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"What Keeps Me Awake at Night": Assisted Living Administrator Responses to COVID-19

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Abstract

Background and Objectives: Assisted living (AL) constitutes an important sector of residential long-term care, yet there has been limited research about the impact of the coronavirus disease 2019 (COVID-19) pandemic in this setting. This qualitative study sought to understand the impact of the early stages of the pandemic (February-August 2020) from AL administrators' perspectives.

Research Design and Methods: Semi-structured phone interviews were conducted with 40 AL administrators in Oregon. A stratified sampling method emphasizing rurality, profit status, Medicaid acceptance, and memory care (MC) designation was used to maximize variation in perspectives. We asked eight questions aimed at understanding the impact of the COVID-19 pandemic on their roles and AL residents and their families, as well as AL operations, such as staffing and resource procurement. Audio-recorded interviews were transcribed and analyzed using an iterative thematic analysis.

Results: We identified three themes that characterize AL administrators' response to COVID-19: emotion and burn-out management, information management, and crisis management. Based on their experiences, administrators made suggestions for managing future crises.

Discussion and Implications: Our findings demonstrate the slow-burning but devastating impact of the COVID-19 pandemic in AL communities similar to recent findings in nursing homes. Coupled with the limited resources, perceived external pressures, and the ongoing pandemic, many administrators were managing but not thriving in these domains. AL as a care setting, and the role of administrators, requires more scholarly and policy attention, especially regarding emergency preparedness and response.

Keywords: Leadership, Long-term care, Qualitative research, Assisted living

Background

The coronavirus disease 2019 (COVID-19) pandemic disrupted the lives of nearly every community in the United States, and the world. Older adults experienced disproportionately high rates of mortality and morbidity, especially those residing in congregate settings such as nursing homes (NH) and assisted living (AL) residences, including residential care. Also impacted are employees, including the thousands who lost their jobs and those whose job duties changed significantly in response to COVID-19 policies and protocols. Although research on NH administrators' responses to crises (e.g., virus outbreaks, natural disasters) exists, little attention has been paid to AL administrators' experiences (cf., Peterson et al., 2020).

Impact of COVID-19 on Assisted Living Residents

The COVID-19 pandemic disproportionately impacted older adults and people with underlying medical conditions—especially long-term care residents who account for approximately 40% of COVID-related deaths in the U.S. (Chidambaram et al., 2020). AL communities deserve focused attention because more than 800,000 residents, or one and a half percent of the US population aged 65 or older, live in about 29,000 communities (Harris-Kojetin et al., 2019). Of the estimated 82,105 COVID-19 related deaths reported in long-term care as of September 2020, nearly one third were in AL (Comas-Herrera et al., 2020). Over half of AL residents are 85 and older, nearly one quarter have an average of four chronic conditions, and 42% have a dementia diagnosis (Harris-Kojetin et al., 2019). AL communities are recognized for a social model philosophy (Dobbs et al., 2020) and a staffing model that relies on uncertified direct care workers (Carder et al., 2016), limited licensed nurse roles (Beeber et al., 2018), and families as care team members (Kemp et al., 2013). These resident and organizational characteristics create a context that might make infectious disease outbreak responses particularly challenging (Dys et al., 2021).

Oregon Context

Oregon licenses assisted living and residential care, either of which might be "endorsed" by the state to operate as memory care (MC). Of the 535 AL/RC licensed as of 2019, 293 had a MC endorsement, with a combined capacity for 27,332 residents (Carder et al., 2019). A national survey reported that in Oregon, the largest share (83.2%) of AL/RC were located in metropolitan areas, 89.8% operated as for-profit entities, and 90.1% were Medicaid certified (Lendon et al., 2019). These characteristics informed our sample selection (see Methods section).

During our study period (see Methods section), the Oregon Department of Human Services (ODHS) implemented seven COVID-19 policy updates for AL (see Online Supplementary Material Section 1), illustrated in Figure 1. These included visitation restrictions, on-site technical assistance on infection control, a new mandatory reporting system for resident and staff infection, and a multi-agency support team to support AL communities' information and personal protective equipment (PPE) needs (Oregon DHS, 2020).

[Place Figure 1 near here]

Long-Term Care Administrators

Administrators manage staff and oversee resident well-being and quality of care in both NH and AL, but their job qualifications differ in meaningful ways that can impact their job preparedness and tenure, which relates to facility quality. Nursing home administrators complete a national administrator licensure examination (Trinkoff et al., 2015), while only six states require AL administrators to complete a licensing examination (National Center for Assisted Living [NCAL], 2019). Nearly all states require AL administrators to complete a job training course (Carder et al, 2016).

Leadership turnover is associated with higher staff turnover in both settings (Castle & Decker, 2011; Lerner et al., 2017) and staff turnover has been associated with lower quality of care

and more deficiencies in NHs (Castle, 2005; Decker & Castle, 2011; Kayyali, 2014). Longer AL administrator tenure is positively associated with fewer resident falls and emergency department visit rates (Dys et al., 2020).

Studies have examined the role of NH administrators in managing natural disasters (Brown et al., 2012; Brown et al., 2015; Dosa et al., 2007; True et al., 2020). While relevant, such emergencies do not compare to the scope and magnitude of the current pandemic. Though information on COVID-19 impact and response in AL is emerging (Dobbs et al., 2020; Peterson et al., 2020; Shippee et al., 2020), research to date has not included the perspective of AL administrators. This study aimed to learn from administrators how the pandemic affected them and their communities.

Research Design and Methods

We conducted a qualitative, interview-based study (Sandelowski & Barroso, 2003) using applied thematic analysis (Guest et al., 2012). Between February and August of 2020, we interviewed 40 administrators from diverse AL setting types to collect varied perspectives and experiences (Patton, 1990). Sampling was organized by eight strata defined by rural/urban location, for-profit/nonprofit ownership, Medicaid acceptance, and MC designation, common in AL research (Zimmerman et al., 2003). A stratified random sample was drawn from all Oregon AL (N = 529). We began recruitment in communities with the lowest reported positive COVID-19 cases, then proceeded with AL that reported positive cases.

We contacted 129 administrators and completed 40 interviews after attempting to reach administrators up to six times, for a response rate of 31%. Community characteristics of responding administrators matched closely that of Oregon AL (Carder et al., 2019), in terms of the share of Medicaid (75.0%, n = 30), memory care (42.5%, n = 17), and urban (57.5%, n = 23) facilities (see Online Supplementary Material Section 2). We oversampled not-for-profit facilities 35% (n = 14) since proportional sampling of the estimated 10% of this setting type would have resulted in too few

to reach saturation. We theorized that having at least 10-15 administrators in each strata would achieve saturation (Guest et al., 2006), and confirmed during analysis that no new themes emerged from later interviews. While it is possible that additional interviews could have revealed new themes or subthemes, the high quality of the data, relatively narrow scope of the study, and clear nature of the topic (Morse, 2000) suggest our sample size was more than adequate to reach saturation. A semi-structured interview guide developed by the study team included eight questions that focused on how the pandemic affected the administrator's job, staffing, and residents and their families as well as licensing agency policies (see Online Supplementary Material Section 3). The guide included follow-up prompts for consistency across interviewers. However, interviews are still shaped by the way each interviewer asks questions (e.g., tone, emphases) and responds to participant statements. The team discussed the content of the interviews and any variation in the order and content of questions in weekly meetings. Transcripts were reviewed by multiple project members and no notable differences were found between interviewers.

Interviews were recorded and transcribed using Otter.ai (Otter.ai, 2018), a speech to text transcription application. Project team members reviewed and edited the Otter.ai files for accuracy and formatting, then uploaded transcribed interviews to Atlas.ti 8 for qualitative analysis.

We conducted a thematic analysis using an iterative process common in qualitative studies (Fereday & Muir-Cochrane, 2006; Guest et al., 2012). This method seeks to present study participants' experiences in an accurate and comprehensive manner (Guest et al., 2012). Two team members (authors 3 and 4) inductively developed codes after reading several interview transcripts. They created a draft codebook and applied codes to two transcripts, clarifying code definitions as needed. For example, defining the application of "staffing" and "direct care staff" codes so that "staffing" applied only to discussions about staffing levels, retention and turnover, rather than general mentions of direct care staff. The team collapsed codes that were similar in concept or frequently used together; for example, "caregiver personality" was merged into the broader code of

"personal character," which described how administrators' personalities impact their success. The coding team consisted of four researchers (authors 3, 4, 6, 7) who conducted the interviews.

