Examining Health Disparities in younger generation of Appalachian population in Urban Cincinnati

A practicum project submitted to the Department of Environmental and Public Health Sciences of the University of Cincinnati College of Medicine in partial fulfilment of the requirements for the degree of

MASTERS OF PUBLIC HEALTH

In

Biostatistics

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Abstract

The health status of the Appalachian population has been a longstanding concern, driven by factors such as geographic isolation, economic disparities, limited healthcare access, and cultural influences. This study explores the health disparities among younger generations (3rd, 4th, and 5th) of Appalachians in Urban Cincinnati, utilizing a mixed-methods approach that combines qualitative insights from focus groups and interviews with quantitative data from the dataset. Our mixed-methods study with 167 young Appalachian participants in Urban Cincinnati revealed a nearly equal gender split and identified a high incidence of chronic diseases (38%) and mental health issues (45%). Significant findings include 60% having health insurance and reliable transportation, yet 55% reported poor air quality. Focus group discussions highlighted barriers to healthcare access, insurance complexities, and the lasting impacts of environmental incidents, with a particular focus on the socio-economic and navigational challenges in accessing care. These insights underline the critical need for integrated health strategies addressing both physical and mental health, improving healthcare access, environmental conditions, and addressing the socio-economic factors contributing to health disparities. This comprehensive approach is essential for reducing health inequalities and fostering a healthier, more equitable community.

INTRODUCTION

The Appalachian region's struggle with health disparities is deeply intertwined with its history of geographic isolation, economic challenges, and a historically limited access to comprehensive healthcare services. These factors contribute significantly to the prevalence of health issues in the region, setting Appalachian health outcomes apart from national averages (Behringer & Friedell). The establishment of the Appalachian Regional Commission in the 1960s marked a critical initiative toward addressing these disparities, emphasizing the need for advancements in economic stability, educational opportunities, and healthcare accessibility (Behringer & Friedell). Appalachian people originate from a region stretching from southern New York through central Alabama, encapsulating the rugged terrain and rich cultural tapestry of the Appalachian Mountains, a heritage reflecting the region's deep-rooted values of self-reliance and communal support.

Migration, both within Appalachia and beyond its borders, has been predominantly motivated by economic opportunities and the aspiration for improved living standards. "The Great Migration" exemplifies this movement, with many Appalachians relocating to urban centers in search of employment, thus encountering new social environments that influenced their traditional health beliefs and practices (Stanzak & Oliver-Lemieux). Despite these transitions, the core of Appalachian health beliefs and practices, including the utilization of folk medicine and a community-centric approach to healthcare, has persevered. This enduring cultural legacy highlights the importance of understanding and integrating these deep-rooted

health beliefs and practices into contemporary healthcare systems to effectively address the unique health disparities faced by the Appalachian population.

This generational shift toward integrating traditional practices with contemporary medical care indicates a broader transformation in health beliefs and behaviors across Appalachia. Such changes underscore the dynamic nature of Appalachian health culture, which continues to evolve while maintaining its foundational principles (Cavender & Beck). Central to Appalachian culture are elements of fatalism, strong religious convictions, and an emphasis on individual and communal resilience. These cultural dimensions significantly influence health-related behaviors and attitudes towards healthcare, often resulting in a propensity for self-care and delayed engagement with formal healthcare systems. Such tendencies can further amplify the health disparities experienced by the Appalachian population (Mixer et al.). The enduring presence of these cultural attributes among Appalachian migrants highlights their continued impact on health outcomes, even beyond the geographic confines of Appalachia (Rowles).

Amidst the Appalachian region's storied hills and tight-knit communities, health disparities have cast a long shadow, exacerbated by economic challenges, geographic isolation, and cultural barriers. While previous research, such as the work by Hutson et al. (2007), has begun to peel back the layers on cancer disparities and the power of community-based approaches to tackle these issues, a significant gap remains in our understanding of how these disparities and cultural narratives impact the younger generations of Appalachians. As Hutson et al. (2007) have shown, the use of community research review work groups has shed light on the unique experience of cancer in Appalachia, highlighting the importance of storytelling, collectivism, healthcare challenges, and cancer expectations within these communities.

However, this body of work primarily focuses on adult perceptions and experiences, leaving a critical question unanswered: How do these entrenched disparities and cultural nuances influence the health and well-being of the younger Appalachians.

Our study aims to bridge this gap by focusing on the third, fourth, and fifth generations of Appalachians living in urban Cincinnati, exploring the continuities and shifts in health-related beliefs, behaviors, and disparities. This focus is both a response to and an extension of the work initiated by Hutson et al. (2007), aiming to illuminate the specific health challenges and opportunities that young Appalachians face today. By adopting a mixed-methods approach that integrates qualitative insights from focus groups and interviews with quantitative data from surveys and questionnaires, we endeavour to offer a nuanced understanding of the younger generation's health landscape. This approach is not only novel but also critically important, as no substantial study has yet to concentrate on the unique interplay of cultural, economic, and geographic factors affecting the health of younger Appalachians in an urban setting (Hutson et al., 2007).

In conclusion, our research is poised at a critical juncture, seeking to fill a pivotal gap in the literature by focusing on the younger generations of the Appalachian population in Urban Cincinnati. The insights gained from this study will not only contribute to the academic discourse on health disparities in Appalachia but also offer practical guidance for developing targeted interventions that address the unique needs and challenges of this community. By weaving together, the threads of past research and current inquiry, we aim to enrich the tapestry of understanding around Appalachian health and well-being, paving the way for a healthier future for all generations within this vibrant community.

Methodology

This study adopted a mixed-methods approach to investigate health disparities among younger generations of Appalachians in urban Cincinnati, combining qualitative and quantitative analyses to capture a comprehensive view of the health-related challenges this community faces. The qualitative aspect involved focus groups and interviews with key informants, conducted between July and December 2023, to gather in-depth insights into the community's health needs, behaviours, and barriers. Focus groups, primarily comprising women, provided valuable perspectives on the local health landscape, while an interview with a key informant offered expert views on the specific challenges confronting the Appalachian population in urban Cincinnati. These qualitative methods were complemented by a quantitative data obtained from UACC by an informed survey.

In this project, we embarked on an investigation into health disparities, leveraging a mixed-methods approach that combined quantitative data analysis with qualitative insights. The foundational quantitative dataset was acquired from the Urban Area Coverage Classification (UACC), derived from a survey conducted by the organization six months prior. This dataset, focusing on Social Determinants of Health and socio-economic status, included responses from 167 participants. To uphold the integrity and accuracy of our analysis, extensive data cleaning and preparation were undertaken, addressing inconsistencies and applying methodologies to manage outliers, enhancing the findings' reliability. Utilizing R version 4.3.3 and SAS for statistical analysis, we meticulously analyzed the dataset to draw meaningful conclusions. Furthermore, the project harnessed qualitative insights through focus groups, enriching our understanding of the nuanced aspects of health disparities.

The synthesis of our research findings was encapsulated in an engaging infographic created with Canva, detailed in Appendix A, making the insights accessible and facilitating

broader dissemination. To ensure the confidentiality and integrity of the data, all collected information and analytical outputs were securely stored in password-protected folders, protecting against unauthorized access. This project, by its design, was a comprehensive mixed-methods study that not only highlighted the quantitative dimensions of health disparities through the UACC survey data but also brought to light the personal narratives and experiences captured through focus groups. The combination of these methodologies provided a profound understanding of the complex landscape of health disparities, contributing valuable perspectives to the ongoing discourse in public health research.

In collaboration with local county organizations, the Urban Appalachian Community Coalition (UACC) facilitated the organization of focus groups through local agencies, aiming to delve into the specific health-related needs of the Appalachian community in Urban Cincinnati. Conducted between July and December 2023, three focus groups were held at two community centers, the Joe Williams Centre and Santa Maria organization, as well as at Community Matters. Each focus group comprised 7-8 participants who self-identified as Appalachian and had firsthand experiences with health disparities. These focus groups, exclusively composed of women, lasted approximately 90 minutes each, concluding with a session for filling out surveys to collect basic demographic information. Additionally, interviews with key informants took place in Hamilton, providing further depth to our understanding. Participation in both the focus groups and interviews was voluntary, ensuring the anonymity and confidentiality of all participants. To express our gratitude for their invaluable insights, participants received gift cards at the end of each session. The discussions, recorded with participants' consent, focused on two critical questions: sharing personal stories related to health concerns within their family or neighbourhood, and

reflecting on how these health concerns have evolved over the past two decades. This approach aimed to capture a comprehensive understanding of the health disparities affecting the younger generations of the Appalachian population in Urban Cincinnati, maintaining the anonymity of all involved.ADD INTEXT FOR UACC

The integration of qualitative and quantitative data in this study facilitates a richer understanding of the complex factors contributing to health disparities within the Appalachian community in urban Cincinnati. By leveraging insights from focus groups, key informant interviews, and a tailored survey, the research offers a multifaceted view of the health issues and barriers faced by these youths. This methodological framework not only underscores the depth and breadth of health-related challenges but also identifies potential interventions and policy changes to effectively address the disparities observed. This comprehensive approach underscores the study's aim to elucidate the intricate web of factors influencing health outcomes among Appalachians in urban settings, paving the way for targeted solutions to improve their health and well-being.

Practicum Site and Overview:

The Urban Appalachian Community Coalition (UACC), rooted in the heritage and vibrant spirit of Appalachian people in Greater Cincinnati, intertwines wisdom from Appalachian traditions and urban life, emphasizing community, cultural expression, inclusivity, and advocacy for unheard voices. Originating from the 1964 Main Street Bible Center and transitioning to UACC in 2014 after decades of service by the Urban Appalachian Council, it stands on over fifty years of commitment to Appalachians in Cincinnati. UACC champions diversity, justice, and cultural awareness, fostering projects and collaborations that encourage

cultural curiosity, inclusiveness, place stewardship, and respect across differences. Prioritizing intergenerational and cross-cultural dialogue, resource sharing, and creative expression, UACC combats racism and oppressive systems while celebrating the region's diverse migration and storytelling traditions, embodying the resilience and adaptability of Appalachian culture in promoting community well-being. ADD INTEXT CITATIONS.

This practicum project endeavors to delve into health disparities among younger generations (3rd, 4th, and 5th) of the Appalachian population in Urban Cincinnati, focusing on examining the range of health-related challenges they face and identifying the factors and social determinants impacting their health and well-being. Adopting a mixed-model cross-sectional study design, the methodology comprises qualitative analyses through focus groups and interviews with key informants, alongside quantitative measures via data analysis. These tools are thoughtfully aligned with the Social Determinants of Health as outlined by Healthy People 2030 and incorporate elements of the PRAPARE Screening Tool. The combined analysis aims to uncover the primary social determinants affecting these younger populations, particularly how these determinants influence their access to healthcare, behavioral health patterns, and overall health outcomes. Expected outcomes are twofold: enhancing community health by addressing local determinants and improving clinical care quality, ultimately contributing to a reduction in health disparities and fostering a healthier, more equitable future for the Appalachian community in Cincinnati. ADD INTEXTS

RESULTS:

Our study included a total of 167 participants, with a nearly balanced gender distribution: 52% were females, and 48% were males (**Figure 1**). This equitable distribution allows for a comprehensive analysis of health-related issues, unaffected by significant gender biases. The

descriptive statistics for the age of participants in the study are consolidated in Table 1. The mean age of the sample is 28.05 years, indicating that the average participant is in their late twenties. The median age, which represents the middle point of the age distribution, is slightly lower at 27.63 years, suggesting that half of the participants are younger than this age. The standard deviation is 5.53 years, which points to a moderate variability in the ages of participants, indicating that while the majority of participants cluster around the late twenties, there is a range of ages both younger and older within the sample. This age distribution provides a framework for understanding the health-related issues and concerns prevalent among younger generations within the Appalachian community in Urban Cincinnati.

Figure 2 illustrates the age distribution of participants in our study, providing a demographic snapshot of the younger generations of Appalachians in Urban Cincinnati. The histogram showcases a concentration of participants in the late twenties, with the majority falling between the ages of 25 and 30 years. This suggests that our sample is relatively young, which could have significant implications for health outcomes and healthcare needs.

Figure 3 presents a stacked bar chart that delineates the health landscape of the participants, depicting the co-occurrence of chronic diseases with anxiety or depression. The chart reveals that 38% of the study's participants reported having at least one chronic disease (represented by the blue section), suggesting a notable burden of physical health conditions within the population. Simultaneously, the red section indicates that 45% of the participants experienced symptoms of anxiety or depression, highlighting a significant concern for mental health among the cohort.

The visualization brings to light that a considerable segment of the respondents faces dual challenges of managing chronic diseases alongside mental health issues, a fact that could have far-reaching implications for healthcare services and support structures. Moreover, the data suggests that while a substantial number of participants are grappling with these health issues, there is also a significant proportion—62% and 55% respectively—who did not report chronic diseases or mental health symptoms, pointing towards a dichotomy in health status within the community.

The bar chart depicted in **Figure 4** provides a visual representation of health insurance coverage among the study's participants. It reveals that a significant majority, or 60% of the individuals surveyed, have some form of health insurance, indicating a level of access to healthcare services. However, a substantial minority of 40% do not possess health insurance, potentially facing substantial barriers to receiving medical care. This distribution underscores the critical need for targeted interventions aimed at increasing health insurance coverage among the community, particularly for those who are uninsured, to ensure equitable access to healthcare resources and services.

The bar chart depicted as **Figure 5** illustrates the reliable transportation availability among participants, a key factor influencing access to healthcare services. The data shows that 60% of the participants have access to reliable transportation, indicating that a majority have the means to attend health-related appointments and access medical facilities. Conversely, the remaining 40% of participants lack reliable transportation, which may pose significant barriers to obtaining necessary healthcare services, thereby potentially exacerbating health disparities within the community. This distribution underscores the

critical need to address transportation issues as part of a comprehensive strategy to improve healthcare accessibility for the younger Appalachian population in urban Cincinnati.

Figure 6 illustrates the community's perceptions regarding air quality, which can be a significant determinant of health outcomes. A slight majority of the participants, representing 55%, perceive their air quality as poor, which may reflect concerns about environmental factors contributing to respiratory issues and other health conditions. In contrast, 45% of participants do not share this concern, which could indicate a range of experiences and perceptions within the community regarding environmental health risks. These insights can guide targeted interventions to address environmental health disparities and improve overall community well-being.

Figure 7 illustrates the correlation matrix of health variables and social determinants within the younger Appalachian demographic in Urban Cincinnati. The heatmap indicates predominantly weak correlations across the board, with the strongest observed relationship being a negative correlation between health insurance and chronic disease prevalence ($r = -0.097$), and between reliable transportation and perception of poor air quality ($r = -0.087$). Conversely, the weakest correlations are noted between age and perception of air quality ($r = 0.017$), and chronic disease and reliable transportation ($r = -0.053$). The subtle degrees of association underscore the complexity of health determinants within this community, suggesting that health outcomes are likely influenced by an intricate interplay of multiple factors rather than by singular determinants. This pattern emphasizes the necessity for comprehensive, multifaceted public health strategies that address the wide spectrum of influences affecting the well-being of these individuals.

The logistic regression analysis explored how specific factors might influence the prevalence of chronic diseases among the younger generation of Appalachians in Urban Cincinnati. According to the values outlined in Table 2, the model suggested that having access to reliable transportation (coefficient = 0.4912, p-value = 0.131) and perceiving poor air quality (coefficient = -0.5807, p-value = 0.070) could potentially affect health outcomes. However, these associations were not statistically confirmed in our analysis, as their p-values did not meet the conventional threshold for significance, set at 0.05.

Despite the positive coefficient for reliable transportation, indicating a possible increase in the likelihood of reporting chronic diseases for those with consistent transportation, the p-value suggests that this finding could occur by chance in about 13 out of 100 similar studies due to random variation. Similarly, the negative coefficient for perceived poor air quality implies that those who are concerned about air pollution might be less likely to report chronic conditions, yet the p-value indicates a 7% probability of this result happening by chance.

Before we explore the intricate details of our focus group discussions, **Figure 8** presents a word cloud that offers a visual summary of the most prominent themes identified. This illustration serves as an immediate visual reference to the prevalence and importance of various topics that emerged from our conversations with the Appalachian communities. The varying sizes of the terms correspond to their frequency of mention, with larger fonts indicating themes that were more frequently discussed. Such a representation allows for a quick understanding of the core issues at a glance, setting the stage for a more in-depth exploration of each theme in the following sections.

Through an in-depth analysis of three focus groups conducted in 2023, involving participants from Lower Price Hills and East Price Hills, this section unveils the nuanced

complexities of health disparities faced by the Appalachian population. The focus groups, comprising individuals with lived experiences of these disparities, offered profound insights into the barriers to healthcare access, the impact of socioeconomic factors, and the lingering aftermath of the Queen City Barrel incident. ADD Factory Explosion (Describe the incident, like how it happened)

Theme 1: Barriers to Accessing Healthcare

"The first theme that emerged from our discussions highlighted a myriad of barriers preventing effective access to healthcare services. Participants described these barriers as multifaceted, impacting both mental and physical health. For instance, one participant shared, 'Although the Queen City Barrel incident took place in 2004, its aftermath still lingers within the community. Presently, I can observe children aged 10 to 12 struggling with breathing issues, often panting when they have to walk a short distance.'"

Theme 2: Limited Preventive Health Services and Education

"Participants also pointed out a significant gap in preventive health services and education. 'I know a woman who does not even know how and where to get a medical card. She was unaware of the medical services she had to pay out of pocket for her entire pregnancy,' revealed one participant, emphasizing the lack of accessible health education and awareness in their community."

Theme 3: Complex Medical Insurance and Services

"Complexity in medical insurance and services was another critical theme. 'It is difficult to navigate through all the different types of medical insurances. We really do not even know

which is the better one,' stated a participant, highlighting the confusion and challenges faced by community members in understanding and accessing medical insurance."

Theme 4: Navigational Challenges in Healthcare Access

"This qualitative data, enriched by the personal stories and experiences shared by our focus group participants, serves to complement and contextualize our quantitative findings. A notable theme that emerged was the 'Navigational Challenges in Healthcare Access.' Participants described a labyrinthine medical insurance system, mirroring the statistical data which indicates a disproportionately high percentage of uninsured or underinsured individuals within these communities. For instance, a participant expressed, 'Navigating medical insurance feels like being lost without a map. You know you need help, but you just can't seem to find the right path.' This sentiment echoes the frustration many feel, underscoring the alignment between our qualitative insights and the broader quantitative data."

Theme 5: The Lethal Delay

"The human impact of health disparities was vividly illustrated through the personal stories shared, bringing to life the cold statistics we've analyzed. Under the theme 'The Lethal Delay,' participants spoke of the devastating consequences of delayed or inaccessible healthcare services. One particularly poignant narrative came from a participant who shared the tragic loss of their daughter to stage 4 colon cancer, a situation they believe could have been avoided with timely medical intervention. 'She kept getting pushed back, appointment after appointment. By the time they really looked at her, it was too late,' the participant shared, their voice breaking. 'If she had been given the proper attention when she first sought help,

my daughter might still be with us today.' This heart-wrenching story powerfully illustrates the fatal consequences of healthcare disparities, making a compelling case for urgent reform."

Theme 6: Shifting Shadows of Health Concerns

"In discussing the changes observed over the last two decades, participants painted a complex picture of evolving health concerns within their communities, encapsulated in the theme 'Shifting Shadows of Health Concerns.' While some noted positive developments, such as increased mental health awareness and the de-stigmatization of discussing such issues, others lamented the persistent shadow cast by past tragedies, particularly the Queen City Barrel incident. 'Twenty years ago, we wouldn't even be talking about mental health like we are today, so that's progress,' one participant noted, highlighting the shift in societal attitudes. However, another quickly added, 'But then, you look at the kids struggling to breathe because of what happened at Queen City Barrel, and you realize some shadows just get longer with time.' This reflective dialogue among participants underscores the dynamic nature of health concerns in their communities, influenced by both progress and lingering challenges."

Figure 1

Gender Distribution Among Participants.

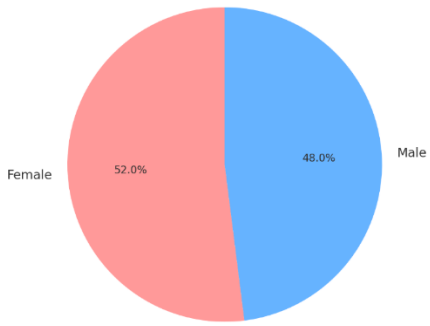

Table 1

Descriptive Statistics for Participant Age

STATISTICS	VALUE
Mean Age	28.05
Median Age	27.63
Standard Deviation of Age	5.53

Figure 2

Age Distribution of Participants

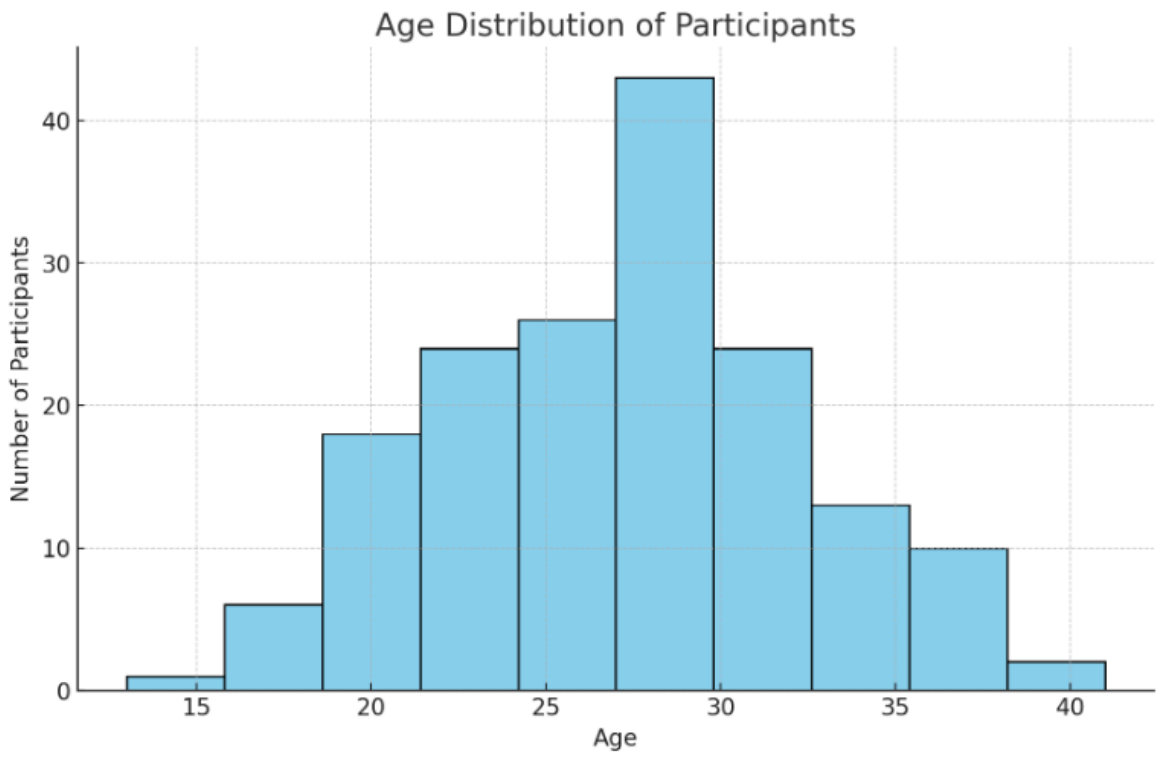

Figure 3

Prevalence of Chronic Diseases and Anxiety or Depression

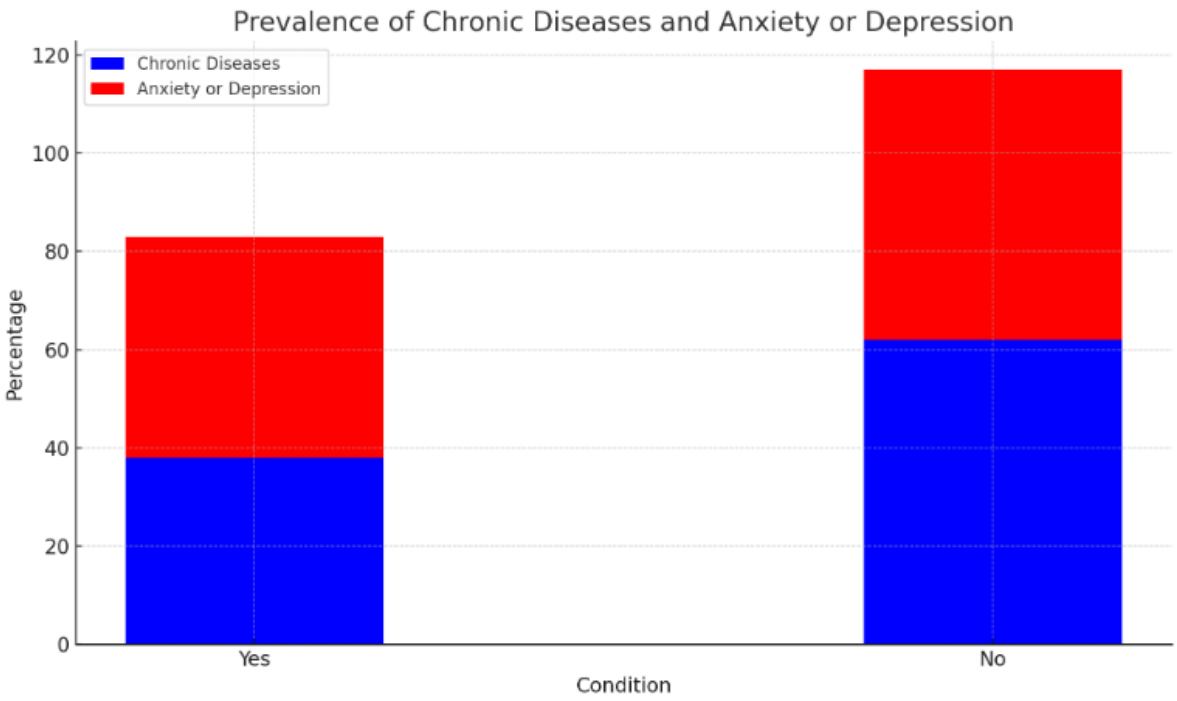

Figure 4

Rates of Health Insurance Coverage Among Participants

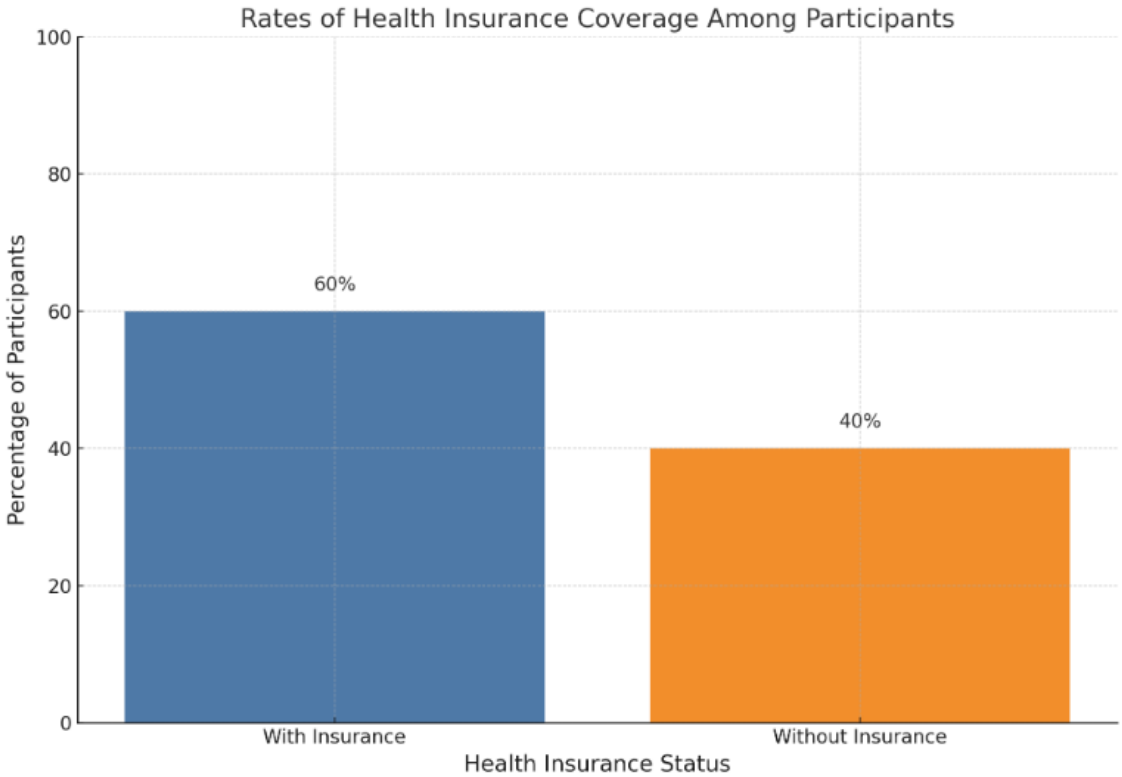

Figure 5

Reliable Transportation Availability Among Participants

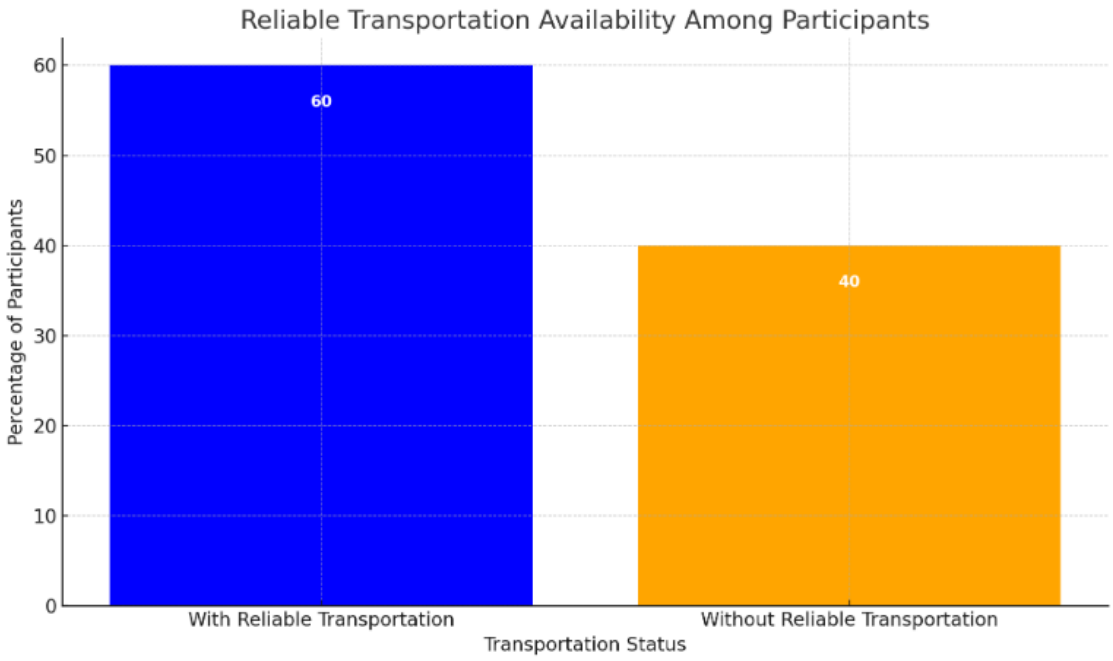

Figure 6

Perception of Poor Air Quality Among Participants

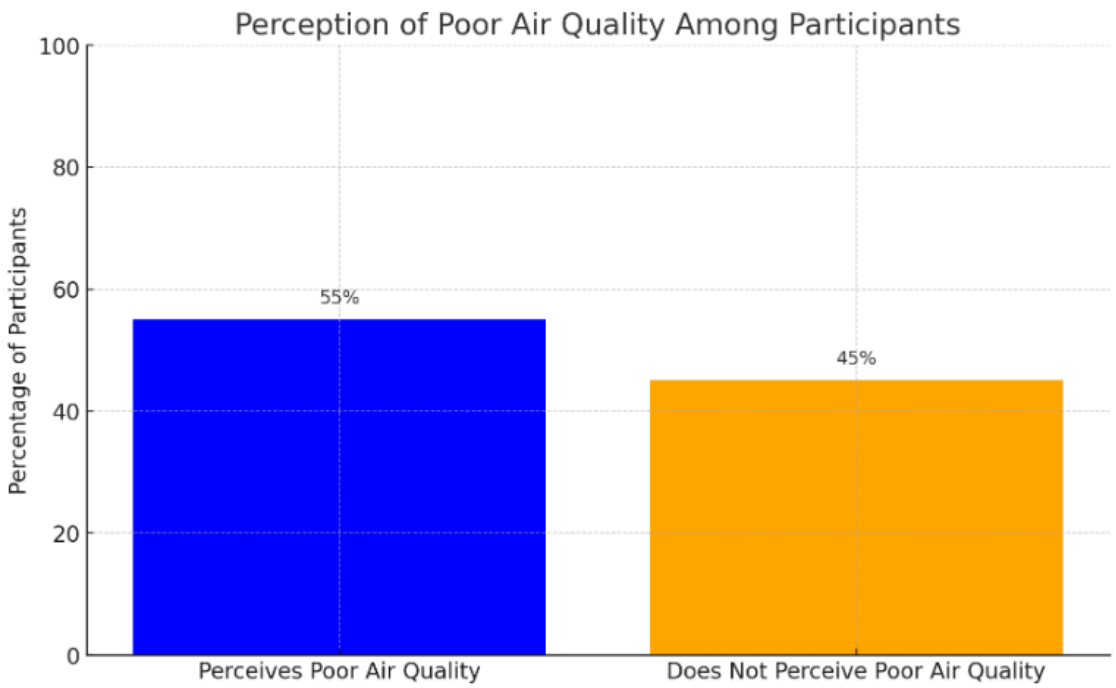

Figure 7

Correlation Matrix of Health Variables Among Participants

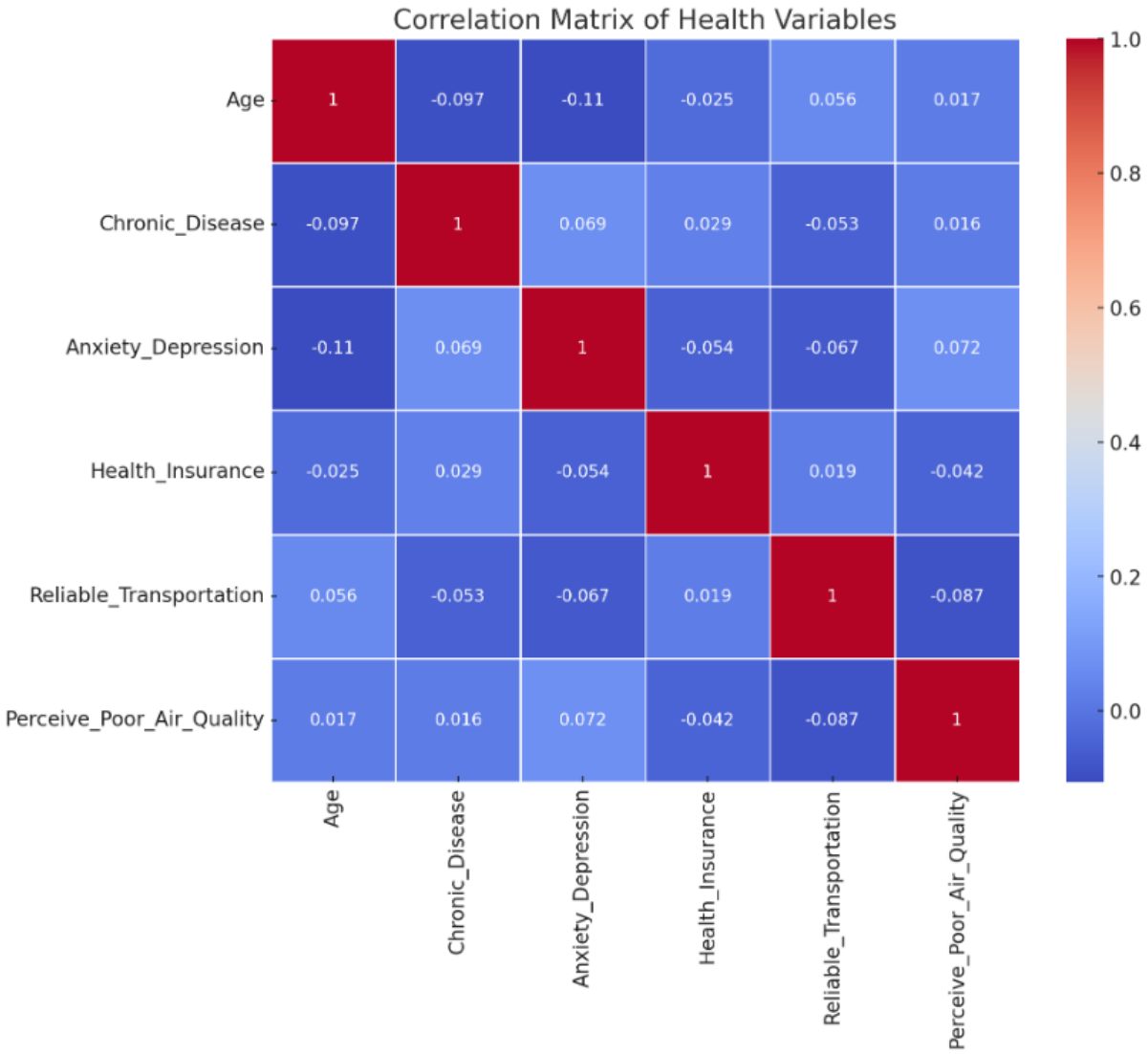

Table 2

Logistic Regression Model Coefficients and Significance for Health Variables

Variable	Coefficient	P-value	Significance
Intercept	-0.1692	0.640	Not significant
Health_Insurance	0.0075	0.981	Not significant
Reliable_Transportation	0.4912	0.131	Not significant
Perceives_Poor_Air_Quality	-0.5807	0.070	Near significant

Figure 8

Visual Representation of Dominant Themes from Focus Group Discussions on Health Disparities

Discussion

The intricate landscape of health determinants and disparities affecting younger Appalachians in Urban Cincinnati has been illuminated through this study. Challenges such as transportation and healthcare access emerge as pivotal factors influencing health outcomes. These issues align with insights from previous research by Wilson, Kratzke, and Hoxmeier (2024), which underscores the significance of social determinants in shaping health perceptions and access among rural Appalachians. Particularly, 40% of participants in this study lack reliable transportation, significantly hindering their ability to seek medical care. This barrier is a substantial determinant of health disparities, highlighting the importance of addressing transportation barriers to improve health outcomes comprehensively (Goins, Spencer, & Williams, 2011).

Another critical aspect identified in our study is the complexity surrounding health insurance and medical services, with a considerable portion of participants uninsured. This reflects broader issues of navigational challenges within the healthcare system, as participants expressed confusion and frustration regarding insurance options and access to care. The complexity of medical insurance emerges as a barrier to healthcare access, emphasizing the importance of culturally sensitive healthcare delivery that accounts for the community's values and health perceptions (Goins, Spencer, & Williams, 2011). Making health interventions and insurance information accessible and understandable to the community can potentially mitigate these barriers.

