Ethiopia - ET041 Excess Mortality: Surveillance Episodes Datasets

Prof Steve Tollman - Agincourt
Prof Kathleen Khan - Agincourt
Dr Kobus Herbst - SAPRIN
Dr Chodziwadziwa Kabudula - Agincourt
Dr Beth Tippett-Barr - Nyanja Health Research Institute

Report generated on: December 22, 2023

Visit our data catalog at: https://data.agincourt.co.za/index.php

Overview

Identification

ID NUMBER
ET041-EXMORTALITY-01

Version

VERSION DESCRIPTION
v1: Dataset for public distribution.

PRODUCTION DATE
2023-06-01

NOTES
v1: Dataset for public distribution.

Overview

ABSTRACT
Following the declaration of COVID-19 as a pandemic by the World Health Organization, there have been high levels of reported deaths, at least in countries with functioning civil registration and vital statistics (CRVS). These largely under-represent the true mortality due to COVID-19. A fundamental question, then, is what is the impact of COVID-19 on mortality and the scale of excess deaths, and the population sub-groups most affected, particularly in low- and middle-income settings? Constructing a true representation of COVID-19 deaths can be useful for social policies and future pandemic preparedness planning. The goal of this initiative is to characterise all-cause mortality rates and trends, by age and sex, across a range of rural and urban sub-Saharan African and South Asian settings under continuous health and demographic surveillance.

This a multinational initiative bringing together 17 sites/centres from Africa and South Asia. This dataset represents a snapshot of the continually evolving data in the underlying longitudinal databases maintained by the nodes.

KIND OF DATA
Event history data

UNITS OF ANALYSIS
Exposure Episodes

Scope

NOTES
Each record in the dataset represents a period of observation for an individual during which all the recorded characteristics of the individual stay constant. For example, on the birthday of the individual a new episode will start, because the age of the individual has changed. An out-migration will result in a new episode, because the location or residential status has changed. Any change in one of the status values, such as education or marital status, will likewise result in a new episode on the date of the change.

TOPICS

Topic	Vocabulary	URI

Topic	Vocabulary	URI
Episodes, Mortality, Migration		

KEYWORDS
Episodes, Mortality, Migration

Coverage

GEOGRAPHIC COVERAGE
Kersa Health and Demographic Surveillance System (Kersa HDSS) is located in Kersa district of eastern Hararege zone of Oromia region, Eastern Ethiopia. It was established in 2007 to track demographic and health changes in the community and to be aplat forma for various health related research by the college of Health and Medical Sciences in Haramaya University. It has a vision to become a center of excellence in health science research in Ethiopia.

The HDSS does monitoring demographic events such as birth, death, marital status change and migration; and health related conditions such as pregnancy, immunization, and morbidity among children and adults. It also conducts verbal autopsy for the deceased to identify the causes of death in the population. Other areas of interest of the HDSS are environmental health, reproductive health, nutrition, HIV/AIDS and health-care seeking and use.

The sex ratio and number of persons per household were 1.0 and 5.1, respectively. The annual net population growth is 1.6. The majority of the populations in Kersa are not within the working age group; hence the dependency ratio below 1. In different years, the total fertility rate ranges from 4.0 to 5.3. The neonatal and under five mortality are 27 and 77 per 1000 live births respectively. Tuberculosis is the leading cause of death among adults and malnutrition is the leading cause of death among children aged under 5 years

UNIVERSE
Households resident in dwellings within the study area will be eligible for inclusion in the surveillance. All individuals identified by the household proxy informant as a member of the household will be enumerated. A resident household member is an individual that intends to sleep the majority of time at the dwelling occupied by the household over a four-month period. