Improving adolescent and adult mortality data in developing countries

Submission date	Recruitment status No longer recruiting	Prospectively registered	
21/01/2014		☐ Protocol	
Registration date 13/02/2014	Overall study status Completed	Statistical analysis plan	
		[X] Results	
Last Edited 08/01/2015	Condition category	[] Individual participant data	
U8/U1/ZU15	Other		

Plain English summary of protocol

Background and study aims

very few low-income countries have complete vital registration systems to monitor adult mortality accurately. Instead, adult mortality is estimated from data collected during household-based surveys, by asking respondents about the survival of their siblings. These siblings' survival histories (SSH) are inexpensive to collect but are potentially affected by large errors. As a result, estimates of the level of adult mortality in low-income countries are frequently contested. In this project, we tested whether a new survey instrument helps improve the quality of data on siblings' survival collected during surveys.

Who can participate?

This study recruited participants who ever resided among the population of the Niakhar Health and demographic surveillance area in Senegal. Participants were aged 15-59 years old, and had at least one adult sibling. We recruited 824 participants among families with at least one adult death and 375 among families with only surviving members.

What does the study involve?

We interviewed participants with either the standard SSH questionnaire (the same questionnaire that is used in most national surveys), or a new questionnaire, which we call the siblings survival calendar (SSC). The questionnaire to which a participant was allocated was decided by a process called randomisation, equivalent to a coin toss. We then compared the answers provided by respondents according to the type of questionnaire they were interviewed with. In particular, we checked whether respondents interviewed with the SSC omitted fewer of their siblings and reported the ages and possible date of death of their siblings more accurately.

What are the possible benefits and risks of participating?

There are no direct benefits for the respondents. However, information gathered from the study respondents will help significantly improve the measurement of adult and maternal mortality in Senegal, and possibly in other low-income countries.

Risks associated with the study only involve possible discomforts felt by respondents when recalling deaths of siblings, as well as a potential breach of confidentiality if information collected during the study is accidentally disclosed to a third party.

Where is the study run from?

The study is run by Columbia University, the Institut National Détudes démographiques (Paris, France), and the Institut de Recherche pour le Développement (Dakar, Sénégal). Recruitment took place in the Niakhar area of Senegal (Fatick region).

When is the study starting and how long is it expected to run for? Recruitment for the study lasted from January to March 2013. Participants were asked to take part in a single interview, which lasted 30-45 minutes. No follow-up was conducted.

Who is funding the study? National Institutes of Health (NICHD, USA) and Agence Nationale de la Recherche (ANR, France).

Who is the main contact? Stéphane Helleringer sh2813@columbia.edu

Contact information

Type(s)

Scientific

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Protocol serial number R03HD071117

Study information

Scientific Title

Improving adolescent and adult mortality data in developing countries: a block-randomised controlled trial

Study objectives

We hypothesize that a new survey questionnaire, which incorporates recall cues and a life calendar approach, will significantly improve the quality of data on adult mortality collected during surveys in developing countries with limited vital registration systems.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Columbia University Medical Center Institutional Review Board, 11/17/2011, Protocol ref.: IRB-AAAI9159

National Ethics Committee for Health Research in Sante (Comite National d'Ethique pour la Recherche en Sante) (Dakar, Senegal), 08/14/2012, Protocol ref.: SEN 12/11

Study design

Parallel arm block-randomised controlled trial of the SSC questionnaire

Primary study design

Interventional

Study type(s)

Screening

Health condition(s) or problem(s) studied

Measurements of adult mortality during retrospective surveys

Interventions

Participants were randomized as follows. first, we drew a sample of potential participants from the list of individuals in the population rosters of the Niakhar HDSS who met eligibility requirements. Among these selected participants, randomization was then done using a random-number generator and was stratified by gender, age of the respondent and family composition. randomization was done in blocks of 10. Each participant then underwent one single interview with either the standard questionnaire (used in most demographic and health surveys) or our new siblings survival calendar. There was no follow-up, all study outcomes were measured durign this single interview.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

Proportion of respondents who forget at least one of their adult siblings during the survey measured at baseline and there was no follow-up. Our study tested the efficacy of a new questionnaire in improving data quality collected during cross-sectional surveys.

Key secondary outcome(s))

Average error in reports of the:

- 1. Current age of live siblings
- 2. Age at death of deceased siblings
- 3. Number of years since the death of deceased siblings

Completion date

30/03/2013

Eligibility

Key inclusion criteria

- 1. Being aged 15-59 years old
- 2. Having ever resided in the Niakhar Health and Demographic Surveillance System (HDSS) area
- 3. Having at least one maternal sibling according to the Niakhar HDSS dataset.

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

Residing outside of Senegal or in areas of Senegal where the study team cannot visit a potential participant (e.g., regions distant from the capital).

Date of first enrolment

15/01/2013

Date of final enrolment

30/03/2013

Locations

Countries of recruitment

Senegal

United States of America

Study participating centre 60 Haven Avenue

New York United States of America NY 10032

Sponsor information

Organisation

National Institutes of Health (USA)

ROR

https://ror.org/01cwqze88

Funder(s)

Funder type

Government

Funder Name

National Institutes of Health

Alternative Name(s)

US National Institutes of Health, Institutos Nacionales de la Salud, NIH, USNIH

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

United States of America

Funder Name

Agence Nationale de la Recherche

Alternative Name(s)

French National Research Agency, French National Agency for Research, AgenceRecherche, ANR (Agence nationale de la recherche), L'Agence nationale de la recherche, National Agency for Research, L'Agence nationale de la recherche (ANR), ANR

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

France

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Study outputs

Output type	Details	Date created Date adde	d Peer reviewed	? Patient-facing?
Results article	results	27/05/2014	Yes	No
Participant information sheet	Participant information sheet	11/11/2025 11/11/202	5 No	Yes