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Certified Nursing Assistants' Explanatory Models of Nursing Home Resident Depression

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Abstract

In this study, we explored how Certified Nursing Assistants (CNAs) understood resident depression. Interviews with 18 CNAs, working in two nursing homes were guided by Kleinman's Explanatory Models of Illness framework. Interview data were content analyzed and CNAs' descriptions of depression were compared to the MDS 2.0 Mood Screen and to DSM-IV-TR Depression Criteria. CNAs identified causes, signs, and symptoms of depression, but they were unsure about the duration and normalcy of depression in residents. Although they had no formal training, CNAs felt responsible for detecting depression and described verbal and non-verbal approaches that they used for emotional care of depressed residents. CNAs hold potential to improve the detection of depression and contribute to the emotional care of residents. Attention to knowledge deficits and facility barriers may enhance this capacity.

Keywords

certified nursing assistants; depression; assessment; emotional care; nursing homes

Approximately 3 million individuals will reside in nursing homes by 2030; roughly double the number residing in nursing homes today (Sahyoun, Pratt, Lentzer, Dey, & Robinson, 2001). Among cognitively intact residents, depression occurs at a prevalence of 20% to 25% and is associated with increased medical morbidity, disability, and mortality (American Geriatrics Society, 2001; Cole & Bellavance, 1997). Despite implementation of the federally mandated Minimum Data Set (MDS), (Centers for Medicare and Medicaid Services, 2005; Hawes et al., 1995), designed to improve the detection and treatment of geriatric syndromes including depression, a growing body of evidence suggests unacceptably high rates of under-detection and under-treatment of depression in nursing home residents (Lawton, Casten, Parmelee, Haitsman, Corn et al., 1998; Schnelle, Wood, Schnelle, & Simmons, 2001). Given the prevalence and outcomes of depression in institutionalized older adults, garnering all available resources to help identify and treat depression is imperative. To date, the capacity of Certified Nursing Assistants (CNAs) to assist in depression assessment has not been studied. Using

Kleinman's (1980) Explanatory Models of Illness (EM) framework to guide a qualitative descriptive study, we describe CNAs' EMs of nursing home resident depression.

Depression in Nursing Homes

Depression is one of the most common and treatable of all mental disorders in later life, but life threatening if unrecognized and untreated (American Geriatrics Society & American Association for Geriatric Psychiatry, 2003). It is a heterogeneous disorder, resulting from genetic and biochemical factors, psychosocial stressors, prescribed medications, or the physiologic effects of disease (Blazer, 2003; Blazer & Hybels, 2006). Currently, residents are periodically screened for depression by the MDS Coordinator, typically a nurse or social worker, using the MDS (2.0 version) mood screening criteria. These criteria screen for depression, and do not signify a clinical diagnosis of depression. To make a clinical diagnosis of depression, a physician or nurse practitioner performs a diagnostic interview based the DSM-IV depression criteria. This diagnostic interview is considered the "gold-standard" for a diagnosis of depression.

Under-detection of Depression in Nursing Homes

CNAs provide the majority of hands-on care (McDonald, 1994), and are well positioned to observe resident's emotions and moods, and report their observations to licensed nursing staff. Even so, little research has been undertaken investigating the capacity of CNAs to provide resident observations that influence the care process of depression assessment. As the "eyes and ears" of the licensed nursing staff, CNAs have the least formal education and training, and CNA turnover may exceed 100% (Castle, 2006). Learning how CNAs conceptualize depression may provide valuable insights into what symptoms CNAs pay attention to and those that they do not, and how CNAs communicate their observations to nurses responsible for completing the resident assessment and care planning processes.

Facility and Staff Barriers to Inclusion of CNA Observations

CNAs are positioned to observe day-to-day emotions and behaviors of residents, but facility and staff factors may prevent CNAs' observations from being included in care processes. No formalized processes are known that permit CNAs to consistently and effectively communicate their accumulated resident observations, influencing the care processes of resident assessment, care planning and decision-making (Colón-Emeric et al., 2006b; Piven et al., 2006). With low Registered Nurse-resident ratios (Eaton, 2000), contact with Registered Nurses and even Licensed Practical or Vocational Nurses may be limited, with few opportunities to share knowledge and jointly solve problems (Colón-Emeric et al., 2006b), much less time for clinical supervision. Positive relationships with nursing staff, especially the MDS Coordinators, improve the likelihood that CNAs will communicate resident observations for more accurate assessment of residents and individualized care planning (Piven et al., 2006). Finally, CNA certification training includes minimal information about depression (Fitzgerald, as cited in Beck, Doan & Cody, 2002; Feldt & Ryden, 1992). Without benefit of education, training, and nursing supervision, CNAs' understandings of depression may be insufficient, leaving them to resort to responses that may not be therapeutic (Anderson et al., 2005).

Explanatory Model Framework and Depression

Explanatory Models (EM) are cognitive/conceptual maps of illness held by patients and practitioners in all health care systems and are influenced by ethnicity, social class, and education (Kleinman, 1980). Kleinman suggested using five major areas to guide interview questions to learn how respondents explain an illness. They are: (a) etiology or the causes of a particular illness; (b) time and mode of symptoms or when the illness might occur and how

symptoms appear; (c) pathophysiology or the signs and symptoms of the illness; (d) course or how long the illness lasts and (e) treatment or what makes the illness go away. According to Kleinman (1980), "Explanatory models determine what is considered relevant clinical evidence and how that evidence is organized and interpreted to rationalize specific treatment approaches" (p. 110). This framework suggests that CNAs' have particular understandings of depression, that come from their lay experience and their work culture. CNAs' EMs of depression influence how they interpret and respond to resident's emotional states and whether they deem their observations relevant to report to nursing staff. CNA EMs therefore, are key to learning about the capacity of CNAs to assist the care process of depression assessment.

PURPOSE

The purposes of this study were to: (a) describe CNAs' EMs of depression in nursing home residents; and to (b) compare CNAs' EMs of the signs and symptoms of depression to the mood screening criteria of the MDS 2.0 (Centers for Medicare and Medicaid Services, 2005) and the diagnostic criteria for depression found in the Diagnostic and Statistical Manual the (DSM-IV-TR; American Psychiatric Association, 2000).

DESIGN

A qualitative descriptive design was selected to achieve the purposes of this study. Qualitative descriptive designs consist of an "eclectic but reasonable and well-considered combination" of sampling, and data collection and analysis techniques (Sandelowski, 2000, p. 337). This study involved convenience sampling, in-depth interviewing, and directed qualitative content analysis (Hsieh & Shannon, 2005). University and agency institutional review board approval and informed consent were obtained.

Sample

Two nursing homes that were part of a larger study focused on management practices and quality of care (RO1 of the second author) were utilized for data collection. The two nursing homes were selected randomly from this parent study and were located within a 60-mile driving distance from the southeastern university where the study was based. During their workdays, when not engaged with resident care, 19 CNAs were approached for study participation; nine from each nursing home participated in the study, one was unable to complete data collection. Fourteen women identified themselves as African American, four as White, and one as mixed race. Seventeen were females and one was male, and their terms of employment at the nursing homes ranged from six months to eight years.

Data Collection

Kleinman's (1980) framework for eliciting EMs involves asking the care provider specific questions about an illness, in this case depression. Directed by this framework, the following interview questions were used to guide CNA interviews: What causes depression? Is depression a normal reaction on admission to the nursing home? How can you tell if a resident is depressed? How long can depression last and how bad can it get? And, how is depression treated? What do you do? Three additional questions were added to gain insight into CNAs' perceptions of their role and communication patterns, including: Whose job is it to pick up on depression in residents? Who do you tell if you are worried about depression? Are they receptive? Interviews were digitally recorded ranging from 16–35 minutes long and were conducted at the nursing home sites in rooms that were private, yet conveniently close to their units, in case CNAs were needed to attend to a unit concern.

Data Analysis

Interviews were transcribed verbatim. Transcriptions were checked for accuracy by simultaneously listening to the digital recording and reading the transcript. Using content analysis, at least two coders, using ATLAS-ti (Research Talk, Inc. 1999), coded the data. In the first phase of content analysis, each CNAs' responses were grouped according to the interview questions asked, as shown in Table 1. The responses of all 18 CNAs were then placed in one matrix display to allowing within and cross-case comparisons. In the second phase of analysis, the CNAs responses were grouped by nursing homes to allow between-nursing home comparison. This analysis showed responses to be indistinguishable by nursing home. In the third phase of analysis, signs, and symptoms as described by CNAs,' were compared to the mood screening criteria (MDS 2.0), and diagnostic criteria for depression (DSM-IV-TR), as shown in Table 2.

FINDINGS

What causes depression in residents?

CNAs identified four primary factors that cause resident depression: losses, medications, environment, and physical conditions (Table 1). CNAs thought depression resulted from the multiple and cumulative losses that usually precipitated nursing home admission, such as loss of physical function and corresponding loss of self-care ability, which resulted in dependence on others for care. They identified loss of the familiar home environment and routine as significant causes of depression. CNA's observed that loss of work and social identity also contributed to depression. As one commented: "We don't know who they were in the past."

CNAs believed that separation from loved ones and loneliness caused depression. Several CNAs described a similar family visitation pattern: families visited frequently around the time of admission, but visits tapered off over time. CNAs perceived that this gradual withdrawal of emotional support left residents feeling lonely and abandoned. As one CNA expressed: "Feeling you have no one, and no one wants you."

Although mentioned less frequently, medications were cited as causing depression, especially for residents taking several medications for multiple medical conditions, increasing the chances of medication interactions, or, as one CNA put it, "medications running together." CNAs also attributed depression to the nursing home environment, for example, factors such as "delayed response to call bell," "monotony of meals," and "lack of privacy and freedom." One CNA appreciated the personal and social implications of living in the nursing home environment. As she observed:

> You come into a building and you don't know anybody; you're going into a bed with someone in the room, there's somebody you don't even know. You got a little space, and you say, "oh well, this is mine, that's my little space." You know, when you are use to having this big old house or going out there and working in your garden.

CNAs expressed empathy and understanding of the significant emotional adjustment required of residents to leave a familiar home environment and adjust to the new and often unpredictable nursing home environment. Not only did they perceive that residents missed their home and struggled to adjust, but one CNA believed that her favorite resident died because she "could not cope" with the intrusive behavior of a roommate with cognitive impairment. Suggesting one reason for the resident's decline, she noted: "You know, stick ducks with ducks and cats with cats, and [do not] not mix them."

Physical conditions such as pain, urinary tract infections, and "chemical imbalance" were noted to cause depression by only a few CNAs.

In summary, CNAs' EMs identified several causes of depression. These causes were weighted towards psychosocial factors such as multiple losses preceding nursing home admission, including loss of physical function and independent self-care and the coping challenges of adapting to the stressors of an unfamiliar nursing home environment. Not surprisingly, CNA's EMs barely acknowledged that genetic and biochemical causes of depression.

Is depression a normal reaction on admission to the nursing home?

CNAs were uncertain about whether depression was a normal reaction to nursing home admission. Some thought that depression was an expected phenomenon that resolved naturally as residents acclimated to the nursing home environment, others perceived that residents' coping ability and cognitive status influenced adjustment to the nursing home. As expressed by one CNA: "They come in feeling sad, their self-esteem low but then after a few days, the majority of them (residents) come around."

Other CNAs, however, noted that depression was not a normal reaction to admission, explaining that some residents adjusted quickly and enjoyed living in the nursing home while others did not. One CNA described residents who coped successfully in the following manner:

> Some people are just stronger and can handle things better, just the way you cope with things; just a matter of how you look at things, you have to make the best of it.

CNAs identified "those that have their mind about them," as better able to adjust to nursing home placement since these residents were able to "use their mind" to accept the need to be in the nursing home and, therefore, more able to "make the best of it." In contrast, CNAs described those with cognitive impairments as not able to appreciate why they were in the nursing home and, accordingly, CNAs had lower expectations for how these residents adjusted to the nursing home.

In summary, some CNAs' EMs identified depression as an expected emotional response to nursing home admission for some residents as they adjusted and identified resident coping ability and cognitive status as influencing adjustment. EMs holding that depression is a normal reaction to nursing home admission may result in CNA's not paying attention to signs and symptoms that may indicate depression. On the other hand, CNAs' EMs clearly recognized that residents differed by individual cognitive status and coping ability.

How can you tell if a resident is depressed?

CNAs agreed that because they worked most closely with residents, they were the staff members most likely to recognize changes in resident mood and behavior that might indicate depression. As shown in Table 1, CNAs described several different signs and symptoms of depression and offered clinical examples. CNAs described "wanting to be away from others" or social isolation as the most common sign of depression, with residents "wanting to be left alone in their room," "not wanting to be around other people," and decreased talkativeness, for example, residents "don't say anything."

CNAs frequently identified "crying" as a very clear and common sign of depression in residents along with a loss of interest in participating in their self-care routines and facility-wide activities. They explained that with this loss of interest, residents withdrew their involvement in daily decision-making and showed greater dependence on staff to act on the resident's behalf. For example, one CNA noted that depression caused residents to "go from picking out clothes and helping [with baths] to not caring." Others suggested that low interest in care routines caused residents to resist care, increasing the CNAs' emotional and physical workload demands. As one CNA described it:

> Residents [with depression] won't let you shave them; won't let you bathe them; got to practically beg them to let you change them. Don't want to be bothered; just want to lay there and die.

They also noted loss of interest in the facility-wide Activities Program. For example, CNAs described residents with depression as having "no interest in what activities are going on," "wanting no part of it, refusing bingo," and preferring to "sit in their room and stare at the wall."

Closely behind social withdrawal, crying, and loss of interest, CNAs identified appetite changes, anger/irritability, and certain types of verbalizations as indicative of depression. Poor appetite was the most common appetite change noted by CNAs, with residents seeming like, "they don't care about eating." CNAs connected poor appetite with physical consequences of weight loss and dehydration.

CNAs identified anger/irritability manifested by residents as a common sign of depression, as indicated by the following remarks:

> Residents physically and verbally lash out at you; throw things; they could get to a state of violence.

> [Residents] may take their frustration out on you by cursing you out, hitting you, or telling you to go away.

CNAs described resident verbalizations (especially repetitive verbalizations) as often indicating possible depression. The most common topics of these verbalizations included being placed in the nursing home by their children and then abandoned by them, missing home and wanting to go home, and wishing for death. For example, one CNA explained:

> While I was dressing her, she says, "Why don't you throw me out the window? Throw me out the window." She'll say her family has abandoned her, they don't love her anymore.

Finally, sleep symptoms were identified as indicative of depression, especially sleeping too much (hypersomnia) or too little (insomnia).

In summary, CNAs' EMs identified multiple, observable signs that they thought indicated possible resident depression, including: not wanting to be around others, crying, not wanting to do anything, lowered appetite, anger/irritability with staff, sleep changes and resident verbalizations. CNAs' EMs also indicated that they did not use language/labels to distinguish between normal mood variations and the persistent low mood of depression.

How long does depression last and how bad can it get?

CNAs varied in their understanding of the time course of depression but they all agreed depression influenced residents and staff. CNAs viewed the time course of depression as ranging from "minutes to hours" and "a day," to "the rest of their lives." Those who perceived a long-term course indicated that depression may last 2–3 years, "may linger," and that residents "may not come out of it quickly."

In regards to severity, CNAs described interplay between the emotional and physical symptoms of depression. CNAs described residents emotionally, as giving up the will to live, hastening death through such behaviors as refusing medications and refusing to eat. One CNA summed it up this way:

> I believe depression can get real bad; get to the point where you don't care about life; don't want to see anybody, you want to put the covers over your head, where you don't want to live, don't want to eat and just let yourself go;

CNAs remarked that poor food and liquid intake resulted in weight loss and dehydration. These factors coupled with general inactivity and too much time in bed resulted in dehydration, decubitus ulcers, overall decline, and death.

CNAs also identified behavioral problems resulting from depression that affected their ability to provide care. For instance, they viewed depressed residents as prone to agitation and aggression towards staff. They described depressed residents as more challenging to provide physical care to since they often resisted routine physical care, such as bathing, requiring more CNA time to provide physical care.

In summary, some CNAs' EMs characterized depression as a transient frame of mind lasting minutes or hours, while others thought it lasted for weeks and months. Again, if CNAs believe that depression is transient, they are less likely to pay attention to signs and symptoms they do observe and may not report those observations. The majority of EMs identified the interplay between the emotional and physical consequences of depression, in addition to the greater physical care challenge and time required to provide care for depressed residents.

How is depression treated? What do you do?

CNAs identified the usual depression treatment as medication alone or coupled with participation in the facility-wide Activities Program, but described limitations of both treatments. They described their role in providing emotional care to residents, although they felt this role was not formally acknowledged by the nursing home.

CNAs voiced skepticism over the side effects and the reliance of clinical staff on medications for treatment. One CNA stated that residents treated with medication became "like zombies." Another commented: "They [staff] figure a pill does miracles all the time."

Along with medications, CNAs said that residents were often encouraged to attend the Activities Program to "get the residents out of bed and around others that are laughing and having a good time." They acknowledged that many residents did not attend the Activities Program due to the limited number of activities and lack of appeal of the ones available.

CNAs described using non-verbal and verbal approaches to provide emotional care to depressed residents. They identified non-verbal approaches, such as holding hands, hugs, and backrubs, and efforts to facilitate pleasant events like "a good shampoo" or a walk outdoors. They emphasized the importance of "just talking" to residents:

> I think we forget to talk to our residents. They're people too and they have a lot of conversation that nobody don't even realize. Besides going in there in the morning and afternoon, I think we need to communicate with our resident more and [then] I don't think they would be so depressed sometimes, and so quick to use profanity and say ugly things. You know a lot of things are in them naturally that comes out from the past but I think if we communicate with them more on a one-on-one basis, we'll really know what is going on with them.

Even though they emphasized the importance of talking with residents, CNAs acknowledged having limited time to talk. As one CNA expressed it:

> If you have 7 or 8 people, you can't sit and talk to them, I've had residents ask [to talk] and I've had to refuse them.

In addition to the importance of increasing communication and getting to know residents, CNAs described specific approaches that they used with depressed residents, such as providing reassurance, distraction, becoming a friend, and making residents feel useful. How the CNAs made sense of the resident's emotional symptoms or behaviors seemed in some instances to shape their approach to that resident. For instance, in the context of the following quotes, both CNAs were discussing anger and irritability as symptoms of depression, yet, their interpretations differed and so did their response to the resident:

> I let them have their tantrums…I just walk away…why should I stand there and talk to you when you not going to hear me anyway? I go away, come back, and try it later; sometimes it works.

This CNA used a time-out like approach in response to resident anger. In contrast, another CNA indicated how she responded to the resident:

> I try to ease their mind and tell them it's going to be ok and I'm here for you, it helps cause I get real close to my residents. One of them fusses at me like I'm her daughter, I just sit there and listen, I let her go ahead and fuss at me, maybe that makes her feel better or something, they'll be okay once they get it out.

In another example, a CNA explained that she distinguishes between "types of crying" to help her decide if the resident just wants attention or is depressed:

> I can tell the difference between the cries of those who want attention and those who are depressed: It's a certain cry-like a baby cries, that they're [wanting] attention; [crying] like an adult or teenager, that's depression;

In summary, CNAs' EMs showed they were cognizant of the primary role of medications in treating resident depression, but they were skeptical about using medication as the only treatment and voiced the importance of individualized activities and increasing interactions with residents by "just talking" with residents who are depressed. EM's also demonstrated that the meaning attributed to resident symptoms/behaviors by CNAs influenced their approach to residents.

Whose job is it to pick-up on depression in residents?

CNAs felt responsible for picking up signs and symptoms of depression, yet felt they should share this responsibility with all staff having contact with residents. Although CNAs felt it was everyone's job, they felt particular responsibility for noticing symptoms because they spent the most time with the residents.

> We see these people every day, sometimes the nurses [part-time] might not see them for a week. It's mine and the nurses' role.

Several CNAs indicated it was "everyone's job" to detect depression: nurses, housekeepers, and even "people in the front office," as they were often in the hallways and in contact with residents.

> They [professional staff] would say typically our [job] as we are working with the residents on a closer basis than they are, but I'm thinking if everyone is observing, and doing their job, then anybody can pick up on depression. You see what I see, so it's everybody's job.

In summary, as the staff who spend the most time with residents, CNAs felt responsible for detecting resident depression, but wished to share this responsibility with all staff have contact with the resident.

Who do you tell if you are worried about depression? Are they receptive?

CNAs all noted that they took their observations of signs and symptoms of depression to nursing staff, as in the following remark:

> I go straight to the nurse on the hall, and she [nurse] takes action. She will tell the Nurse Practitioner and if she's here, she will go and evaluate.

Another CNA commented about the nurse: "She will get us all together, and talk about what each of us are seeing."

A minority of CNAs indicated that they also communicated with the nurse, but perceived that certain nurses ignored CNA observations, delaying action. They interpreted this behavior as lacking respect for the CNA and delaying resident depression assessment:

> I go to the nurse that has the resident; they'll listen, but they don't come and look at the situation at the time. Maybe later, down the road they'll notice it themselves. It's like you didn't say anything. You know the things the CNA says, it doesn't matter.

Another CNA explained that CNA observations may be ignored by nursing staff because nursing staff attribute depressive symptoms to dementia rather than depression:

> I tell the nurse that something is wrong with the resident and they kind of blow it off, saying, 'well, she's got Alzheimer's Disease.' They're throwing it off, they think that everybody's got Alzheimer's.

When ignored by nursing staff, one CNA described how feeling responsibility for the residents motivated her to move up the chain of command:

> I have learned over time which nurses follow-up on CNA communications and which ones don't. Sometimes even though you don't want to overstep them, it's up to us to make sure that if we notice something to report it to the nurse. And then kind of wait and see if nothing comes of it, we know what to do, you have to go up the chain of command; somebody's got to follow-through.

In summary, CNAs said that they reported their observations of depressive symptoms to the nursing staff. They perceived most nurses as receptive and responding with additional assessment, but perceived other nurses as unresponsive and lacking respect for CNA input. Other CNAs who may feel less empowered or disrespected may not persist, and relevant observations may go unreported.

CNA Explanatory Models and Comparison with the MDS 2.0 and DSM-IV-TR

Aspects of CNAs' EMs of depression were accurate but in other aspects, CNAs held misconceptions that could contribute to under-detection of resident depression. CNAs emphasized psychological (multiple losses, coping, personality), social (loneliness, infrequent visitors, incompatible roommates), and environmental causes (monotony of meals, lack of privacy, delayed response to call bell), but seemed less aware of the biochemical causes of depression. A few CNAs mentioned medication interactions, and physical conditions (pain, and chemical imbalance) as causes of depression. Although CNAs expressed uncertainty about whether depression was normal or not, they did appreciate that the resident's coping and personality resources influenced their adjustment to the nursing home environment.

CNAs cumulatively identified six signs and symptoms of depression that corresponded to five of the MDS 2.0 mood screening items and three of the DSM-IV-TR diagnostic criteria, as shown in Table 2.

CNAs gave diverse responses about the time course of depression with some describing it as a transient state (minutes to hours) while others said that depression could last for years. Clinical depression refers to low mood or loss of interest or pleasure, most of the day, nearly every day for 2 weeks or more (American Psychiatric Association, 2000).

CNAs described death and physical decline and aggression and violence as possible depression outcomes. Untreated depression is associated with increased morbidity, mortality, suicide, functional impairment, and decreased quality of life for residents (Bell & Goss, 2001). Agitation and aggression are common behaviors associated with co-existing dementia and depression (Neugroschl, 2002).

CNAs recognized medication and the formal Activities Program as the primary treatments for resident depression. First line treatment of depression includes antidepressants, and in selected residents, psychotherapeutic modalities including group and individual cognitive-behavioral therapy. Other nonpharmacologic interventions include increasing social activities, and providing meaningful activities that maintain the residents' past roles (American Geriatrics Society and American Association for Geriatric Psychiatric Psychiatry, 2003).

DISCUSSION

CNAs' EMs of depression suggested three possible areas that might contribute to the under-detection of depression by the MDS. First, if CNAs believe that depression is "normal" they are less likely to pay attention or report observations of symptoms of "depression" if they deem these symptoms "normal." Second, misconceptions existed about how long depression lasts, with many describing it as transient (minutes, hours, up to a day). Again, if CNAs perceive depression as transient, they may discount resident observations, not sharing them with licensed staff for inclusion in depression assessment. Third, many CNAs perceived that when they do share observations related to resident mood, they are sometimes not listened to or their observations are disregarded by nursing staff. Any one of these areas could interfere with CNA observations being incorporated into depression assessment, negatively influencing the detection of depression.

Although much of the CNAs' knowledge of depression was consistent with existing MDS 2.0 screening criteria, and to a lesser degree the DSM-IV-TR depression criteria, misconceptions and inadequate knowledge (such as the normalcy and transient nature of depression) may be corrected with training and supervision. This study did not measure the extent to which CNAs detected or assisted depression assessment in actual practice. Nevertheless, in previous research, CNAs were better at picking up on depression than more formally trained nursing staff (Teresi et al., 2002). Taken together, these findings suggest that even without formalized training, CNAs hold potential to provide significant observations critical to depression assessment.

It is widely accepted that CNAs "know the resident best," but receive little training about depression or even about the emotional aspects of care, leaving them to their own devices to understand and manage the complex emotional needs and behaviors of residents. Feeling responsible for making observations that may indicate depression without adequate training and clinical supervision can result in increased job stress, frustration, and insufficient tools to provide resident care (Gates, Fitzwater & Succop, 2003). This coupled with perceptions that nursing staff do not always value their observations of resident depression, may also lead to CNA turnover (Harris-Kojetin, Lipson, Fielding, Kiefer, & Stone, 2004).

There is consensus that nursing homes should provide adequate treatment and personal care, facilitating psychosocial well-being and social interaction (Achterberg et al., 2003). Yet, unlike physical care processes, psychosocial or emotional care processes are provided by default,

since there are no available models for provision of psychosocial support, or, if available, these are not widely implemented (Zinn, Brannon, Mor, & Barry, 2003). In conjunction with the development of needed emotional care processes within nursing homes, targeted training is essential to address knowledge deficits that influence CNA's EMs. Training charge nurses and administrative staff is imperative given the shortage of Registered Nurses in nursing home care. The majority of charge nurse supervisors are Licensed Practical Nurses who may have little more training in depression than CNAs.

The study found that CNAs feel responsible for noticing symptoms of depression and feel they provide emotional care (Cancian, 2000; Lopez, 2006) without benefit of training or acknowledgement by the nursing home. CNAs therefore, may be receptive to training about resident depression, and ways to facilitate emotional care to residents. For managers and administrators, enabling CNA observations within the facility could help unlock the capacity of the CNA to influence depression assessment. Systems developed, however, must attend to the facility barriers to CNA and clinical staff sharing of information (Anderson et al., 2005; Colón-Emeric et al., 2006a; Colón-Emeric et al., 2006b; Piven et al. 2006). Given the high CNA turnover, it may argued that the time and cost of further educating CNAs is not prudent; but, providing additional training along with supervisory support may improve CNA morale and job satisfaction, influencing turnover. Future research should include data on the cost/benefit of training including such factors as turnover.

References

Achterberg W, Pot AM, Kerkstra A, Ooms M, Muller M, Ribbe M. The effects of depression on social engagement in newly admitted Dutch nursing home residents. The Gerontologist 2003;43(2):213–218. [PubMed: 12677078]

American Geriatrics Society. AGS position statement psychotherapeutic medications in the nursing home. 2001. Retrieved May 9, 2006, from http://www.americangeriatrics.org/products/positionpapers/psychot.shtml

American Geriatrics Society and American Association for Geriatric Psychiatry. The American Geriatrics Society and American Association for Geriatric Psychiatry Recommendations for Policies in Support of Quality Mental Health Care in U. S. Nursing Homes. Journal of the American Geriatrics Society 2003;51:1299–1304. [PubMed: 12919244]

American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 4. Washington, DC: American Psychiatric Association; 2000.

Anderson, RA. (No. 2R01 NRR03178094A2). Outcomes of nursing management practice in nursing homes. Bethesda, MD: National Institute of Nursing Research; 2002–2007.

Anderson RA, Ammarell N, Bailey D, Colon-Emeric C, Corazzini K, Lillie M, et al. Nurse assistant mental models, sense-making, care actions and consequences for nursing home residents. Qualitative Health Research 2005;15:106–121.

