FACTORS ASSOCIATED WITH TURNOVER RATES OF CERTIFIED NURSING

ASSISTANTS IN LONG-TERM CARE FACILITIES: THE IMPACT ON RESIDENTS AND

THE IMPLEMENTATION OF EMPOWERED WORKFORCE STRATEGIES

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Factors Associated with Turnover Rates of Certified Nursing Assistants: The

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Strategies

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ABSTRACT

This paper reviews factors associated with high turnover rates of certified nursing assistants employed in long-term care (LTC) facilities. Adults 85 and older are the main consumers of LTC services. It is projected that the LTC industry will experience an increase in demand as this oldest-old subgroup of the aging population grows. Therefore, it is necessary to have an ample and caring workforce to meet this emerging need. The direct target population for this paper is certified nursing assistants, while residents in long-term care facilities represent the indirect population. The objective of this paper is to explore factors that positively correlate with high turnover rates of certified nursing assistants in this specific setting, and to provide intervention strategies that will offset this trend. In turn, the intervention strategies should positively impact the quality of life and care amongst the evaluated residents.

Keywords: long-term care, job satisfaction, turnover rates, aging population

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LIST OF ABBREVIATIONS

CNAs………………Certified Nursing Assistants

LTC…………………Long-Term Care

NACSP……………..Nursing Assistant Communication Skills Program

PA…………………..Permanent Assignment

SMWTs……………..Self-managed Work Teams

1. INTRODUCTION

Older adults are the fastest growing segment of the American population; although they exist within a small percentage of the overall total. In 2010, there were 40 million adults ages 65 and older (Federal Interagency Forum On Aging-Related Statistics, 2013). This segment represented 13% of the United States' total population. By 2030, this portion of the population is expected to increase to 20%. After 2030, the overall percentage of older adults will remain fairly stable; however, the oldest-old subgroup of aging adults (85 and older) will continue to grow. The oldest-old subgroup is expected to increase from 5.5 million aging adults in 2010 to 19 million by 2050 (Federal Interagency Forum On Aging-Related Statistics, 2013). This subgroup is the fastest growing segment of the aging population (Wetle, 2008).

In 2011, a small portion of the aging population resided in long-term care facilities. In the United States only 1.5 million adults 65 and older inhabited long-term care (LTC) facilities. This represents 3.6% of the aging population. Although the overall percentage is small, it does not account for the lifetime usage of LTC services (Department of Health and Human Services, 2013). The need for LTC services increases with age. It is estimated that 17% of adults between the ages of 65-74 will requires some form of LTC service. This percentage increases with age. It rises to 36% for adults between the ages of 75-84, and to 60% for adults older than 85. Moreover, 55% of those accessing LTC facilities will have a lifetime use of at least one year, while 21% will have a lifetime use of five years or more (Kemper & Murtaugh, 1991).

The label long-term care has many implications. Ideally, long-term care encompasses a variety of services, including individualized and coordinated total care. These services promote the individual's functional independence. All services offered should enhance both quality of life and care. The services provided typically include: personal care services; health care assistance;

specialized dementia housing; social, educational, and religious activities; exercise programs; transportation; laundry services; and housekeeping. The range of services received by clients affects their overall costs. Some long-term facilities provide services a la carte, while others offer package deals. Additionally, residents can upgrade to more comprehensive services as their needs change. In general, long-term care (LTC) facilities are defined as an institution licensed to provide care and services to aging and incapacitated adults. Long-term care (LTC) institutions include: assisted living facilities, supportive housing, hospice care, skilled nursing facilities and specialized mental health units (i.e., memory care). The various LTC settings demonstrate the wide range of services that fall under the LTC umbrella (Pratt, 2010).

A majority of residents in LTCs require assistance with personal care. Personal care refers to assistance with activities of daily living (ADLs) and instrumental activities of daily living (IADLs). ADLs vary from resident-to-resident, but some personal care services are delivered more frequently. For example, it is estimated that 68% of residents need help with bathing. Other common ADLs residents require help with are dressing, toileting, eating and transferring. On average, most residents need assistance with at least two types of ADLs. Moreover, 86% of residents require help with IADLs. Such activities consist of housework, laundry, medication management and transportation. The availability and provision of services contributes to the overall quality of life for aging long-term care residents (Pratt, 2010).

Certified nursing assistants (CNAs) provide the bulk of personal care services. In fact, CNAs dispense 90% of all care provided in long-term care facilities (Pfefferle, & Weinberg, 2008). The role of CNAs is deeply connected to residents' quality of life and quality of care. Unfortunately, quality of life and continuation of care are affected by high staff turnover of CNAs. In 2005, Castle and Engberg estimated the national annual turnover rates of nursing

assistants to be as high as 400%. This figure demonstrates that a large portion of the direct care workforce self-terminates their employment in LTC facilities. As a result, residents experience negative physical and emotional health outcomes. Residents are exposed to interruptions in care, inexperienced temporary workers, and a lowered standard of care (Castle & Engberg, 2005).

Additionally, residents form personal relationships with CNAs, which further contributes to the overall quality of care. When CNAs and residents develop intimate relationships, the care becomes emotionally-oriented. Research demonstrates that CNAs develop familial feelings for residents under their care (Secrest, Iorio, & Martz, 2005). Emotional care relationships develop from the desire to help and serve others. This desire serves as a motivational factor for CNAs working in long-term care (Kopiec, 2000).

However, this desire does not stop high turnover rates from occurring in long-term care facilities. The Center for Disease Control and Prevention (CDC) found that 37.2 % of CNAs leave this employment field because of poor pay. Others leave to find better jobs, have problems with facility policy, are overburdened by providing care to too many residents, receive limited benefits, and lack good working relationships with their supervisor and/or co-workers (Center for Disease Control and Prevention, 2008).

Furthermore, high turnover rates are associated with specialized memory care units. There is not a lot of research comparing turnover rates between assisted living facilities and memory care units. However, research demonstrates that CNAs who are exposed to residents with Alzheimer's disease and other dementias experience higher levels of burnout and job dissatisfaction (Zimmerman, Reed, Boustani, Preisser, Heck, & Sloane, 2005). High turnover rates on these specialized units have been linked to increased stress and educational deficits.

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Both factors increase the likelihood of staff burnout and turnover rates (Pennington, Scott, & Magilvy, 2003).

As mentioned previously, residents' quality of life and continuity of care are intrinsically linked to certified nursing assistants (Secrest, Iorio, & Martz, 2005). Unfortunately, residents are subjected to negative outcomes when high staff turnover ensues (Castle & Engberg, 2005). It is important for long-term care facilities to explore opportunities that will retain trained and experienced certified nursing assistants (Pennington, Scott, & Magilvy, 2003).

This paper begins with a literature review, which evaluates factors associated with high turnover. The section following the literature review contains an overview of two theoretical perspectives: ecological perspective and social exchange theory. Both theories offer insight into the different exchange relationships present in LTC facilities. Afterwards, potential intervention strategies are explored using memory care units as a vehicle for delivery. A brief section on evaluation methods is provided, as well. These evaluation methods are beneficial in analyzing data pre -, during, and post-intervention.

In this paper, certified nursing assistants represent the direct target population, while the indirect target population is long-term care residents. In other words, the high turnover rates of certified nursing assistants represent a large problem within a mesosystem. The effect of high turnover rates on elderly residents represents a problem with a microsystem. To make improvements within the microsystem, then the larger problems within the mesosytem must be rectified as well (Greene, 1999). The objective of this paper is to demonstrate that an increase in job satisfaction will decrease turnover rates. Sequentially, this will cause elderly residents to report elevated satisfaction in quality of life and continuity of care in a long-term care setting.

