Highlighting the Impact of Inequities in Nursing Homes during COVID-19: An Expert Discussion

Part II of II
Highlighting the Impact of Inequities in Nursing Homes during COVID-19: An Expert Discussion
By Adwoa Nantwi, MPH, AFAR Clarence Pearson Fellow in Public Health and Aging

Part II of a two-part of Expert Discussions arranged by AFAR to lend insights on health disparities and COVID-19.

The impact of COVID-19 has been felt particularly in nursing homes across the country. As of January 31, 2021, 125,008 total COVID-19 deaths and 624,782 total COVID-19 cases have been reported among US nursing home residents. As a result, there has been a call for improved nursing home preparedness and infection prevention and control.

To explore what factors have contributed to high COVID-19 case counts and severe outcomes in nursing homes and to suggest steps the aging research community can take to alleviate the burden in this population, AFAR gathered insights from distinguished geriatric practitioners and public health experts.

The experts address:

- **Why is there a higher risk of COVID-19 deaths within long-term care facilities, such as nursing homes?**
  “Social isolation is deadly for older people, particularly for nursing home residents and we need to figure out a way that families can visit and that staff can be working in the facility safely.”
  - Terri Fox Wetle

- **What role does mitigating the risk of COVID-19 spread in nursing homes have on alleviating burden in hospital systems?**
  “The problem is that many nursing home residents are so disabled that they need so much care. The challenge is that because the death rate is so high, there is an element of futility in sending COVID-19 nursing home residents to hospitals.”
  - Richard Besdine

- **What strategies, in the US or abroad, have you seen implemented by nursing homes that have minimized or stopped the spread?**
  “Mobile homes or rented housing to keep employees and residents from being uninfected, which I thought was very innovative.”
  - Mark Lachs

- **What factors contribute to reduced participation in vaccine trials among older adults in nursing homes?**
  “Type of recommendation provided to the older adult is important: Offering the vaccination with authority, e.g., “Today I am going to administer a coronavirus vaccine to you that will protect you and your loved ones from the coronavirus and its related consequences.” as opposed to just saying, “there is this vaccine available if you want it, let me know.”
  - Jasmine Travers
Featured Experts:

Richard Besdine, MD [RB]
Professor of Medicine and Director of the Division of Geriatrics and Palliative Medicine, Alpert Medical School of Brown University; Executive Committee Member - Board of Directors, AFAR

Mark S. Lachs, MD, MPH [ML]
Psaty Distinguished Professor of Medicine, Weill Cornell Medical College; Immediate Past President, AFAR

Stephanie Lederman, EdM [SL]
Executive Director, AFAR

Jasmine Travers, PhD, MHS, RN, AGPCNP-BC [JT]
Assistant Professor, New York University Rory Meyers College of Nursing

Terri Fox Wetle, PhD, MS [TW]
Professor and Dean Emeritus, Health Services Research, Policy and Practice, Brown University School of Public Health; Executive Committee Member - Board of Directors, AFAR
Why is there a higher risk of COVID-19 deaths within long-term care facilities, such as nursing homes?

[TW]: The most obvious answer to me is that nursing home residents tend to be frail and very old. They have multiple comorbidities that put them at higher risk, so there are those individual factors. The next set of factors have to do with that they're living in very close quarters, often sharing a room or having four people in a room. And then the third level. There's been research done by David Grabowski and others that was published recently that the caregivers who provide care to nursing home residents are often themselves at risk that they're living in vulnerable communities, they're living in high density situations. Additionally, social isolation is also deadly for older people, particularly for nursing home residents. We need to figure out a way that families can visit and that staff can be working in the facility safely. Also, because nursing homes pay such low rates wages, many of the staff will work in multiple facilities, which spreads COVID from one facility to the other or take on a home nursing gig where they may be sleeping in their patient's home. This can bring COVID into or between facilities. We talk about systemic racism, but I think that we also have systemic ageism that is putting people at risk. And then we pile on to the vulnerabilities of populations with lower socioeconomic status who've been discriminated against in the healthcare system because of their race or ethnicity and it just compounds.