Additionally, the perception of poor air quality by a majority of participants underscores the impact of environmental factors on health. The historical context of the Queen City Barrel incident and its lasting effects on community health highlight the intersection of environmental justice and health disparities. This points to the need for integrated health interventions that address both physical and environmental health risks (Patrick, Pullen, Ibrahim-Bacha, & Spencer, 2022). The intricate interplay of factors such as transportation accessibility, healthcare system navigation, insurance complexity, and environmental health concerns calls for multifaceted public health strategies. These strategies should not only aim to enhance healthcare access and literacy but also advocate for improvements in environmental health and transportation infrastructure.

In conclusion, the findings underscore the critical need for integrated and comprehensive health interventions tailored to the unique needs and challenges of the younger Appalachian population in urban settings. By acknowledging and addressing the multifaceted determinants of health, including transportation barriers, healthcare access complexities, and

environmental factors, we can move toward mitigating health disparities and enhancing the overall well-being of this community. Aligning with the literature, this study emphasizes the necessity of culturally attuned and contextually sensitive approaches to health promotion and healthcare delivery within the Appalachian community in Urban Cincinnati (Goins, Spencer, & Williams, 2011; Wilson, Kratzke, & Hoxmeier, 2024).

Conclusion

In light of the findings from this comprehensive study on the health disparities faced by younger generations of Appalachians in Urban Cincinnati, it becomes imperative to address these issues through targeted, multifaceted approaches. Enhancing transportation access emerges as a critical need, suggesting the development of community-based transportation solutions to ensure healthcare services are accessible to all. This initiative could involve partnerships with local transportation companies, subsidized transportation vouchers, or community shuttle services for medical appointments.

