

OLDER ADULTS' EXPERIENCES WITH COVID-19: A MIXED METHODS STUDY

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Abstract

Older adults have a higher risk for negative health outcomes during the COVID-19 pandemic. For many, the epidemic has contributed to physical activity changes such as getting out and being away from home, increased stress and anxiety that might affect sleep, and increased loneliness and isolation. The purpose of this study is to explore older adults' experiences at home during the COVID-19 pandemic using a mixed-methods approach. This study is ongoing, and to date, 474 participants have completed the online survey that includes demographics and questions about physical activity, stress, anxiety, mood, sleep, health, and resilience. Twenty participants who volunteered to participate in the qualitative interview were selected to gain a more in-depth view of their home experiences during the pandemic. At the time of this publishing, researchers have conducted and completed 14 interviews. The results of this study may assist health care providers in understanding better the resources and interventions needed during stressful situations such as the current COVID-19 pandemic and future pandemics.

Keywords: sedentary behavior, older adults, African American older adults, physical activity interventions

Introduction

Older adults' vulnerability to functional decline, limited mobility, and challenges getting out beyond their homes were problems even before the COVID 19 stay-at-home order. A decrease in mobility contributes to lower physical activity levels that, in turn, can lead to an increase in obesity, chronic disease, and falls (Satariano et al., 2011). For many, the COVID-19 pandemic limits physical activity, increases stress and anxiety and affects sleep. These extremely unusual circumstances have altered the daily routines of many lives, especially those of older adults. The stay home order may limit older adults' ability to access medical care and participate in health-promoting programs to improve

health. Further, limitations on socialization with peers and the diversity of life activities may introduce or intensify loneliness and

depression. Changes in daily routines due to the pandemic can harm the quality of life of older adults.

The significance of sleep for people of all ages affects both their physical and mental health (Irwin, 2015). To maintain health and quality of life, adults should get seven hours of sleep or more (Watson et al., 2015). Improper sleeping patterns may lead to various chronic health problems such as diabetes, obesity, hypertension, heart disease, and psychiatric disorders

(Buysse, 2014). Changes in sleep behavior, impacted by increased stress and anxiety due to the pandemic, could lead to negative coping behaviors.

Lingering issues related to stress can cause short- or long-term problems. Stress has negative effects on one's mental and physical health. Short-term stress symptoms can lead to digestive issues, skin rashes, headaches, and hair loss (Senior Advisor, 2015). Long-term stress may lead to elevations of stress hormones, such as cortisol, leading to issues with anxiety, sleep, and memory and concentration problems. There can also be changes with weight, headache occurrences, digestive issues, depression, heart disease, high blood pressure, and possibly a stroke (American Heart Association, 2017).

Fear and distress can be caused by prolonged anxiety that may cause issues with physical and mental functioning. In the Nurses' Health Study, women with high levels of phobic anxiety were 59% more likely to suffer from a heart attack and 31% more likely to die from it than women with lower levels of anxiety (Harvard, 2020). By recognizing stress and anxiety early on, patients can be treated by physicians, helping reduce these conditions' mental and physical effects, and improve older adults' quality of life.

Resilience, being the ability to adapt to stress and adopt positive coping habits, is key to how older adults respond to

abrupt experiences. Maintaining stability helps keep a positive mindset for the future. This mindset is what provides hope, helps through hard times, and keeps people going. Having a resilient attitude contributes to achieving goals and desires that many wish to accomplish despite difficult situations (Ackerman, 2020).

Statement of Purpose

The purpose of this study is to examine the experiences of older adults during the time of COVID-19 related to activity, stress, anxiety, sleep, health, and resilience.

The aims were to:

- 1) Examine the relationships between isolation, life space, stress, anxiety, quality of life, mood, activity, and sleep in older adults during the COVID-19 pandemic via survey.
- 2) Describe the daily life experiences of older adults during the COVID-19 pandemic through qualitative interviews and photos of their environment.

Methods

This study is a descriptive mixed-methods study. Multiple regressions will be used to explore the effects of resilience, considering other variables. Pearson correlations will be used to examine the relationships between all variables. Data will be stored on encrypted computers and will be downloaded into SPSS for analysis. Pseudonyms are assigned to participants to transcribe audio recordings from the interview. Qualitative data will be analyzed

using thematic analysis to identify common themes, ideas, and repeated patterns. This mixed-methods study allows us to gain a more in-depth, genuine understanding of information involving older adults' experience.

