

# Evaluating the Physical Mobility Levels and Well-Being of Elders: Insights from the Countryside Setting of the Philippines

Jonas P. Fabillar Physical Education Faculty, Samar State University – Paranas Campus Philippine jonas.fabillar@ssu.edu.ph (corresponding author)

Madelynn N. Reposo Associate Professor, Samar State University – College of Education Philippine madelynn.reposo@ssu.edu.ph

Anecito A. Sultan Physical Education Faculty, Samar State University – College of Education Philippine anecito.sultan@ssu.edu.ph

### Abstract

The pandemic significantly affected the health and well-being of elders, especially in disadvantaged communities. This study examines the physical mobility and well-being of elders aged 60-80 in Samar, Philippines. A descriptive research design was used to survey forty (40) voluntarily participating members of the Senior Citizens' Organization. Physical mobility in both indoor and outdoor activities was assessed, with well-being self-reported by participants. Results showed a high percentage engaged in stretching and walking exercises, while the majority had irregular sleep patterns. However, many did not engage in household chores, market visits, or entrepreneurial activities. The study recommends establishing targeted educational and community-centric intervention programs among Local Government Units (LGUs) to enhance the physical health, cognitive functioning, and overall well-being of elders.

Keywords: Community health, elderly care, health programs, pandemic

Received 31 August 2024/Revised 19 October 2024/Accepted 28 February 2025 ©The Author all rights reserved 2025

### Introduction

The pandemic's onset significantly impacted marginalized communities and marginalized groups such as the elderly raising global anxieties. Older adults face heightened risks of infection and mortality due to age-related physiological changes and comorbidities, which have been exacerbated during the pandemic (Su & Jin, 2023).

Additionally, rural elders face unique challenges such as limited access to transportation and medical services, which restrict their mobility and willingness to travel. These barriers are compounded by aging and geographic obstacles, necessitating improved transportation accessibility (Li et al., 2024). The implementation of age-friendly systems in rural areas is hindered by community and health system barriers, including reliance on volunteers and communication issues. These challenges affect the ability to support active aging and mobility (Liebzeit, 2023). Education, income, and psychological capital serve as mediators in the relationship between physical activity and health outcomes for rural



older adults. These factors influence the effectiveness of physical activity in improving health, suggesting that interventions should consider these mediating pathways (Ramírez-Gomez et al., 2024).

By 2030, one out of every six people globally will be over 60 years old. The population of those aged 60 and above is expected to increase from 1 billion in 2020 to 1.4 billion. By 2050, this number will double to 2.1 billion. Additionally, the number of individuals aged 80 and older is projected to triple, reaching 426 million between 2020 and 2050 (WHO, 2022).

Worldwide, people are living longer, with most individuals today expected to reach their sixties and beyond. The elderly population and their proportion within the total population are rising in every country, including the Philippines, where 8.5 percent or 9.22 million of the household population were senior citizens in 2020 (Philippine Statistics Authority, 2022).

Over the last decade, the aging population in the Philippines has been gradually increasing (Cruz, et al., 2019). With this demographic transition, an increasing proportion of older adults expected in the coming years (Vicerra, 2023a). Current studies on aging predominantly focus on developed countries, leaving a gap in understanding the unique challenges faced by older Filipinos (Sanchez, 2016).

As highlighted by the study of Bastani et al. (2021), the pandemic led to increased fragmentation in the healthcare system in the Philippines, impacting the physical health and well-being of elders. It also discusses how social distancing measures increased isolation among older adults, leading to declines in mental health and physical activity levels. Many older adults experienced increased isolation due to social distancing measures, which led to a decline in mental health and physical activity levels.

This isolation was compounded by limited access to healthcare services, resulting in exacerbated chronic conditions and reduced overall health outcomes (Tomioka, et al., 2024). Moreover, the pandemic heightened the risk of physical health issues, with many elders reporting increased anxiety and depression, which further affected their physical well-being (Lino-González, et al., 2024).

Furthermore, the study of Felipe et al. (2023) highlights the lack of longitudinal research tracking mobility changes over time and the psychological impacts of pandemic restrictions on elders. This study underscores the need for research that examines how mobility evolves with varying pandemic restrictions. Similarly, Hyori et al. (2023) points out the gap in understanding mobility across diverse demographic groups, including younger adults and those with disabilities, emphasizing the importance of exploring how different populations were affected by mobility restrictions. Rogers et al. (2024) reveal a decline in physical activity levels due to lockdowns but note the insufficient exploration of underlying factors such as access to safe outdoor spaces and social support systems.

Additionally, financial burdens associated with healthcare costs have intensified, as government insurance covers only a fraction of medical expenses. The health crisis disrupted access to healthcare services, particularly for older adults, who require consistent medical attention (Soriano & Aruta, 2022). Implying that these financial constraints affected the health and well-being of elders.

The physical health and well-being of elders in the rural Philippines is a pressing concern. The elderly frequently rely on their families for financial support due to limited personal resources (Medina & Medina, 2023), as supported by thy study of Vicerra (2023b) of the increasing physical limitations



(around 18%) among older adults in the Philippines.

The poor provinces in the Philippines specially Samar, encountered unique challenges and difficulties in implementing health programs for elders amidst and towards the end of the pandemic. Hence, the study focused on the physical mobility and self-reported well-being faced by marginalized elders in the countryside setting who are members of the Senior Citizen's Organization in Paranas, Samar, Philippines.

# Method

### Design

This research utilized a descriptive-quantitative design. The design focuses on the physical mobility of elders along indoor, and outdoor activities, and their self-reported well-being. The researchers gathered data through a survey questionnaire adapted from the World Health Organization (2015) on the standardized health-related lifestyle along physical mobility for elders, which was modified, and translated into the local dialect "*Waray-Waray*" to consider language barriers among respondents, and underwent expert validation and institutional ethical approval.

# Participants

Forty (40) respondents were selected utilizing a random sampling technique. They are residents of Paranas Samar, Philippines aged 60-80 years old and are members of the municipality's Senior Citizen's Oganization. While there are about two hundred members of the organization, not all of them are physically able. Lastly, given the exploratory nature of the study forty (40) respondents was deemed sufficient.

# Data Collection and Analysis

After securing clearance to conduct the study from the Samar State University – Institutional Ethics Review Board (SSU-IERB), a letter of approval was sought from the municipal mayor stating the purpose and objectives of the study. Data were gathered using a survey questionnaire and were administered to the respondents at their most convenient time. The questionnaire was adapted from World Health Organization (2015) standardized health-related lifestyle and was modified by the researchers to suit to the present study. The modification and contextualization of the questionnaire was submitted and approved by the SSU-IERB. Data gathered was securely compiled by the researchers.

The cover page of the questionnaire is their informed consent stating the purpose and objectives of the research. Part one is their demographic profile detailing their name, age, sex, monthly income, educational attainment, and health comorbidities (if any). Part two is survey proper divided into three parts, part one is their physical mobility along indoor activities with questions such as "I engage in stretching activities", "I do household chores", "I listen to relaxing music", and part two is also their physical mobility along outdoor activities with questions such as "I engage in entrepreneurial activities", and lastly for part three is their self-reported well-being with questions such as "I engage in medication exercises".

Moreover, elders who are unable to write were assisted by their family members who took care of them. They were also informed that their participation was voluntary and could withdraw their participation at any time without the need to give reasons or an explanation.

In addition, respondents also initially received written and oral information about the objectives of the study. Also, before the researchers initiated the data gathering, the proposed procedure and protocol



by the researchers were submitted and approved by the SSU-IERB for the review of ethical considerations, relative to the interview, interpretation, handling, and disposal of data. Data were physically collected, it was sorted and interpreted using descriptive analyses such as frequency counts and percentages with the aid of Microsoft excel.

### Ethical Consideration

This study conformed to the national and institutional guidelines of the research conducted for human samples. Ethical approval was obtained before the commencement of the study. All participants had received written and oral information about the aim of the study and the possibility of withdrawing their participation at any time without the need to give reasons for doing so. Confidentiality was assured according to ethical research guidelines. Moreover, informed consent was obtained from all participants.

# Results

The tables below present the demographic data, physical mobility levels of elders along with indoor activities, outdoor activities, and self-reported well-being.

٦	<b>a</b> b	le	

Demographic Data of Respondents		
Age	Frequency (f)	Percentage (%)
60-70	25	62.5
71-80	12	30
81-90	3	7.5
91-100	-	-
Total	40	100%
Sex	Frequency (f)	Percentage (%)
Male	12	30
Female	28	70
Total	40	100%
Health Comorbidities	Frequency (f)	Percentage (%)
Hypertension	13	32.5
High Blood Sugar	5	12.5
Others/None	22	40
Total	40	100%

Table I presents the age, sex, and health comorbidities of elder respondents in the locale. It shows that majority of them are aged 60-70, and females with 28 respondents. Surprisingly, most of them do not have health problems while a few have hypertension. The studies on physical mobility predominantly involved older adults aged 60 to 86, with a notable representation of women (Lipardo et al., 2023).

### Table 2

Indoor	Activities	of	Flders	During	Pandemic
110001	neuvines	v		During	rundenne

Indicators	Frequency (f)	Percentage (%)
Does stretching exercises	37	92.5
Does not engage in stretching exercises	3	7.5
Total	40	100%
Listens to relaxing music	22	55
Do not listen to music	18	45
Total	40	100%
Does household chores	5	12.5
Do not do household chores	35	87.5



Total 40 100	%
--------------	---

Table 2 shows that elders typically spend their time indoors, with many engaging in stretching exercises, while most do not participate in household chores. Stretching exercises not only help alleviate physical discomfort associated with prolonged sedentary behavior but also contribute positively to mental health by reducing anxiety and stress levels (Costa, et al., 2023). Additionally, music alleviates anxiety and depression, enhancing emotional well-being among older adults (Vernia, 2024), and engaging with music fosters self-connection and meaning-making, which is crucial for mental health (Siltainsuu & Peltola, 2024).

### Table 3

utdoor Activities of Elders During Pandemic		
Indicators	Frequency (f)	Percentage (%)
Does walking exercises	19	47.5
Does not engage in walking exercises	21	52.5
Total	40	100%
Goes to the market to buy food and goods	14	35
Do not go to the market to buy food and goods	26	56
Total	40	100%
Engages in entrepreneurial activities	16	40
Do not engage in entrepreneurial activities	24	60
Total	40	100%

Table 3 highlights that most elderly individuals do not participate in walking exercises, and a significant number are not involved in entrepreneurial activities. Social connections and physical exercise are crucial for the well-being of older adults. Maresova et al. (2023) highlights that mobility restrictions can lead to falls, injuries, and hospitalizations, which worsen quality of life and increase mortality.

Self-Reported Well-Being of Elders During Pandemic		
Indicators	Frequency (f)	Percentage (%)
Gets regular sleep	16	40
Does not sleep regularly	24	60
Total	40	100%
Consumes fruits and vegetables regularly	25	62.5
Does not consume fruits and vegetables regularly	15	37.5
Total	40	100%
Engages in regular meditation exercises	14	35
Do not engage in regular meditation	26	65
exercises		
Total	40	100%



Table 4 reveals that while most elderly individuals do not maintain regular sleep patterns, a significant proportion include fruits and vegetables in their diet. The pandemic has notably disrupted both sleep and dietary habits among the elderly. Research shows that many older adults faced sleep disturbances, leading to increased insomnia and daytime sleepiness due to heightened anxiety and altered daily routines (Lopes & Silva, 2023).

# Discussion

Community empowerment programs have been essential in managing the health and well-being among older adults. For instance, training family members along healthcare improved knowledge and skills in recognizing hypertension symptoms (Dolifah et al., 2023). Globally, a significant increase in self-reported hypertension was observed, rising from 43.7% to 56.3% between 2020 and 2021 (Mistry et al., 2022). This perspective underscores the need for ongoing support and adaptation in managing chronic conditions during crises specifically in rural areas. While some health variations among older adults are genetic, most are influenced by their physical and social environments (World Health Organization, 2022), including activities they do at home.

Additionally, the study of Noviati, et al. (2021), highlighted the importance of physical activities, with elders participating in home-based exercise, which not only promoted physical health but also mental well-being. This implies that the majority of elders of Samar, Philippines is physically able since they can do stretching exercises at home, they also love to listen to music to relax. Surprisingly, most of them no longer do household chores. These indoor activities that they engage in help them maintain their physical mobility and well-being.

Whereas meditation exercises have emerged as effective strategies to enhance the health of adults during the COVID-19 pandemic, particularly in addressing mental health challenges such as anxiety and stress. In fact, longitudinal studies suggest that pre-existing meditation practices can protect against increased anxiety and stress during prolonged lockdowns, emphasizing the importance of cultivating self-regulation skills (Monteiro et al., 2024).

Furthermore, the psychological impact of the pandemic, such as loneliness, including fear of illness and loss, has been profound, necessitating targeted mental health support for older adults (Briere, et al., 2023). While the pandemic has posed significant challenges to elder well-being, it has also highlighted the importance of resilience and adaptability in maintaining social connections and health care access (Morgan, 2023).

Although modern cultures strive to provide comprehensive social and health services amid the pandemic, these systems are continually evolving, and shaped by changing national and regional policies (World Health Organization, 2022). Cohesively, the establishment of the UN Decade of Healthy Ageing (2021–2030) which aims to reduce health inequities and enhance the well-being of older individuals, their families, and communities through collaborative efforts in four key areas: transforming societal attitudes and actions towards aging and ageism; developing communities in ways that promote the capabilities of older adults; providing person-centered, integrated care and primary health services that are responsive to the needs of older individuals; and ensuring access to quality long-term care for older people who require it highlighting that efforts must be made to cater to the health and wellness of marginalized aged group – elders.

The above data implies that elders have irregular sleeping patterns, and a majority of them do not engage in meditation exercises. Similarly, encouraging the elderly to engage in meditation exercises can positively improve their well-being. Lastly, the current study solely focuses on the descriptive



indoor physical mobility, outdoor physical mobility and self-reported well-being of the elders, with a limited number of respondents from a countryside perspective.

### Conclusion

The study revealed that elderly individuals in the countryside setting of the Philippines exhibited unique physical mobility and well-being patterns. Many preferred to remain at home, engaging in simple indoor activities such as stretching exercises, while a significant percentage also participated in outdoor walking exercises. Despite these healthy habits, irregular sleeping patterns were common among the elders. On a positive note, the majority maintained a diet rich in fruits and vegetables. These findings provide valuable insights into the physical mobility levels and well-being of elders in countryside and rural areas, highlighting the need for targeted health interventions to support this vulnerable population.

The study recommends the implementation of targeted educational and community-centric intervention programs tailored to enhance and maintain the physical health and well-being of elders, addressing their lack of awareness regarding its impact. Additionally, Local Government Units (LGUs) in the should intensify health promotion efforts to improve the physical health, cognitive functioning, and overall well-being of the elderly population. These combined efforts will ensure a more comprehensive approach to supporting the health needs of elders in the rural community.

Furthermore, as highlighted in the UN Decade of Healthy Ageing (2021–2030) aims to address health inequities and enhance the lives of older people, their families, and communities through collective action in four key areas: changing perceptions and attitudes towards aging and ageism; creating age-friendly environments that support the abilities of older adults; providing person-centered, integrated care and primary health services tailored to older individuals; and ensuring access to quality long-term care for those in need.

Additionally, it is evident that this group seldom participates in indoor and outdoor activities. It is crucial to provide them with sufficient knowledge about the importance of engaging in such activities, as they significantly contribute to healthy living in various ways (Fabillar & Rosales, 2019). The data above implies that simple activities like walking and engaging in entrepreneurial ventures can significantly impact the health and well-being of the elderly. Moreover, fostering a supportive environment can encourage the elderly to participate more actively in these beneficial activities.

### Acknowledgment

The researchers would like to extend their gratitude to Samar State University (SSU), and the Research Center for Culture and Social Issues (RCCSI) for institutionally funding the study.

### **Conflict of Interest**

The researchers declare that this paper has no conflicts of interest.

### **Author Contribution**

All authors have contributed equally to the study's conceptualization, interpreting data, reviewing, and editing the manuscript.

### Data Availability

Data can be provided upon request to the author.

#### **Declarations Ethical Statement**

The study followed the guidelines of the Declaration of Helsinki.

#### Informed Consent Statement

Informed consent was obtained from all persons involved in the study.