2. LITERATURE REVIEW

As previously cited, certified nursing assistants (CNAs) provide the bulk of hands-on care for residents in long-term care (LTC) facilities. Certified nursing assistants (CNAs) deliver 90% of residents' care, affirming their role as direct-care-workers. Unfortunately, high turnover rates in LTC facilities results in a shortage of CNAs. In facilities with continuously high turnover rates, residents are adversely affected. For example, high turnover rates are associated with an elevated risk of infectious disease amongst nursing home residents (Hayes, 2006). Residents' quality of life and continuity of care decrease as turnover rates increase (Fitzpatrick, 2002). In a systematic review, Bostick, Rantz, Flesner, and Riggs (2006) found that low weight, pressure ulcers and functional declines were linked to high turnover rates. However, these problems were not prevalent in facilities with low turnover rates. This demonstrates that high retention rates negatively impact the quality of care and life for residents (Bostick et al., 2006).

Residents are affected on an emotional level, as well. High turnover rates reduce the likelihood of emotional care, and clinical outcomes become the priority (Fitzpatrick, 2002). This decreases of the provision of personalized care. On the other hand, incidences of job satisfaction correlate with higher levels of quality of life and care. These higher levels are linked to the concept that job satisfaction increases commitment to both the facility and residents. In 2008, Bishop et al. found that job commitment promoted relational care in LTC facilities. This means the needs and wants of the residents were acknowledged and addressed, and clinical outcomes became a matter of periphery interaction. This type of care further supported residents' autonomy (Bishop, 2008).

The previous paragraphs demonstrate that the quality of life and care for LTC residents is dependent on the availability and longevity of the CNA workforce. Due to this fact, the literature

review evaluates the role of CNAs as related to residents. Furthermore it provides insight into the factors associated with low job satisfaction, including reasons highlighted by the Center for Disease Control and Prevention (CDC). The CDC gathered data during a nationwide survey of 304,400 certified nursing assistants (Center for Disease Control and Prevention, 2008). The CDC (2008) revealed that CNAs left past employers because they desired better jobs and pay, experienced problems with facility policy, felt overwhelmed by the staff-to-resident ratio, received limited benefits, or did not possess good working relationships with supervisors and/or co-workers ("Nursing home nursing," 2008).

Furthermore, this literature review addresses the high turnover rates of certified nursing assistants (CNAs) working on specialized dementia units. In 2010, it was estimated that 17% of all residential care communities had specialized dementia units. In 2011, the Alzheimer's Association found that 52% of all long-term care facilities contained memory care units for residents with Alzheimer's disease and other dementias (Alzheimer's Association, 2013). These specialized dementia units accounted for 13% of all beds in long-term care facilities (Park-Lee, Sengupta & Harris-Kojetin, 2013). Additionally, it is estimated that 42% of all residents in long-term care suffer from Alzheimer's disease or other dementias, which represents a large portion of the LTC population (Alzheimer's Association, 2013).

High turnover rates within these specialized environments need to be addressed for multiple reasons. First, CNAs and other direct-care-workers report increased job-related stress while working on these units. Secondly, the total population of older adults with Alzheimer's disease is expected to grow. By 2050, it is estimated that those diagnosed with Alzheimer's disease will increase to 13.2 million. This number does not account for other dementias, which would further boost the number of people living with dementia-related disorders (Hebert, Scherr,

Bienias, Bennett, & Evans, 2003). Finally, as the incidence of Alzheimer's disease and other dementias increase, so will the need for specialized care. It is projected that the use of long-term care will rise as care needs increase. Shortages of CNAs will create care gaps within this booming industry. Therefore, it is important to understand the reasons for high turnover rates related to this specific LTC consumer group (Zimmerman et al., 2005).

2.1. Certified Nursing Assistants: Their Role in Long-Term Care

Certified nursing assistants (CNAs) are considered paraprofessionals and perform multiple tasks with and for residents. Legally, all CNAs are required to be licensed. The 1987 Nursing Home Reform Act mandates that all CNAs have at least 75 hours of training, 16 of which must consist of supervised hands-on-care. Additionally, CNAs must pass a state certification exam and skills test, and all licensed CNAs are required to complete 12 hours of continuing education or in-service training each year. Many CNAs choose to continue their education, becoming rehabilitation or medication aides (Singh, 2010).

Certified nursing assistants (CNAs) assist residents with basic activities of daily living (ADLs) through hands-on-interaction. Certified nursing assistants (CNAs) aid residents with bathing, dressing, grooming, oral hygiene, eating, hydration, transferring, toileting, incontinence, and maintaining personal living space (Singh, 2010). In fact, CNAs often provide the only intimate physical contact that residents receive on a daily basis (Baier, 2012). In addition, CNAs are trained to take vital signs, measure height and weight, recognize changes in bowel functioning and urine output, and to report and document changes (Singh, 2010).

Not all tasks performed by CNAs are related to the physical care of residents. CNAs are trained to identify behavioral changes, and decreases in social interactions. Furthermore, CNAs often provide support to family members. This interaction makes communication with family

members and residents a vital part of their job. All CNAs should be trained to work with dementia or special needs residents. When CNAs lack training, it leads to poor care and increased job dissatisfaction. Finally, CNAs need to understand patient rights, privacy, confidentiality, autonomy and dignity (Singh, 2010).

Certified nursing assistants (CNAs) are responsible for the majority of care residents receive in long-term care facilities. They are involved in shaping the emotional statuses of residents and monitoring changes, as well (Singh, 2010). Typically, continuity of care is measured by evaluating clinical outcomes. However, Bowers, Esmond, and Jacobson's (2000) study of 38 CNAs revealed that this group did not use clinical outcomes to gauge the level and quality of care. Furthermore, they discovered that the CNAs did not distinguish between quality of life and quality of care. They felt the two factors were intrinsically linked (Bowers, Esmond & Jacobson, 2000).

Bowers and colleagues (2000) revealed that quality of life and care was connected to the personal relationship that CNAs developed with residents. When CNAs created and nurtured personal relationships with residents, they delivered a higher standard of care, because residents and CNAs identified and communicated with each other on an intimate level. Certified nursing assistants (CNAs) were able to better identify the needs of residents as personal relationships grew and deepened. For example, multiple CNAs believed incontinence was related to the failure to recognize individual signs for toileting. As familiarity developed, CNAs were able to identify when each resident needed to use the toilet, in turn decreasing the number of residents categorized as incontinent. Furthermore, CNAs felt that these intimate relationships were sustained through emotional reciprocity. This reciprocal relationship helped strengthen residents' personal sense of autonomy, as well (Bowers, Esmond & Jacobson, 2000).

Dodson and Zincage (2007) further explored the importance of care-giving relationships in LTC facilities. Dodson and Zincage (2007) suggested that in order for quality of life and care to exist in long-term care, than intimate relationships with residents are necessary. In fact, the authors identified a family model as being the source for quality care. In a sample of 18 nursing homes, fictive kin was commonly associated with increased job satisfaction amongst certified nursing assistants (CNAs). This familial relationship served as a positive motivator for this specific workforce. One CNA interviewed stated, "The residents are what make the job good" (as cited in Dodson & Zincage, 2007, p. 914). However, numerous CNAs reported feeling torn between their fictive kin, and facility policy (Dodson & Zincage, 2007).

The Green House model located in Tupelo, Mississippi understands the importance of developing personal relationships between residents and certified nursing assistants (Rabig, Thomas, Kane, Cutler, & McAlilly, 2006). This model empowers CNAs, known as Shahbazim, to make decisions based on the needs of the residents as opposed to the desires of the facility. Moreover, Shahbaz are assigned to one Green House and are not rotated throughout the different housing units. This promotes a sustained relationship between Shahbaz and elders. This relationship is further supported as Shahbaz and elders work together to ensure a functional and pleasant living environment (Rabig et.al, 2006). The Green House model creates an environment that allows CNAs to interact with residents on a personal level, while providing direct and indirect care (Sharkey, Hudak, Horn, James, & Howes, 2011).

However, when turnover rates are present and staff shortages ensues, it hinders the development of an emotional relationship between certified nursing assistants (CNAs) and residents. Increased workloads and time shortages prevent communication and interaction between CNAs and residents. In a study of 32 care providers, McGilton and Boscart (2007)

revealed that staff shortages and increased workloads left the direct-care-workers with no time "to listen to what residents wanted to tell them" (McGilton & Boscart, 2007, p. 2153). In turn, the 25 residents interviewed felt ignored and rejected. This negatively affected interactions between the two parties, and caused interruptions in care (McGilton & Boscart, 2007).

2.2. Personal Factors for Turnover Rates: Better Jobs, Pay, and Benefits

The previous subsection highlighted the importance of the relationship between certified nursing assistants (CNAs) and residents. When both residents and certified nursing assistants are faced with staff and time shortages, old and developing relationships suffer. This affects residents' overall quality of life and care (McGilton & Boscart, 2007). Unfortunately, staff shortages are a result of high turnover rates of CNA (Kash, Castle, Naufal, & Hawes, 2007). The desire for a better job or a wage increase is one of the many reasons CNAs leave their current positions ("Center for Disease Control and Prevention, 2008).

According to the CDC (2008), 65.9% of 304,400 surveyed CNAs left their jobs because they wanted a better job or a pay increase. It is suggested that the desire for better employment with a more substantial income is related to the socioeconomic status of CNAs. Using the 2000 U.S. Census data, Stone and Dawson (2008) highlighted socioeconomic trends of CNAs. The data revealed that 91.3% of CNAs were women with a median age of 36. More than a quarter of these women were single mothers who worked several jobs. Moreover, their income was the main source of economic support for their households (Stone & Dawson, 2008). These socioeconomic conditions create an adverse work environment, in which these women feel torn between their families and the need to provide (Dodson & Zincavage, 2007).

Poor pay is the primary reason CNAs seek out new employment. In 2005, CNAs earned an average of $10.10 per hour (Wiener, Squillace, Anderson, & Khatutsky, 2009). The average

yearly salary for CNAs was $22,000 (Montgomery, 2006). Certified nursing assistants (CNAs) employed as part-time workers earned an average yearly salary of $13,000 (Dawson, 2007). Monetary compensation varies in rural and urban settings, as well. Furthermore, over 30% of CNAs received food stamps to supplement their meager income (Dawson, 2007). To compensate for the low pay, many certified nursing assistants work paid holidays and double shifts to receive overtime and boost their earning power. As a result, they sacrifice time with family and run the risk of burnout (Bishop, Squillace, Meagher, Anderson, & Wiener, 2009).

It is suggested that family-sustaining wages and full-time employment will offset high turnover rates in long-term care facilities. However, research demonstrates that minor wage increases marginally affect turnover rates. Minor wage increases have shown to only reduce turnover rates by 15% to 30%. For example, Mickus and colleagues (2004) revealed that a $1.00 increase in wages reduced turnover by 27% in Michigan long-term care facilities. This pay increase did not totally rectify the problem (Dawson, 2007). Furthermore, many long-term care administrators feel like increased wages result in bidding wars between competing facilities. This further exasperates the problems with turnover rates (Fitzpatrick, 2002).

Nonetheless, research continuously demonstrates the demand for increased pay and more work hours. In a survey of 3,468 CNAs, Kemper et al (2008) revealed that 36% desired wage raises and more work hours. This 36% of CNAs felt monetary rewards boosted job satisfaction and retention rates (Kemper et al., 2007). Howes (2002) revealed that turnover rates of homecare workers in San Francisco County were reduced by 57% in 2005, when the county doubled the wage of homecare workers. This demonstrates that substantial, rather than marginal, pay does positively affect turnover rates (Dawson, 2007).

Limited employer-sponsored benefits are another reason CNAs sought new employment. Out of 304,400 surveyed CNAs, 11% left their previous employer due to poor benefits ("Nursing home nursing," 2008). The lack of employee-sponsored benefits continues "to reflect the marginality of chronic caregiving work within the health care system and within society at large" (Brannon et al., 2002). In general, this group of paraprofessionals is less likely to have health insurance. Furthermore, more than 75% do not have employer-sponsored pensions. Health insurance and employer-sponsored pensions are intrinsically linked to retention rates. Unfortunately, many long-term care administrators claim they cannot provide benefits to every employee, because of dependence on public reimbursement. They assert this reimbursement type prevents increases in wages, as well (Harahan & Stone, 2007).

2.3. Organizational and Job-related Factors Associated with High Turnover Rates

In 2008, the CDC determined that 15.6% of the 304,400 surveyed certified nursing assistants (CNAs) left previous employers because of problems with facility policy or working conditions (Center for Disease Control and Prevention, 2008). These problems are categorized as organizational and job-related factors associated with turnover rates. This subsection provides an expansive overview of the negative organizational and job-related factors associated with high turnover rates of CNAs.

For-profit long-term care facilities experience higher turnover rates than non-profit organizations. Banaszak-Holl and Hines (1996) discovered that staff turnover was 1.7 times more likely in for-profit facilities than non-profit organizations. Overtime, this percentage has continued to increase. In 2002, Brannon, Zinn, Mor, and Davis (2002) revealed that for-profits facilities were 51% more likely to experience staff turnover than non-profit organizations.

Brannon et al. (2002) further determined that for-profit, investor-owned chains had higher incidences of staff turnover than independently-owned facilities.

It has been suggested that for-profit facilities are more concerned with economic gain as opposed to clinical care and outcomes. As a result, for-profit have more beds than nursing staff, which increases the risk for burnout. Certified nursing assistants are faced with limited supplies, as many for-profit chains seek to reduce unnecessary spending. Various items are reduced in order to serve the bottom line. Furthermore, in larger for-profit facilities, certified nursing assistants and other low-level staff are often ignored. Their services are not acknowledged and reward systems are scant. In smaller non-profit facilities, there are fewer beds, and employees are more likely to be rewarded for individual efforts (Castle & Engberg, 2007).

Bed-to-aide ratio is a problem faced by for-profit facilities, as well as non-profit organizations. However, it is generally believed that non-profit facilities have fewer beds, which reduces the disproportionate bed-to-aide ratio (Castle & Engberg, 2007). Regardless of organization status, large bed-to-aide ratios are linked to the burnout of certified nursing assistants (Banaszak-Holl & Hines, 1996). Donoghue and Castle (2006) surveyed 354 facilities from four different states. Their study revealed that a smaller bed-to-aide ratio reduced burnout and voluntary staff turnover. However, their study showed that smaller facilities suffered from involuntary staff turnover due to smaller fiscal gains (Donoghue & Castle, 2006).

Although the bed-to-aide ratio affects the level of care provided and turnover rates, Kane (2001) does not believe increasing staff would rectify the problem. Kane (2001) suggests that organizations need to offer more incentives to employees, especially lower-level nursing staff. The organizational goal of each long-term care facility should be to create a rewarding work

environment. In turn, this boost in employee morale will trickle down to residents, improving their quality of life and care (Kane, 2001).

Distrusting management is another reason certified nursing assistants seek employment elsewhere. Reasons for distrust include: perceived workplace surveillance (i.e., micro-managing) and an emphasized distinction in employee status (i.e. higher vs. lower-level employees). These two factors project a perceived lack of respect onto CNAs from facilities' management. One participant from Mittal, Rosen, and Leana's study (2009) stated, "It's like you're at the bottom of the pole" (p. 627). Participants from the same study reported internal work conflicts with registered nurses, which further promoted a sense of disrespect in the work environment (Mittal, Rosen, & Leana, 2009).

It is proposed that turnover rates are heavily influenced by supervisorial and managerial interaction with the ground staff (Hayes et al., 2012). Mittal and colleagues' (2009) research supports this theory. In this study, there were 47 participants, in which 20 were categorized as "leavers." The interviewed "leavers" felt that management did not support quality care; instead, they felt management was more concerned about paperwork and workplace surveillance. The "leavers" felt their job lacked emotional and monetary rewards, as well (Mittal et al., 2009).

However, Hayes et al (2012) demonstrates that when management promotes a supportive environment through communication and teamwork, there is a decrease in turnover rates. Furthermore, retention rates increase when CNAs are allowed to participate in care planning. This validates the role of CNAs and their relationships with residents. Positive management creates a rewarding workplace environment, demonstrates good leadership, and enables recognition of all staff members. When this type of management takes pace, CNAs feel supported and respected. They feel connected to their work community, as well (Hayes et al.,

2012). Furthermore, this work environment fosters the growth and maintenance of job

satisfaction and loyalty (Choi & Johantgen, 2012).

Nursing home violence is another job factor that contributes to turnover rates. In fact,

Gates, Fitzwater & Succop's (2005) research revealed that 27% of all workplace violence occurs

in long-term care facilities. In the long-term care setting, workplace violence and aggressive

behavior often includes repetitive demands, verbal outbursts, sexual harassment, and physical

violence. It has been estimated that certified nursing assistants are subjected to violent and

aggressive behavior at least nine times per month (Hall, Hall & Chapman, 2009). However, it is

suggested that 60-80% of all incidences go unreported (Gates et al, 2005).

Research demonstrates that 75% of violent and aggressive behavior occurs during close

CNA-to-resident contact. This includes transferring and turning (26-32%), dressing (43%),

toileting (9%), feeding (12%), and bathing (19%). During these times, grabbing/pinching/hair

pulling (38-40%), scratching/biting (4-28%), hitting/punching (12-51%), pushing/shoving (8-

8.2%), hitting with object/throwing objects at staff (3-9%), kicking (2-27%), and spitting (1-

11%) have been reported. Verbal assaults are common, as well. Incidences of verbal assaults

include: verbal insults (18.1%), verbal threats (10.7%), and sexual advances (0.7%; Hall et al.,

2009). Moreover, racial slurs have been reported during incidences of verbal assault. In fact,

Berdes and Eckert (2001) estimate that one-third of residents exhibit racist behavior, while two-

thirds of nursing assistants have been exposed to this behavior. Residents most likely to exhibit

these behaviors are: elders with dementia/Alzheimer's disease, males, those between the ages 65

and 84, and elders diagnosed with a psychiatric condition (Hall et al., 2009).

Workplace violence and aggressive behavior negatively affects certified nursing

assistants (CNAs). Continued exposure to workplace violence and aggression results in increased

stress and latent anger. This leads to destructive behavior in CNA-to-resident interactions. In some cases, certified nursing assistants begin to exhibit abusive behaviors towards the residents. Other destructive behavior includes ignoring residents' needs and increased staff absences (Gates, 2004). Overall, continued violence and aggression contributes to the turnover rates of certified nursing assistants (Hall et al., 2009).

2.4. Turnover Factors Associated with Memory Care Units

Caring for residents with various forms of dementia amplifies job-related stress of certified nursing assistants (CNAs). Stress levels and burnout are more prominent when caring for residents with Alzheimer's disease and other dementias. It is estimated that 50% of all residents in nursing homes have a form of dementia. In residential care/assisted living facilities, 24-42% of elders suffer from dementia. Furthermore, 8% of this population is considered to have severe dementia and require intensive care. This specialized client population amplifies the workload and stress of CNAs. This contributes to the turnover rates of CNAs (Zimmerman et al., 2005).

The number of residents with Alzheimer's disease and dementia is expected to increase. Multiple studies revealed that certified nursing assistants lack the training to properly care for this specialized clientele. Furthermore, they lack behavioral management training, and are often subject to violent and physical behavior (Sung, Chang, & Tsai, 2005). It is estimated that 64.5% of all nursing assistants working with the cognitively-impaired are subjected to aggressive behavior. It is estimated that 48% to 82% of all cognitively-impaired residents present with aggressive behavior. Additionally, 11% to 44% of all cognitively-impaired residents become physically violent with CNAs. This behavior includes: punching, slapping, biting, and spitting (Morgan et al., 2012).

When CNAs are continuously exposed to negative behavior, job dissatisfaction is prevalent and the level of care provided is affected (Brodaty, Draper, & Low, 2003). Morgan et al. (2012) study of 83 nursing assistants supports this concept. The nursing assistants exposed to aggressive and physical violent behavior were less likely to develop intimate and caring relationships with residents. Although they continued to provide care, the services lacked personal touch and intimacy, which has been proven to contribute to the overall quality of life of residents. Moreover, the surveyed nursing assistants were dissatisfied with their jobs (Morgan et al., 2012). In Brodaty and colleagues' (2003) study, the CNAs reported that they weren't allowed to acknowledge or discuss the aggressive and violent behavior of residents. This further contributed to dissatisfaction with their job (Brodaty et al., 2003).

Behavioral management programs and continued educational training have shown to increase job satisfaction and reduce aggressive behavior in cognitively-impaired residents (Sung, Chang, & Tsai, 2005). Education focusing on improving communication techniques has proven beneficial, as well. Communication programs designed to enhance interaction between nursing assistants and residents with moderate to severe dementia are especially important. Communication programs, such as the Nursing Assistant Communication Skills Program (NACSP), have been shown to reduce aggressive and violent behavior. Furthermore, this training promotes bonding between staff and residents. Programs such as this have been shown to increase job satisfaction and reduce turnover rates on specialized care units (McCallion, Toseland, Lacey, & Banks, 1999).

3. THEORETICAL PERSPECTIVES

When high turnover rates exist in long-term care facilities, relationships between certified nursing assistants (CNAs) and residents are underdeveloped or strained. As previously stated, the lack of personal relationships negatively impacts quality of life and care for elderly residents. Intimate care relationships between elderly residents and CNAs contribute to the overall therapeutic environment (McGilton & Boscart, 2007).

It is beneficial to explore theories applicable to high turnover rates of certified nursing assistants (CNAs) and the development of intimate care relationships. The ecological perspective is a valuable theoretical tool for analyzing environmental factors associated with high turnover rates. Social exchange theory is equally beneficial for evaluating personal relationships between CNAs and elderly residents. This theory is an asset, because it demonstrates that emotional exchanges contribute to the overall quality of life and care for elderly residents.

These two theories are investigated, because they provide a richer understanding of the direct problem (high turnover rates) and the outcome (disparities in quality of life and care). The use of more than one theory is beneficial, because it does not limit the scope of the problem. Instead it acknowledges the complex layers associated with this particular topic. Both theories allow for the professional and personal behavior of CNAs to be thoroughly explored (Moberg, 2001).

3.1. The Ecological Perspective

The ecological perspective acknowledges that a person and his or her environment are inseparable, and must be mutually considered. This theory proposes that a person develops a relationship with his or her environment and vice versa. In this relationship type, the person and the environment engage in reciprocal exchanges; each becoming dependent on the other. The

nature of the relationship depends heavily on reciprocal transactions within the given environment (Greene, 1999).

The ecological perspective recognizes that power dynamics greatly influences the quality of the person-environment relationship. In a copacetic person-environment relationship, a goodness-of-fit exists. In this case, the environment is supportive of the person. The environment provides necessary resources, offers a sense of security, and promotes the well-being of the person. The person reciprocates with equally nurturing transactions (Greene, 1999).

Balance must be present for a positive person-environment relationship to develop. In constructive relationships where mutual exchanges occur, a person and the environment will engage in adaptive responses. These adaptive responses promote growth, development, and emotional and physical wellbeing. However, when adaptive and reciprocal balances are lacking, both the person and environment become stressed. As a result, maladaptive behavior is prevalent creating turmoil in the person-environment relationship (Greene, 1999).

This theory is especially important for evaluating reasons behind high turnover rates in long-term care environments. Throughout the literature, reasons behind high turnover rates were explored. These reasons represent an imbalance in reciprocal transactions. For example, many certified nursing assistants work paid holidays and double shifts for extra income to compensate for their low income (Bishop, Squillace, Meagher, Anderson, & Wiener, 2009). Consequentially, the mental and physical health of certified nursing assistants suffers. Maladaptive behavior occurs, such as smoking, alcohol and drug abuse, increased work absences and turnover, and elder neglect and abuse. In this instance, the services provided by the CNAs are not being reciprocated by their environment (Geiger-brown, Muntaner, Lipscomb, & Trinkoff, 2004).

In an empowered work setting, reciprocal transactions exist between certified nursing assistants and their environment. In this person-environment setting, CNAs participate in decision-making and goal accomplishment. Furthermore, CNAs are in control of their workload, work duties, and work relationships. This allows for the flow of mutual exchanges to occur between CNAs and their work environment. This promotes a sense of connectedness to the environment, with their co-workers, and with the elderly residents. As a result, maladaptive behaviors decrease and quality of care increases (Greco, Laschinger, & Wong, 2006).

When CNAs are involved in mutual exchanges with their environment, elderly residents benefit from the positive effects. Barry, Brannon and Mor's (2005) research demonstrates that when a goodness-of-fit exists between CNAs and the work environment, then residents' care and life are improved. This study revealed that an empowered work environment resulted in lower incidence of pressure ulcers (Barry, Brannon, & Mor, 2005). Research such as this demonstrates that creating a goodness-of-fit through mutual exchange relationships benefits long-term care facilities, CNAs, and elderly residents.

3.2. Social Exchange Theory

Social exchange theory highlights interpersonal exchanges that symbolically connect human beings to one another. Social exchange is defined as "the exchange of activity, tangible and intangible, and more or less rewarding or costly, between at least two people" (Cook, Cheshire, Rice, Nakagawa, 2013, p. 62). This theory highlights the cost-to-benefits analysis of interactions. In a rewarding relationship, behavior is reinforced through positive and desirable exchanges. In costly relationships, interactions become strained or cease to exist. In order to sustain exchange relationships, interactions must exceed or balance out each other (Backburn & Dulmus, 2007).

Involvement in social exchange relationships does not cease with age. Older adults who are actively involved in exchange relationships demonstrate higher levels of well-being (Dannefer & Phillipson, 2010). However, it is often perceived that older adults lose exchange power with age. This perception is derived from monetary and tangible exchanges, as opposed to intangible offerings. It is important to not forget that intangible exchanges have value. For example, emotional support is deemed a highly valuable resource (Touhy, Jett, & Ebersole, 2014). Emotional exchanges between certified nursing assistants and elderly residents in long-term promote the well-being of residents (Bowers, Esmond & Jacobson, 2000). Furthermore, emotional exchanges between CNAs and residents increases job satisfaction and retention rates (Sung, Chang, & Tsai, 2005).

Positive emotional exchanges have the ability to reinforce high standards of care that residents receive. In this sense, the bestowment of affection between CNAs and elderly residents reinforces their relationship and commitment (Lawler & Thye, 1999). For example, Bowers, Esmond, and Jacobson (2000) demonstrated that meaningful relationships motivated CNAs to be more concerned and aware of individual residents' physical and emotional comfort. Care was delivered in ways that respected the desires, needs and wants of the residents. Moreover, residents felt the personal relationships improved their quality of life and care (Bowers, Esmond, & Jacobson, 2000).

Bowers, Esmond, and Jacobson (2000) revealed that close relationships promoted the exchange of intimate emotions. The surveyed CNAs felt the care they supplied was reciprocated by the return of affection (Bowers, Esmond, & Jacobson, 2000). Bowers, Fibish and Jacobson (2001) found that residents felt empowered by these intimate relationships, as well. Residents felt they served as good listeners, and provided advice when needed. In return, the residents felt

their individual identities were acknowledged. These exchanges served to strengthen and reinforce personal relationships (Jacobson, Fibish & Jacobson, 2001).

Lawler and Thye (1999) state the exchange of negative emotions will sever personal relationships. Poor verbal and nonverbal communication contributes to the development of negative emotions in this dyadic relationship. When poor communication techniques establish barriers, then the care and quality of life for the resident suffers. Nursing assistants are uninterested in providing personalized care (Carpiac-Claver, & Levy-Storms, 2007). When intimate relationships are not forged or are severed, certified nursing assistants deliver care associated with clinical outcomes, rather than individual needs (Jacobson, Fibish & Jacobson, 2001). The type of care is reinforced by the negative or unresponsive interactions with residents. In this relationship, the exchanges are deemed unprofitable by both interacting parties (Lawler & Thye, 1999).

4. INTERVENTION STRATEGIES

The intervention strategies suggested are influenced by the current drive for culture change in long-term care facilities. Under the LTC umbrella, culture change is defined as the "systematic efforts to transform the underlying operative values about aging and elders and the work of caregivers in maintaining quality of life for residents and those who care for them" (Scalzi, Evans, Barstow, & Hostvedt, 2006, p. 368-369). Culture change focuses on improving the quality of life for residents, and enhancing the work environment for staff.

Ideally, staff culture change would involve increases in pay, and benefits. CNAs would be paid a larger salary, receive health insurance and be enrolled in an employee-sponsored retirement plan. Unfortunately, facilities are financially restricted and only minimal monetary increases are available. Therefore it is important to offer other programs that validate and support the vulnerable CNA workforce. Offering empowering workforce interventions that promote leadership, decision-making, skill building, and intimate care are vital alternatives to monetary incentives. Like the residents that CNAs provide care for, autonomy is equally important to this LTC population (Hollinger-Smith & Ortigara, 2004).

In traditional long-term care facilities, management is best represented by the top-down management model. Certified nursing assistants (CNAs) are considered to be lower-level staff. This creates tension within the organizational structure. This lower-level status is reinforced by wage and benefit gaps, and care duties. Furthermore, certified nursing assistants lack a voice in the organizational structure (White-Chu, Graves, Godfrey, Bonner, & Sloane, 2009).

Several models of culture changes are available for analysis and review. These models include the Eden Alternative, the Green House Project, the Wellspring Model, and the Pioneer Network. Although each model is designed differently, the mission is the same: to promote a

sense of security, physical comfort, joy, meaningful activity, reciprocal relationships, functional competence, dignity, privacy, spiritual wellbeing, autonomy, and individuality. These goals are achieved by removing barriers associated with the traditional medical model of long-term care (Kane, 2001).

On a large scale, nursing homes are renovated completely altering the facility. This includes both structural and organizational changes (Kane, 2001). This is especially true of the Green House Project. When the Green House Project was developed, new facility structures were built to resemble cottages. Only ten elders were allowed to reside in one cottage, which promoted a sense of community amongst each individual household. Additionally, CNAs managed their assigned houses under the title Shahbaz. The CNAs are not micromanaged and work alongside the elders to develop a functioning and pleasant aging environment. This model empowers both CNAs and elders by acknowledging their voice and needs (Rabig et al., 2006).

On a smaller level, numerous facilities are allowing residents to have more choice over their specific care routines. In this case, the resident works with the CNAs and the facility to develop an individualized care schedule. For example, residents are able to choose their wake-up and bedtimes. They are not forced awake at 7:00 AM and put to bed at 9:00 PM. This ability to choose applies to meal times and bathing times, as well. This approach installs a sense of autonomy in the elders (Kane, 2001).

As previously mentioned, culture change does not solely benefit residents; it acknowledges the importance and the role of direct-care workers, such as CNAs. For example, behavioral problems are less prevalent in facilities that promote personalized bathing options, wake-up and bedtimes, and meal options. As a result, CNAs are exposed to less stress and burnout. Additionally, the culture change movement promotes teamwork and continued

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education. This creates an empowered work environment, which increases efficiency and effectiveness, and reduces work-related stress (Koren, 2010).

This section presents three different intervention models that are beneficial to empowering CNAs and improving care relationships. The three intervention strategies promote job satisfaction and reduce turnover rates of direct care workers. In turn, residents experience improvements in quality of life and care. The three intervention strategies are: permanent assignments; self-managed work teams, and communication education.

4.1. Permanent Assignments

The first proposed intervention is permanent assignments (PA). Permanent assignments are an intervention associated with staff-related culture change. Under this scheduling model, CNAs are assigned to specific residents in hopes of improving accountability, relationships and continuity of care. This model is the opposite of rotating assignments (RA). When CNAs are scheduled using RA, they are continuously placed with different residents. The schedule can change daily, weekly or monthly. The lack of regular and consistent interactions makes it difficult for CNAs and residents to develop intimate care relationships (Burgio, Fisher, Fairchild, Scilley & Hardin, J, 2004).

Past research indicates that family members and residents prefer PA. In fact, Goldman's (1998) research revealed the family members and residents felt more comfortable interacting with a consistent and primary caregiver. Bowers et al. (2000) research shows that CNAs are initially resistant to PA; they do not want to be permanently assigned to difficult residents. Once integrated into PA, CNAs are reluctant to return to RA scheduling. The hesitation is linked to the development of meaningful CNA-resident relationships and the reduction of problematic behavior (Bowers et al., 2000).

This particular intervention strategy replicates past successful studies. The goal is to reduce CNA turnover rates, while increasing the quality of life and care for elders residing on memory care units (Burgio et al., 2004). Additionally, permanent assignments (PA) are recommended in order to promote and enhance reciprocal relationships between CNAs and residents (Patchner & Patchner, 1993). This intervention strategy correlates with social exchange theory by acknowledging the importance reciprocal relationships between CNAs and residents (Rahman & Schnelle, 2008).

For PA to be successful, managers and administrators must support the model and the participating staff. Moreover, CNAs need to be involved in the planning process, because they are the ones most affected by permanently assigning residents. It is necessary to fairly assign residents to CNAs. It is important to let CNAs voice concerns about specific assignments and residents, as well. Residents should be divided into two groups based on the level of care needed: basic and intensive. Members of each group can then be equally distributed amongst the CNAs, so that no one CNA has an overwhelming number of intensive care residents. The CNAs and managers should work as a team to promote preferred assignments (Patchner & Patchner, 1993).

Ideally, CNAs would be assigned to residents with whom they have a pre-existing relationship. Relationships can be verified by asking both the resident and the CNA if they are willing to work together on a continued basis. Unfortunately, this might not always be the case as certain CNAs and residents might be rejected by each other. Additionally, new residents might be assigned to a CNA working with fewer elders. The facility should work with the resident and CNA to foster growing or vulnerable relationships (Patchner & Patchner, 1993).

4.2. Self-managed Work Teams

A second intervention strategy is**:** self-managed work teams (SMWTs), which correlate with the ecological perspective. Self-managed work teams (SMWTs) are considered a type of empowered workforce. Under this model, CNAs are divided into teams, and work together to make decisions that benefit the residents. Additionally, they make decisions that affect their work environment. SMWTs are encouraged to make managerial decisions regarding their specific unit. Self-managed work teams (SMWTs) reject the top-down management model, and acknowledge the voice of all members of the care team, especially CNAs (Cready, Yeatts, Gosdin, & Potts, 2008).

Self-managed work teams (SMWTs) allow for reciprocal exchanges between CNAs and their environment to occur. As a result, a goodness-of-fit develops, which leads to increases in job satisfaction, and quality of care (Greene, 1999). In general, SMWTs consist of 3-15 CNAs who are responsible for the technical conditions of care (i.e., dressing/bathing), as well as managerial duties. Management duties include: scheduling, establishing daily goals, and evaluating team performance. Additionally, SMWTs make decisions related to residents' care and wellbeing. They develop care plans for residents and their input is respected by other medical professionals employed by the facility. Moreover, SMWTs are encouraged to forge relationship with other teams working on and outside of the unit (Yeatts & Seward, 2000)

Self-managed work teams (SMWTs) could be implemented on a memory care unit. To execute the intervention strategy, program development should utilize steps outlined by Yeats, Cready, Ray, DeWitt & and Queen (2004). The first step involves educating management and administrative staff about the benefits of SMWT. For example, increased job satisfaction and continuity of care are associated with SMWTs. The benefits and past successes of SMWTs need

to be emphasized (Yeatts & Seward, 2000). It is necessary for management and administrative staff to support the program. Without the support of management, it is less likely that SMWTs will be successful and internal work conflicts are a possibility (Yeats et al., 2004).

Next, management is encouraged to participate in the development of the program, and the creation of SMWTs. This allows management to feel like they are part of the process. To promote inclusion, team contacts are created from the members of management. Team contacts serve as a guide to SMWTs. However, this does not give team contacts the right to micromanage or dictate SMWTs. Additionally; all employed registered nurses (RNs) should undergo an informational session about SMWTs. This should reduce potential conflict between the RNs and CNAs. RNs ought to be encouraged to serve as a guide to SMWTs. Meeting with management, administrative staff, and RNs should help reduce internal conflict prior to implementing SMWTs (Yeats et al., 2004).

Finally, CNAs are able to participate in SMWTs' orientation. During orientation, CNAs learn about their new role and duties. At this time, management and RNs aid CNAs with the development of SMWTs and duties. Further education should be offered to train CNAs in making managerial decisions. To promote cohesiveness, SMWTs should meet weekly with their team contact and/or facilitator to discuss work-related problems and solutions. These weekly meetings allow SMWTs to get constructive feedback, as well (Yeats et al., 2004).

4.3. Communication Education for CNAs on Memory Care Units

A third intervention strategy is: communication education for CNAs working with memory impaired elders. Although communication education interventions typically focus on improving residents' lives in LTC facilities, these programs recognize the limited training CNAs receive and aim to compensate for this gap. Communication training provides CNAs with the

skills to communicate effectively and efficiently with elders. These programs recognize that communication gaps contribute to care barriers and increased rates of caregiving stress, burnout and CNA turnover. By providing additional training, the role of CNAs is validated and they are better equipped to meet the daily demands of their residents (Winchester, 2003). Understanding and participating in verbal and nonverbal communication is vital for interacting with residents with Alzheimer's disease and dementia. Burgio and colleagues (2001) noted that positive and negative communication is rare. In fact, data suggests that neutral interactions are the norm, which prevents the growth of reciprocal relationships (Burgio et al., 2001).

Elderspeak is a communication style that is common in CNA-resident interactions on memory care units. Elderspeak is defined as "infantilizing communication" (Williams, Herman, Gajweski, & Wilson, 2009, p. 2). Examples of elderspeak include terms like "baby," "honey," and "good girl." This communication type is associated with resistance-to-care (RTC) behavior. This means that aggressive behavior is more likely to be present when using elderspeak (Williams et al., 2009). However, cooperative communication has shown to reduce maladaptive behavior of both CNAs and residents (Robinson et al., 2007).

In the literature review, a program known as Nursing Assistant Communication Skills Program (NACSP) was briefly highlighted. This program has been successful in reducing turnover rates, increasing job satisfaction and improving residents' care (Coogle, Parham, & Rachel, 2007). The intervention outlined mimics the NACSP strategy used by McCallion and colleagues (1999).

Nursing Assistant Communication Skills Program (NACSP) addresses several areas related to Alzheimer's disease and other dementias. The subject matters addressed are: the various types and symptoms of dementia, verbal and nonverbal communication, memory aids,

and problem behaviors. Group and individual sessions are used to the deliver material and observe NACSP in action. In the first group session, normal age-related changes are discussed. Then communication changes associated with dementia are reviewed. Basic enhancement communication strategies are provided, as well. These basic communication strategies reinforce the importance of proper eye wear, hearing aids, dentures, and reducing excess stimulus. After the first session, CNAs have the opportunity to discuss concerns with the NACSP instructor (McCallion, Toseland, Lacey, & Banks, 1999).

During the second group session, effective verbal and nonverbal communication skills are taught. This session teaches CNAs to identify communication cues. They are taught to respond to varying situations in constructive ways. In this session, role playing is used as a teaching tool. Following the group session, individualized attention is given to each participant. The participants are observed, while engaging in personal care routines. This allows CNAs to use their new skills in a more controlled environment. The instructor provides guidance and constructive feedback (McCallion, Toseland, Lacey, & Banks, 1999).

In the third group session, memory aids are introduced. Memory aids include photographs, labeling possessions, bold lettering, and Memory Charts. Memory Charts provide a list of at least four topics or events that are meaningful to individual residents. CNAs are encouraged to assist families and residents in creating personalized Memory Charts. When using the Memory Charts to communicate, CNAs point to appropriate sections and residents are encouraged to do the same. In the individual sessions, the instructor observes CNAs using the Memory Charts when interacting with residents (McCallion, Toseland, Lacey, & Banks, 1999).

In the fourth group session, CNAs are taught to effectively respond to agitation, wandering, repetition, resistance to care, hoarding, self-harm, physical violence, and

hallucinations/paranoia. CNAs are trained to identify and respond to unmet needs, and ensure residents' safety. They are taught to ask yes/no questions, interpret nonverbal communication, use the resident's perspective, and promote memory recall. In the individual sessions, the instructor observes CNAs interaction with residents during personal care routines (McCallion, Toseland, Lacey, & Banks, 1999).

In the last session, CNAs are rewarded for their participation. CNAs are provided with the opportunity to discuss concerns and review problem areas. Successful and frustrating experiences are discussed. Strategies for improvements should be explored, as well. A follow-up session is provided at the 6 month interval to refresh course material (McCallion, Toseland, Lacey, & Banks, 1999).

4.4. Intervention Goals and Potential Outcomes

The overall goal of each intervention strategy is to reduce staff turnover rate, while boosting the quality of life and care for residents on memory care units. Intervention strategies designed to enhance the work environment for CNAs, working specifically with residents who have Alzheimer's disease or other related dementias, is particularly important. By 2050, it is estimated that 1 out of 85 persons will be diagnosed with some form of dementia. Out of this group, 40.3% will need high levels of care. Nursing homes are expected to be the main providers for high levels for elders with dementia and Alzheimer's disease. Therefore, it is vital to retain trained CNAs to meet the growing demand (Rocca et al., 2011).

These projections signify the importance of implementing strategies to retain CNAs. Permanent assignments (PA) and self-managed work teams (SMWTs) are unique strategies, because they enable CNAs to have an active voice in their work environments. They promote open discussions between management, RNs, and CNAs. These strategies challenge the system-

based barriers that undervalue the work efforts of CNAs. Coogle, Head, and Parham (2006) state that more system-based strategies are needed to counterbalance educational interventions and to determine the overall effectiveness and efficiency of each type. If all three strategies were implemented on different memory care units, it would be possible to cross-examine the effectiveness and efficiency of both system-based strategies and educational training.

5. EVALUATION METHODS

The main goal of the proposed interventions is determine their effectiveness in reducing turnover rates of CNAs, while increasing residents' quality of life and care. However, supplemental goal includes evaluating the system-based strategies (i.e., PA and SMWTs) versus educational training (NACSP). Fortunately, research methods are available to gauge the usefulness of each strategy and to determine which intervention is more effective. This could be done using a quasi-experiment research design. Quasi-experimental methods would be applicable, because it is cost and time efficient. This would allow for the different outcomes of the described interventions to be recorded and evaluated (Rossi, and Lipsey, 2004).

A quasi-experimental design would be useful, because it reduces the burden of acquiring random intervention and control groups. This method enables researchers to place the sample into intervention or control groups. The outcome measurements are then compared across the groups. It is important to mention the possibilities of biases. Present biases influence the true value of the observed outcomes in both intervention and control groups. It is necessary to have controls in place to minimize the existence of biases (Rossi & Lipsey, 2004).

In order to reduce the probability of biases, three methods could be employed. First, only valid and reliable measurements would be utilized to prevent biases from appearing in the outcome results. Second, matching variables could be used to limit biases. Matching variables (i.e., gender, age, and race) have the ability to make the intervention and control groups equivalent to each other. Additionally, secular trends, interfering events and maturation of the sample participants could be accounted for with the purpose of reducing biases (Rossi and Lipsey, 2004).

5.1. Sample Population

       The targeted population would consist of CNAs assigned to memory care units. CNAs that rotate between assisted living and memory care units would not be considered. The targeted group would be derived from CNAs working first shift (7AM-3PM), because this group spends the most time with residents during their waking hours. It is estimated that residents spend 50-65% of their time with first shift (Burgio et al., 2004). The percentages decrease with each shift change. However, this does not discredit the role of CNAs on second and third shift. If successful, the intervention strategies could be altered to meet the needs of these CNAs. More specifically, these strategies could be modified to account for the reduction of available staff on both second and third shift.