[RB]: The reason there are so many COVID deaths in nursing homes is that these are the most vulnerable people in our society. You make any minor perturbation with a medication, dehydration or oxygen, and they get delirious. These are people who are balanced on a knife edge, usually, and the grim reaper comes along in its many forms—COVID-19 is a particularly malignant one. Until this past January, I led several programs for Brown University, one of which was the Division of Geriatrics and Palliative Medicine in the Department of Medicine. I'm still doing work with them, so I've been seeing up close and personal, although remotely, the COVID pandemic in Rhode Island nursing homes and it's just horrible. The nurses, nursing assistants, therapists, dieticians and cleaners are very low paid and work multiple jobs, so they become vectors. Not only is there a long incubation period that can be as long as a week or even more before people get sick when they are shedding the virus. In fact, we know that the virus shedding is most abundant the two days before you get sick and that a large proportion of people who test positive, never get sick at all. So imagine the havoc that this reeks in nursing homes.

Nursing home residents are more likely to be hospitalized due to their impairments. What role does mitigating the risk of COVID-19 spread in nursing homes have on alleviating burden in hospital systems?

[TW]: The first thing I will say is that the transmission of COVID-19 goes in both directions. Nursing home residents may bring it to the hospital when they're hospitalized but nursing home residents who come into the hospital for other reasons may actually contract COVID-19 in the hospital. However, the prevalence rates are so high in nursing homes that by mitigating the risk of spread in the nursing home, you also will mitigate the spread to the hospital. In fact, of the broader community, I think it's very important to put into place infection control surveillance measures.

[RB]: None to some is the answer. If you're successful in mitigating spread, then fewer people get sick and are at risk for getting hospitalized. The problem is that this COVID-19 is a nasty virus. The people who get the sickest are the people with pre-existing conditions, with serious chronic illnesses that are pretty far advanced, which describes a lot of how people get into nursing homes. They can't care for themselves at home, even when they're at their optimum health status. If we could stop spread entirely or stop it from getting in the nursing home, which would be mitigation of spread further upstream, then
there would be no nursing home residents going to the hospital. That would certainly be a big help, but the problem is that many nursing home residents are so disabled that they need so much care. There is a challenge because the death rate is so high, that there is an element of futility in sending COVID-19 nursing home residents to hospitals. One of the things we’ve been doing [at Brown] in the department of geriatrics and palliative medicine are frequent goals of care conversations with these residents, many of whom have cognitive impairment, so it has to be the family member. If we did the conversations perfectly and every nursing home resident or family member decided that if COVID is contracted to not hospitalize, stay in her nursing home bed, and die there without a ventilator, rather than living four or eight more days on a ventilator in the hospital, that would certainly alleviate pressure on the hospital and the intensive care unit. Now, that may not be the right thing to do for every nursing home resident so these decisions are made one person at a time.

What strategies, in the US or abroad, have you seen implemented by nursing homes that have minimized or stopped the spread?

[ML]: We think that a lot of the early spread was from asymptomatic people coming from communities where there were hotspots, particularly the direct care workers in nursing homes. [They] are often from disadvantaged communities that have higher COVID cases. While well-meaning, they brought COVID to nursing homes asymptotically, so there were a couple of nursing homes and assisted living facilities where owners paid overtime to employees for them to not go home. They got mobile homes or rented housing to keep employees and residents from being uninfected, which I thought was very innovative. Another strategy is testing because that’s the only way you can get a handle on what is going on.

[JT]: Some strategies I’ve observed are: isolation units specific to COVID-19 or cohorting residents who have tested positive for the virus; restricting nursing assistants and others from working multiple jobs. Some facilities have increased wages so that nursing assistants don’t have to work multiple jobs; increased testing for staff and residents including rapid testing and implementing strict testing protocols; non-traditional nature of nursing homes (private rooms, staff that earn wages that allow them to work one job), e.g. the Green House Model; and providing housing to staff so that they do not need to commute back and forth to homes which increases the spread of the virus.

[RJ]: One of the things that creative nursing homes have tried to do is to limit traffic. For example, what we did was reassign physicians and nurse practitioners. Previously everybody had in the same week, if not in the same day, clinical responsibilities, in: nursing homes, the acute hospital, and in our ambulatory practice. What we did was reassign so that the providers, doctors, and nurse practitioners, were the only ones who went to nursing homes. They didn’t go to several, they only went to one, so that at least our healers didn’t become vectors. That’s what the providers did, but what about all the nursing assistants? There are dozens of them [who work] multiple shifts and floors. What places that have the resources have done is to pay people not to go elsewhere. I’ve read about a few places that have actually provided housing on the premises, have the staff sleep there because these are borderline poverty individuals. It takes a lot of money to pay people double what you were paying last month or last year, but those are some of the things that have been done.
What factors contribute to reduced participation in vaccine trials among older adults in nursing homes?

[TW]: I used to be the deputy director of the National Institute on Aging (NIA), so I’ve thought about this a lot. While I was there, which was now 20 years ago, we started a major trial to look at diabetes prevention. NIDDK did not want to include older people, even though they were the highest risk for developing Type-II diabetes. The reason they didn’t [want to include older adults] was: (1) it was harder to recruit them, (2) they thought compliance would be lower because they were doing a diet, so they were worried that the outcomes wouldn’t show a difference with the exercise arm [of the trial]. We, at the NIA, said we will provide you expertise for recruitment and compliance and keeping people in the trial and will pay to have those people included. At the end of the trial, it turned out that the older people were more compliant and had a bigger benefit. When you’re testing a vaccine, the last thing you want to do is to have people dying or getting sick from your vaccine in the early stages, so [they] leave off people who have comorbidities that might put them at greater risk, like people in nursing homes. People over 65 are at higher risk and [those conducting the trial] knew that people over 65 were having a worse reaction to COVID-19, even if they were healthy. There were a whole lot of reasons that they put forth as protecting the population but it’s like a lot of cancer drugs. They develop with clinical trials and [use] younger populations, but who has the cancer? Older people. As there’s more evidence that the vaccine is safe and effective, we’ll probably see some expansion in the clinical trial [inclusion criteria].

[JT]: Black and Latino nursing home residents are less likely to be offered vaccines such as influenza and pneumococcal vaccines and more likely to refuse these vaccines, below are some considerations:

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<th>Mistrust in Vaccines</th>
<th>Language and cultural barriers</th>
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<td>There is mistrust in vaccines (e.g., there are people who believe the flu vaccine will cause conditions such as autism). But there is also mistrust in the provider and healthcare system among racial and ethnic minority older adults. For example, there is a long-history of mistrust among the black community from mistreatment in cases such as the Tuskegee study.</td>
<td>Language and cultural barriers, as well as poor communication about the benefits of vaccines may impact patients in BIPOC communities. (there is poor knowledge of vaccines among older adults); poor knowledge of vaccines among Americans- this could be related to factors such as health literacy or a general lack of knowledge about the vaccine</td>
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<td>Patients may hold a disbelief in the effectiveness of vaccines. Residents and staff may hold many mistaken beliefs about vaccines, which can decrease their willingness to receive them. They may believe vaccines are ineffective or will cause severe adverse effects. There are also residents’ and staffs’ beliefs that they do not need a vaccine because they are already healthy, negative things patients have heard from friends, social media, or the news which translates to false information and often takes the form of misinformation (drawing conclusions from incorrect underlying facts) and disinformation (the deliberate spreading of incorrect information).</td>
<td>The type of recommendation (hard vs. soft) given by the healthcare provider to the older adult is important: Offering the vaccination with authority, for example, “Today I am going to administer a coronavirus vaccine to you that will protect you and your loved ones from the coronavirus and its related consequence, as opposed to just saying, “There is this vaccine available if you want it, let me know.” Also, unconscious bias in healthcare among healthcare providers and healthcare providers themselves not believing in the vaccines</td>
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In the nursing home environment, the way we handle, for example, the flu vaccine is that the nursing homes get the vaccine from the state of Rhode Island directly. And every resident is offered a vaccine for influenza and virtually every resident takes it. The reason nursing home residents aren't participating in vaccine trials is that the vaccine manufacturers don't want nursing home residents in their trials. They're much higher risk and you have to go to the nursing home. Most people in vaccine trials come to a central place where the vaccine is administered and they are monitored, so [the trial researchers] would have to go out there. Then getting consent [is an issue], since so many nursing home residents have cognitive impairment. There's a whole code of laws and ethics around consent. The nursing home residents can participate in a vaccine trial, but only if there is benefit to them. In other words, they can't give consent to be in the control group for a vaccine. So there are special things you have to do: get Institutional Review Board (IRB) approval for research on nursing home residents. You can do it but it's cumbersome and unless you're doing it exclusively as a nursing home trial, it's very complicated. I would say reduced participation is almost built-in. And to my knowledge, there is not yet, there won't be a trial of vaccines in nursing home residents until there's an FDA approved vaccine as that's essential.

What were important considerations to make as new COVID-19 vaccines will soon be distributed and seniors in nursing homes remain such a high-priority group?

(For more up-to-date information on vaccine priority groups, check out: the CDC ACIP’s Phased Allocation of COVID-19 Vaccines.)

These things are really complex. The first thing that's important is to make sure that the vaccine is effective and safe for nursing home residents. Right now, the testing of these vaccines has primarily been people under the age of 65. The few people over 65 who've been included are people who don't have comorbidities, so anyone with a comorbidity that puts them in a nursing home would be excluded from the trial. What needs to be carefully thought about is “Who's most vulnerable at risk?” and “Who's most vulnerable to actually spread the disease?” I would say that if we have an effective vaccination program that it should focus on elders, but also focus on the staff that are providing care to them and the family members of the older population.

CMS has put structures in place to guarantee and prioritize supply of vaccines to nursing homes, but nursing homes will need to ensure that they have the resources, such as personnel, to deliver these vaccines to their residents. For example, securing the National Guard, volunteers, etc.

I think some strategies to improve access include:

**Education**

- Develop a vaccination plan.
- Train healthcare providers so that they use a presumptive approach when offering the vaccine to every older adult despite their racial, ethnic, or socioeconomic background.
- They should also be prepared to respond to hesitancy about the vaccine with adequate education and materials in the appropriate language. Additionally, staff should be ready to confront myths about the COVID-19 vaccine. Increase patients’ knowledge of the facts. Patients want to know health problems that can be caused by COVID-19, success rates of COVID-19 vaccines, and vaccine-associated adverse effects.
• Take time to listen and answer patients’ questions about the vaccine: You need to find out what is stopping someone from getting vaccinated and deal with that. For instance, if they are concerned that they will get the virus from the shot, you can show them data to counter this.

• Healthcare providers should be knowledgeable of their own unconscious bias when offering the vaccine and how that might change the way they offer the vaccine depending on the resident. Are you not as enthusiastic? Normalizing vaccine use among residents and staff will facilitate a culture of receiving the COVID-19 vaccine in that nursing home.

**Spreading Awareness**

• Improving messaging by having reputable organizations publish clear, consistent, and personally relevant messaging distributed through multiple channels. Messaging should also make clear that the COVID-19 vaccine does not protect against the flu.

• Trusted messengers are vital for countering vaccine disinformation. Staff have the power to correct vaccine misinformation and shape public opinion.

• To help reach minority populations, promotional campaigns/materials should be available in multiple languages, be written in plain language, and feel culturally relevant.

**Teamwork**

• Any division between staff and administrators could result in testing noncompliance, and failure to identify asymptomatic staff could have significant consequences for residents. In-facility and less-invasive testing methods (i.e.-nasal swabs or saliva vs. nasopharyngeal swabs) may help to ensure compliance.

• Talk about vaccination status in huddles, interdisciplinary team meetings: this is where updates can be provided, challenges discussed, and questions answered.

**Address Challenges**

• Recognize potential barriers to access to vaccines brought on by structural racism and the opportunity structures that are limited in specific socioeconomical environments such as income inequality, community resources, and housing.

• For example, counties with greater proportions of black members may experience scarcity of resources and service availability (e.g., transportation, health services), mistrust in the healthcare system among community members, and low socioeconomic indicators (e.g., education, income).

• Moreover, the provision of resources to communities is done through a history of racial bias in which communities of higher proportions of black members generally receive fewer resources. This could play out in the timing of when communities and the nursing homes in those communities receive the vaccines and the availability of services and workers to perform services that are important to vaccine delivery.
Going forward, how can nursing home staff be better supported in their role and what role does research play in identifying and implementing these opportunities for improvement?

[ML]: I think having PPE for those employees is one. Also nursing home staff are at high-risk because they work with COVID-patients, so they are people who I believe should have early access to vaccines if they want them. In our research, we should be preferentially enrolling employees in these vaccine studies because they’re at higher risk and also, come from communities of color. I also think that you can also use this to study the natural transition of COVID because we’ve heard about transmission from restaurants and such; however, with nursing homes, you can carefully contact trace because we know who’s entering and leaving. I think there’s all kinds of scientific opportunities.

[FT]: I have been involved in a research project with Elizabeth White, where we have been interviewing frontline nursing home workers about their experiences with COVID-19 so my answer is going to be informed by those interviews. Even today, it is very difficult to access PPE. Our respondents were reporting coming to work in raincoats, sewing PPE out of shower curtains, and using their masks for two weeks at a time because there just wasn't enough available PPE. We also have interviewed nursing home administrators who said that they had to buy their PPE off the gray market as it wasn't available. One man told a story about going to a truck stop to meet someone to get N-95 masks because they just weren't available anywhere else. That has been a real problem. I think another thing that we want to think about is making sure that there's hazard pay for people who are working under these conditions. We're asking people to risk their lives, but what are we doing in return? I think we should have an adequate sick leave policy so that workers in these facilities, if they're not feeling well, really do stay at home. The final thing is care and compassion. We know many of our nursing home staff and administrators see all these newspaper articles or every night at 6pm [on the news], everybody waves and cheers for the hospital workers being heroes. But the newspaper articles about nursing homes are also all about death pits. They feel that the resources and the praise is all going to the hospitals and they're not getting the resources or the praise and compassion.

[RB]: Higher pay! All of these critical roles of feeding, cleaning, clothing, comforting, and socializing with these residents are absolutely heroic and are usually immigrant, disadvantaged women. Not only do they get unacceptable, outrageously low pay, they get vilified and humiliated often. On top of that, the biggest factor that correlates with quality of nursing home care is staff turnover. If you can keep the same people working with the same residents for the [same amount of time], it's infinitely better. The reason that turnover is so high is that either another company will offer higher pay, or the employee is burnt out. It's really hard and demanding work. There is an enormous body of knowledge, and I'm proud to say that our gerontology center scientists, 30 of them, have contributed to that knowledge about how to reduce staff turnover, how to improve lives, but you can have a fancy break room and give them good snacks, but pay them above minimum wage. Pay them $20 or $25 an hour.

What measures should be taken to improve the quality of infection control protocols in nursing homes?

[FT]: I think that there are several aspects to this. The first one is to have true experts in infection control provide consultations for the nursing homes. They’re required to, by regulation, but often it’s someone who spends a half an hour a week on the phone in the evening. It really needs to be an effective infection control expert consultation. Another one is funding and making sure that you have the appropriate funding to do this. We have, in one of our centers, an expert panel that we meet with and these are actual
facilities that have a lot of private pay and a lot of resources. They were saying that they're sort of scraping the barrel in being able to meet their needs. To do appropriate testing infection control, CMS wanted testing machines sent to all the nursing homes. The nursing home got the machines and there was only one month's supply of reagents and swabs needed to do the test. If you're testing twice a week, then it's only half a month's supply, and it really was a problem. Research is also key because learning about the lower normal temperature or learning about how to prevent spread is important as well.

[JT]: I believe the following measures should be taken:

1. Isolating those with COVID-19
2. Dedicated infection control staff
3. Ongoing training for nursing home staff (nursing assistants, LPNs, RNs, Clinicians, Infection Preventionist)
4. Infection control protocols that are clearly communicated
5. Sharing and implementing best practices
6. Communication about challenges and successes related to infection control
7. Quality Improvement Organizations have been providing technical assistance regarding infection control protocols worldwide
8. There has been some prioritization of nursing homes that are the hardest hit but make sure attention (including resources and supports), are given to nursing homes that have greater proportions of black residents, located in rural settings and are in communities with the greatest COVID-19 burden
9. Nursing homes should be sure to take part in the weekly national training in partnership with CDC.
10. Tailored education that incorporates the most recent lessons learned from nursing homes and teaches frontline staff and management best practices that they can implement to address issues related to COVID-19 is available.