# References

- Bastani, P., Mohammadpour, M., Samadbeik, M., Bastani, M., Rossi-Fedele, G., & Balasubramanian, M. (2021). Factors influencing access and utilization of health services among older people during the COVID- 19 pandemic: a Scoping review. Archives of Public Health, 79, 1-11. https://doi.org/10.1186/s13690-021-00719-9
- Briere, J., Wang, S. H., Khanam, U. A., Lawson, J., & Goodridge, D. (2023). Quality of life and well-being during the COVID-19 pandemic: associations with loneliness and social isolation in a cross-sectional, online survey of 2,207 community-dwelling older Canadians. BMC geriatrics, 23(1), 615. https://doi.org/10.1186/s12877-023-04350-x
- Costa, B. O. D., Andrade, L. S., Botton, C. E., & Alberton, C. L. (2023). Effects of a telehealth stretching exercise program on pain, sleep, depression, and functionality of women with fibromyalgia during the COVID-19 pandemic: a randomized clinical trial. *Sustainability,* 15(3), 2604. https://doi.org/10.3390/su15032604
- Cruz, G. T., Cruz, C. P., & Saito, Y. (2019). Ageing and health in The Philippines. Economic research institute for ASEAN and East Asia (ERIA) & Demographic research and development foundation, Inc.
- Dolifah, D., Rahmat, D. Y., Haryeti, P., Ningrum, D., & Fauzan, H. A. (2023). Optimalisasi pemberdayaan keluarga dan kader melalui pelatihan pendidikan kesehatan pengelolaan hipertensi lansia pada pandemi covid-19. (Optimizing empowerment of families and cadres through health education training in hypertension management in the elderly the covid-19 pandemic). PengabdianMu: Jurnal Ilmiah Pengabdian kepada Masyarakat, 8(5), 681-687. https://doi.org/10.33084/pengabdianmu.v8i5.4477
- Fabillar, J., & Rosales, R. (2019). Health-related lifestyle of senior citizens in Samar. Journal of Samar Studies, 1(1), 17-21. http://www.jar.ssu.edu.ph/index.php/JSS/article/view/260
- Felipe, S. G. B., Parreira Batista, P., da Silva, C. C. R., de Melo, R. C., de Assumpção, D., & Perracini, M. R. (2023). Impact of COVID-19 pandemic on mobility of older adults: A scoping review. International Journal of Older People Nursing, 18(1), e12496. https://doi.org/10.1111/opn.12496
- Hyori, Kim., Jua, Kim., Jiyeon, Ha. (2023). Factors influencing mobility in community-dwelling older adults during the early COVID-19 pandemic: a cross-sectional study. *BMC Public Health*. https://doi.org/10.1186/s12889-023-16553-3
- Liebzeit, D., Krupp, A., Bunch, J., Tonelli, S., Griffin, E., McVeigh, S., ... & Buck, H. (2023). Rural age-friendly ecosystems for older adults: An international scoping review with recommendations to support age-friendly communities. *Health Science Reports, 6*(5), e1241.https://doi.org/10.1002/hsr2.1241
- Lino-González, A. L., Téllez-Alanís, B., Carrillo-Mora, P., Palacios-Hernández, B., Hernández-Galván, A., & Durand-Rivera, A. (2024). Physical activity, mental health, support networks, lifestyle, and memory in older adults during the COVID-19 pandemic. *Neurology Perspectives*, 4(2), 100146. https://doi.org/10.1016/j.neurop.2024.100146
- Lipardo, D., Rogelio, M. C., Castueras, K. A., Felipe, C. J., Koa, D. Y., Liao, E. K., ... & Yap, A. M. (2023). Physical activity level and quality of life of Filipino community-dwelling older adults during the covid-19 pandemic: a cross-sectional study protocol. *Philippine Journal of Allied Health Sciences*, 6(2), 6-11. https://doi.org/10.36413/pjahs.0602.002
- Lopes, F., & Silva, M. R. (2023). Changes in eating and sleeping habits, but no associations between subjective sleep quality with body composition and biomarkers among Portuguese elderly during the COVID-19 pandemic. *Clinical Nutrition ESPEN, 58*, 542.