After initial coding, we used an iterative process to combine codes into overarching themes, updated theme meanings, and reviewed connections within and across themes. Using this process, we found that rules aimed at controlling infection of COVID-19 intersected with resident socialization with other residents and family visitation which reportedly lead to substantial decline in resident wellbeing. We examined how facility-specific characteristics (i.e., urban/rural, Medicaid, memory care, profit status) intersected with participants' pandemic experiences. We sorted responses by facility location to consider how rural location might influence access to PPE and attitudes about COVID-19 policies. During the final analytic stage, we looked for connections across codes and identified interview quotes that comprehensively captured multiple aspects of a theme. Some quotes are lightly edited for ease of reading (e.g., removal of "you know" and repetition of key words or ideas).

Study rigor was addressed through weekly team meetings to discuss on-going data collection (sampling and interview questions), early code development, and data analysis. We initially coded two test interviews, clarifying definitions and code applications, and resolving differences, as needed, before coding all transcripts (see Supplementary Material Section 4 for code list). Atlas.ti software was used to track coding decisions, providing an audit trail. The study team (all authors) met monthly to discuss emerging themes and data saturation.

Findings

Based on interviews with 40 AL administrators, we identified three primary themes related to managing the COVID-19 pandemic: 1) emotion and burnout management among administrators, as well as staff, residents and their families; 2) information management, including communications and documents received from state and national agencies; and 3) crisis management, including infection control measures and personal protective equipment (PPE) access. Management is used here broadly to describe both how participants felt (e.g., managing feelings) as well as management in the organizational sense (e.g., doing tasks). Variability in the three themes included community characteristics such as urban/rural location, profit status, dementia care, local and non-local factors that affected AL administrators' experiences such as state and national guidelines, and support from others.

Emotion and burnout management

With few exceptions, the COVID-19 pandemic exacerbated existing pressures that administrators faced by adding new challenges that left many feeling emotionally overwhelmed and overworked. As one administrator said, "[The pandemic] has really flipped our world upside down." Within this theme, there were three subthemes: managing personal emotions, employees' emotions, and the emotions of residents and their family members.

Managing personal emotions. Feeling responsible for the safety and health of both residents and staff during the pandemic weighed heavily on administrators. "Making sure that no one's gonna die from COVID in our building" was a consistent burden that made them anxious, lose sleep, become physically ill, and feel burned out. Some had thoughts of leaving their jobs. The words of one administrator captured the emotional weight shared by many others.

> The gravity, especially right now, how many souls I'm responsible for, especially with COVID, and the fact that the virus could rip through our building and kill half of our people and then

infect our staff and they bring it home to their families. Those are things that keep me awake at night.

These fears were heightened for some administrators located in regions of the state that reduced community restrictions in the late spring of 2020. For example, an administrator interviewed at the end of May expressed concerns that staff and other visitors would have increased exposure when local businesses reopened, saying,

> How do we keep our residents safe at this point when life is trying to get back to normal for everybody else, but it doesn't change the vulnerability of my residents?

Despite the immense COVID-19 related responsibilities experienced by administrators, some reframed the pandemic as motivation to provide a high quality of care and to ensure resident safety. One said,

> It's really very challenging and I am struggling right now because of this pandemic. But at the end of the day, I consider it as a reward. If I satisfy the residents, I make sure that they get the proper care that they deserve, then that is rewarding for me.

Managing employees' emotions. Administrators described new responsibilities emerging during the pandemic, including managing their employees' emotions, especially fear of COVID-19 infection. An administrator interviewed in late June said, "We lost some staff because they were scared to work when this started, so there were staffing issues."

Despite the emotional toll of the pandemic, administrators described staff who responded positively and effectively to challenges. Staff worked to "switch gears" when policies were updated, promoted infection control processes, and distracted residents from focusing on the pandemic or not being able to see relatives. Some staff turned social distance measures into quality one-on-one time with residents, getting to know them better, and improving their understanding of resident's individual needs.

Managing resident and family emotions.

> Families have been... it's been difficult on families. They've had a really rough time. Lots of tension. The residents have had a very, very, very difficult time. It's all been very difficult.

By mid-March of 2020, state guidelines permitted only essential medical and emergency personnel and visitors to residents at the end of life. Administrators believed that the lack of in-person social support from loved ones led to noticeable decline in residents' physical, mental, and emotional health, expressed through agitation, fear, cognitive decline, confusion, depression, and lowered quality of life.

Additional infection control measures limited social interactions among residents, canceling social events and group dining. As with visitor restrictions, administrators explained that the lack of social interaction negatively impacted resident well-being. Some AL facilitated window visits and virtual visits, but with limited success, as described by an administrator interviewed in early June,

> We're doing an activity where they open their apartment door and basically participate from their doorway. We've had lots of window visits with families. We've been doing Skype and FaceTime and that kind of stuff to help keep them connected, but they really miss socialization and even to be with their table eating three meals a day. I had a resident say, 'I miss the people at my table. I miss coming down to a meal together.' I mean, just the things that we all really took for granted. They're scared and I get it.

Some administrators described how residents' pre-existing behavioral health conditions, such as depression, were exacerbated by the loneliness and isolation, as well as how new behavioral health issues emerged. Some residents with dementia were particularly vulnerable to decline, while others were protected from the effects of isolation because they still were able to interact with staff who became the most recognizable people in their lives. As described by a MC administrator,

> Even though our residents have cognitive issues, they still sense that there's something going on because normal people that used to come in all the time, the environment is definitely different. [Doing] visitation on Facebook, FaceTime, Skype, types things is great for the family, but the resident sometimes doesn't understand what's going on, so it can be somewhat confusing for them.

Administrators described residents' family members who expressed fears, worry, sadness, and at times, anger about their relative's wellbeing. Residents' families were accustomed to visiting, hugging their relatives, taking them shopping, and sharing meals. Some administrators spent additional time communicating with family members, including those who doubted the pandemic's severity. Interviewed in late July, an administrator said,

> I get calls probably two or three times a week from families when I'm at home, and they just want to talk. They're so sad and upset and, and I am so willing to do that for them because I'm as frustrated as they are and scared and they want to have details about their loved ones. Many of them don't have access to technology, such as Zoom, or they're old themselves and it's hard for them to do that. So, we've tried as best as we can, but it's really hard on the families, and then I have some families who believe this whole thing is a hoax. I let them know 'you're welcome to take your loved one home. They're not in prison here.' They're angry, frustrated, and I understand it wasn't personal.

An administrator interviewed in early June shared the story of a husband who was no longer able to visit his wife.

> We have a resident that's been on hospice for about three years, and her husband would come in every night at four o'clock and feed her. And now he hasn't been able to come in for a couple of months… And even though she's on memory support and doesn't always know

who she is, who he is, he knows who she is and she was a huge part of his life and it just breaks our hearts.

At the same time, some AL communities maintained normal activities but with social distance measures, as described by an administrator interviewed at the end of May,

> We did the 14-day total quarantine of all residents… Since then, we have not been on total quarantine, in that sense. So, inside our buildings, life is pretty normal. We're still having our exercises. Some of our activities, we had to switch up because we used volunteers to come in and lead some of our activities, and we don't have that anymore. But we have meals together in the dining room, but we have fewer people per table.

Information Management

A second theme concerned how administrators managed seemingly contradictory policies and the level and complexity of new information, about infection control, state and national COVID-19 policies, and related topics. We identified two subthemes: managing policies and information overload.

Managing policies. Most administrators recognized that state health agency staff did the best they could given the circumstances and described the overall response as helpful. Some said that state agency staff visits lacked material support, that policies permitting residents to leave the buildings rendered infection control policies useless, and that COVID-19-related rules reflected an urban-centered perspective, as explained by a rural MC community administrator,

> Definitely feels like someone sitting in a seat or group of people are sitting in a room up in Salem or Portland and not really taking into consideration how those things affect people that work in different areas. As far as being able to source things or finances. One guy said it should be totally reasonable and feasible for us to use this much PPE a day and we're like,

'have you tried purchasing PPE?' So, I think that reaching out to the little people would be more helpful before they start implementing things, but they never did.

Another administrator explained that NH policies did not apply to AL,

Oregon [state agency] made it so that anything put out as [a] nursing home is effective for all long-term care and I don't like it totally. There are a lot of different types of facilities and the way they deal with that we should be dealing with things that are not always the same as what a large nursing home would need to do. But I know they did it to simplify it and to make it easy, and to make it, so that everybody across the board knows, has the same, same regulation, but in some ways I wonder if that was…Not the best way to do it.

Information overload. Tracking, understanding, and implementing current and changing guidance and regulations from local, state and federal agencies added a significant amount of work:

In the beginning, it was just a barrage of information and we could get literally three to four changes in one day. So in the beginning, [keeping up to date with the changing rules and regulations] was silly for probably the first six weeks. Literally consuming, because not only did I have to understand it, but also had to write something that my staff could understand, and with a 24-hour staff, I had to make sure that I had staff that all had access to it.

