

Correlates of Frailty among Older Persons in Rural Eastern Uganda: A Cross-sectional Survey

Wandera, S.O.* , Kawooya, S.*, Kisaakye, P.*, Nakasujja, N.**, Diaz, M.M.***

*Department of Population Studies, Makerere University, Kampala, Uganda, E: swandera@gmail.com

**Department of Psychiatry, Makerere University, School of Medicine, Kampala, Uganda

***Department of Neurology, University of North Carolina at Chapel Hill, School of Medicine, Chapel Hill, North Carolina, USA

1. Introduction

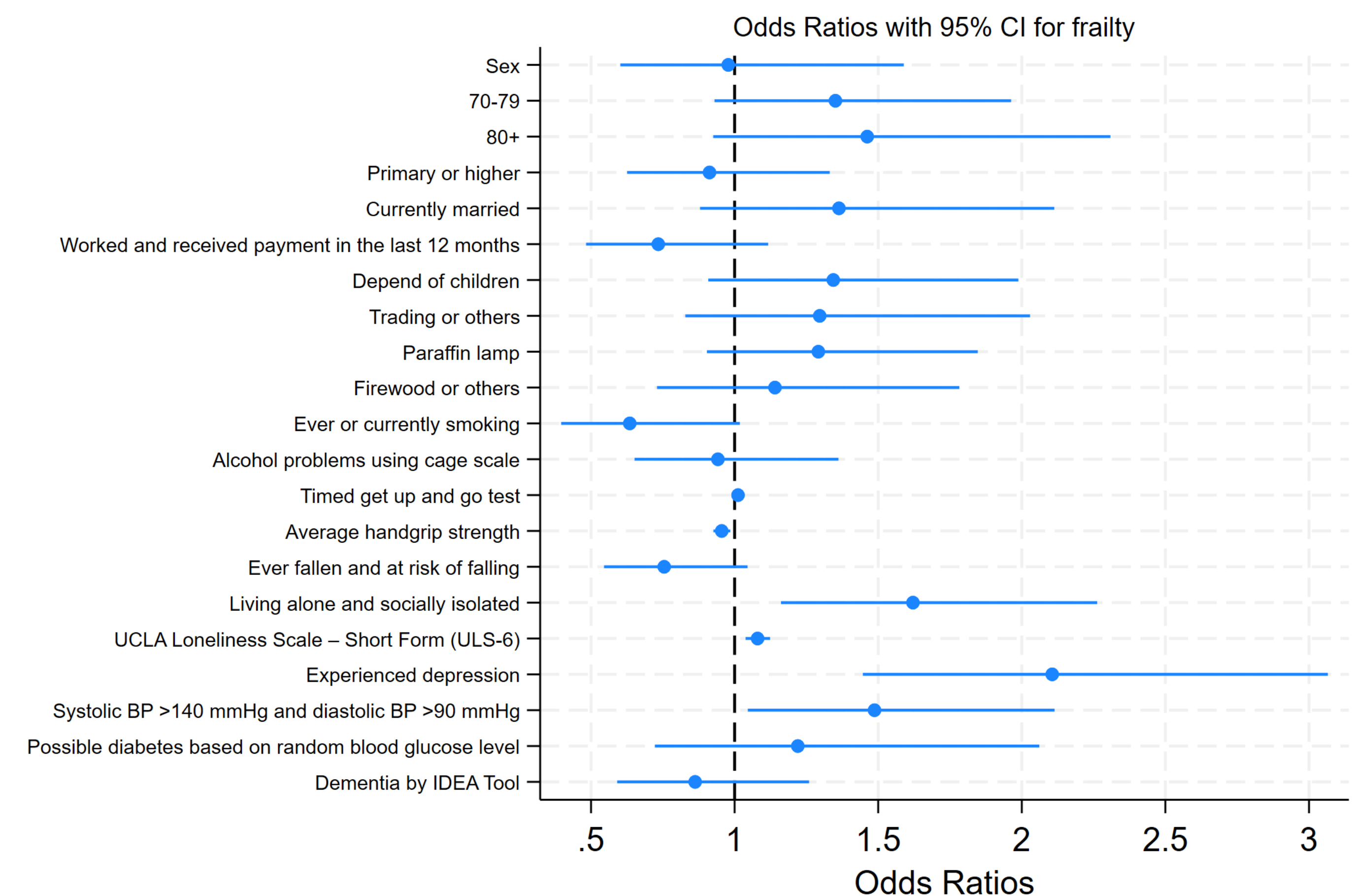
- Globally, 8.5% of the population is aged 60 years and older, to 16.7% by 2050.
- In Uganda, adults aged 60 years and older account for about 5% of the 45 million.
- Limited data on the prevalence and factors associated frailty among older persons in rural Eastern Uganda.

2.2 Location of Uganda in Africa



Map of Uganda UG-02 World Atlas (2025)

3.2 Risk Factors for Frailty



2.1 Data & Methods

- Study design:** Cross-sectional survey of 598 older adults
- Study Districts:** Busia and Namayingo
- Data collection:** 12 December 2023 – 30 Sep 2024
- Ethical approval:** TASO Research and Ethics Committee (**TASO-2022-179**) and the Uganda National Council of Science and Technology (**HS2693ES**).
- FRAIL Scale:** Fatigue, Resistance (difficulty walking up), Aerobics (cannot walk 100 meters), Illness (have more than 5 illnesses) and Loss of Weight (5 kgs unintentionally).
- Frailty:** 0 = robust, 1-2 = Pre-frail, 3-5 = Frail. A score of 3 to 5 indicated frailty and 0 to 2 indicated no frailty.

