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AALNA Section

Caught off guard by covid-19: Now what?

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ABSTRACT

Human beings are social in nature and maintaining social interactions, relationships and intimacy are fundamental needs of older adults (OAs) living in assisted living (AL) communities. Yet, these very basic human needs have been impeded by quarantine mandates imposed by the COVID-19 pandemic.

The socialization aspect offered in AL, allows for an integration of the whole person: body, mind, and spirit and is beneficial in mitigating the development of co-morbidities and negative patient outcomes. Additionally, the authenticity of home comes from the caring interactions provided by an interprofessional health care staff. Utilizing the 4 M Framework, created by The John A. Hartford Foundation and Institute of Healthcare Improvement, the authors describe simple direct bedside interventions of low cost, and high patient-centered value which front-line nursing and caregiver staff can employ to maintain social connections, interactions, mentation, function and mobility among residents they care for, and care about, in AL communities.

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Introduction

Many of the one million older adults residing in assisted living/ senior living communities across the United States, enter to maintain their social activities and physical independence as well as to receive care for medical ailments. Direct care to residents is largely provided by nurse's aides (83%) and less often by licensed professional nurses (6.1%). In some states, such as Pennsylvania, there are no requirements for supervision or provision of care by professional Registered Nurses (RN) to provide needed assessments and health monitoring and to supervise the provision of health promotion or restoration activities, such as exercise and physical activity known to improve health, function, and overall well-being. Additionally, because the AL community is comprised mostly of the old-old, (i.e. persons over age 85) many of

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whom are diagnosed with multiple and chronic health conditions, ranging from dementia (41.9%), arthritis (42%); asthma (6.8%); and diabetes (18.1%) to depression (30.9%)², continuous appraisals and monitoring of their health by qualified licensed health care providers is essential in chronic disease management. Fe Yet, across the post-acute care continuum, national trends show care is being provided by staff who work with work force shortages of RNs, $^{7-9}$ and who lack specialization or certification in in geriatrics and geriatric nursing. 10

Owing to a lack of clinical expertise among the nursing staff and/ or limited access to expert clinicians places front line healthcare staff in a vulnerable situation. Added to this situational context, is the emotional toll of compassion fatigue, 11 physical exhaustion, 12 and the psychological strain/stress associated with caregiving. 13 Further exacerbating this caregiver stress are the acute changes in older adult conditions resulting from contagious diseases such as COVID-19. This then jeopardizes front line staff's ability to provide comprehensive and timely assessment of residents' chronic health conditions.

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Older adults are at risk for not only acquiring additional co-morbidities and high risk conditions in the aftermath of COVID-19, but to also be impacted by the outcomes on cognition and mental health as a result of imposed social isolation. Social isolation stemming from social distancing has been shown to increase the older adult's risk of mortality, especially when the older adult is frail. Due to the lack of social contact with family caregivers and significant others and restricted contact with other residents, older adults in AL are likely to experience: (1) dysphoria and major depressive episodes; (2) psychological stress/strain such as feelings of loneliness or anxiety; (3) reduced mobility/immobility; and (4) functional decline. Moreover, because physical mobility is impaired with social distancing, functional decline is likely, as there is less opportunity for physical activity and exercise. When functional decline occurs, so can deconditioning, further hindering restorative nursing efforts aimed at prevention of functional impairments and disability.

Purpose

The purpose of this paper is to present some practical solutions and best practice recommendations for care delivery which can be implemented by front line staff in their daily care of older residents in their rooms. These best practices are directed at the psycho-social, functional, and emotional needs of older adults. These practices are likely to also be beneficial to healthcare staff as they build on maintaining relationships with residents. The ultimate goal of care in the AL community is to preserve the resident's functional and social independence, quality of life, dignity, and autonomous decision making for self-determination.

Social implications

There is no shortage of information in the literature to support that "humans by nature are social animals" (Aristotle) with social needs, that when met, can, and will improve quality of life, protect against illness, and promote health and well-being. 15 All human beings, regardless of age, share the need to be loved, accepted by their peers, and to feel a sense of belonging to a community, 15 in addition to the need for intimacy; but these social needs become more pronounced as people age. A systematic literature review of 14 studies conducted on the social needs of older people revealed four major themes: (1) diversity of needs; (2) proximity; (3) meaningful relationships; and (4) reciprocity. ¹⁶ Diversity of needs refers to the fact that everyone is different and what an individual needs as they age will depend on their personality, culture, and expectations at that particular time in their life. The social need for proximity, to develop a social support network of relationships with friends and family, is what contributes to "older adults' feelings of safety, comfort, and connectivity". 15-16 Meaningful social relationships not only provide affection, but they give an individual a sense of purpose and respect that is needed in order to maintain one's independence. Finally, reciprocity is about that basic human need to not only receive but to give back, to feel useful by helping others. 15-16

