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Non-Pharmacological Management of Behavioral Symptoms in Dementia Residents

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Abstract

The World Health Organization explains that 50 million people are diagnosed with dementia globally (2017). In dementia patients, agitation is the most common reported symptom (Livingston et al., 2017). Interventions for agitation are crucial in promoting quality of life, providing a safe environment, and reducing caregiver burden. Many residents within long-term care facilities display forgetfulness and many have a diagnosis of dementia. Nursing Assistant Certification programs provide little to no education on non-pharmacological techniques to de-escalate agitated residents (C. Taylor, personal communication, February 21, 2018). The focus is to provide an education tool for Certified Nursing Assistants (CNAs) within long-term care facilities to obtain knowledge on how to note verbal and nonverbal signs of agitation, find the root cause of the agitation, and being able to implement de-escalation techniques such as music therapy, massage, and reducing environmental stimulation etc. A survey tool was used to evaluate the receptiveness of the educational powerpoint and a case study that provided opportunity to work through a real clinical scenario of an agitated resident diagnosed with dementia. The goal of this project is to better equip unlicensed nursing personnel at long-term care facilities with a knowledge base and educational tools on techniques for staff to implement in provision of care for agitated dementia residents.

Focus

At nursing homes, inadequate staffing is a common problem and leads to issues with quality in care. The Belgrade Nursing Home experiences a similar problem with staff among other areas of concern. When discussing with the DON and floor staff, issues that need attention include: staffing, falls, COPD symptoms, anxiety and agitation in dementia patients, lateral

violence, and hand hygiene. Initially, optimizing staff to their fullest ability was the main focus. However, due to the amount of time needed for this project we are unable to effectively analyze, plan, and implement based on this topic. Rather than focusing on the issue of staffing, the DON explained that it would be more beneficial to complete a quality improvement centralized on their residents. COPD exacerbations has been commonly seen in residents at Belgrade Nursing Home where this was a potential area of focus. Again, this quality improvement project would have been difficult to implement with the different levels of education of staff members including activity volunteers, CNAs, and RN staff. Many residents at this facility are diagnosed with dementia in addition to other individuals having memory problems. It has been observed that residents with dementia commonly get agitated throughout the day upon becoming confused and needs not being met. The attention focus for the quality improvement project is non-pharmacological interventions for dementia patients. More specifically, the goal is to educate CNA staff on non-pharmacological ways to de-escalate and calm residents down during times of agitation and distress related to dementia.

Analysis

Twenty-two out of thirty-nine residents have a dementia diagnosis at Belgrade Nursing Home. Along with dementia comes the increased the risk for agitation, irritability, and other behavioral issues. According to Livingston et al. (2017), “Agitation is reportedly the most common neuropsychiatric symptom in individuals with dementia” (p. 171). Agitation is considered a symptom of distress and can be demonstrated in a range of actions including restlessness, pacing, inability to focus, irritability, being angered easily, and verbal or physically aggressive behavior. _

Residents who have increased agitation are at a risk for a lower quality of life. Individuals can potentially put their self and others at risk for harm. In care facilities, it is essential to ensure safety for each resident and employee. Therefore, education of noticing the signs of agitation and de-escalating residents will assist in safety of each individual in the care facility. Additionally, caring for these residents can cause some burnout and financial burden.

In 2017, the cost of caring for individuals with dementia was approximately \$259 billion (Lynch, 2017). On top of this, Lynch discovered that, “Total payments for health care, long-term care, and hospice care for people with Alzheimer’s and other dementias are projected to increase to more than \$1.1 trillion in 2050” (2017, p. 2). To decrease these costs, education and implementation of de-escalation techniques are vital when considering quality of life, caregiver and financial burden, and the future of healthcare. A pharmacological approach may be the easier option, but taking the time to know each resident and how he or she respond to these techniques will benefit the caregiver along with increasing the quality of life of the resident. As the incidence of dementia continues to grow, so does the impact and cost of providing care. Non-pharmacological approaches are essential when tackling this subject. As noted earlier, as the severity of dementia increases so does the agitation. The simple solution to this concern is the use of antipsychotics and/or sedatives. However, to improve quality of each resident’s life is to move away from using these types of medications to treat these symptoms. When speaking with the DON, she made it apparent that other nursing homes have up to sixty to seventy percent of their residents on antipsychotics whereas only one of their residents out of thirty-nine are prescribed an antipsychotic medication. Without the use of medications, focus shifts to non-pharmacological approaches, especially de-escalation techniques when attempting to relax an agitated resident.

