

## Original Research

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# Coping With Disasters and Pandemics Through Experience and Community: How African American Older Adults Navigate Disaster Planning, Response, and Recovery

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## Abstract

**Objective:** Studies have reported that minorities are disproportionately impacted by the COVID-19 pandemic. Few studies have elucidated the lived experiences of African American older adults, and the resiliency displayed in combatting the COVID-19 pandemic and other disasters.

**Methods:** This study used 4 recorded focus groups with 26 African American older adults who have spent most of their lives living in Houston, Texas to assess safety, economic, and health concerns related to the pandemic and similarities or differences with other types of disasters that are specific to Houston/ the Gulf Region of Texas, such as Hurricane Harvey.

**Results:** Key themes emerged from the thematic analysis: 1) previous disasters provided important coping and preparation skills, although each occurrence was still a major stressor, 2) while telehealth was a significant benefit, regular health maintenance and chronic disease management were not completed during the COVID-19 pandemic, 3) information from the federal and state authorities were inconsistent and spurred fear and anxiety, 4) participants experienced few to no disruptions to their income but were heavily called on to support family members, and 5) participants experienced anxiety and isolation, but many used existing social connections to cope.

**Conclusions:** These findings demonstrate how African American older adults navigate disaster response and recovery through experience and community. Providing unambiguous information to older adults could prove useful in preparing for future disaster events and coping with disasters.

## Introduction

Natural disasters, such as pandemics, may have non-human and non-biased origins but their effects are unequally distributed amongst those with limited autonomy and power, and those with lower levels of social capital.<sup>1,2</sup> Certain groups, such as the poor, racialized groups, and older populations, are more vulnerable to the consequences of disaster events.<sup>3</sup> While individuals in these aforementioned groups may live unique lives from 1 another, the dynamism caused by demographic intersections may affect individual levels of vulnerability.<sup>4</sup> For instance, African Americans experienced higher mortality rates than Whites during and following Hurricane Katrina, but interactions among age, gender, and evacuation status resulted in disproportionate fatalities among African American men over the age of 75.<sup>5,6</sup> Since the onset of the coronavirus pandemic, African American and Latinx older adults have been disproportionately affected, experiencing an excess 8.4% COVID-19 related deaths in proportion to their population distribution.<sup>7</sup>

As the pandemic rages on, there has been a renewed focus on disaster response and coping, especially in vulnerable populations such as older adults. Coping mechanisms are used to help an individual manage demands that are taxing or exceed the resources available to the individual.<sup>8</sup> Coping strategies tend to fall into 2 main categories- active or passive. Active coping methods include more proactive and problem-solving strategies, while passive coping methods are more emotion based.<sup>8</sup> Passive coping methods are more likely to be linked to a negative psychological state, as was seen within survivors of Hurricane Katrina.<sup>8</sup> Supportive social networks prove helpful with coping during a disaster, as individuals with supportive social networks are more likely to practice proactive coping methods that lead to more positive psychological states.<sup>8</sup> Those who maintained high quality relationships and sought out social support during the pandemic indicated greater success coping with the difficulties presented by the isolation.<sup>9</sup>

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There is also evidence that physical health and religiosity can impact an individual's coping through improved psychological well-being,<sup>10</sup> and social supports to weather the challenging situation.<sup>11</sup>

However, for many, disasters can come in successive waves that impact coping.<sup>12</sup> In Houston, Texas, residents have experienced continued compounding crises from natural disasters, and from the global pandemic. Previous Houston-based disasters include Hurricane Harvey (2017), Hurricane Irma (2017), Tropical Storm Imelda (2019), and Tropical Storm Beta (2020), as well as the global COVID-19 pandemic (2020-2021), and Winter Storm Uri (2021). Older adults bear a different burden in disasters due to varying degrees of vulnerability that include: chronic health problems, disability and mobility issues, special nutritional needs, and isolation.<sup>13</sup> Research has also shown that they are at greater risk for death or injury when these catastrophic events occur.<sup>14</sup> However, the literature is scant on how older adults who live in environments rife with natural disasters cope with crisis and leverage their experiences to improve outcomes. Existing literature on disasters (natural or man-made) have focused on the negative symptoms and impacts. For example, victims of disasters experience a range of disturbances that include health problems, death and bereavement, and property loss coupled with household disruption and financial challenges. However, understanding the positive outcomes of disaster are important.

Using a qualitative research design, this study assessed the lived experiences of African American older adults during the COVID-19 pandemic, the physical and mental anguish experienced, as well as coping strategies used in combatting the pandemic. Research of this nature is not only important for Houston, but also critical for the future of our nation as minority populations are projected to significantly increase by 2060.<sup>14</sup> As the number of Black and Hispanic Americans over the age of 65 increases as a proportion of total population, it is imperative to understand coping in these populations, specifically for communities experiencing successive disasters. Understanding the coping mechanisms employed by African American older adults provides a lens to explore protective factors in the community and opportunities to capitalize on existing community supports to aid in disaster response and recovery.

## Methods

### Design

A qualitative study design employing 4 focus groups were facilitated virtually between February 2021 and March 2021. This approach was selected as most appropriate to achieve the purpose of the study and to understand the unique lived experience of each participant. The development of focus group guides was performed by 3 researchers, who represented expertise in community health, health services research, and community-engaged research. The focus group guide was organized in the following areas of focus: (1) overall experience with COVID-19 pandemic and other disasters, (2) seeking health care services during a disaster, (3) disaster planning, and (4) disaster recovery. The study was approved by the Research Integrity and Oversight Office, Institutional Review Board (IRB) at the University of Houston.

### Eligibility and recruitment

The purpose of the focus groups was to understand the experiences of African American older adults during the COVID-19 pandemic, how the experiences related to previous disasters, and their

methods for coping, preparedness, and response. A total of 4 focus groups were facilitated with participants who met the following criteria: (1) self-identify as African American, (2) at least 65 years of age, and (3) have lived in Houston. Most participants self-identified as lifelong Houston residents (having lived in Houston for majority of their lives). Participants were recruited via email through multiple networks in the Houston community (e.g., faith-based, and social service community-based organizations) and participants elected to participate. Each of the 26 participants received a \$50 gift card for their participation.

### Procedures and analysis

Before each of the focus groups began, participants were presented information about the purpose of the study through an informed consent form. All participants were provided informed consent forms and agreed to participate. Each focus group session lasted 90-minutes and included discussions on participant experiences in disaster planning, recovery, and resilience. The focus groups delved into 4 discussion topics: (1) overall experience with disaster, (2) health care services during the pandemic, (3) disaster planning and infrastructure, and (4) disaster response and recovery.

All focus group sessions were recorded, and extensive notes were taken by a note taker and the facilitator. Following an inductive thematic analysis approach, the notes and recording were reviewed by 2 members of the research team with extensive experience in qualitative data analysis following an established protocol. The protocol followed 4 steps: (1) individual systematic coding, (2) the development of descriptive themes, (3) comparison of themes amongst team to identify agreements and resolve disagreements, and (4) a second review as a team to refine anecdotes and quotes, that served as illustrative examples of the themes. The focus group facilitator was a member of the analytic team.

## Results

Key themes emerged from the thematic data analysis:

### Finding 1: Range of emotions spurred by the COVID-19 pandemic

Participants noted that they experienced a range of emotions at the onset of the COVID-19 pandemic, throughout the majority of 2020, and in January 2021. They reported feelings of being overwhelmed, fearful, frustrated, as well as frightened, panicked, upset, and skeptical about not knowing what would happen next. The participants largely attributed these feelings to the then novel and unknown nature of the virus. Early on, there were varying reports on the virus, how deadly it was, and what precautions were needed.

*'My first concern was getting a clear picture of what we were being faced with. There was confusing information. The authorities were not able to share clear information to communities. We kept waiting for the authorities/media to have a clear idea what we were going to face.'*

A first indicator that the COVID-19 pandemic was a serious concern was the announcement to cancel the remainder of the Houston Livestock Show and Rodeo, popularly referred to as the Houston Rodeo. The Houston Rodeo was cancelled on March 11, 2020, after a new presumptive case was reported at the Rodeo, and there was a suspicion of community spread.

*'When I first heard of the virus, we were at the rodeo with other older adults. There were signs all around that said, 'Don't Panic but We are Fixin' to Shut*

*Down.’ Everybody started looking around and we didn’t really know what to do next.’*

The participants also noted significant concerns related to their age. The daily news conferences about the virus suggested that it was more common among older adults and people with pre-existing conditions. Participants noted that friends and people with whom they were acquainted had contracted COVID-19 and died.

*‘What was frightening, and disturbing was that so many of our parishioners got sick with the virus and some of them passed away. For many of us, we have suffered quite a bit from different illnesses, so we were scared.’*

*‘When hearing the demographics that were most vulnerable to being victims of the coronavirus, I was struck that the 2 groups most vulnerable were my age group and those with [my] pre-existing conditions.’*

Overall, the participants recalled many months of changing emotions due to the COVID-19 pandemic.

### **Finding 2: Previous disasters provided important coping and preparation skills, although each occurrence was a major stressor**

Previous Houston-based disasters such as Hurricane Harvey (2017) and Hurricane Irma (2017) helped provide coping skills for future disasters like the COVID-19 pandemic. Several participants noted that the beginning of the COVID-19 pandemic started like the beginning of Hurricane Harvey with shortage of supplies and reports that a major event was nearing Houston.

*‘Hurricane Harvey was stressful; it forced us away from each other for a while. Everyone was impacted in some way [but] it prepared us (for COVID-19) because we were already in disaster mode.’*

*‘Because [Hurricane] Harvey damaged our church so bad, we were prepared to not meet in person. Once COVID started, my church never missed a mass. We already had a means in place to fulfill our offerings online. We do Mass on a live stream through Facebook Live – and we figured out how to do it on YouTube. We kept moving. We haven’t missed choir rehearsal either.’*

Although armed with coping skills from previous disasters, participants reported that each occurrence is still stressful, but somewhat easier to manage than the previous.

### **Finding 3: Regular health maintenance and chronic disease management were not done or modified during the COVID-19 pandemic; tele-health was a significant benefit**

Participants discussed the impact of the COVID-19 pandemic to their health. Many experienced cancellations of medical appointments including women’s well visits, mammograms, and colonoscopies. They all acknowledged that this was for their safety; however, they noted that their continuum of care was neglected. Most of the participants also reported discovering and using telemedicine for the first time.

*‘I care for my 94-year-old mother. Tele-health visits aren’t the best, but we were able to get her seen by her doctor and that was the most important thing. It was kind of scary in the beginning.’*

*‘I love telehealth! Wish I knew about it sooner.’*

Most older adults mentioned that they did not have previous experience with telemedicine visits but did it out of necessity.

### **Finding 4: Helpful information came from a variety of community sources; information from the authorities was inconsistent**

Participants discussed frustration with information received during the pandemic. COVID-19 information from authorities, such

as the CDC, the White House, and local entities, were inconsistent. Early confusion on whether to wear a mask, stay home, and how serious the COVID-19 virus was, sparked confusion and anxiety. A bright spot for participants was that they were able to get information about COVID-19 from a variety of sources, such as churches and universities, their place of employment, as well as schools, public health departments, and community agencies. A source of disappointment for some participants was having little to no information shared by their primary care provider.

Most participants expressed satisfaction and praise for Houston leaders Mayor Sylvester Turner and County Judge Lena Hidalgo for their leadership and care for the Houston community.