Conceptual framework

Utilizing the Age Friendly Health System 4Ms Framework created by The John A. Hartford Foundation, Institute for Healthcare Improvement, American Hospital Association and the Catholic Health Association of the United States: What Matters Most to Residents, Mentation; Medication and Mobility provides guidance to understanding how healthcare staff can intervene effectively to assist older adults through this life changing event. Increased awareness of the impact of social distancing on social relationships provides an opportunity to examine the current strengths within AL communities and among its healthcare staff to foster an Age-Friendly community. This article highlights best practices as they relate to strengthening social and interpersonal relationships among older residents which can serve to strengthen their baseline mentation, emotional

status, and mobility associated with social isolation from COVID-19. Within the health system or practice setting, the 4M Framework is instituted as a set of recommendations. Thus, at the beginning of every resident encounter, health care professionals ask the older adult: "What Matters most, document it, and share What Matters across the care team, ensuring the care plan aligns with What Matters most". 17

Mentation. Mentation is operationalized within the Age Friendly Health System 4Ms Framework around the prevention, identification, treatment and management of delirium.¹⁷ Delirium is an acute change in mentation which is not only treatable, but more significantly, preventable. Delirium manifests as confusion and disorientation, along with changes in the level of alertness, and waxing and waning from states of hyperalertness to hypoalertness (i.e., lethargy). Because there is a relationship between mentation or cognition and emotional processes, it is important not only to assess the resident's cognition, but to screen for depression.¹⁷ Delivering nursing care interventions directed at mentation involves acknowledgement of all of the factors known to influence mentation from chronic illnesses such as depression, Alzheimer's Disease, Parkinson's Disease, and acute illnesses such as dehydration, infection or myocardial infarction, to adverse reactions to medications and changes in environment.

Nursing staff's knowledge of the resident's baseline mentation is critical as subtle changes in behavior (i.e. outbursts of anger and/or frustration, indicative of hyperarousal states), or increased isolation or function (refusal to engage in normal activities, inability to use commonly used objects which may signal confusion, apraxia, agnosia) can signal delirium. Change in mentation or delirium is a medical emergency warranting immediate assessment by a professional nurse, physician and/or referral to a local emergency department. Because COVID-19 is a highly contagious and infectious disease, any change in mentation among residents living in a high risk community, such as AL, must be assumed to be due to COVID-19 until diagnostically proven otherwise.

Generalized nursing interventions need to promote social connectedness especially during a pandemic when residents are forced to physically distance from their relationships. Interventions to promote mental and emotional well-being include: maintenance of normal and familiar routines; ensuring care is delivered by the same nursing staff; authentic presence, such as sitting aside the resident; actively listening and reflecting with that resident; personalizing the residents' room with familiar items and promoting privacy; choice in participation in activities which can be accomplished in one's room (refer to Box 1). Additionally, staff need to communicate in writing

Box 1. Generalized nursing interventions performed by front line nursing staff to promote mental and emotional well-being.

Activities:

- Develop a plan of activities of interest to the resident at the beginning of each day
- Use activity cards for residents who struggle to articulate interests due to low mood or hypoarousal
- Actively listening to the resident and reflecting through authentic presence
- Communicate in large print writing as the use of face masks interferes with a hearing impaired elderly residents ability to visualize or lip read
- Set aside a specific time to call family, friends, or other residents using iPads. iPhones as available
- Personalize the residents room with familiar items
- Introduce calming activities such as music or art
- Engage in an activity of interest to the resident at the bedside, i.e. drawing or writing a letter
- Humming, singing songs with resident which are of interest to the resident
- Communicate in writing as the use of face masks interferes with a hearing impaired elderly residents ability to visualize or lip read
- Report any changes in the resident's mood
 Reference: Adapted from best practices in clinical practice.

using large print lettering on notepads, to use large print signage in the room (i.e., to accomodate visual impairment), and to facilitate identification of resident needs (signage could indicate identification of unmet needs such as thirst, hunger, pain).

Case vignette 1

Mr. P is an independent retired professor residing in AL who became vocal about the conferment to stay in his room. He wrote a letter to state officials in the Governor's Office stating his strong opposition to the room confinement on the basis that it violated his resident's rights and civil liberties. Though his voice was heard by state officials, no action was taken because of the heightened risk for the spread of COVID-19 throughout the community.

