



## Socio-demographic and lifestyle influences on falls among the elderly persons living in Gatanga Sub-County, Murang'a County, Central Kenya: A cross-section study

Ernest Kimani<sup>1</sup>, Simon Karanja<sup>2</sup>, Lawrence Muthami<sup>3</sup>, Samuel Ndanya<sup>4</sup>, Samuel Gitonga<sup>1</sup>

<sup>1</sup>Department of Surgery and Orthopedics, Embu Level V Hospital, Embu County, Kenya, <sup>2</sup>Department of Public and Community Health, College of Health Sciences, Jomo Kenyatta University of Agriculture and Technology, Kiambu County, Kenya, <sup>3</sup>Center for Public Health Research, Kenya Medical Research Institute, Nairobi, Kenya, <sup>4</sup>Department of Surgery and Orthopedics, Nanyuki Level V Hospital, Laikipia County, Kenya

[dx.doi.org/10.17504/protocols.io.vqxe5xn](https://doi.org/10.17504/protocols.io.vqxe5xn)

 Ernest Kimani 

### ABSTRACT

An estimated one-third of the elderly people worldwide sustain falls every year, which contributes to over 20% of injuries in this age group. In the central region of (Mount) Kenya, despite increasing awareness about this condition, the magnitude as well as the socio-demographic and lifestyle factors leading to falls in the elderly are not well known.

The main objective of this study was to investigate the prevalence of falls, their outcomes, and the factors influencing their occurrence among the elderly persons living in Gatanga Sub-County, Murang'a County, central Kenya. An analytical cross-sectional study design was used. Using systematic random sampling, 420 out of 9247 study participants were identified and interviewed at home. Using a structured interview form, data was collected on socio-demographic, socio-economic, lifestyle, and medical factors, as well as on fall or non-fall status from September 2016 to August 2017.

With 42%, the prevalence of falls amongst the elderly in this region is high. The farming lifestyle involving crop farming and animal husbandry, socio-economic factors, and medical illnesses are significantly associated with falls. To reduce the occurrence of falls, we need to better understand the underlying contributing factors and the integration of relevant preventive measures that reduce the risk of falls in communities of the elderly.



Manuscript.docx



S1 Appendix 1\_ Interview form\_ Falls Elderly Study.docx



S2 APPENDIX 2 \_ Written Consent.docx

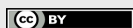


Falls Elderly Gatanga\_Dataset.xls

### PROTOCOL STATUS

#### Working

We use this protocol in our group and it is working



This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited