

**An Examination of Health Disparities
in the Aging Population during COVID-19:
A Two-Part Expert Discussion Series**



Introduction and Overview

The current COVID-19 pandemic has served as a major crisis in the United States, particularly for our aging population. Older individuals have been the most impacted by both case and disease counts, which have been exacerbated by several health disparities, particularly race/ethnicity and housing. Such structural differences have impacted COVID-19 outcome severity, testing, and representation in COVID-19 research studies and vaccine development protocols. Driven by AFAR's mission to advance research knowledge in the aging community and integrate strategies to address health disparities within aging research, this two-part series gathers enlightening perspectives from esteemed public health and clinical practitioners from across the country that not only explain the impact of these disparities, but also offers insightful steps toward improved protection of older individuals as the pandemic continues and aging research methods that address these disparities.

This series will have a special focus on two areas of health disparities in populations impacted greatly by COVID-19: Black, Older Adults and Nursing Home Residents.

The COVID-19 pandemic has highlighted many of the structural inequities present within healthcare that disproportionately impact older, Black adults, while a long standing history of medical mistrust affects advancements in vaccine education and public health messaging within this community. Additionally, COVID-19 outbreaks in nursing homes have led to nursing home residents being a heavily impacted population in both case and death counts. Inefficiencies in safety and infection protocols coupled by an overworked, underpaid staff has led to necessary conversations focused on improving the health and safety of this subset of older individuals, many of whom already suffer from debilitating ailments.

This two-part series brings together experts across public health and geriatrics to lend research-backed perspectives while raising important questions. We are grateful for the time and insights they have lent.

It is our hope at AFAR that through this work, we will be able to advance the mission of Clarence Pearson, who was deeply devoted to advancing aging awareness through quality research and compassion. We also hope that this series will not only inform and educate the public on health inequities, but also spark efforts and actions toward advancing health equity in both research and practice.

Stephanie Lederman, EdM
Executive Director, AFAR

Erin Beck, MPH
Strategic Partnerships and Development Manager, AFAR

Adwoa Nantwi, MPH
COVID-19 & Health Disparities Clarence Pearson Fellow in Public Health in Aging, AFAR

Spotlight on How COVID-19 Has Brought Racial Inequities to the Forefront in Older Adults: An Expert Discussion



afar american federation
for aging research

Part I of II

Spotlight on How COVID-19 Has Brought Racial Inequities to the Forefront in Older Adults: An Expert Discussion

By Adwoa Nantwi, MPH, AFAR Clarence Pearson Fellow in Public Health and Aging

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

The COVID-19 pandemic has shed an intense light on many of the health disparities within the aging population given that older adults above the age of 65 have accounted for [79% of all COVID-19-related deaths](#) within the United States. Disparities in race and ethnicity have been directly associated with poor health outcomes as a result of multiple systems that have been built upon institutional racism and discrimination. These institutions foster environments that contribute to a plethora of vulnerabilities experienced by racial/ethnic minorities, such as minimal access to adequate health care, increased stress and disproportionate disease burden. Public health emergencies such as COVID-19 have highlighted the role that racial inequities in resource accessibility have in understanding the distribution of disease rate and burden.

To examine the impact that COVID-19 has had on older Black adults in the US and identify ways in which aging research can become more involved in addressing racial inequities, AFAR collected enlightening perspectives from esteemed practitioners and sociobehavioral scientists.

The experts address:

- **How have comorbidities contributed to the rates of COVID-19 cases, hospitalizations, and deaths observed in Black older adults?**
“Black elders are more likely to be in situations where they’re exposed, more likely to have chronic conditions that come from a lifetime of inequities that leads to high rates of diabetes and asthma, and less access to the resources to fend off the worst consequences.”
– Steven Wallace
- **How do biases among health professionals impact diagnosis and treatment in older, Black adults?**
“By definition, we’re not aware of our unconscious biases, so we have a high level of unconscious biases that may or may not come out. We may be able to overcome that in making recommendations, but it may come out in our interactions with patients and their families.”
– Keith Norris
- **Why is medical mistrust a barrier that impacts the recruiting of older Black adults for vaccine trials and testing?**
“The impact of the Tuskegee study and other histories of medical exploitation of Black people includes misgivings and deep mistrust of doctors and the medical establishment. This makes it extremely difficult to convince older black adults—some of whom were similar in age to those in the Tuskegee study—to be accrued to clinical trials or anything on an experimental basis.”
– Karyn Faber

Featured Experts



Karyn E. Faber, EdD, MPH [KF]

Director of Undergraduate Experiential Learning and Clinical Assistant Professor of Social and Behavioral Sciences, New York University School of Global Public Health



Stephanie Lederman, EdM [SL]

Executive Director, American Federation for Aging Research



Keith C. Norris, PhD, MD [KN]

Professor of Medicine, UCLA Division of General Internal Medicine and Health Services Research; Editor-in-Chief Emeritus of the international journal, *Ethnicity & Disease*; Executive Committee Member of the NKF Kidney Early Evaluation Program (KEEP)



Monique Pappadis, MEd, PhD [MP]

Assistant Professor, Division of Rehabilitation Sciences, University of Texas Medical Branch; Communications Officer, ACRM Brain Injury Interdisciplinary Special Interest Group (BI-ISIG)



Steven P. Wallace, PhD [SW]

Associate Center Director, UCLA Center for Health Policy Research
Professor, Community Health Sciences, UCLA Fielding School of Public Health
Director, Coordinating Center for NIH/NIA Resource Centers on Minority Aging Research (RCMAR)

In the context of racial disparities, how do you define health equity?

[KN]: Health equity would be a state where people from every background have similar access and opportunities to receive societal benefits that are important to health, from education to housing to access to care. Within the healthcare space, [everyone] is treated equitably or fairly. At no time is there a difference of health outcomes based on structured discrimination or structured inequities based on society as a whole or as a healthcare system.

[SW]: Health equity involves eliminating differences between populations and between racial and ethnic groups that are avoidable. Health equity also has a moral component to it, where it's not just avoidable differences, but it's unjust differences. These differences are based on historical inequities, power, and access to resources, where in a more just society, those differences shouldn't be there. The example I give is that just because there's a higher rate of injury among people who do extreme sports than people who don't, that's not an inequity. There's a difference, but it's a chosen difference. It's avoidable by the people who are being injured if they take the right precautions or don't do the sport, but that's not an inequity. The inequity is part of the power differential.

Many diseases such as cardiovascular disease, diabetes, and asthma have a higher prevalence in Black individuals and are COVID-19 co-morbidities. How has this contributed to the rates of COVID-19 cases, hospitalizations, and deaths observed in Black older adults?

[MP]: Such diseases already place Black individuals at an increased risk for multimorbidity, hospitalization and death. Coupled with COVID-19, the symptoms of these diseases are exacerbated. If individuals have poor control of these pre-existing diseases along with reduced capacity or desire to follow appropriate practices to health self-management, they might be less likely to follow public health guidelines to reduce their risks of contracting COVID-19 placing their health at greater risk for adverse outcomes.

[KN]: Among the reasons there are higher comorbidities of these conditions is because of the structured inequities in society that position people to be more susceptible to develop these diseases, both the disease incidence and progression of the disease. If you're in communities and housing situations that are suboptimal, you're likely to have asthma. For many diseases, if you're in an oppressed, discriminated community, you have all these additional stresses, which lead to what's called weathering. People are ageing more quickly, developing more physiologic dysregulation, and having higher levels of inflammatory markers. Once you become COVID-positive and have comorbidities, possibly delayed access to care, this leads to increased hospitalizations. The data suggests that once you're hospitalized, and once you control for comorbidities, mortality is equal across all racial and ethnic groups. Now in addition to comorbidities, age is another risk factor for susceptibility to COVID, so for older Black/Hispanic patients, that confluence of conditions—be related to this underlying weathering that doesn't get captured anywhere on an admission form to the hospital—can contribute to poor outcomes, such as the likelihood of getting COVID.

[SW]: All the epidemiological information suggests that if you have diabetes, asthma, or other chronic conditions, then you're more likely to have adverse consequences for getting COVID-19. If you look at the

infection rates, they are relatively similar across age, so it's the impact of those infections that is the most challenging. The infection rates aren't the same across races. Some of the racial differences are due to participation in the essential workforce. African-Americans and Latinos are more likely to live in intergenerational households than whites and more older adults in those households were more likely to be exposed to COVID-19 because family members were more likely to be out working in the community versus working from home. If you're an accountant or a university professor, you can work from home, but if you're a grocery store worker or a delivery person, that's not an option for you. That becomes a higher risk for older adults because of the hybrids of co-residents. Then older adults are more likely to have diabetes, asthma, or hypertension, so that if they do get exposed and they do get COVID-19, it increases the risk for hospitalization and death. Black elders are more likely to be in situations where they're exposed, more likely to have chronic conditions that come from a lifetime of inequities that leads to high rates of diabetes and asthma, and less access to the resources to fend off the worst consequences.

What role does access to healthcare play for COVID-19 outcomes in Black older adults?

[KN]: There is health, which is one's overall wellbeing and there's healthcare, which is the access to and delivery of care. A lot can vary on one's background. At a particular age, particularly if you've been in the United States and working, you have access to Medicare. If they are low income and not eligible for Medicare, then you can be eligible for Medicaid. If you're older and low income, you can be eligible for Medicaid even if you do have Medicare. The challenge with Medicaid, and to some extent Medicare, is the restructuring into Medicare or Medicaid Advantage companies, which are these healthcare entities where there are care providers that tend to be disproportionately lower in communities of color. What insurance gives you is theoretical access to care. For a lot of people, they may be limited to a number of providers and, if those providers are not in their area, then their functional access to care may still be constrained. There are communities who, due to historical and ongoing contemporary mistreatment, have a high level of mistrust, so they may opt to delay seeking care in a traditional, western, allopathic medical setting, which can further adversely impact their care due to delayed diagnosis. There's more parity in access to care and it still may not lead to the degree of equity we would have hoped for because there are still other barriers that exist.

[KF]: Access to healthcare is a major determinant of health outcomes for Black older adults, and this is especially true with the COVID-19 pandemic. The intersectional identities of being black, aged, and poor/low income place them in grave danger of poor outcomes if COVID-19 is contracted. Considering that, on average, Blacks experience lower quality and access to healthcare along with poor outcomes, elderly blacks' hospitalizations and deaths due to COVID-19 are not surprising. The reality is that they are disproportionately impacted by the virus; are hospitalized at higher rates, and are also dying at higher rates compared to other groups.

How do biases among health professionals impact diagnosis and treatment in older, Black adults?

[KN]: There's a lot of literature that supports provider bias as a contributor to disparities in care. If you look at the [Harvard Implicit Association test](#), there's data that shows: the average American has a racial bias that is considered to be on the border of moderate to large, which is not unexpected in this country. Physicians score large and have high implicit bias. The first major report on this was the Heckler Report in 1984, then there was the Unequal Treatment by the Institute of Medicine in 2003 and several other papers along the line that show disparate treatment with racial/ethnic and gender/sex biases among providers. While physicians strongly believe that they are not biased because they're dedicated to do their best for all patients, that's an external belief and position that many may take. By definition, we're not aware of our unconscious biases, so we have a high level of unconscious biases that may or may not come out. We may be able to overcome that in making recommendations, but it may come out in our interactions with patients and their families. There can be microaggressions that can lead to fragmentation of the relationship. As physicians, we do a lot of anti-bias training, but we don't know what happens afterward. I think there are more and better quality. I sense that there's more and more physicians who see this as a good thing. My *a priori* supposition would be there's a higher percentage that doesn't believe racism exists at all.

[SW]: There's plenty of literature on the implicit bias that physicians bring in diagnosis to different groups of people. For example, if you see an older Black person with diabetes, you may ask fewer questions or assume *a priori* that they're less likely to be adherent to medication or less likely to try more physical activity and a diet before moving toward medication on an assumption that they wouldn't do it or benefit from it. They might also assume that those individuals live in a community where it's unsafe to engage in outdoor physical activity rather than actually asking the questions around like, "Tell me about your neighborhood, do you have sidewalks? Do you have parks?" They may or may not, but you don't know until you actually talk to the individual. There's also been research where they've done interesting studies where they would show physicians a video of diagnostic interviews with patients that have the same underlying conditions, just varying by race and gender. Black patients are often recommended different non-evidence-based differences in treatment or follow up from physicians who think they're applying the same medical standards to everybody. Physicians can say, "I treat everybody the same," but when you look at certain scenarios and assess what their treatment plan would be, you find that there really are differences based on unconscious biases.

[KF]: There is a lot of research detailing the effects of health provider biases on the treatment of ethnic minority patients or adults, especially Black adults. Most studies determined that provider bias is highly correlated with interactions between patient and provider, treatment adherence and decisions, and patient outcomes. What's important here is implicit bias – unconscious beliefs, attitudes, or views that influence their judgements about ethnic minorities – which may lead to unintentional but harmful decisions about treatment or the way they practice medicine. These biases, for example, may influence whether a patient is referred to a clinical trial, such that an older Black adult is not told about a clinical study; or pain medications are not prescribed to Black patients compared to whites. Diagnosis and treatment is negatively impacted.