Administrators described challenges understanding and implementing the state's new infection control policies. During the first weeks of the pandemic, ODHS frequently updated the policies, and some administrators said these updates conflicted with previous policies, making implementation difficult. Over time, ODHS communications became more useful, as described by an administrator interviewed in late June,

[ODHS has been] getting more helpful. One of the challenges with my management company is that [ODHS] was sending a flood of information that then they would contradict

the next day, but they're kind of starting to get their act together. They've had two webinars recently that were really helpful and communicative, and this is where we are now, this is when you can expect to see it, that type of thing.

Most administrators received information from multiple sources, including the Centers for Disease Control and Prevention (CDC), ODHS, local health departments, and senior housing professional organizations. Some expressed concern that the amount of information coming too frequently and from many sources may lead to important details getting lost.

Despite the amount of information, some administrators appreciated the webinars and policy updates, particularly when the guidance resolved their confusion about visitation restrictions and end-of-life care. They appreciated that state agency staff visited to assess their needs, describing it as important to supporting their pandemic response.

Crisis Management

Administrators described several components to managing the crisis, including staffing, infection control procedures, and feeling responsible and prepared. For some, the crisis was moderated by support from executive leaders, including corporate offices, management companies and boards of directors. For instance, administrators described how supportive management improved their ability to procure necessary supplies including PPE and COVID tests, support staff and maintain staffing levels, problem solve and make necessary decisions, and stay up to date on infection control policy. On the other hand, a small number of administrators shared that their management companies and owners were unsupportive, which resulted in administrators struggling to sort through frequent policy updates, procure PPE, and maintain good staff morale.

Adequate staffing was a persistent concern. Some administrators believed that their employees' reactions to the enhanced federal unemployment benefit and new staff hiring protocols exacerbated the crisis. A few blamed staff departures on the enhanced unemployment benefit

provided by the federal government. Hiring new staff, already a difficult endeavor, became more challenging. A state policy requiring new employees to quarantine for two weeks and receive COVID-19 testing complicated the hiring and onboarding process.

Administrators of for-profit facilities described staff "fleeing" the job more often compared to their not-for-profit counterparts. The administrator at a for-profit AL suggested that a combination of the enhanced federal unemployment benefit and motivational factors contributed to their staffing challenges.

> I totally agree that none of my staff signed up to work in the middle of a pandemic. None of my staff signed up to have a crazy virus riddle our country or world that we know very little about, and all that. However, you did sign up to care for the sick [during] the worst, and the best times for them.

In contrast, although the numbers are small, we heard from not-for-profit AL administrators that their staff did not leave during the early months of the pandemic.

A related and ongoing issue described by administrators of both for- and not-for-profit facilities included the challenge of recruiting and retaining staff because of low wages. Several for-profit facilities responded to staffing issues during the pandemic by buying food and meals for staff and their families, using outside staffing agencies, and paying for hotel stays for staff concerned about bringing the virus home to their roommates or families.

Implementing the new COVID-19 policies to keep residents and staff safe consumed some administrators,

> One of the things that for me was vitally important was that every single staff member was empowered to quarantine a resident. Every single person was empowered to quarantine residents if they thought they were sick for whatever reason, no matter how big or how small. And for me that, I mean, that was, that was

bigger than my own life. Big, because that could stop that could prevent, that could save a life and save many lives, and I think about—I try not to get emotional— I think about what it would do to me in my heart if COVID wiped out several of our residents, or our all of our residents because I'm directly responsible.

The intensity of crisis management varied during the first months of the pandemic, with administrators working some weekends and long days, followed by relatively calm periods of time. One described “ebbs and flows” starting mid-March when the no-visitor policy started, followed by “a quiet period” and then a period when several residents became ill, requiring “nonstop” work and “a lot more thinking about, you know, hygiene and safety practices.” This administrator described a new practice of taking residents' temperatures each day and receiving alerts from their electronic chart system if a resident had “abnormal vitals.” Summing up the perspective of many, when asked “how has the COVID-19 pandemic impacted your work as an administrator,” an administrator said, “Oh, every single thing. Every single thing we do is done a bit differently and more time-consuming. Every process has been affected.” Relatedly, some administrators discussed whether they, their communities, and the state licensing agency, were prepared for COVID-19.