Furthermore, simplifying healthcare navigation and increasing insurance literacy through educational programs can empower individuals to make informed decisions about their health. This initiative should aim to demystify insurance options, coverage benefits, and the necessary steps to access healthcare services. Additionally, there is a pressing need to integrate and expand access to mental health services and chronic disease management programs within the community, potentially through mobile health clinics, telehealth services, and community health workshops that cater to both physical and mental health needs.

Addressing environmental concerns that impact health, such as air quality, is also paramount. Collaborating with environmental health organizations and local governments to monitor and improve air quality, implement pollution control measures, and raise community awareness about environmental health risks can significantly contribute to improved health outcomes. Designing and implementing public health campaigns tailored to the younger Appalachian population's needs and cultural context, focusing on preventive health measures, chronic disease awareness, mental health support, and the importance of regular health screenings, is another vital step.

Moreover, encouraging the development of community support networks and engagement initiatives that promote health literacy, cultural competence, and the sharing of health resources is crucial. This could include forming community health advisory boards, peer support groups, and health education programs leveraging local knowledge and cultural traditions. Advocating for policy changes that address the social determinants of health impacting younger Appalachians, involving policy reforms related to healthcare access, environmental health regulations, and economic support measures, is essential for lasting impact.

Lastly, supporting and conducting ongoing research to continually assess the health needs and disparities within the Appalachian community in Urban Cincinnati will ensure that interventions remain relevant and effective. Through collaborative efforts, a commitment to cultural sensitivity, and a focus on addressing the root causes of health disparities, achieving meaningful improvements in the health and well-being of this community is within reach.

Implementing these recommendations can significantly mitigate health disparities and foster a healthier, more equitable future for younger Appalachians in urban settings.