https://doi.org/10.1016/j.clnesp.2023.09.345

- Maresova, P., Krejcar, O., Maskuriy, R., Bakar, N. A. A., Selamat, A., Truhlarova, Z., ... & Vítkova, L. (2023). Challenges and opportunity in mobility among older adults-key determinant identification. BMC geriatrics, 23(1), 447. https://doi.org/10.1186/s12877-023-04106-7
- Medina, B. T., & Medina, M. C. T. (2023). The elderly in the filipino family. in resilience and familism: the dynamic nature of families in the Philippines (pp. 285-299). Emerald Publishing Limited. https://doi.org/10.1108/S1530-35352023000023016
- Mistry, S. K., Ali, A. M., Yadav, U. N., Khanam, F., Huda, M. N., Lim, D., ... & Sarma, H. (2022). Changes in prevalence and determinants of self-reported hypertension among Bangladeshi older adults during the COVID-19 pandemic. International Journal of Environmental Research and Public Health, 19(20), 13475. https://doi.org/10.3390/ijerph192013475
- Monteiro, B., Galhardo, A., Senra, H., Pinto-Gouveia, J., & Cunha, M. (2024). Beyond fight or flight: The protective role of pre-pandemic meditation practice against anxiety and perceived stress. Stress and Health, 40(5), e3440. https://doi.org/10.1002/smi.3440
- Morgan, A. K. (2023). Well-being in the age of COVID-19: The role of social support. Cogent Public Health, 10(1), 2245525. https://doi.org/10.1080/27707571.2023.2245525
- Noviati, E., Sukmawati, I., & Kusumawaty, J. (2021). Happy elderly in the pandemic period with elderly gymnastics and counseling methods. *ABDIMAS: Jurnal Pengabdian Masyarakat*, 4(2), 666-670. https://doi.org/10.35568/abdimas.v4i2.1142
- Philippine Statistics Authority. (2022). https://psa.gov.ph/population-and-housing/node/167965
- Ramírez-Gomez, D. C., Osorio, A. N. V., Cerquera, P. E. B., Cruz, A. M. R., & Quintero, A. M. (2024). Niveles de actividad física y bienestar psicológico de las personas mayores en zonas rurales (Levels of physical activity and psychological well-being of the elderly in rural areas). Retos, 51, 69-74. https://doi.org/10.47197/retos.v51.100441
- Rogers, A., Pantelaki, E., Gilroy, R., Weston, R., Spencer, B., Holland, C., & Yazdanpanahi, M. (2024). A systematic review of older adults' travel behaviour and mobility during COVID-19 pandemic: lessons learned for sustainable transport provision and healthy aging. *Transport Reviews*, 44(2), 405-433. https://doi.org/10.1080/01441647.2024.2303746
- Siltainsuu, H., & Peltola, H. R. (2024). Music as support for older adults' wellbeing: a Scoping review. *Music & Science*, 7, 20592043241268721. https://doi.org/10.1177/20592043241268721
- Soriano, J. R. J., & Aruta, J. J. B. R. (2022). Mental health of Filipino older adults with dementia during COVID-19 pandemic: Reflections and viewpoints. *International Journal of Geriatric Psychiatry*, 37(10). https://doi.org/10.1002/gps.5811
- Su, K., & Jin, K. (2023). Aging during the pandemic: untangling the complexities of COVID-19 and geriatric care. Aging and Disease, 14(3), 572. https://doi.org/10.14336/AD.2023.0405
- Tomioka, M., Yuan, S., Yago, J., & Medeiros, C. (2024). The impact of the covid-19 pandemic on older adults who participate in group physical exercise program. *Hawai'i Journal of Health & Social Welfare, 83*(7), 180.
- Vèrnia, A. M. (2024). Music and quaility of Life: a Brief theoretical review. International Journal of Health and Music, 1(1), 23-32. https://doi.org/10.61629/ijhm.v1i1.41



- Vicerra, P. M. M. (2023ab). The well-being of older adults in the Philippines: Application of the years of good life. *Journal of Population & Social Studies*, 31. https://doi.org/10.25133/JPSSv312023.018
- World Health Organization. (2015). Young people: a resource book. WHO Western Pacific Region. Retrieved from

https://iris.wpro.who.int/bitstream/handle/10665.1/10929/9789290616849.

World Health Organization. (2022). Ageing and health. World Health Organization. Retrieved https://www.who.int/news-room/fact-sheets/detail/ageing-and-health

World Health Organization. (2022). UN decade of Healthy ageing 2021-2030, 2021.