Discussion and Implications

We explored AL administrators’ perceptions of how the COVID-19 pandemic affected them and their staff, residents and residents’ family members. The pandemic created a significant number of new stressors across all domains of the AL administrator job. Administrators described finding themselves in a position to provide what can be dubbed “triple duty”: their usual workload being exacerbated by the increased demands of physical constraints, regulatory agencies, and resident families and by the need to accommodate their personal lives during a global pandemic.

We identified three themes associated with COVID-19 in AL that administrators managed: emotions, information, and crisis response. These themes are interconnected and associated, to varying degrees, by community-level characteristics and local, state, and national influences.

AL administrators in our study described considerable emotion management and burnout. Nursing home administrators who experience burnout are at risk of leaving their job (Wilson, 2018). Among essential workers employed during the pandemic, 42% had symptoms of depressive disorder or anxiety, 25% started or increased substance use, and 22% seriously considered suicide (Kamal et al., 2020). Some AL administrators described feeling so stressed that they considered quitting. Many, especially those in for-profit AL, described staff departures. In sum, the mental health needs of AL administrators and staff, including how to retain these employees, deserve attention during and after the pandemic.

Information about the emerging and rapidly changing pandemic impacted many individuals and organizations. In addition to the large amount of information that AL administrators received, they believed that state and federal COVID-19 guidelines were too NH-centered, an observation substantiated by others (Chen et al., 2020; Coe & Van Houtven, 2020). However, some of these and other federal and NH-specific guidelines may not be applicable in AL due to differences in the AL population, staffing, and infection control policies and procedures (Dobbs et al., 2020).

Adequate policies and regulations can provide the level of specificity needed by those responsible for enacting them (Spiller, 1995). Recent regulatory reviews found that states' AL infection control policies were minimal or lacking (Kossover et al., 2014); 31 states' AL regulations required an infection control policy and 13 states had "robust" policies (Bucy et al., 2020). All states require AL to have emergency preparedness plans, but most address only building fires (Carder et al, 2019). These findings parallel the AL administrators' descriptions that they and government agencies lacked adequate pandemic preparation.

Leadership is especially important during a crisis; skilled leaders can imbue staff with a common purpose to meet shared goals (Knebel et al., 2012). AL administrator disaster and emergency preparedness duties include effective communication and preparing evacuation plans that account for residents with mobility, sensory, and cognitive impairments (Yee-Melichar et al., 2011). NH administrators who experienced a natural disaster said that emergency responders abandoned and did not prioritize their needs; they identified substantial challenges evacuating frail NH residents and staffing retention issues (Dosa et al., 2007). Some AL administrators we interviewed felt unsupported, a theme found in a discourse analysis of newspaper portrayals of AL COVID-19 responses (Allen & Ayalon, 2021). Rural administrators felt left out of the policy discussion, similar to those in other states (Crumb et al., 2020). Organizational literature on disaster preparedness and response provides theories to guide future research and policies. Leadership styles (e.g., participative, directive) and management systems (e.g., planning, designating teams) can impact organizational success during crises (James, 2011).

Our findings suggest that states need to bolster administrator training in disaster and emergency response. Including AL administrator voices in state and local disaster/emergency preparedness is important for several reasons. The Centers for Medicare and Medicaid Services did not include NH representatives in emergency planning, resulting in generic evacuation plans that resulted in poor outcomes associated with four separate hurricanes (Dosa et al., 2012). Participation in policy and program planning by those responsible for policy implementation can improve adherence. AL administrators must manage disasters and emergencies, including flu outbreaks, floods, and hurricanes. After our study concluded, wildfires threatened several AL communities, resulting in new wildfire evacuation policies (Oregon DHS, 2020).

Limitations

This study has limitations. First, as with many AL studies, this is a single-state study. Although we included a variety of AL types, we likely missed some variation in corporate, state, and local policies and administrator experiences. Although AL in rural and urban communities, and those with a private pay versus a largely Medicaid population, typically differ in terms of access to resources, we did not find notable differences based on these characteristics in terms of pandemic response. One explanation might be that there has not been enough time in this crisis for such inequalities to emerge. Second, due to the ongoing and dynamic nature of the pandemic, this study is limited to administrators who recounted their experiences at a particular point in time and who were willing to participate. The field may benefit from a longitudinal analysis of administrators' emotional and operational responses to COVID-19, including vaccine distribution to residents and staff. Further, interviews with administrators who departed from their positions during the crisis would provide valuable information given that leadership turnover can negatively impact staff and resident outcomes. Third, the study includes only the perspectives of administrators, and not others involved in the AL arena, including licensing agency staff, executive leaders, staff, residents, and their family members. Additional research examining the unique challenges and perspectives of AL stakeholders could illuminate how multi-level public health responses impact AL settings.