References

1. Batey, L., DeWitt, E., Brewer, D., Cardarelli, K., & Norman-Burgdolf, H. (2023). Exploring Food-Based Cultural practices to address food insecurity in rural Appalachia. Health Education & Behavior, 50(4), 529–537. https://doi.org/10.1177/10901981231175360

2. Cardarelli, K., DeWitt, E., Gillespie, R., Graham, R. H., Norman-Burgdolf, H., & Mullins, J. (2021). Policy Implications of the COVID-19 Pandemic on Food Insecurity in Rural America: Evidence from Appalachia. International Journal of Environmental Research and Public Health, 18(23), 12792. https://doi.org/10.3390/ijerph182312792

3. Cardarelli, K., DeWitt, E., Gillespie, R., Graham, R. H., Norman-Burgdolf, H., & Mullins, J. (2021). Policy Implications of the COVID-19 Pandemic on Food Insecurity in Rural America: Evidence from Appalachia. International Journal of Environmental Research and Public Health, 18(23), 12792. https://doi.org/10.3390/ijerph182312792

4. Clem, P. A. (n.d.). The investigation of Appalachian Public Health. Encompass. https://encompass.eku.edu/honors_theses/840/

5. Goins, R. T., Spencer, S. M., & Williams, K. A. (2011). Lay meanings of health among rural older adults in Appalachia. Journal of Rural Health, 27(1), 13–20. https://doi.org/10.1111/j.1748-0361.2010.00315.x

6. Griffith, B. N., Lovett, G. D., Pyle, D. N., & Miller, W. C. (2011a). Self-rated health in rural Appalachia: health perceptions are incongruent with health status and health behaviors. BMC Public Health, 11(1). https://doi.org/10.1186/1471-2458-11-229

7. Griffith, B. N., Lovett, G. D., Pyle, D. N., & Miller, W. C. (2011a). Self-rated health in rural Appalachia: health perceptions are incongruent with health status and health behaviors. BMC Public Health, 11(1). https://doi.org/10.1186/1471-2458-11-229

8. Gutschall, M., Thompson, K. L., & Lawrence, E. (2017). Addressing Health Disparities in Rural Nutrition Practice: A Qualitative Model from Rural Appalachia. Journal of Hunger & Environmental Nutrition, 13(1), 84–99. https://doi.org/10.1080/19320248.2017.1337536

9. Gutschall, M., Thompson, K. L., & Lawrence, E. (2017). Addressing Health Disparities in Rural Nutrition Practice: A Qualitative Model from Rural Appalachia. Journal of Hunger & Environmental Nutrition, 13(1), 84–99. https://doi.org/10.1080/19320248.2017.1337536

10. Health beliefs, health care, and rural Appalachian. . . : Family & Community Health. (n.d.-a). LWW. https://journals.lww.com/familyandcommunityhealth/citation/1990/05000/Health_beliefs,_health_care,_and_rural_Appalachian.3.aspx

11. Hege, A., Ball, L., Christiana, R. W., Wallace, C. W., Hubbard, C., Truesdale, D., Hege, J. R., & Fleming, H. (2018). Social Determinants of health and the effects on

quality of life and well-being in 2 rural Appalachia communities. Family & Community Health, 41(4), 244–254. https://doi.org/10.1097/fch.0000000000000201

12. Hege, A., Ball, L., Christiana, R. W., Wallace, C. W., Hubbard, C., Truesdale, D., Hege, J. R., & Fleming, H. (2018). Social Determinants of health and the effects on quality of life and well-being in 2 rural Appalachia communities. Family & Community Health, 41(4), 244–254. https://doi.org/10.1097/fch.0000000000000201

13. Hege, A., Ball, L., Christiana, R. W., Wallace, C. W., Hubbard, C., Truesdale, D., Hege, J. R., & Fleming, H. (2018). Social Determinants of health and the effects on quality of life and well-being in 2 rural Appalachia communities. Family & Community Health, 41(4), 244–254. https://doi.org/10.1097/fch.0000000000000201

14. Morrone, M., Kruse, N. A., & Chadwick, A. E. (n.d.). Environmental and health disparities in Appalachian Ohio: perceptions and realities. Digital Scholarship@UNLV. https://digitalscholarship.unlv.edu/jhdrp/vol7/iss5/5/

15. Morrone, M., Kruse, N. A., & Chadwick, A. E. (n.d.). Environmental and health disparities in Appalachian Ohio: perceptions and realities. Digital Scholarship@UNLV. https://digitalscholarship.unlv.edu/jhdrp/vol7/iss5/5/

16. Paskett, E. D., Fisher, J. L., Lengerich, E. J., Schoenberg, N. E., Kennedy, S., Conn, M. E., Roberto, K. A., Dwyer, S., Fickle, D., & Dignan, M. (2011). Disparities in underserved white populations: The case of Cancer-Related Disparities in Appalachia. Oncologist, 16(8), 1072–1081. https://doi.org/10.1634/theoncologist.2011-0145

17. Patrick, J. H., Pullen, C., Ibrahim-Bacha, K., & Spencer, M. (2022). Role of medical insurance in reducing place-based health disparities: Functional disability in rural Appalachia. Journal of Elder Policy, 2(2). https://doi.org/10.18278/jep.2.2.6

18. Patrick, J. H., Pullen, C., Ibrahim-Bacha, K., & Spencer, M. (2022). Role of medical insurance in reducing place-based health disparities: Functional disability in rural Appalachia. Journal of Elder Policy, 2(2). https://doi.org/10.18278/jep.2.2.6

19. Patrick, J. H., Pullen, C., Ibrahim-Bacha, K., & Spencer, M. (2022). Role of medical insurance in reducing place-based health disparities: Functional disability in rural Appalachia. Journal of Elder Policy, 2(2). https://doi.org/10.18278/jep.2.2.6

20. Patrick, J. H., Pullen, C., Ibrahim-Bacha, K., & Spencer, M. (2022). Role of medical insurance in reducing place-based health disparities: Functional disability in rural Appalachia. Journal of Elder Policy, 2(2). https://doi.org/10.18278/jep.2.2.6

21. Patrick, J. H., Pullen, C., Ibrahim-Bacha, K., & Spencer, M. (2022). Role of medical insurance in reducing place-based health disparities: Functional disability in rural Appalachia. Journal of Elder Policy, 2(2). https://doi.org/10.18278/jep.2.2.6

22. Swan, L. E. T., Senderowicz, L., Lefmann, T., & Ely, G. E. (2023). Health care provider bias in the Appalachian region: The frequency and impact of contraceptive coercion. Health Services Research, 58(4), 772–780. https://doi.org/10.1111/1475-6773.14157

23. Swan, L. E. T., Senderowicz, L., Lefmann, T., & Ely, G. E. (2023). Health care provider bias in the Appalachian region: The frequency and impact of contraceptive

coercion. Health Services Research, 58(4), 772–780. https://doi.org/10.1111/1475-6773.14157

Appendix A

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