Beck C, Doan R, Cody M. Nursing assistants as providers of mental health care in nursing homes. Generations 2002 Spring;:66–71.

Beck C, Ortigara A, Mercer S, Shue V. Enabling and empowering certified nursing assistants for quality dementia care. International Journal of Geriatric Psychiatry 1999;14:197–211. [PubMed: 10202662]

Bell M, Goss AJ. Recognition, assessment and treatment of depression in geriatric nursing homes. Clinical Excellence in Nursing Practice 2001;5(1):26–36.

Blazer D. Depression in late life: Review and commentary. Journal of Gerontology: Medical Sciences 2003;58A(3):249–265.

Blazer DG, Hybels CF. Origins of depression in later life. Psychological Medicine 2006;35:1–12.

Cancian, F. Paid emotional care. In: Meyer, MH., editor. Care work: Gender, labor, and the welfare state. New York: Routledge; 2000. p. 51-84.

Castle NG. Measuring staff turnover in nursing homes. The Gerontologist 2006;46(2):210–219. [PubMed: 16581885]

Centers for Medicare and Medicaid Services. Revised Long Term Care Resident Assessment Instrument User's Manual for the Minimum Data Set (MDS), Version 2.0 [on-line]. [Accessed May 25, 2005]. Available at: http://www.cms.hhs.gov.libproxy.lib.unc.edu/quality/mds20/raich3.pdf

Cole MG, Bellavance F. Depression in elderly medical inpatients: A meta-analysis of outcomes. Canadian Medical Association Journal 1997;157(8):1055–1060. [PubMed: 9347776]

Colón-Emeric C, Ammarell N, Bailey D, Corazzini K, Lekan-Rutledge D, Piven ML, Utley-Smith Q, Anderson R. Patterns of medical and nursing staff communication in nursing homes: implications and insights from complexity science. Qualitative Health Research 2006b;16:173–188.

Colon-Emeric C, Lekan-Rutledge D, Utley-Smith Q, Ammarell N, Bailey D, Piven ML, Corazzini KN, Anderson RA. Connection, Regulation, and Care Plan Innovation: A Case Study of Four Nursing Homes. Health Care Management Review 2006a;31(4):337–346. [PubMed: 17077708]

Eaton SC. Beyond 'unloving care': Linking human resource management and patient care quality in nursing homes. The International Journal of Human Resource Development 2000;11(3):591–616.

Feldt KS, Ryden MB. Aggressive behavior: educating nursing assistants. Journal of Gerontological Nursing 1992;18(5):3–12. [PubMed: 1583285]

Gates D, Fitzwater E, Succop D. Relationship of stressors, strain, and anger to caregiver assaults. Issues in Mental Health Nursing 2003;24(8):775–793. [PubMed: 13129753]

Harris-Kojetin, L.; Lipson, D.; Fielding, J.; Kiefer, K.; Stone, RI. Washington, DC: Office of Disability, Aging and Long-Term Care Policy (DALTCP) and the Institute for the Future of Aging Services; 2004. Recent findings on frontline long-term care workers: A research synthesis 1999–2003. Retrieved May 9, 2006, from http://aspe.hhs.gov/daltcp/reports/insight.htm

Hawes C, Morris JN, Phillips CD, Mor V, Fries BE, Nonemaker S. Reliability estimates for the minimum data set for nursing home assessment and care screening. Gerontologist 1995;35:172–178. [PubMed: 7750773]

Hsieh HF, Shannon SE. Three approaches to qualitative content analysis. Qualitative Health Research 2005;15:1277–1288. [PubMed: 16204405]

Kleinman, A. Patients and healers in the context of culture: An exploration of the borderland between anthropology, medicine, and psychiatry. Berkley, CA: University of California Press; 1980.

Kolanowski A, Piven ML. Geropsychiatric Nursing: The state of the science. Journal of the American Psychiatric Nurses Association 2006;12(2):75–99.

Lawton MP, Casten R, Parmelee PA, Van Haitsma K, Corn J, Kleban MH. Psychometric characteristics of the minimum data set II: Validity. Journal of the American Geriatrics Society 1998;46:736–744. [PubMed: 9625190]

Lopez SH. Emotional labor and organized emotional care: Conceptualizing nursing home care work. Work and Occupations 2006;33(2):133–160.

McDonald CA. Recruitment, retention, and recognition of frontline workers in long-term care. Generations 1994;8:41–42.