Nursing response

In light of the COVID-19 pandemic, there are now many more efforts made to effectively communicate the psycho-social and medical concerns and needs of AL residents so that their voices are heard beyond the AL community. An essential nurse's response is not only to promote and ensure a safe living and care environment for AL residents, but to advocate for their resident rights and civil liberties.

Mobility. Mobility is operationalized within the Age Friendly Health System 4Ms Framework around the assurance that each older adult moves safely every day to maintain function and do What Matters. 17 Impaired mobility can be due to an acute or chronic illness, unwitnessed fall, and adverse effect(s) of a medication or due to a change in mentation which is potentially preventable. Impairment in mobility can quickly progress to a handicap or disability if not appropriately assessed and managed. Impaired mobility manifests as difficulty in ambulation or transferring from one position to another or the need for use of an assistive device suddenly. It is important for nursing staff to regularly assess/evaluate mobility by screening for mobility limitations and to monitor for lower extremity weakness or generalized weakness which can be indicative of the COVID-19 infection. Nursing staff's knowledge of the resident's baseline mobility is critical to early recognition of potentially modifiable causes. Interventions to promote safe mobility and to maintain motion and movement through activity and exercise are provided in Box 2.

Box 2. Generalized nursing interventions performed by front line nursing staff to promote mobility.

Activities

- Move joints through active range of motion with supervision from physical therapy or nursing
- Ensure personal adaptive equipment (cane, walker, wheel chair) is present and assist resident to use
- Movement Teach or reinforce simple movement exercises for in-room, such as morning and evening stretching exercises; if mobility concerns – teach or reinforce chair exercises such as chair voga
- Progressive muscle relaxation supports relaxation and tension/use of large muscle groups
- Consulting with peers about activities that have been successful with other residents
- Slow dancing with resident to music of their choice
- Use of one pound ankle weights to march in place while holding the back of a high rise chair
- Walk arm in arm with resident around room, using assistive deice if necessary
- Encourage resident to take deep breathes to expand lungs and prevent atelectasis (as indicated, if medically approved); use inspirometer at bedside as indicated if medially approved)
- Report any changes of the resident's mobility or falls
 Reference: Adapted from best practices in clinical practice.

Case vignette -2

Ms. T is a spry 85 year old female resident of AL who has resided at the community for about one year. Her primary diagnosis on admission to AL is generalized osteoarthritis of her knees. Her baseline mental status is alert and oriented with no evidence of cognitive impairment. During the COVID-19 pandemic at the AL community she tested positive for COVID and was isolated as required. As she recovered however, Ms. T became so weak she was unable to stand without assistance and required three staff members to help her move from a sitting to a standing position. The AL community transferred Ms. T with her consent to a rehabilitation facility for a short term stay for rehabilitation. She then regained her strength and was able to return home to AL.

Nursing response

Despite the fact that we are in a pandemic and the resident is COVID-19 positive, this case demonstrated that health promotion and restorative practices need to be prioritized by attending to and treating active medical problems such as reduced muscular strength, rather than maintaining the resident in isolation at the AL community.

Discussion

To say that 2020 will be memorable would be an understatement. Many of us, particularly those in healthcare and in positions of interacting with the public, may look back and describe this year of the COVID-19 pandemic as one riddled with despair, death, and dependency with the most devastating impact of this disease seen among the aging community, especially those confined to LTC and AL communities. The end of 2019 leading into 2020 began as something so un-imaginable, starting with world-wide social distancing and isolation; business, travel and life as we have known it coming to a halt; the loss of personal identity (covering our faces with masks and shields); the proscription of customary greetings (shaking hands, hugging, kissing), to the unthinkable legal mandate barring people from being with loved ones during illness, hospitalization and at the time of their dying and ultimate death (being unable to accompany loved ones, friends, pets to the physician's office or visit them while hospitalized, and ultimately not being able to share in communal burial rituals). However, a phoenix emerged from these losses to reveal a transformation from grief and disbelief to a revelation of awareness, awakening, and assessment.

As a society, there was an awakening to the value of family, particularly the inclusion of older adults in our lives. Collectively, we became aware of the importance of a comprehensive hygiene and infection control protocol for everyone, not just for health care providers that is as simple, yet scientifically significant, as handwashing. It became readily apparent that we all need to assess how we go about life and business from an individual, but more importantly, population and public health consideration. From COVID-19, emerged what should have been obvious all along, the need for societal awareness, awakening and assessment of the social needs of all human beings and in particular, older adults, especially those who have moved into an AL community.

According to the United States Census Bureau, in 2018 there were 52 million people 65 and older, making up 16% of the population. 18 10,000 baby boomers turn 65 every day. By 2030 all baby boomers will be 65 or older and by 2034 older adults will outnumber children under the age of 18. 18 These statistics demonstrate that as the population of older adults continues to expand, ensuring their social needs are met becomes paramount for them to remain healthy and "community-dwelling". 16 Though addressing the social needs of the older

segment of society is the 'right thing to do' altruistically, the practical basis for this concern is grounded in economics, because the longer an individual can remain heathy in body, mind and spirit, the less of a burden they become financially and medically on themselves, family and society.

The unprecedented death toll among older adults in our communities due to COVID brought much needed attention to a vulnerable group who, until this pandemic, has been ignored and kept in the dark, particularly those in post-acute care settings. Attention to the socialization needs and the impact of social distancing and isolation of residents in ALs and nursing homes throughout the country has been heightened. This nation's older adults' living in post-acute care settings, were not just separated from society due to their living arrangements, but now were confined to one room. Visitation and contact with other human beings was limited to direct care staff who were now covered with masks and face shields, gowns and gloves, who only entered the room to complete a task and left just as quickly as they entered if the resident tested positive to COVID-19. Even with COVID negative residents there was a reduction in social engagement between residents, staff, family and friends because of state official mandates disallowing gatherings during mealtimes and recreation activities, visitation and community trip that could lead to cognitive and physical deterioration leading to a failure to thrive and increased risk for co morbidities and mortality. Based on state guidelines many of the above mentioned activities were not permitted at all. But as noted previously, the pandemic brought awareness, awakening, and assessment to the healthcare community and to society as a whole, of what can occur to pre-frail and frail older adults who are confined to a post-acute care setting. That has led to the societal and healthcare community re-commitment to the promotion of health and wellness, prevention of disease and focus on healing that studies have shown result when social needs of older adults are met whether living at home, alone, or in AL.

Conclusion

Older adults who move from their home of many years to reside in AL communities do so primarily for: assistance with medications, management of chronic illnesses and access to, and diversity of, social benefits that range from recreational activities and entertainment to dining experiences, excursions and most significantly the forging of new friendships. The health care component offered In AL communities, though important is often subsidiary to the socialization endeavors that are unique to AL communities. This socialization aspect, offered in AL communities, allows for an integration of the whole person¹⁹: body, mind, and spirit. Emotional attachment is often associated with places of socialization within ALs, (i.e. the dining room), that quickly became off limits with COVID. The psychosocial consequences that resulted from the need to initially quarantine and then require social distancing to prevent the spread of COVID, for many led to a sense of loss of place, social isolation, or loneliness which in turn could lead to low mood or dysphoria. Nurse's aides have been, and continue, to provide a quintessential role in ensuring that the social needs of older adults in AL facilities are met, in addition to their valuable contributions as members of the interprofessional healthcare team. Additionally, to hold onto and/or restore their sense of place, older adults in AL describe the authenticity of home that come from the caring interactions provided by an interprofessional health care staff.²⁰

In this article, the challenges within teams working in AL during a pandemic that restricted socialization via quarantine and social distancing was highlighted. A discussion on the 4M framework with its template that provides specific directives to promote a sense of belonging, familiarity with routines and rituals was offered as a guide

to ensure the social needs of older adults living in AL facilities. Results of a literature review of 14 studies that had been conducted to determine the social needs of older adults and how meeting those needs can prevent disease and illness and promote and maintain health was presented. Census statistics on the number of baby boomers over 65 now and in the future was also presented to provide additional evidence and support of why society and healthcare providers must prioritize and ensure the social needs of the older adult population are met. Older adults in AL require interventions that promote cognitive function, decrease the risk for falls, maintain muscle tone, and provide engagement to limit the negative effects of social distancing and social isolation. Simple direct interventions that can be accomplished in light of limited time and money as well as reduced healthcare provider resources in AL can lead to optimum function despite the marked limitation of normal functioning during the COVID pandemic.

References

- National Center for Assisted Living (NCAL) Available on the Internet at: https:// www.ahcancal.org/Assisted-Living/Facts-and-Figures/Pages/default.aspx. Accessed September 21, 2020.
- Harris-Kojetin L, Sengupta M, Lendon JP, Rome V, Valverde R, Caffrey C. Long-term care providers and services users in the United States, 2015–2016. National Center for Health Statistics. Vital Health Stat. 2019;3(43).
- 3. Promoting wellness in older patients. National Institute on Aging Age-Page. Available on the Internet at: https://www.nia.nih.gov/health/promoting-wellness-older-patientsHealth promotion activities improving health and function. Accessed on September 21, 2020.
- Golinowska S, Groot W, Baji P, Pavlova M. Health promotion targeting older people. BMC Health Serv Res. 2016;16(Suppl 5):345. https://doi.org/10.1186/s12913-016-1514-3. Published 2016 Sep 5.
- Lorig K, Sobel DS, Stewart AL, et al. Evidence suggesting that a chronic disease selfmanagement program can improve health status while reducing hospitalization: a randomized trial. Med Care. 1999;37(1):5–14.
- Healthy People 2020. Chronic Disease Management. Available on the Internet at: https://www.healthypeople.gov/2020/topics-objectives/topic/older-adults.
- Manatt Analysis Report: Recommendations to strengthen the resilience of New Jersey's Nursing homes in the Wake of COVID-19. June 2, 2020. Retrieved July 15, 2020 from https://www.manatt.com/Manatt/media/Documents/NJ-LTC-Report_2.
- Harrington C, Carillo H, Dowdell M, Tang P, Blank B. Nursing Facilities, Staffing, Residents, and Facility Deficiencies. 2005–2011. Department of Social and Behavioral Sciences, University of California-San Francisco; 2011. http://thenewsoutlet.org/media/documents/Nursing-Homes/Funding/Harrington-nursing-home-staffing-report.pdf.
- Coalition of Geriatric Nursing Organizations (CGNO). Nursing staffing requirements to meet the demands of today's long-term care consumer recommendations. Retrieved August 10, 2020 from https://www.nursingworld.org/practice-policy/nursing-excellence/official-position-statements/id/nursing-staffing-requirements-to-meet-the-demands-of-todays-long-term-care-consumer.
- National Commission for Quality Long-Term Care. The Long-Term Care Workforce-Can the Crisis be Fixed? January, 2007. Institute for the Future of Aging Services. Retrieved August 10, 2020 from https://americanprogress.org/wp-content/ uploads/events/2007/07/pdf/workforce.pdf.
- Smith, J. Nursing home employees often suffer from compassion fatigue. McKnights Long-Term Care News. June 19, 2012. Available on the Internet at: https://www.mcknights.com/blogs/guest-columns/nursing-home-employees-often-suffer-from-compassion-fatigue/. Accessed September 25, 2020.
- Harrad R, Sulla F. Factors associated with and impact of burnout in nursing and residential home care workers for the elderly. *Acta Biomed*. 2018;89(7-S):60-69. https://doi.org/10.23750/abm.v89i7-S.7830. PMID: 30539935; PMCID: PMC6502144.
- Pristavec T. The burden and benefits of caregiving: a latent class analysis. Gerontologist. 2019;59(6):1078–1091. https://doi.org/10.1093/geront/gny022. PMID: 29659788: PMCID: PMC6858826.
- Hoogendijk EO, Smit AP, van Dam C, et al. Frailty combined with loneliness or social Isolation: an elevated risk for mortality in later life [published online ahead of print, 2020 Jul 23]. J Am Geriatr Soc. 2020. https://doi.org/10.1111/jgs.16716.
- McMaster Optimal Aging Portal. Addressing the social needs of older adults: A contributing factor to their health and well-being. https://www.mcmasteroptimalaging.org/blog/detail/blog/2018/12/05/addressing-the-social-needs-of-older-adults-a-contributing-factor-to-their-health-and-well-being (December 5, 2018).
- Bruggencate TT, Luijkx KG, Sturm J. Social needs of older people: a systematic literature review. Ageing Soc. 2018;38(9):1745–1770.
- 17. The John A. Hartford foundation, institute for healthcare improvement, American hospital association and the catholic health association of the United States, Age

- Friendly Health Syst 4Ms Framework. Available on the Internet at: http://www.ihi.org/Engage/Initiatives/Age-Friendly-Health-Systems/Pages/default.aspx . Accessed September 24, 2020.

 18. United States Census. Available on the Internet at: https://www.census.gov/library/stories/2019/12/by-2030-all-baby-boomers-will-be-age-65-or-older.html. Accessed on line on September 24, 2020.
- Cutchins M. The complex process of becoming at home in assisted living in Graham D. Rowles, PhD, and Marie A. Bernard. Environmental Gerontology: Making Meaningful Places in Old Age. Springer Publishing Company; 2013.
 Morgan Leslie A, et al. Quality Assisted Living: Informing Practice Through Research. Springer Publishing Company; 2011. ProQuest Ebook Central. https://ebookcen-