*‘Lena Hidalgo has done double duty in that she will do her whole spiel in English, and then again entirely in Spanish. Mayor Turner and she work well together. I have a lot of confidence as a resident of Houston.’*

*‘Turner and Hidalgo did as well as they could do given the influence they had from the state and national level. It was a wise decision to cancel the Houston Rodeo. To me, they put Texas health ahead of potential financial gain.’*

A smaller segment of participants expressed discontent with how local and state leadership managed the pandemic. They were distressed by the lack of information that was shared early on ‘*from the top down.*’ At the time of the focus groups, the COVID-19 vaccine was being introduced. The participants discussed having similar feelings about the vaccine in terms of the quality of information being provided, rollout, and the safety of the vaccine.

### **Finding 5: Participants experience few to no disruptions to their lives financially; however, they were called to support family members such as their adult children and grandchildren**

Participants lacked financial disruption to their lives; several noted how they saved money by not shopping and driving. However, the hardships brought on by pandemic to their family members, particularly adult children, was significant. Participants helped their children by providing funds in instances of job loss or other financial hardship, childcare, help with homeschooling, and covering bill payments.

### **Finding 6: Participants experienced varying degrees of anxiety and isolation, but many found ways to cope with the isolation through existing social connections**

Participants experienced anxiety for a variety of reasons including fear of the unknown regarding how bad things could become, the uneasiness in not knowing all the details of the pandemic, and the likelihood that themselves or their family members could contract the virus.

*‘I had an anxiety attack just to go to the grocery store. Wiping down stuff when you get home. I was thinking too much about touching things.’*

*‘I was anxious about food because [Grocery store] online was backed up. I didn’t know if I would have food to eat.’*

Participants also discussed their experiences with isolation and loneliness. Most of the participants self-identified as active and social individuals who were engaged in their community. During the COVID-19 pandemic, they were concerned about other older adults who were less mobile, their groups of friends, their families, and their places of worship.

*‘My church is a very social group. So, suddenly being cut off from people all the time was a lot. At the beginning, we didn’t recognize Zoom as a social*



outlet. It was hard. It's still not the same because you miss the touches and the hugs.'

*'The sense of social isolation and hopelessness from both disasters. Water separated me from the people I loved. We knew that [Hurricane] Harvey would leave. We knew rising water would fall. Hurricanes do not come to stay. The difference is that COVID doesn't have any barriers. COVID, unlike the hurricanes, can stay the whole year. We are wondering how much longer this pandemic would endure? We have a set hurricane season, or duration of a hurricane. But there is no forecast for this pandemic.'*

Participants who had healthy social connections prior to any of the disasters discussed the ways in which they were able to manage their isolation. Many reached out over the phone, made group text messages, and learned how to use Zoom and Facebook Live to host meetings and gatherings.

*'I figured out early on, Zoom is helpful. I would rather see the faces somewhere than nowhere.'*

*'...another thing we did was checking on each other. We intentionally checked on each other by making groups to call people.'*

### **Finding 7: A key recovery lesson for older adults was learning to live a new normal**

When asked the lessons learned from previous disasters, participants noted that learning how to live in a 'new normal' was essential for disaster recovery. Participants also noted that having an emergency preparedness plan, a 90-day supply of medication, knowing 1's food and medication allergies, and keeping a listing of medical conditions are critical.

*'Disasters and emergencies can be anything, it doesn't have to be a pandemic or ice storm. Just naturally always be prepared.'*

*'Always remain prepared. Go out and prepare before you know it's coming.'*

Another new normal that participants echoed was the importance of hygiene practices, such as handwashing, wearing masks, and social distancing.

*'Recovery will be based on the kind of behaviors that we adopt. This will look like masking up, consistent sanitization, being careful of what we touch, and any other behaviors needed to be to cope with this new world.'*

*'I think recovery happens when we can say we have learned something from this. Until we can tell the story in completion, we have not recovered.'*

Finally, participants discussed a new normal that they hope for the city and the state. They discussed needing clearer information and for all sources to be 'on the same page.' Information was conflicting at times which caused fear and anxiety. They saw this as an area of improvement for leaders.

