The Content of Education for Direct Caregivers

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Abstract

Direct caregivers in nursing homes are the certified nursing assistants (CNAs) who provide the majority of hands on care. This study administered a knowledge instrument to a sample of CNAs (n=106) employed at nursing homes in a northeastern city to evaluate their knowledge in the domains of aging, cognition, and mental health. This study found that despite working with older adults on a daily basis, the CNAs had less than average knowledge in these areas. They demonstrated deficits in knowledge in all three domains. Implications for CNA education and regulation are discussed.

Keywords: CNA, knowledge, training, cognition, aging, mental health.

Introduction

Health care and social service workers who interact with older adults in long term care settings need education that specifically prepares them to address the complex interaction between chronic health and mental health conditions, functional and cognitive decline and psychosocial well-being in later life. This gerontological content is discussed in higher education degree programs, certificates, majors, and minors, but is omitted in primary and secondary education, and limited in paraprofessional training programs (Rosenbaum et al., 2008). It is limited because of the breadth of subjects covered in a small amount of time. Thorough, quality education for Certified Nursing Assistants (CNAs) is critical because they provide hands-on care for frail, vulnerable and marginalized older adults who need assistance with the activities of daily living, cope with the effects of multiple losses, and often experience emotional and psychological responses to functional decline and increased dependence. Despite their extensive caregiving role, CNAs have minimal mandatory training

The Nursing Home Operations Manual (CMS, 2014) outlines federal regulations for CNAs. They require a minimum of 75 hours, including 16 hours of supervised clinical training and 12 hours of continuing education per year (Glaiser & Blair, 2008.) Individual states may opt for more extensive requirements. Prior to contact with residents, CNA candidates must have at least 16 hours of content including "communication and interpersonal skills, infection control, safety and emergency procedures including the Heimlich Maneuver, [content on] promoting resident's independence and respecting resident's rights (CMS, 2014, p.57)." Additionally, the training curriculum must include "basic nursing skills, personal care skills, mental health and social services of residents, care of cognitively impaired residents, basic restorative services, and resident's rights (CMS, 2014, p.57-59)." While the outline appears to cover the necessary

subjects for addressing the nexus of physical and mental health needs in frail individuals with chronic and acute health conditions, these topics cannot be covered in adequate detail in the total time required.

CNA training covers all areas related to job performance. Content areas related to this study include: "(1) cognitive, psychosocial, and physical age related changes; (2) psychosocial needs of residents, including fundamental human needs, emotional support strategies, and intervention strategies to assist residents with coping with losses and adjustments to nursing home placement; (3) the importance of observing and reporting behavioral changes such as mental status and mood changes, reality orientation/validation techniques, emotional stresses, and defense mechanisms; and (4) psychological problems, including common psychological impairments and related care (New York Department of Health, 2014, p 22-23)." The required total of 75 hours relative to the number of content areas suggests only cursory coverage of material about health and mental health issues in the long-term care population While CNAs in states with a higher training requirement were more likely to report feeling prepared than those in states with only the federal minimum (Han et al., 2014), many CNAs continue to feel not well prepared to do their jobs (Menne et al., 2007). In New York, where this study took place, CNAs receive 100 hours of education (Hernandez-Medina et al., 2006). Mental health and normal aging content remains cursory (New York Department of Health, 2014) because there are so many topics to be covered. Without a focus on the complex situations that can be encountered it may be difficult for CNAs to understand which situations are the result of normal age related changes and which require additional attention.

This study sought to understand what CNAs know about older adults and their needs based on current training standards. The guiding research questions were: (1) Do CNAs who

received standard training know about the aging, cognition, and mental health needs in the population with which they work? (2) Do CNAs obtain information about aging, cognition, and mental health over the course of employment in long-term care?

Design and Methods

This study is part of a larger study that used surveys to understand CNA life experiences, caring behaviors, and knowledge of older adult needs. The overall study used a cross sectional survey design which employed quantitative methods to explore relationships between life experiences and work related performance. The data presented in this brief report are the results of a 25 question knowledge exam given as part of the larger survey.

Participants

CNAs who participated in this study had received training that met New York State requirements (100 Hours), and had passed the certification exam. They were employed at a convenience sample of large (>200 beds) nursing homes in a northeastern city. All CNAs employed at the facilities were invited and participation was voluntary. At two facilities, CNAs participated during work time, and at a third they participated during lunchtime. Considering the Path Model tested in the larger study, pre-study power analysis suggested that considering an effect size in the range of .35, a sample size of 70 individuals would be the minimum required for a power of .80 (NCSS, 2008). Final sample size was 106.

Posted fliers, nurse managers, and supervisors informed CNAs about the study. Data was collected at the nursing homes by the PI. Participants signed an informed consent form, completed a one-time paper survey, and received $5 as a thank you. Study procedures were approved by the University at Buffalo Social and Behavioral Sciences Institutional Review Board.

Measures

The overall study included five instruments on demographics, life events, organizational culture, caring behaviors, and knowledge. The knowledge instrument will be reported here. The Mary Starke Harper Aging Knowledge Exam (M-SHAKE) contains 25 true/false statements designed to measure knowledge about normal aging, mental health, and dementia in health care workers (Santo-Novak et al., 2001) and has demonstrated a standardized alpha of 0.71 - 0.72 in pre/posttest testing (Santo-Novak et al., 2001). The questions assess knowledge about health and mental health issues that CNAs encounter in their work- changes of normal aging; depression, dementia, and delirium; and care issues (Santo-Novak et al., 2001).

Analysis

The M-SHAKE has no published scoring criteria. Thus, scoring was as follows: one point for correct items, zero points for incorrect items and omitted items. Mean scores are reported as percent correct and raw score out of 25. Mean scores of CNAs in this study were compared to the mean scores of Social Service Directors published by Bonifas (2011) using t tests. Correlations between knowledge scores and years of experience were used to determine if CNAs learn the information over time and exposure to older adults. Content of correct and incorrect items was compared to CNA job duties and New York CNA exam curriculum.

Results

All respondents were employed as CNAs in nursing homes. Final N=106. They were predominantly female (87.7 %), and black (57.5%). Fifteen participants endorsed Hispanic ethnicity. Most had completed high school (60.4%) or obtained a GED (37.7%). MSHAKE scores are percent of items answered correctly and range from 32% to 92%, with a mean of 67% (SD=11.69). Scores were normally distributed. The 25 questions on the MSHAKE cover three

domains: aging, cognition, and mental health. The number of correct responses varied within domains, with some questions frequently correct and others frequently incorrect.

Analysis

Research Question 1: Do CNAs who received this training know about the aging, cognition, and mental health needs in the population with which they work?

CNA training and certification exams contain content about physical, cognitive, and mood changes in aging. CNAs also work with older adults every day. Despite this, CNAs scored less than average (average being 75, or a "C" in most educational settings) scores on health and mental health knowledge in the population with which they work every day. This cutoff has been used by others to represent a basic level of mastery (Bonifas, 2011). Mean scores were 64% in the aging domain, 65% in the mental health domain, and 74% in the cognition domain.

Within the domains, there was extreme variability in number of correct responses. Within the cognition domain, participants answered "Reorienting an agitated dementia patient is helpful" correctly 16% of the time, while they answered "Some patients with dementia become more confused in the evening" correctly 96.2% of the time.

Insert Table 1, Table 2, Table 3 here.

Research Question 2: Do CNAs gain knowledge on aging, cognition, and mental health over the course of performing their jobs?

This question looked at whether CNAs with more years' experience had higher scores on the MSHAKE instrument. The distributions of years as a CNA and knowledge scores were examined. While knowledge scores were normally distributed, years as a CNA was not, thus a

non-parametric test was used. A Spearman Correlation was not significant between the two, supporting the null hypothesis of no relationship between years in the field and knowledge.

Discussion

CNAs are employed in positions where they take care of frail older adults who have complex physical and mental health needs on a daily basis. They are in a key position, because they spend the most time with these older adults. They may be the first to notice changes and prompt reporting to nursing and medical staff can facilitate prompt follow up. They can provide support to older adults who are struggling. While CNAs are the frontline workers, who see residents more often than any other health care workers, The CNAs scored significantly lower (Mean = 16.76, SD = 2.92) than a similarly sized sample of social service professionals (Mean = 20.18, SD = 2.27, (Bonifas, 2011)) ($t=9.8625$, $df =223$, $p = < .0001$). Both overall scores and individual item responses raised concerns about CNA education because of the implications for care.

