

Aging in Poverty in Low-Income Countries: a Focus on Haiti

Short abstract

This study investigates the challenges of aging in poverty in Haiti, where older adults face significant health, economic, and environmental issues exacerbated by systemic factors like limited healthcare access, food and water insecurity, and the absence of social support networks. Utilizing data from a national survey conducted in 2024, which included 1,408 older adults, we used logit regression to estimate associations between health-, poverty- and environmental-related outcomes and sociodemographic characteristics. The research highlights that over one-third of the study participants rated their health as poor, and many reported chronic conditions, including hypertension and diabetes. Additionally, a majority of participants experienced food insecurity, while a notable percentage reported high stress levels. The findings reveal that older women are particularly vulnerable, facing worse health outcomes compared to men, while those in rural areas are more likely to experience food insecurity. The study underscores the urgent need for a comprehensive approach to strengthen healthcare infrastructure and enhance social support systems for the aging population in Haiti.

Background

Aging in poverty presents unique challenges, particularly in low-income countries such as Haiti (1,2). As the global population ages, the intersection of poverty and aging is becoming increasingly critical to understand, especially in contexts where systemic issues exacerbate the vulnerabilities of older adults(3). In low-income countries, a complex interplay of health, economic, and environmental factors exacerbates these challenges (4,5). Limited access to healthcare, coupled with high levels of stress, food insecurity, and water insecurity, places older adults in precarious situations (6,7). Furthermore, the absence of specialized geriatric care and formal support networks means many older individuals do not receive appropriate management for age-related conditions, leading to rapid health deterioration, poorer outcomes, and a reduced quality of life (3,8,9).

Despite this critical situation, aging in low-income countries received little attention from the research community, international and national public health partners(4,10,11). Since the demographic profile of many low-income countries features a relatively young population, aging-related care and support are not considered top priorities in either the national or global health agendas for these nations. (1). This is despite evidence that non-communicable or chronic conditions, which are often associated with aging, are among the leading causes of death in these countries (12,13). Additionally, the scarcity of health data and national health surveys has hindered potential research in this area. (11).

In this study, we examined the complex experience of aging in poverty in Haiti, with a focus on health issues, stress, food insecurity, and water insecurity. Haiti, a low-income country, continues to face severe poverty alongside major health and political challenges(13–15). Older adults in Haiti, often overlooked, endure economic hardship due to limited financial resources, persistent poverty, and the impact of natural disasters, all exacerbated by the absence of a social safety net(16). Our analysis utilized data from a recently conducted national survey on health and food habits for adults aged 18 and older in Haiti (2024), gathered by the research team.

Methods

We retrieved data on older adults (60 years or more) from a national representative health and food habit survey implemented in 2024 in Haiti. Data were collected in all the 10 geographical regions and stratified by urban and rural areas, though some neighborhoods in Port-a-Prince, the Capital, and the Artibonite region were excluded due to gang activities and safety issues. The general sample of the survey is 7040 adults aged 18 years or more. For our analysis, we used the subsample of 1,408 older adults aged 60 or more, with 60.1% female and 39.9 (data unweighted).

The data covers a variety of topics. To capture the burden of aging in poverty, we used two sets of dependant variables: health-related variables, namely self-rated health, physical disability, and some chronic conditions (hypertension, diabetes, stroke, kidneys, frequent infections, and chronic respiratory problem); poverty- and environmental-related variables: food insecurity, water insecurity, and social distress). All these variables we dichotomized to facilitate the analyses. First, we estimated the prevalence and confidence interval of each of these conditions among the Haitian older adults; second, we performed some logit model to estimate the associations of the conditions with some sociodemographic characteristics, with special focus on sex/gender, residence area (rural vs urban), and status socioeconomic. The study was approved by the Haiti national bioethics committee and all the participants provided written or documented oral consent.

Main results

The results indicated a high prevalence of poor health and chronic conditions among older adults in Haiti. Specifically, 37.4% of participants rated their health as poor; 51.8% reported some vision issues and 30.5% some level of mobility issues; 38.6% were diagnosed with high blood pressure by a medical professional; 19.2% had concerns about diabetes symptoms; 18.3% had kidney problems; 14.6% experienced frequent infections; and 7.3% had chronic respiratory issues. Regarding poverty- and environmental-related

burden, 60.4% of participants faced food insecurity, and 29.1% experienced water insecurity. Using the Perceived Stress Scale 4 (PSS-4), over 21% of participants scored high stress levels. Regression models revealed that older women were more likely than men to report poor health status (Odds Ratio: 1.3**), increased mobility issues (OR: 1.1*), and higher blood pressure problems (OR: 1.8***). There was no statistical difference in food and water insecurity between older men and women. However, the analysis indicated that participants living in rural areas were more likely to experience food insecurity (OR: 1.3***) but less likely to face water insecurity (OR: 0.6***).