Noticing and understanding the root cause of distress in a resident is necessary when aspiring to decrease the incidence of agitation. Symptoms of agitation often arise from an unmet need (Livingston et al., 2017). It is those residents that are unable to identify or communicate their own needs to staff that exemplify increased behaviors. The root cause of most agitation that occurs at Belgrade Nursing Home aligns with unmet basic needs.

As soon as agitation or irritability arises, staff members report that basic needs have not been met. Having a full bladder or bowel, hunger or thirst, pain, fatigue, and not being comfortable are the basic needs that coincide with increased agitation. The nursing assistants were able to identify what can cause agitation in residents, however these individuals respond too late. The concern is that staff members respond to this behavior when it appears rather than preventing the onset. Anticipation of meeting residents' needs can be beneficial when reducing agitation. This finding also supports that education to certified nursing assistants about noticing signs and the prevention of such behavior will lessen distress and enhance quality of life for the residents.

Behaviors such as irritability and agitation occur regardless of the time of day. However, behaviors seem to increase during the evening into the overnight shift, which is consistent with sundowning. As dictated by Assad, Ghani, Sulebria, Mansoor, & Ameer (2017), sundowning is a syndrome with those who have dementia that causes worsening confusion and agitation in the late afternoon and evening hours. This also coincides with staff interviews where evening staff has reported being much busier during these hours due to needed attention by agitated residents. It was apparent that these behaviors did occur more frequently when one of the student nurses worked on the floor with a nurse on the evening shift. When compared to the day shift, more staff was needed during meal times and in the day room to ensure safety of the residents and to

decrease the risk of elopement. To decrease staff burnout and safety risks, it is evident that educating staff members on methods to lessen irritation and distress of dementia residents is crucial.

Certified nursing assistants are the main targets when educating about de-escalation techniques in dementia residents since these are the individuals that spend the most time with them and understand them the best. Most certified nursing assistants at Belgrade Nursing Home have received education related to this topic. Upon hire and annually, nursing assistants are required to complete online modules through Health Care Academy. There are four online modules that are mandatory for staff, which includes abuse prevention, caring for Alzheimer's individuals, caring for the vulnerable adult, and dementia training. Nevertheless, when assessing this population of nursing assistants it was noticeable that staff members were easily affected by agitation shown in residents. In addition to the education that they receive annually, not enough information has been retained since online modules can simply be skipped through. Informing and demonstrating in person about the correct techniques to de-escalate a resident is more beneficial than online modules.

When assessing the issue of agitation in dementia residents at Belgrade Nursing Home, it was clear that the need for education was vital. Higher agitation levels are associated with lower staff, basic needs being unmet, and antipsychotic usage, which correlates directly with this facility. The study by Livingston et al. (2017) concluded that applying personalized approaches to managing agitation in resident with dementia and identifying individualized activities would be the greatest benefit. In order to do so, tools are needed for staff members to understand and analyze the underlying reasons for agitation to treat the underlying cause. This will not only reduce agitation, but increase quality of life as well. This is why the education to certified

nursing assistants at Belgrade Nursing Home is important to notice signs of agitation and to respond appropriately. To accomplish this, a developed plan to approach this concern is needed.

Develop

In talking with the staff at Belgrade Nursing Home, the solutions for de-escalation of agitated dementia residents needed to be low-cost and time efficient. The goal was to find different non-pharmacological approaches. Pharmacological techniques can lead to increased confusion and can even worsen cognition. Additionally, nursing homes are required to perform a gradual dose reduction for any residents on any psychotropic drugs. Initially in the research process and in having discussions with various nursing staff members, one solution was to coordinate music therapy sessions for the residents who had a diagnosis of dementia. The article “Nonpharmacological Interventions to Reduce Behavioral and Psychological Symptoms of Dementia: A Systemic Review” explains a study where people diagnosed with dementia participated in thirty-minute music therapy sessions, twice a week, for a total of six weeks (Oliveira et al., 2015). The results of the study showed that the dementia patients had an overall decrease in anxiety (Oliveira et al., 2015). Another brainstormed solution was to interview staff and family members of residents with dementia to see what types of de-escalation techniques have worked for each individual resident. The with information from the interviews, we would create a checklist for staff to reference if the resident started to becoming agitated. Other solutions based on literature reviewed included therapeutic touch with the use of massage, having dementia patients carry a baby doll, and even using aromatherapy to help decrease anxiety. Camille King, in the article “Managing Agitated Behavior in Older People”, explains that scented oils such as lavender, vanilla, and chamomile have shown to help reduce anxiety and agitation (2012). Literature supports many de-escalation techniques for people who are

diagnosed with dementia. Many of the techniques were activity based such as doing puzzles, reading, and art. Evidence also supported the use of snacks as a means of de-escalation. Comfort foods can help to reduce anxiety, as well as providing the resident with tea or warm milk (King, 2012).

As previously stated, some evidence based non-pharmacological de-escalation interventions included therapeutic touch, music therapy, drawing and other activity based therapies, aromatherapy, and snacks. Originally, the thought was to implement the use of music therapy. However, with weekly music therapy sessions we would have needed months in order to fully implement the intervention, and allow for there to be adequate time to evaluate if there was a therapeutic response from the residents who participated in the music therapy sessions. Additionally, evaluation of effectiveness of music therapy would have been a potential challenge. The evaluation would have been based on interviews with staff and family members, which, again, would have taken more time in order to coordinate times for interviews. Ultimately, education seemed to be the most plausible intervention within the time frame given.

Evidence has shown that ninety percent of people with a diagnosis of dementia exhibit behavioral issues (Staedtler & Nunez, 2015). Non-pharmacological techniques are a safe and effective way in helping to reduce behaviors such as agitation. However, there are barriers to implementing non-pharmacological techniques within care facilities such as a nursing home. Two of the top barriers to implementation of non-pharmacological interventions included lack of education of various forms of non-pharmacological techniques and lack of education on the effects these techniques have on dementia behaviors such as agitation (Staedtler & Nunez, 2015). It was learned, in interviewing Kris Taylor RN, that certified nursing assistants (CNA), there is little to no education on non-pharmacological interventions to de-escalate agitated residents with

the diagnosis of dementia (K. Taylor, personal communication, February 21, 2018).

Room # _____

ACTIVITIES THAT I ENJOY
(Select All That Apply)

<input type="checkbox"/> Music	<input type="checkbox"/> Dolls
<input type="checkbox"/> Singing	<input type="checkbox"/> Exercise
<input type="checkbox"/> Dancing	<input type="checkbox"/> Conversation
<input type="checkbox"/> Reading	<input type="checkbox"/> Napping
<input type="checkbox"/> Coloring/Art	<input type="checkbox"/> Snacking
<input type="checkbox"/> Massage	<input type="checkbox"/> Reminiscing
<input type="checkbox"/> Folding Laundry	<input type="checkbox"/> Cards
<input type="checkbox"/> TV/Movies	<input type="checkbox"/> Puzzles
<input type="checkbox"/> Board Games	<input type="checkbox"/> Other

Please Specify: _____

There is a decrease in factors such as rates of hospitalization, caregiver burden, and injuries of patients when behavioral and psychiatric symptoms of dementia patients are lessened. Research has also shown that caregiver education is an effective mean in which to implement non-pharmacological de-escalation techniques that reduce agitation behaviors from occurring (Staedtler & Nunez, 2015). An educational intervention for CNA staff can be easily evaluated on the effectiveness of information slides created through pre- and post- assessments. Furthermore, educating staff is low cost due to little to no materials or extra resources. The education for CNA staff will also be combined with an “Activities That I Enjoy...” checklist for each individual resident in the care facility with the medical diagnosis of dementia. All items on the checklist are techniques supported through evidence-based research. A checklist will be placed inside the door of the select residents. The sheet will not contain names due to HIPAA, but the identifier at the top of the checklist will include room number and bed number . The objective of the checklist is

to provide a set of de-escalation techniques that can be tailored to fit the needs of each individual resident. Education and intervention checklists are cost and time effective for staff. When staff is educated on different non-pharmacological de-escalation techniques and the therapeutic effects of the various techniques it creates an environment that fosters quality of life for the residents and promotes a decrease in caregiver burden (Staedtler & Nunez, 2015).

After coming up with the most efficient and effective solution, a PowerPoint slide show was made that included information on signs of agitation, figuring out the root cause of agitation, how to respond to an agitated resident, and de-escalation interventions. We also explained how crucial it is to de-escalate agitated residents in order promote staff and patient safety. The resident Checklist was explained to the CNA and nursing staff. Markers are used to check activities on the list. Staff working with the resident can refer to the checklist, if the resident starts exhibiting behaviors. Partners within the implementation of the quality improvement project were the nursing staff, mainly the DON of Belgrade Nursing Home. Resources included finding a computer and projector in order to present the PowerPoint to CNA staff. The ADON was utilized to figure out a time to present to the most amount of CNA staff as possible. Before the presentation there was a pre-test to see how much previous education the CNA staff has had working with patients diagnosed with dementia. The post-evaluation was included within a case-study that each staff member worked through after the information presented. The evaluation questions ask about signs of agitation, root cause of agitation, what interventions should be used, and future prevention of agitation. The evaluation form was based on specific learning outcomes established before the presentation.

Execution and Evaluation

After working with the DON and other RN's at Belgrade Nursing home, the buy in for non-pharmacological de-escalation techniques for alzheimer's and dementia patients was better than expected due to the high number of dementia and alzheimers patients, which is 22/39 of the residents. A goal of Belgrade Nursing Home, as well as state policy, is to follow the gradual dose reduction policy, which is to ween all residents off of anti-psychotropic medications or at least attempt to reduce the dose. This made it easier for the RNs and DONs to buy into this change. This change would not only make the quality of life greater for the residents but the goal of achieving the gradual dose reduction policy for nursing facilities would be met. The CNA staff is the primary group we directed our quality improvement project towards because they are the ones working with the residents closely on a day-to-day basis when performing cares.

After planning with the DON, we were set to present about alzheimer's and dementia including de-escalation techniques at a staff meeting inbetween the day and evening shift on April 11th. The DON said attendance is not always a priority for the CNAs but we actually had seven staff members and the DON come to the presentation. When planning this education session we talked with the DON about how to do the teaching. She told us to make it simple, and to keep in mind that most of the CNAs do not have higher than a high school education. We appealed to the CNAs in attendance by first teaching them the basics about dementia and alzheimer's using a power point. Throughout the power point we asked the CNA's to offer personal suggestions for helping with de-escalation and what has worked with specific residents from their experience. Using the information, we instructed them how to use the laminated de-escalation check lists that will be on the residents' doors and how to add on personal ideas as well. We stressed how important it is to share experiences with other staff to keep each other safe in addition to keeping the residents safe. After we completed our teaching, we gave the staff

members a case study to evaluate the effectiveness of our teaching. It included a scenario where a resident became agitated and asked the following questions:

1. What signs of agitation is Mr. Aponi showing?
2. What is the cause of Mr. Aponi's agitation?
3. What deescalation techniques would you apply?
4. How could you prevent Mr. Aponi from getting agitated in the future?

The objective for this evaluation tool was for the CNA staff to use the knowledge they have gained through our presentation and personal experience to answer the questions correctly. Time was allowed for them to complete the case study individually and then it was discussed with everyone as a group to collectively share answers and further the education. After reviewing the case studies, the post-evaluation showed that the CNA staff was able to identify signs of agitation, the cause, de-escalation techniques, and how to different approach a situation after agitation occurs. All answers were sufficient and included the signs, causes, and techniques that were included in our educational powerpoint. The staff participated when asked what de-escalation techniques they use to redirect residents. The DON was able to participate in the education session and is going to help with keeping the staff motivated. She is able to do this because she is on the floor checking in everyday. The smaller size of the facility allows her to spend some of her day checking in and making sure the standards of care are being upheld. Two of the student nurses hung the checklists on each door and label them by room and bed number, making sure to not include any names or violations to HIPAA. They were able to talk to staff and residents about de-escalation techniques that work for each individual resident.

One way to improve the effectiveness of our quality improvement would be to incorporate discussion of the checklists with families so that they can have input on the various

de-escalation techniques that would work best for their family member. This was not plausible for us in the time frame and schedule we had, but in the future it would be beneficial for the staff and residents to involve a family discussion.

The doors cards seemed to show improvement with agitation and relationships with residents and staff. Each resident with dementia received an activities sheet. After implementation of this tool, fifteen out of twenty residents have had the checklist filled out regarding the activities that he or she specifically enjoys doing. Resident interviews showed that they felt a deeper connection with staff since nursing assistants had a better understanding of what each specific resident likes to do. In addition, a resident explained that, "I see new faces all the time". Each resident that was provided this tool was very engaged when filling it out and it led to conversation where it demonstrated relaxation for the individual. Evaluating this information has made it easier to conclude that this tool can assist with continuity of care and improve personalized care for each resident at Belgrade Nursing Home.

When interviewing staff, this was also apparent where it was an easy tool to use and new staff were able to establish a relationship quicker through this checklist. The checklist was not used as much with long term staff members since these nursing assistants know what each resident likes or does not like. With new employees, it served to be helpful when experiencing agitation in certain residents. This tool is to be used after basic needs have been met and no other techniques are working such as reapproaching or distraction. Overall, this checklist has served as a way to get to know each resident better while reducing agitation.

Conclusion

The prevalence of dementia among nursing home residents is an area of concern considering the exponential growth rate of the geriatric population. Dementia, as a part of the

aging process, is difficult to control or prevent. However, symptoms and behaviors of dementia, such as agitation and aggression, can be managed with the appropriate resources. For Belgrade Nursing Home, it was determined that agitation among its dementia residents, is a concern for the safety and well-being of the residents as well as the staff. During the time in the facility, an educational intervention regarding non-pharmacological techniques for de-escalating agitation was implemented. In addition checklists indicating residents' preferences of interventions were hung in each of their rooms. It was determined, through staff evaluation and survey, that the certified nursing assistants had not received adequate education about residents with dementia. Following the implementation of a powerpoint educational session, the certified nursing assistants were asked to complete a case study in order to evaluate if they retained the presented information. It was determined that the educational session and discussion was effective because the staff adequately answered each question. Each staff member that attended the meeting understood that it is possible to reduce agitation in dementia residents through the use of evidence-based non-pharmacological interventions.

References

- Assad, S., Ghani, U., Sulehria, T., Mansoor, T., & Ameer, M. A. (2017). Intensive care unit psychosis-sundowning: A challenging phenomenon. *Indian Journal Of Critical Care Medicine*, 21(2), 112-113. doi:10.4103/ijccm.IJCCM_390_16
- King, C. (2012). Managing agitated behaviour in older people. *Nursing Older People*, 24(7), 33-36.
- Livingston, G., Barber, J., Marston, L., Rapaport, P., Livingston, D., Cousins, S., . . . Cooper, C.

(2017). Prevalence of and associations with agitation in residents with dementia living in care homes: MARQUE cross-sectional study. *BJPsych Open*, 3(4), 171–178.

<http://doi.org/10.1192/bjpo.bp.117.005181>

Lynch, M. (2017). New Alzheimer's association report shows growing cost and impact of Alzheimer's disease on nation's families and economy. *Alzheimer's Association*, 1-3.

Oliveira, A. d., Radanovic, M., Mello, P. d., Buchain, P. C., Vizzotto, A. B., Celestino, D. L., . . .

Forlenza, O. V. (2015). Nonpharmacological interventions to reduce behavioral and psychological symptoms of dementia: A systematic review. *Biomed Research International*, 20151-9. doi:10.1155/2015/218980

Staedtler, A. V., & Nunez, D. (2015). Nonpharmacological therapy for the management of neuropsychiatric symptoms of Alzheimer's disease: Linking Evidence to Practice. *Worldviews On Evidence-Based Nursing*, 12(2), 108-115. doi:10.1111/wvn.12086

World Health Organization. (2017). Dementia. Retrieved from

<http://www.who.int/mediacentre/factsheets/fs362/en/>