       Residents would feel the effect f the intervention strategies, as well. The indirect targeted population would be the elders residing on the memory care units. As CNAs experience a boost in job satisfaction and declines in job-related stress, quality of life and continuity of care should increase for residents. It is hoped that residents will feel the secondary effects of the intervention strategies (Burgio et al., 2004).

       Four facilities would be chosen; however matching procedures could be in place to reduce the likelihood of biases. There would be four intervention groups, and key characteristics would be identified from each sample group. Each intervention group could participate in only one intervention strategy. Group One would participate in permanent assignment. Group Two would engage in Self-Managed Work Teams. Group Three would be the recipients of the Nursing Assistant Communication Skills Program. Group Four would receive all four interventions to measure the symbiotic effect of all interventions being implemented. The

identified key characteristics would be used to find a comparable control group. The control group will receive no intervention strategy (Rossi and Lipsey, 2004).

5.2. Assessment Tools

All three intervention strategies would use the same measurement tools. This is done to allow for cross-comparison analysis across the groups. Various measurements should be used to gauge the effectiveness of the intervention strategy. Direct observational systems could also be put into place to examine the amount of time that CNAs engage residents in nonverbal and verbal communication. Plus, the Personal Appearance and Hygiene Index adapted by Burgio and colleagues (2004) would be useful in measuring the hygiene of residents. The Cohen-Mansfield Agitation Inventory (CMAI) could be used to evaluate aggressive behavior in residents. This includes both physically and verbally aggressive behavior (McCallion et al., 1999). Furthermore, levels of staff absenteeism, shift turnover, jobs satisfaction (Job Satisfaction Index) and CNA stress/burnout (Maslach Burnout Inventory) could be analyzed (Burgio et al., 2004.)

Relational aspects should be investigated, as well. The Relational Behavior (RB) Scale could measure the empathetic and reliable behavior of CNAs. This is an observational scale with higher scores indicating positive results. A continuity index could be utilized to measure the amount of direct care provided. Residents' perspective could be measured using the Relational Care (RC) scale. Higher scores indicate more positive care relationships. In cases of severe dementia, family members could be interviewed along with the residents (McGilton et al., 2003). Using these methods would allow for a comparison of each intervention's impact on CNA-resident relationships (McGilton and Boscart, 2007).

5.3. Data Collection

The study could last 12 months and reflexive controls would used to collect data. The data collection system would be best represented by a time-series design. The time-series design allows for a series of observations to be made throughout a study's timeframe. This design allows for measurements to be given at three month intervals. Additionally, pretest and posttest data can be collected. Since multiple intervention strategies would be in place, an alternative treatment design would be best option. This allows for the apparent differences between the scales to be detective, and would determine the most effective intervention strategy (Leedy and Ormond, 2013).

6. CONCLUSIONS

Direct care worker provides 90% of all hands-on care in long-term facilities (Pfefferle, & Weinberg, 2008). This particular workforce experiences turnover rates as high 400% on a national average. High turnover rates prevent both elders and certified nursing assistants (CNAs) from developing intimate care relationships. This negatively affects the physical and emotional care of elders residing in long-term care facilities (Castle and Engberg, 2005). Empowered work strategies, such as permanent assignments (PA), self-managed work teams (SMWT), and Nursing Assistant Communication Skills Program (NACSP).

The suggested intervention strategies are significant, because of the projected increases of elders with dementia or Alzheimer' disease. Future growth trends predict that this group will need a high level of care. To meet this growing demand, long-term care facilities must consider methods that will support the needs of their direct-care workforce. Without CNAs, facilities will experience shortages when they are encountering the greatest care demand. As a result, elders residing on short-staffed memory care units will experience unmet care needs, which will affect their overall quality of life (Warshaw & Bragg, 2014).

Permanent assignment (PA), self-managed work teams (SMWTs) and Nursing Assistant Communication Skills Program (NACSP) are three different strategies that have demonstrated positive results (Patchner & Patchner, 1993; Yeatts & Seward, 2000; and Coogle et al., 2007). PA and SMWTS are system-based interventions, while NACSP is an education-based strategy. Coogle, Head, and Parham (2006) postulate that system-based strategies are needed to counterbalance educational interventions and promote empowerment within the vulnerable CNA workforce. As a result, a trickledown effect should occur; an empowered CNA will promote the autonomy of residents (Coogle et al., 2006).

Permanent assignments (PA), self-managed work teams (SMWTs), and Nursing

Assistant Communication Skills Program (NACSP) acknowledges the necessity for balanced

exchange relationships. SMWTs promote positive exchanges between CNAs and their work

environment (ecological perspective). These exchanges allow for growth between the two

entities, and encourage a goodness-of-fit. This is a core value of the ecological perspective

(Greene, 1999). On the other hand, PA and NACSP promote emotional exchanges through social

interactions. As a result, both CNAs and residents feel like they are actively participating in a

balanced relationship. This strengthens intimate connections and promotes autonomy in

residents. No entity feels powerless or inferior in the relationship (Bowers, et al., 2000; and

Coogle, et al., 2007).

Although permanent assignments (PA), self-managed work teams (SMWTs), and

Nursing Assistant Communication Skills Program (NACSP) have shown success, each strategy

has certain limitations. In PA, concerns exist about the over-involvement of staff in residents'

lives. This emotional connection negatively impacts CNAs when residents pass away, and can

contribute to job-related stress (McGilton, & Boscart, 2007). SMWTs are often difficult to

implement and maintain. Yeats and Seward's (2000) research revealed that management is often

resentful when SMWTs are implemented. Authoritative figures do not want to relinquish their

power positions, and are resistant to teamwork. Therefore, it is important that facilities commit to

this change and remain supportive throughout the transition (Yeats & Sewards, 2000).

Limitations are present in NACSP, as well. McCallion's et al. (1999) research revealed that

NACSP has short-term effects if continued education is not provided. If implemented, continued

education is necessary to promote the benefits of NACSPs. Permanent assignments (PA), self-

managed work teams (SMWTs), Nursing Assistant Communication Skills Program (NACSP)

and other interventions strategies are a valuable resource in maintaining standards of care and licensing (McCallion et al., 1999).

Facilities receiving state or federal funding are required to meet certain standards of care. These standards of care focus on clinical outcomes, proper licensing, and adequate staffing. If a facility does not have the necessary staff required to maintain quality of life for residents, they are held accountable. In the future, intervention strategies could become part of the required standard, due to the increasing demand for high-levels of care. Future policy could demand new workforce strategies to boost CNA recruitment and retention. Facilities will become responsible for staff retention (Blackburn, & Dulmus, 2007).

Facilities, administrators, staff and CNAs are responsible for promoting strategies that empower the workforce and enhance care-relationships. This contributes to the overall standard of care for residents, and supports the needs of a vulnerable workforce. Although research provides guidelines to implement interventions, flexibility should be present when applying the strategies. This allows the interventions to be molded to fit the needs of CNAs and residents within individual facilities. Limitations or concerns should not deter facilities from the responsibilities of maintaining a standard of care for both residents and CNAs. Facilities need to have goals that exemplify the value of emotional care relationships between CNAs and residents to create a copacetic living and work environment (McGilton et al., , 2007).

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