The APHA has suggested key principles to advancing racial equity, some of which include: raising awareness surrounding health inequity, addressing and clarifying the roots of health inequity, and developing empathetic health care approaches and practices to support people of color. How do you address these principles within your research?

[KN]: I'll start with the last. With empathetic approaches, when I lecture on bias and disparities, my focus is to try to minimize disparities and attenuate potential healthcare biases by focusing on being compassionate, empathetic, and caring. If you care about everybody, then that should minimize the level of bias you have and the way you treat people. By humanizing groups that are traditionally oppressed, then that inherently reduces the bias and the discrimination that comes with it. The other one is increasing awareness, which I think is very important. We've previously put into medical school curricula lectures on the social determinants of health, race, racism in health, health disparities, but for many medical schools, the curricula is being redone so that it's not just a separate lecture, but it's actually weaved into everything.

To understand the mechanisms, you need to talk about the mechanisms for each condition when it arises, some of which will be similar and unique. I think those are all important things to do, but I would add one more: having awareness and talking about the underlying problem. With the underlying problems, a part of it is within the direct influence of a healthcare provider, who has biases and different beliefs than what we may bring. The root causes come down to the inequitable distribution of the social determinants of health and the inequitable distribution of resources and adverse consequences of how society is structured. If you understand the need for this work, then you must ask yourself - are you actively looking at institutional and more societal policies, helping to revamp the institutional policies, being thoughtful for who you are voting for, and holding them accountable to move to change societal laws, policies, and practices?

[KF]: In my research, I prefer to incorporate community-based participatory research models, or at the very least, participatory action research models. These frameworks encourage the inclusion, as research partners, of the people who will be impacted by the health initiatives and programs that I plan and evaluate. My goal is to create sustainable programs that are eventually "owned" and sustained by community residents, leaders, and stakeholders.

Why is medical mistrust a barrier that impacts the recruiting of older Black adults for vaccine trials and testing?

[SW]: There's a concept of historical trauma, which involves knowing what's gone on in history. It's particularly discussed among American Indians in regard to genocide and dis-appropriation of territory, while in the Black community, the medical experimentation, lack of concern over safety of health services, and greater likelihood to be in low quality nursing homes. People assume that if you're Black, the medical care system is not going to treat you as well as if you're white. It's logical, given what we see around us and the way the criminal justice system and the educational system treats Black people. So why would we expect the healthcare system to treat them any differently than the other institutions? This is why I think trusted community leaders are so important in getting older Black adults, in particular, to accept the COVID-19 vaccine. Many older, Black adults have lived their lives for 60-80 years and know all the bad things that can happen to and around them. To overcome that level of institutional mistrust and skepticism about medical authorities, it takes an extra effort.

[KF]: The long-standing mistrust of the medical establishment is well-documented, and goes farther than the well-known Tuskegee study that started in the 1930s. The impact of the Tuskegee study and other histories of medical exploitation of Black people includes misgivings and deep mistrust of doctors and the medical establishment. This makes it extremely difficult to convince older black adults – some of whom were similar in age to those in the Tuskegee study – to be accrued to clinical trials or anything on an experimental basis. This breach of trust caused by the medical establishment is a difficult one to overcome. But what should happen is 1) continued acknowledgement by the medical establishment of the medical abuse and atrocities that have happened for centuries, even before the well-known Tuskegee study, and 2) the medical establishment must provide honest, accurate, and up-to-date information to the Black community—including older adults—about the vaccine and how it was developed.

Once a COVID-19 vaccine is approved, how can we best provide public health messaging and educational tools to improve vaccine adherence among older Black adults?

[MP]: Due to media coverage, older Black adults are becoming more aware that the Black community has been impacted negatively by COVID-19. They will have reservations about getting a vaccine for fear of not having enough evidence to prove its effectiveness. Public health messages and educational tools should be developed in partnership with members of the Black community (if they are your target population). Messages should be easy to understand and well balanced with positive (i.e., the direct positive impact of the individual being vaccinated along with how one person vaccinated can positively impact a community) and honest, negative consequences (i.e., any potential adverse events associated with the vaccine).

[SW]: I think it is probably the biggest challenge. I think the most important messaging is to get people in the communities where you're trying to get uptake, who are trusted by people in those communities to be on TV or Facebook getting the vaccine. It could be your pastor, an entertainer, or even the mayor. It should be whoever it is in that the community, where people say, "Oh, she or he is doing it, so it must be okay." or "If he or she is telling me this is important, then it must be believable." You need to figure out who the most trusted individual is in the local community because, it's one thing to have an image of

somebody on TV, but if it's somebody who you've had interaction with before or know from experience is trustworthy, then I think that has a much higher likelihood of uptake. Also, the best vaccine would be a single dose, highly effective, and, to administer, you go to where the people are. You don't make people go to the hospital, but rather you go out into the community and give it, whether it's in schools, churches, barber shops, or the grocery store, you have to make it easy for people.

