Analysis of qualitative data, Statistical Analysis and Health Economic Analysis

In 1 collection

Kajiru Gad Kilonzo[1], Stefanie J. Krauth[2], Jo Halliday[2], Clive Kelly[3], Stefan Siebert[2], Gloria Temu[1], Christopher Bunn[2], Nateiya M Yongolo[4], Sally Wyke[2], Emma McIntosh[2], Blandina Mmbaga[1]

[1]Kilimanjaro Christian Medical Centre; [2]University of Glasgow; [3]Newcastle University; [4]Kilimanjaro Clinical Research Institute

Yujin Du

MAY 19, 2023

OPEN ACCESS

DOI: dx.doi.org/10.17504/protocols.io.e6nvwjrbdlmk/v1

Protocol Citation: Kajiru Gad Kilonzo, Stefanie J. Krauth, Jo Halliday, Clive Kelly, Stefan Siebert, Gloria Temu, Christopher Bunn, Nateiya M Yongolo, Sally Wyke, Emma McIntosh, Blandina Mmbaga 2023. Analysis of qualitative data, Statistical Analysis and Health Economic Analysis. **protocols.io** https://dx.doi.org/10.17504/protocols.io.e6nvwjrbdlmk/v1

Protocol status: Working

Created: Apr 20, 2023

Last Modified: May 19, 2023

PROTOCOL integer ID: 80838

ABSTRACT

This protocol details analysis of qualitative data, statistical analysis and health economic analysis.

ATTACHMENTS

706-1522.pdf

Analysis of qualitative data

1 REA data will be analysed using a constant-comparison method (34) to build up a preliminary classificatory scheme of the different kinds of joint pain reported in the community. Observation and documentary evidence will be used to situate the scheme.

2 Interview data will be analysed using thematic analysis to identify the major ways in which joint pain is experienced and managed, including sources of support and help.

Statistical Analysis

3 Data from the community and hospital survey will be analysed using mixed-effect multivariable logistic and linear regression models with random effects for village, household, and observer to describe the prevalence and associated factors for MSK disorder among participants.

4 Stepwise selection, likelihood ratio test, and parsimony will be used for model refinement and optimisation.

Health Economic Analysis

5 All health and social care resource use identified and measured in the health economic components of the surveys will be valued using available local/regional unit costs.

6 Estimates of productivity loss (absenteeism and presenteeism) will be generated by attaching proxy values (e.g. average wage, by type of occupation, age and gender) to measured time off work, using the human capital approach.

7 Preference based quality of life values from the prevailing Ugandan value set for the EQ-5D and CHU-9D will be attached to EQ 5D responses for all adults/children respectively.

8 An econometric model based on the statistical relationships between quality of life and healthcare resource utilisation and socioeconomic characteristics will be built using standard regression analysis, accounting for clustering (i.e. by household/village) as well as specificities of health economics quality of life and cost data (non-normal, skewed distribution).

9 The impact of MSK on catastrophic expenditures will be explored using principle components analysis, as well as calculating wealth asset scores.

10 Results will be incorporated into a risk-based prediction algorithm to identify individuals and households at increased risk of poorer outcomes.

11 Regression models will be run for predicting income/ asset levels and or Health related quality of life. The impact on the average utilisation of health services will be identified and differential effects with socioeconomic characteristics tested.