## **Discussion**

This study assessed the lived experiences of African American older adults during the COVID-19 pandemic, the physical and mental anguish experienced, as well as the resiliency displayed in combatting the pandemic. These findings suggest that previous disaster experiences provide some important coping and preparation skills for future disasters. These findings align with other studies in literature that suggest having some prior experience with disasters influences 1's decision making, particularly how 1 perceives risk from an incoming disaster.<sup>15,16</sup> These earlier experiences, despite being negative, make older adults better able to cope and navigate disaster events.

Findings from this qualitative research also suggest that many older adults experienced fear, frustration, and panic particularly in the beginning of the pandemic when there was a lack of consistency

and clarity in information about the pandemic and how to protect oneself. Other studies have highlighted the importance of clear communication on patient adherence. For example, it was seen that patients were 1.6 times more likely to adhere to their medications if their physician had communications training.<sup>17</sup> The conflicting information about COVID-19 vaccines works in a similar manner, increasing anxiety and reducing an individual's ability to determine the reliability of information.<sup>18</sup> Individual disaster coping strategies can be improved or hampered by the government, especially through the provision of unambiguous information. Such efforts will help mitigate the fear and anxiety felt by these populations.

Importantly, findings from this study support the theory of resilience and prior work on stress, adaptation, wellness, and resource dynamics as applied to African American communities.<sup>19</sup> The American Psychological Association (APA) defines resilience as 'how easily individuals can adapt and recover from difficult situations including traumatic events, tragedy, serious health problems, and financial stressors.'<sup>20</sup> Factors contributing to resilience include having a good support system, and the ability to manage 1's feelings and impulses in a healthy way.<sup>20</sup> Resiliency in African American older adults has particularly been highlighted in other studies.<sup>21</sup> For example, Lowe et al. found that African Americans who lived through Hurricane Katrina felt less distress if they had 'greater resiliency.'<sup>21</sup> Religion also plays a key role in resiliency, evidenced by social network connections forged by African American older adults with their churches and places of worship.<sup>22</sup>

Adaptability to maintain social connectedness was another major take-away from this study. For example, these African American older adults learned how to use technology to stay connected with their loved ones, as well as to access healthcare. Staying connected with friends and family was seen to be closely associated with lowering distress and stress felt due to the pandemic.<sup>23,24</sup> Individuals with low levels of social capital, lower levels of social support, and lower neighborhood relationships were more likely to experience depression, anxiety, stress, and poor sleep quality due to the lockdown.<sup>25</sup> While the use of newer technologies proved to be quite useful for many participants, it took them time to find these resources and learn how to use them. Adjusting to this new normal has involved learning new preparedness and coping strategies (e.g., creating an emergency preparedness plan) and finding new ways (e.g., using technology to manage health, connect with loved ones, and shop) to persevere despite the difficulties.

## **Limitations**

This study is not without limitations. The study is limited to life-long Houston-based older adults who have a unique lived experience of higher-than-average number of disasters experienced that, perhaps, does not mirror that of other older adults in the USA. Additionally, study participants were recruited among close knit networks in faith-based and community service organizations. This may affect the generalizability of this study's findings to other older adults, such as those that do not engage in faith and/ or community organizations, and those in institutionalized settings. Despite these limitations, these findings demonstrate how African American older adults navigate disaster planning, response, and recovery to cope with disasters through experience and community.

## Conclusion

While most studies on disaster preparedness in minority populations focus on the negative impacts, the findings of this study underscore how these negative experiences can fuel positive coping mechanisms through experience and social supports. This in turn builds individual resilience to better plan, respond, and recover from disasters. Providing unambiguous information and how to use it could prove useful in preparing for future disaster events.

**Author contribution.** OEA conceptualized the study; KS led the focus groups and thematic analysis with assistance from ET; OEA and SS conducted the literature review and wrote the initial draft. DLH provided guidance on study framing. All authors approved the final version.

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