Participants and Procedures

Qualifying participants included older adults of any gender and ethnic background between the ages of 70 to 90, those who lived at home, spoke English and had internet access. The recruitment strategy focused mainly on reaching out to participants through organizations, agencies, such as the OASIS senior program, and word of mouth. Participation consisted of completing an anonymous online survey that took 20-30 minutes to complete and included questions about demographic information and brief scales involving stress, mood, life space, sleep, health habits, and technology used concerning experiences with the COVID-19 pandemic. The survey's last question asked for participants' consent to be contacted and interviewed about their experiences. All those who participated in the survey were able to enter a drawing for a chance to win 1 of 3 \$50 Amazon gift cards, and all interviewed participants received a \$50 Amazon gift card.

Measures

Demographics

The demographic questionnaire includes age, race, marital status, living arrangements, type of residence, highest grade or year of school, gender, have you had COVID-19, and do you know anyone

who has had COVID-19.

Perceived Stress Scale

Stress was measured using the perceived stress scale (PSS). The PSS is the most widely used psychological tool to measure the perception of stress. The PSS measures the degree to which people perceive situations in their life to be stressful. The item's design is intended to tap into how uncontrollable, unpredictable, and overloaded respondents feel about their lives (Cohen, 1994). The scale includes ten items that range from 0 "never" to 4 "very often". Sample items include: "In the last month, how often have you been upset because of something that happened unexpectedly?"

Mood

Mood was measured using the Center for Epidemiologic Studies Depression Scale (CESD-10), which is a self-report measure of depression. The responses are based on the frequency of occurrence during the past week using a 4-point ordinal scale ranging from rarely or none of the time (less than one day) to most or all of the time (5-7 days). Sample items include: "I felt depressed," "I felt that everything I did was an effort" (Björgevinnsson et al., 2013).

Life Space

Life space measures how much a person gets out and about and the spatial extent of the person's usual life space or the typical range of places a person engages within a designated time frame. Respondents answer "yes" or "no". Sample items include: "During the past 3 days, have you been to other rooms of your home besides

the room where you sleep” (Stalvey et al., 1999).

Sleep

The Pittsburgh Sleep Quality Index (PSQI) was used to measure sleep. The PSQI is a self-report questionnaire that assesses sleep quality over a 1-month time frame. It consists of 19 individual items that form seven component scores that range from 0 “no difficulty” to 3 “severe difficulty”. Sample items include: “During the past month, how often have you had trouble sleeping because you have to get up to use the bathroom” (Bussye, 1989).

Health Outcomes

Several brief scales were drawn by The National Institute of Health’s (NIH) Patient-Reported Outcomes Measurement Information System (PROMIS) tools that are standardized brief measures of patient health outcomes including global health, anxiety, and loneliness (Cella et al., 2007). The total number of questions from all surveys is 60. Links to websites such as the Centers for Disease Control (CDC) and the National Council on Aging with older adults’ resources during the COVID-19 pandemic were posted at the end of the survey. The survey’s final question will ask if participants would like to be contacted for an interview about their experience.

Interviews

Interviews were conducted via Zoom or phone. The interviews took about 1 hour to complete and were audio-recorded and transcribed with pseudonyms for later analysis. Sample questions for the

interviews included: “Tell me about your experience staying at home,” “How does your typical day NOW differ from a typical day prior to stay-at-home orders?”

Results

To date, 477 participants completed the survey. Eighty-seven percent of the survey participants are from the Midwest region. The mean age of participants is 75.79 years of age, with a standard deviation (SD) of 4.74. The majority were white (93.9%) and female (77.4%) with 12.5 mean years of education (high school level). Among these older adults, 87.3% were reported good to excellent health, and an average of 2.3 claimed to have chronic conditions. For COVID-19 diagnosis, 1.3% reported they had COVID-19, and 37.1% said that they knew someone who had contracted the virus.

Results for Aims 1 and 2 are pending as this is an ongoing study.

Limitations

Researchers conducted this study at one point in time and cannot analyze the effects of the COVID-19 pandemic over time. Cause and effect cannot be determined, just relationships among the variables. The majority of the participants are from the Midwest and White. Therefore, the results may not generalize to other geographical regions or populations.

Conclusion

This study will allow investigators to understand better the resources and interventions needed to better support older adults during stressful times like the COVID-19 pandemic. Older adults require resilience and coping skills to maintain quality of life and promote health. Unforeseen circumstances like COVID-19 causes a great deal of change that can negatively affect

health and limit health-promoting behaviors.

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