Respondents demonstrated strengths in some areas of the cognitive domain. More than 90% knew that people with dementia may be more confused in the evening and that in people with early dementia "recent memory is usually lost while remote memory is often spared (Santo-Novak et al., 2001)." However, more than 80% of CNAs thought it was helpful to "re-orient agitated dementia patients." Reality orientation is part of their training despite evidence supporting redirection, assessment of unmet needs, and environmental modification (Dewing, 2010). This supports the need to improve education on dementia, agitation, and behavioral management. CNAs also possessed inaccurate information about cognition. Nearly half thought delirium was a permanent condition and/or Alzheimer's disease had an abrupt onset. This is concerning since CNAs are often the first observers of changes in patients. The belief that

cognitive changes are normal or irreversible, could lead to under-reporting of potentially treatable conditions.

State of CNA Training

CNA education and training is often provided by community colleges, high schools, proprietary schools, community organizations and job corps (Hernandez-Medina et al., 2006). Rosenbaum et al (2008) gathered stakeholders to discuss workforce education, including paraprofessional education, to compare needs across urban, suburban, and rural areas, and to raise the level of input across disciplines. The final report indicates "Most of the discussion (50 percent) focused on the need for more/expanded training for aides, which needs to be provided at the level of their comprehension, and should include incorporating education about gerontology. Aides receive only the mandated basic training opportunities (Rosenbaum et al., 2008, p.6)." Rosenbaum et al (2008) supported infusing gerontology content across existing primary educational curriculums. This is important for CNAs since two thirds of CNAs have a high school education or less (Smith & Baughman, 2007). Aging education at the college and professional levels has failed to address the needs of this workforce.

The findings of this study suggest that current training measures are inadequate because CNAs are missing information vital to doing their jobs. If they are expected to report changes in cognition and mental health, they need to understand the differences between normal and abnormal events. Additionally, this study demonstrates that CNAs may not gain this knowledge through experience.

Improving education for CNAs would involve changing delivery methods, content, and quantity. There is evidence to support room for improvement in all areas. CNAs who received hands on training or training that was evenly split between hands on training and classroom

training report being better prepared than those who received classroom training only (Sengupta, Ejaz, & Harris-Kojetin, 2012). Apprenticeship models, including ongoing mentoring, support, and supplemental classroom training, produce workers with better skills, which translates into improved productivity, longer job tenure, and greater quality of care (Lerman, Eyster, & Kuehn, 2014). As mentioned above, the content needs to be examined, and infused with evidence based best practices. In order to increase content in mental health and dementia without compromising other necessary information, policy changes are needed to expand the educational requirements.

Challenges to improving education include funding and time. CNAs often pay for their own education. As this is a population that earns low wages; CNAs may not have funds for more education, and additional requirements may deter some from entering the field. Facilities may be reluctant to provide on-the-job training because of cost and relatively high turnover. Many facilities wonder why they should train CNAs since they may be likely to leave. Facilities would have to absorb the costs of the training and train their replacements. Facility reimbursement, particularly through Medicaid, is currently inadequate to support necessary initiatives.

This study also may inform nursing homes in other countries. This discussion has been limited to regulations and reimbursement specific to the United States. However, the content of direct caregiver education can be extended to those who provide care in any country.

Limitations

The facilities who participated in this study were chosen by convenience and were limited to large facilities, thus the findings may not be generalizable. Measures to address this limitation were that all CNAs employed by the participating nursing homes were eligible for participation, and that data collection took place on all three shifts. Small to medium sized

homes were not represented. The sample is also limited to CNAs certified in New York State which has different training requirements than other states.

Conclusion

The aging population continues to grow and professional caregivers will continue to be needed. The training of those caregivers can have a significant impact on the quality of care given to older adults because CNAs are on the front line, spending the most time with nursing home residents of any staff members. Despite its limitations, this study demonstrates that CNAs who receive customary training lack information in areas of aging, cognition, and mental health that they are likely to encounter in their jobs.

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