuals who begin receiving care at home are at risk for developing a pressure ulcer (Ferrell, et al., 2000). Home Health Aides (HHA) therefore represent a primary line of defense for preventing pressure ulcers. However, little is known about HHA practices related to pressure ulcer prevention or about the attitudes and beliefs that may in part determine whether such care is provided. This research study examined HHA attitudes, beliefs, and intentions as a precursor to the development of educational training materials on pressure ulcer preventive care.

METHOD:
The research was guided by an integrative model (Figure 1) grounded in reasoned action theory (c.f., Ajzen, 1991; Ajzen & Fishbein, 1980; Armitage & Conner, 2001; Sheppard, Hartzick, & Warshaw, 1988). The model includes the psychosocial constructs of intentions, attitudes, subjective norm, and perceived control as well as specific individual behavioral beliefs, normative influences, and control beliefs. Individuals working in home health care participated in telephone interviews (n=20) to identify beliefs and attitudes related to pressure ulcer prevention behaviors. 23 behavioral, 21 normative, and 30 control beliefs were identified. The most frequently occurring positive theme was preventing the wounds. The most frequently occurring negative theme was patient fear, followed closely by patient uncooperativeness (Goldsworthy, in press). The information acquired was used to create a survey of attitudes, beliefs, and intentions. The survey was completed by a representative and geographically distributed sample of HHA (n=80). HHA were provided a $25 stipend for participating. Protocols were approved by the institutional boards of Academic Edge and Indiana University. Univariate, correlational, and regression analyses were conducted.

RESULTS:
HHA report strong intentions to monitor for and take steps to prevent pressure ulcers (Table 1). Preliminary analysis indicated that expected theoretical correlations among direct constructs (e.g. Attitudes and indirect variables (e.g. the mean of the behavioral beliefs) were observed, although at slightly attenuated levels. A multiple regression and correlation analysis (MRC) was conducted on the direct psychosocial variables, regressing Intention to engage in pressure ulcer preventive care on Attitudes toward such care, Subjective Norm regarding such care, and Perceived Control over engagement in care. As depicted in Figure 2, Attitude emerged as the sole significant predictor of Intention to engage in care (R² = .560, p < .001), with the resulting model having R²= .304.

As indicated in Table 2, several behavioral beliefs are implicated in whether HHA intend to provide pressure ulcer preventive care, including that such care shows compassion, reduces long term consequences, and is perceived as a standard of practice.
Although HHA hold the behavioral belief that patient well being is a primary concern, in terms of normative beliefs HHA tend to discount patients and families as a source of normative influence responding instead to employers, supervisors, and previous training (Table 3). No negative normative influences were observed indicating that the HHA do not believe any group or organization thinks the HHA should not engage in preventive care. Perceived barriers and facilitators vary, as evidenced in Table 4. Facilitators of performance include having established rules and procedures, having adequate space and supplies, and having the time and privacy to work with the patient. Barriers to performance include having patients and families that do not follow instructions in the time between visits, working within a dirty or cluttered environment, and encountering patient or family resistance.

**LIMITATIONS:**
The psychosocial constructs are all quite high and fairly invariant, perhaps stemming from the inclusion of a significant number of participants with more than two years of experience. With these variables approaching their ceilings, it is likely that the research has identified factors related to engagement in pressure ulcer preventive care; however, the identification of factors that are related to non- or dis-engagement from such care has not occurred. Ideally, factors influencing both participants and non-participants would be identified. Here, however, it may be that we have the “ideal” state, which could be a target for training, but not the “worst case” state for which specific interventions might be tailored. Also, although it is likely that the results described are applicable to other HHA care behaviors, application of these beliefs to other behaviors is methodologically inappropriate without empirical validation.

**CONCLUSIONS:**
Although HHA appear highly motivated to engage in pressure ulcer preventive care, pressure ulcers continue to occur in home care.

Education, training, and performance support may assist HHA to provide appropriate and effective preventive care. This study generated a model of HHA intentions, attitudes, perceived norms, and perceived control related to pressure ulcer preventive care and identified factors that positively and negatively influence HHA engagement in looking for and taking steps to prevent pressure ulcers. The results of the study can be used to prioritize targets for educational and performance support efforts. For example, because family and patient resistance appears to be an important barrier to pressure ulcer preventive care, the development of materials to help the family and patient engage in preventive care is likely. Factors influencing both family and patient resistance to engaging in preventive care related to skin care were identified. Ongoing work is currently being refined through evaluation among home health aides.

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