What are effective and ineffective strategies for improving COVID-19 vaccine education among older Black adults?

[MP]: In older Black adults, I believe that:

Effective strategies include:	Negative strategies include:
<ul style="list-style-type: none">• Messages from older Black individuals who are from the community that is being severely impacted by COVID-19.• Personal stories from those who were hesitant but then decided to get vaccinated and why they chose to do so.• Messages that communicate the importance of a vaccine to the individual, their loved ones, and the community.• Communicating whether the vaccine is affordable and accessible to all.• Educational workshops or community groups with medical professionals as well as individuals within the community to get questions answered.• Using community organizers to share the message and work as a collective.	<ul style="list-style-type: none">• Only targeting vaccine education to the Black community (in other words, the Black community is tired of feeling like they are guinea pigs to the science community).• Including too much statistical data to make an argument of its importance.• Including individuals who are not relatable in images or other educational communications• Not using simple and targeted message approaches.

What are immediate research priorities to explore and address racial inequities and what recommendations do you have for ensuring this research is translated into practice?

[KN]: What we have is a lot of descriptive work on disparities because that's easier to do. A lot of our work is done by clinical guidelines and algorithms, so we need to evaluate those, cause some of those will have race or gender in there. There could be good reasons why they're in there, but we need to go back and see: (1) Why it was there and what was the foundation for putting it there?; (2) We do epidemiological studies, but how does that translate and how reliable are those numbers at an individual level? Our whole practice is saying what happens to the whole and applying that generality to the individual, which may have no relevance at all to that individual; (3) Does having that character, via racial/ethnic background or sex as a distinguishing characteristic in a clinical guideline, help or hurt a group that is at greater risk? If it's hurting, then we have to ask, "why is it there?" A lot of times, they get put in there because we see disparities by race/ethnicity and sex and we include them because they're important and we need to control for them. There may be other things that need to go into a formula with them, many of which we can measure and many that we can't measure (e.g. discrimination), which may not go into the development of those formulas. We put it there and say the issue or the problem is that "this person is at an increased risk because of their race." We end up saying, "What's wrong with that person or these people?" rather than saying "Because of their race, society has placed them in this situation" and instead of asking "What's wrong with that person or these people?," we should be asking "What did we do to this person or these people?" If you ask that question differently, that brings with it a different sense of empathy and compassion immediately because now there's a sense that some harm has been done to this person or these people that makes you feel more empathetic vs. fulfilling an existing narrative of inferiority, so it's a lot easier to not be empathetic or compassionate.

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



afar american federation
for aging research

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



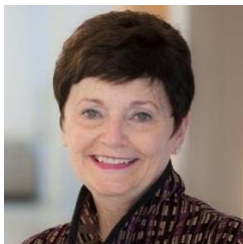
Stephanie Lederman, EdM [SL]

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.

[RB]: 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:

Mistrust in Vaccines 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.	Language and cultural barriers 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
Perceived need/severity 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).	Provider Recommendations 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

[RB]: 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.)

[TW]: 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.

[JT]: 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 socioeconomic 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

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.

Additional Resources

[African-American older adults and race-related stress: how aging and health-care providers can help](#)

[Chapman EN, Kaatz A, Carnes M. Physicians and implicit bias: how doctors may unwittingly perpetuate health care disparities. J Gen Intern Med. 2013;28\(11\):1504-1510. doi:10.1007/s11606-013-2441-1](#)

[Confronting Ageism, Racism, and Abuse in Later Life During COVID-19](#)

[Green AR, Carney DR, Pallin DJ, et al. Implicit bias among Physicians and its prediction of thrombolysis decisions for Black and White patients. J Gen Intern Med 2007; 22:1231-1238. doi: 10.1007/s11606-007-0258-5.](#)

[Institute of Medicine. 2003. *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/12875>.](#)

[Report of the Secretary's Task Force on Black & Minority Health \(The Heckler Report\)](#)

[Sabin JA, Nosek BA, Greenwald AG, et al. Physicians' implicit and explicit attitudes about race by MD race, ethnicity, and gender. J Health Care Poor Underserved 2009; 20\(3\): 896-913. doi: 10.1353/hpu.0.0185](#)

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.