Within AFAR, what potential funding programs do you believe would be beneficial to increasing our knowledge of health disparities through the basic biology of aging or geroscience?

[ML]: There’s so many opportunities. Some of the drugs we’re studying to slow the aging process, also seem to protect against COVID. There’s a drug being studied called metformin that’s been used to treat diabetes. There’s good studies showing that diabetics who happen to be on metformin had lower rates of COVID deaths when they contracted COVID. Understanding basic geroscience and the science of longevity, will yield unexpected and beneficial results in aging. A drug called rapamycin, a drug that has some anti-aging properties has been shown to improve antibody response to the flu vaccine. I think that when we improve the aging process generally, we improve the immune function of people generally. Hopefully that will include susceptibility to COVID, which is an unintended benefit. For example, the space program where NASA went to the moon provided all kinds of things—computers and new science that we never even realized. This is a little bit like that, where investing in basic geroscience will create all kinds of new knowledge. There are larger things to study, such as transmission in the nursing homes and communities, as well as contact tracing.
[SL]: I believe that there are vast opportunities for AFAR to advance the work of tackling health disparities in older adults. Seeking funding opportunities to examine interdisciplinary approaches. Much of the research involving the biology of aging offers a plethora of ways to examine the disparities that we know to already exist. Instead of simply looking at older adults as one population, we can work on stratifying older adults by race/ethnic background to examine what differences exist and offer new ways to mitigate these differences. Within AFAR, it’s also necessary to consider programming and resource materials for older individuals living in urban areas, such as finding ways to stay healthy through activity and diet. In these times, it might even be beneficial to partner with trusted, local organizations in the NY-area to help increase education on the importance of vaccines.
Additional Resources

Abrams HR, Loomer L, Gandhi A, Grabowski DC. Characteristics of US nursing homes with COVID-19 cases.

AFAR Webinar: COVID-19 Vulnerability and Mortality in Nursing Homes: Why Systemic Changes are Needed Now

AFAR Webinar: The Biology of Aging and Our Body's Readiness for COVID-19 Vaccines

CDC: Guidelines for Nursing Home and long-Term Care Facilities

CDC ACIP's Phased Allocation of COVID-19 Vaccines Lachs, MD, MPH and Karl Pillemer, PhD

CDC: Guidelines for Nursing Home and long-Term Care Facilities

Commission for Safety and Quality in Nursing Homes: Infection Control Recommendations

ECHO from the University of Mexico School of Medicine and AHRQ: Free training to nursing homes focused on evidence based-practices to combat COVID-19

The Hill Op-Ed: Want to slash coronavirus deaths? Start (really) caring about long term care by Mark

Issues Briefs for Long-Term Care Quality and Innovation, Brown University School of Public Health

Front-line nursing home staff perspectives on staffing challenges during the COVID-19 pandemic
(White E, Reddy A, Wetle TF, Baier RR)

Nursing home front-line staff experiences during the COVID-19 pandemic
(White E, Reddy A, Wetle TF, Baier RR)

Front-line nursing home staff perspectives during the COVID-19 pandemic: Personal protective equipment (PPE)
(White E, Reddy A, Wetle TF, Baier RR)

State Actions to Mitigate COVID-19 Prevalence in Nursing Homes

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AFAR COVID-19 WEBINARS AND ARTICLES

Like you, the staff and board of the American Federation for Aging Research have been deeply concerned by the rapid impact of the COVID-19 pandemic, particularly on the health of older adults.

The evolving response to COVID-19 calls on insights and talents that AFAR has supported and advanced for 4 decades:

- building and applying the foundation of knowledge on the biological processes of aging,
- understanding how the biology of aging impacts the biology of disease,
- improving care by supporting physician-scientists,
- encouraging cross-disciplinary collaboration, and
- sharing insights from trusted experts.

Now more than ever, the coronavirus shows us, we must remain dedicated to solid science, accurate information, and proactive solutions.

Through webinars and articles, AFAR is working to share the insights of AFAR experts on the relationships between the biology of aging and COVID-19 and the promise of geroprotectors.

Visit www.afar.org/covid-19 to watch and read.