Impacts and implications

Aging in poverty in a low-income country poses several challenges that are closely linked to health, economic, and environmental factors. Tackling these issues necessitates a comprehensive approach that includes strengthening healthcare infrastructure, enhancing food and water security, and creating targeted social support systems to better assist the aging population.

References

1. Bollyky TJ, Templin T, Cohen M, Dieleman JL. Lower-Income Countries That Face The Most Rapid Shift In Noncommunicable Disease Burden Are Also The Least Prepared. *Health Aff.* 2017 Nov;36(11):1866–75.
2. Prynne JE, Kuper H. Perspectives on Disability and Non-Communicable Diseases in Low- and Middle-Income Countries, with a Focus on Stroke and Dementia. *Int J Environ Res Public Health.* 2019 Sep 19;16(18):3488.
3. Barrientos A, Gorman M, Heslop A. Old Age Poverty in Developing Countries: Contributions and Dependence in Later Life. *World Dev.* 2003 Mar;31(3):555–70.
4. Kämpfen F, Wijemunige N, Evangelista B. Aging, non-communicable diseases, and old-age disability in low- and middle-income countries: a challenge for global health. *Int J Public Health.* 2018 Dec 28;63(9):1011–2.
5. Tannor EK, Chika OU, Okpechi IG. The Impact of Low Socioeconomic Status on Progression of Chronic Kidney Disease in Low- and Lower Middle-Income Countries. *Semin Nephrol.* 2022 Sep;42(5):151338.
6. Young S, Bethancourt H, Frongillo E, Viviani S, Cafiero C. Concurrence of water and food insecurities, 25 low- and middle-income countries. *Bull World Health Organ.* 2023 Feb 1;101(02):90–101.
7. Neves Freiria C, Arikawa A, Van Horn LT, Pires Corona L, Wright LY. Food Insecurity Among Older Adults Living in Low- and Middle-Income Countries: A Scoping Review.

Gerontologist. 2024 Jan 1;64(1).

8. Hu B, Chou Y-C. Care poverty among older adults in East Asia: A comparison of unmet care needs between China and Taiwan. *Arch Gerontol Geriatr*. 2022 Sep;102:104738.
9. Ferri CP, Schoenborn C, Kalra L, Acosta D, Guerra M, Huang Y, et al. Prevalence of stroke and related burden among older people living in Latin America, India and China. *J Neurol Neurosurg Psychiatry*. 2011 Oct 1;82(10):1074–82.
10. Hatefi A, Allen LN, Bollyky TJ, Roache SA, Nugent R. Global susceptibility and response to noncommunicable diseases. *Bull World Health Organ*. 2018 Aug 1;96(8):586–8.
11. Malekzadeh A, Michels K, Wolfman C, Anand N, Sturke R. Strengthening research capacity in LMICs to address the global NCD burden. *Glob Health Action*. 2020 Dec 31;13(1):1846904.
12. Engelgau MM, Rosenthal JP, Newsome BJ, Price L, Belis D, Mensah GA. Noncommunicable Diseases in Low- and Middle-Income Countries: A Strategic Approach to Develop a Global Implementation Research Workforce. *Glob Heart*. 2018 Jun 1;13(2):131.
13. Fene F, Ríos-Blancas MJ, Lachaud J, Razo C, Lamadrid-Figueroa H, Liu M, et al. Life expectancy, death, and disability in Haiti, 1990-2017: a systematic analysis from the Global Burden of Disease Study 2017. *Rev Panam Salud Pública*. 2020 Nov 2;44:1.
14. Lachaud J, Hruschka DJ, Kaiser BN, Brewis A. Agricultural wealth better predicts mental wellbeing than market wealth among highly vulnerable households in Haiti: Evidence for the benefits of a multidimensional approach to poverty. *Am J Hum Biol*. 2020;32(2).
15. Brewis A, Wutich A, Galvin M, Lachaud J. Localizing syndemics: A comparative study of hunger, stigma, suffering, and crime exposure in three Haitian communities. *Soc Sci Med*. 2022 Feb;295:113031.
16. Cros M, Cavagnero E, Alfred JP, Sjoblom M, Collin N, Mathurin T. Equitable realization of the right to health in Haiti: how household data inform health seeking behavior and financial risk protection. *Int J Equity Health*. 2019 Dec 27;18(1):77.