Neugroschl J. Agitation: How to manage behavioral disturbances in the older patient with dementia. Geriatrics 2002;57(4):33–37. [PubMed: 11974389]

Piven ML, Bailey D, Ammarell N, Corazzini K, Colon-Emeric C, Lekan-Rutledge D, Utley-Smith Q, Anderson R. MDS Coordinators Relationships Nursing Home Care Process. Western Journal of Nursing Research 2006;28(3):294–309. [PubMed: 16585806]

Research Talk Inc. Atlas. ti introductory work session materials pack (Version 4.2). Bohemia, NY: Vital Research; 1999. [Computer software]

Sahyoun NR, Pratt LA, Lentzer H, Dey A, Robinson KN. The changing profile of nursing home residents: 1985–1997. Aging Trends 2001;4:1–8. [PubMed: 11894226]

Sandelowski M. Whatever happened to qualitative description? Research in Nursing & Health 2000;23:334–340. [PubMed: 10940958]

Schnelle JF, Wood S, Schnelle ER, Simmons SF. Measurement sensitivity and the minimum data set depression quality indicator. The Gerontologist 2001;41(3):401–405. [PubMed: 11405438]

Teresi JA, Abrams R, Holmes D, Ramirez M, Shapiro C, Eimicke JP. Influence of cognitive impairment, illness, gender, and African-American status on psychiatric ratings and staff recognition of depression. American Journal of Geriatric Psychiatry 2002;10:506–514. [PubMed: 12213684]

Zinn JS, Brannon D, Mor V, Barry T. A structure-technology contingency analysis of caregiving in nursing facilities. Health Care Management Review 2003;28(4):293–306. [PubMed: 14682671]

Table 1

CNA's Understanding of Depression

EM component	Category*
Etiology	What causes depression in residents?
Loss	Physical function/dependency on others
	Unfamiliar environment
	Separation from significant others
	Loss of social and work identity
Medications	Medication interactions
Environment	Unfamiliarity
	Monotony of meals
	Lack of privacy
	Delayed response to call bell
	Incompatible roommates
Physical conditions	Urinary tract infection
	Pain
Other	Nervousness, worry
	Chemical imbalance
Normal reaction	Is depression a normal reaction on admission to the nursing home?
	Yes
	Abandonment by family
	Resident opposed to admission
	No
	Some residents prefer living in the nursing home
Signs and symptoms	How can you tell if a resident is depressed?
Social withdrawal	Staying in room
	Increased time in bed
	Decreasing verbalizations
Crying	Increased crying
	Easily tearful
Loss of interest	Uninterested in participating in Activities Program
	Nonparticipation in usual care routines
Appetite	Poor appetite
	No interest in food
Anger	Observable irritation with staff
	Angry outbursts
Verbalizations	Put here by children against their will
	Want to go home
	Family does not visit
	Wish to die
	Increased complaints
Sleep	Hypersomnia
	Insomnia
Course	How long does depression last?
	Short-term
	Minutes
	A day
	Long-term
	Two-three years
	Until death
Other	No one knows
	Until treated
	Lingers
Severity	How bad can depression get?
	Death
	Stop caring about life
	Passive suicide
Physical decline	Weight loss
	Dehydration
	Decubitus ulcers
Behavior problems	Aggression towards staff
	Violence towards staff
	Resistant to care routines
Treatment	How is depression treated**?**
	Medications
	Antidepressants
	Address the chemical balance
Formal Activity	Keep resident active
Program	Socialization opportunities
	What do you do?
Communication	Verbal
	Increased number of interactions
	Get to know resident
	Non-verbal
	Hand holding

EM component	Category*
	Hugging
	Kissing
	Backrubs
Approach	Distraction
	Encouragement
	Reassurance
	Make them feel useful

* Clinical terms substituted for CNA language for clarity.

Table 2

Comparison of CNA Understanding of Signs and Symptoms of Depression with MDS 2.0 Mood and Behavior Patterns and DSM-IV-TR Depression Criteria

	CNAs	MDS 2.0	DSM-IV-TR
Signs and Symptoms activities	Loss of interest	Loss of Interest	Loss of interest
	-activities -social interaction	-activities, family -social interaction	in most
	Crying	Sad, Apathetic Anxious Appearance -Sad, pained, worried facial expression -Crying tearfulness -Repetitive physical movements	Depressed mood by self report or observation of crying
	Insomnia/hypersomnia	Sleep Cycle Issues -unpleasant mood in morning; -insomnia/change in usual sleep pattern	Insomnia/hypersomnia
	Decreased appetite	———	Decreased appetite
	Verbal expressions “wish I were dead” say things hatefully “just throw me out the window” “here against my will family has abandoned me”	Verbal Expressions of Distress -negative statements -repetitive questions -persistent anger with self or others -self-depreciation -unrealistic fears -something terrible about to happen -repetitive health complaints -repetitive anxious complaints	———
	———	———	Psychomotor retardation/agitation
	———	———	Fatigue/energy loss
	———	———	Feelings of
	worthlessness/	guilt	inappropriate
	———	———	Diminished ability
	think/concentrate		Indeciveness
	———	———	Thoughts of death/suicidal ideation
	———	Behavioral Symptoms Wandering	———
	Cursing CNA	Verbally Abusive Behavioral Symptoms	———
	Striking out at CAN	Physically Abusive Behavioral Symptoms	———
		Socially Inappropriate/ Disruptive Behavioral Symptoms	———
	Resists care	Resists Care	———