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Community-based cross-sectional survey

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

ABSTRACT

This protocol details community-based cross-sectional survey.

ATTACHMENTS

706-1522.pdf

GUIDELINES

A community-based cross-sectional survey will be used to estimate the prevalence, economic and societal impact of arthritis in the community setting using clinical screening tools, economic and quality of life questionnaires. The community survey will comprise a representative sample of all residents (aged over 5 years old) living in Tanzania's Hai district in the Kilimanjaro region, and one street in the Moshi urban setting.

Participant selection

1 Based on sample-size calculations, the study will recruit 1050 households (approximately 5701 individuals) for this cross-sectional survey, to achieve a confidence level of 95% and assuming a 15% prevalence of MSK (as estimated in the pilot study).

2 Two-stage cluster sampling with replacement and probability proportional to the size of the village population will be used. (25)

3 In the first stage villages will be selected from a sampling frame, and one village can be selected more than one time with the probability of selection proportional to the size of the village. In the second stage, households will be selected with random probability.

4 The selection of households in the second stage benefits from the existing organisation of Tanzania households within Balozi, as the Balozi 'informal' infrastructure will be used to enumerate the households and to inform the households in the villages about the aims of the survey.

5 In addition, in the Moshi urban setting one street is selected using convenience sampling. All eligible members of selected households identified in the community setting will be invited to participate in the study and asked to provide written informed consent as described in the consent section below.

Data collection

6 A three-stage screening process for all participants will be followed (See Table 1: Summary of community-based research).

Table 1: Summary of community-based research

	A	B
	Community survey:	
	Setting	Randomly selected villages in HAI district & Majengo community in Moshi urban
	Participants	Members of selected households (general population)
	Research methods	Questionnaire surveys

	A	B
		Physical examinations
		Medical imaging & blood testing
	Instruments:	**Tier 1: General (all participants):**
	(tiered according to GALS results)	GALS (Swahili version)
	*denotes instruments applied to participants below 18 years of age	pGALS (Swahili version)*
		WHO DAS (Swahili version)
		EQ5D (Swahili version)
		Demographic questionnaire
		Short health questionnaire
		Short health economics questionnaire
		CHU 9D (Swahili version)*
		Tier 2: GALS^{+} participants:
		HAQ (Swahili version)
		Global Health + modified Joint Pain Visual Analog scale (Swahili version)
		REMS
		pREMS*
		66/68 swollen/tender joint count*
		Tier 3: REMS^{+}/pREMS^{+} participants:
		Blood testing
		Ultrasound
		Long health economic questionnaire
		Additional health questions
		Further medical examinations (height, weight, blood pressure, details on identified MSK disorders)
		The Tier 2 and 3 tools (excluding medical imaging, bloods and further medical exams) will also be administered the GALS- control sample from Tier1 who are age and sex-matched to REMS+/66/68 joint count+ participants in Tier3
	Community-based qualitative research	
	Setting:	Randomly selected villages in HAI district
	Participants:	Members of selected households (general population)

	A	B
	Research methods:	Focus groups (GALS+ community members) (Appendix 18)
		Semi structured interviews (GALS+ community members)
		Visualisation methods
		Co-creation methods

*A copy of all tools compiled into a single survey document can be requested from the authors.

7 In the first stage, all participants will be assessed using a version of the Gait Arms Legs Spine (GALS) screening test adapted for the local context and translated for delivery in Swahili. (26)

8 An adapted version of the paediatric version (pGALS) will be delivered in Swahili for those aged 5-17 years (27) who declare locomotor limitations or symptoms. The pGALS has previously been translated into Swahili, among other languages, and shown to be practical and acceptable in children in Malawi. (28)

9 In addition, All participants will be administered a demographic questionnaire, a short health questionnaire, and a short health-economics questionnaire (only participants >11 years).

10 Furthermore, adult participants (18+ years) will be administered the WHO Disability Assessment Questionnaire (WHO DAS), and the EQ-5D questionnaire (29,30), whereas minors under 18 will be administered the CHU 9D questionnaire (31).

11 Individuals who test negative in the GALS examination will be assessed whether they are of the same sex and similar age range as already-identified REMS+ participants and, if so, will be included as controls.

12 GALS- individuals who are not included as controls during their first visit will be asked for assent to be re-visited in case of further questions and will be revisited in case they are an appropriate control for a REMS+ case.

13 The second stage will be applied to GALS+ individuals as well as sex and age matched controls

for REMS+ individuals and will include the modified Health Assessment Questionnaire (HAQ), and the Global Health questionnaire.

14 GALS+ individuals (but not controls) will be administered REMS and the 66/68 swollen/tender joint count + Joint Pain Visual Analog Scale (VAS).

15 In the third stage, all REMS+ individuals and controls will be administered the long health-economic questionnaire (only participants >11 years), be asked additional questions about their health including the presence of additional non-communicable diseases, and have their height, weight and blood pressure measured.

16 REMS+ individuals (but not controls) will have their blood taken for laboratory analysis. In addition, ultrasound imaging will be taken from all affected joints (see Laboratory and radiological data collection section) and additional details about the participants' MSK disorders will be recorded.