Conclusion

AL administrators play a key role in managing the response to COVID-19, including resident and staff safety, preparedness, and implementation of national, state, and local guidelines. Their burden is heavy and some lacked sufficient organizational support during a crisis. Administrators need to effectively communicate with diverse audiences, including residents (some with cognitive impairment), family members (experiencing grief and/or anger), staff (fear, refusal of vaccinations), and their own executive leadership and state agents. This qualitative study indicates that more

needs to be known about AL administrator training and preparedness and the effect of emergency and disaster policies on their tenure and turnover, as well as staff and resident outcomes.

This paper contributes to the AL and COVID-19 literature in three primary ways. First, it is one of the first studies to provide insights into the role of AL administrators. Second, it provides details about how the worldwide pandemic affected AL, from the perspective of AL administrators, with implications for future emergencies or disasters. Third, it includes recommendations based on administrators' first-hand experiences.

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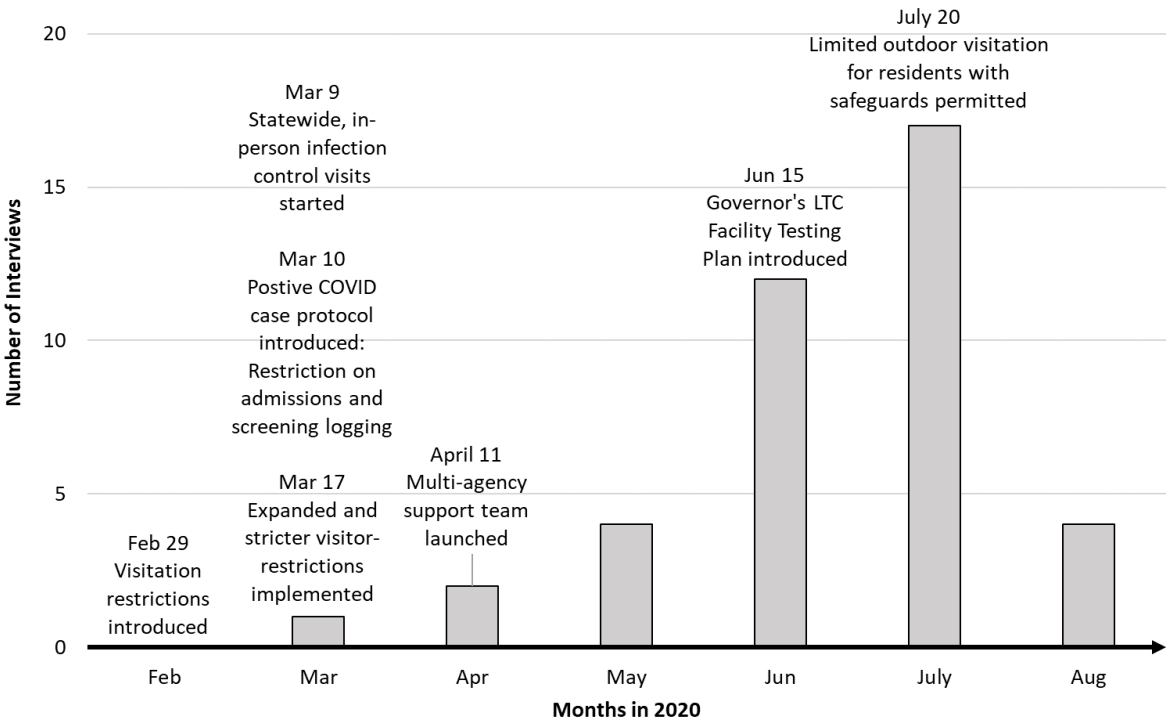
Figure 1

Timeline for State-Level COVID-19 Policy Updates for Assisted Living (AL) and AL Administrator Interviews



Note. Dates and policies retrieved from https://www.oregon.gov/DHS/COVID-19/Pages/LTC-Facilities.aspx. COVID = coronavirus disease; LTC = long-term care.