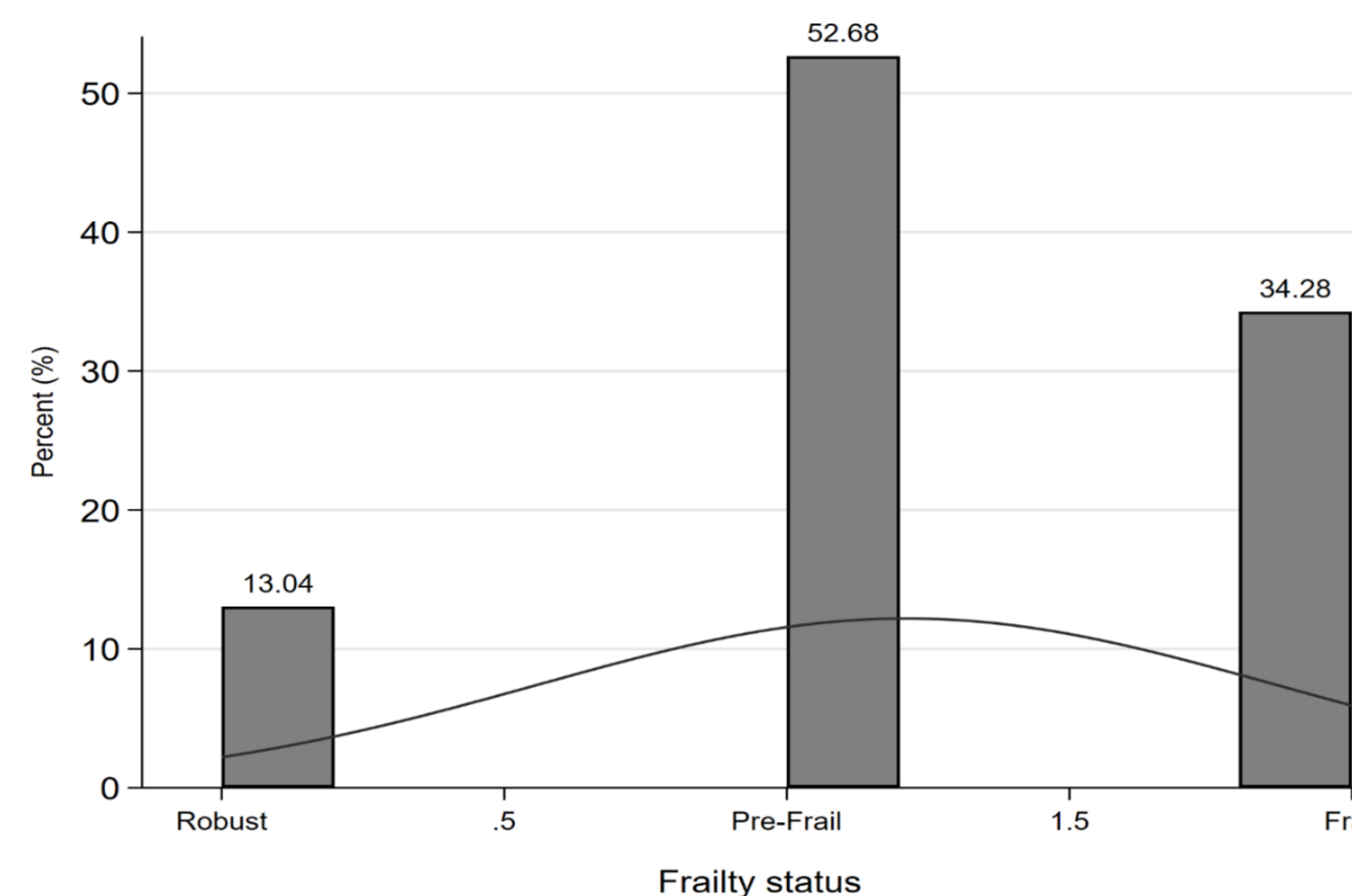


Hand Grip Strength



Timed Up and Go test

3.1 Results: Descriptive



Risk factors:

- Low Handgrip strength
- Living alone or being social isolated
- Loneliness
- Depression
- Hypertension

3.3 Conclusion

- Prevalence of frailty was 34%** and pre-frail status (52%).
- Risk factors for frailty** were:
 - Low Handgrip strength
 - Living alone or being social isolated
 - Loneliness
 - Depression
 - Hypertension

Reference

Fried, L. P., Tangen, C. M., Walston, J., Newman, A. B., Hirsch, C., Gottdiener, J., Seeman, T., Tracy, R., Kop, W. J., Burke, G., & McBurnie, M. A. (2001). Frailty in older adults: evidence for a phenotype. *J Gerontol A Biol Sci Med Sci*, 56(3), M146-156. <https://doi.org/10.1093/gerona/56.3.m146>

Acknowledgement

- Funding from the Alzheimer's Association (AARGD-NTF-22-975156)
- Study participants
- Research Assistants
- District officials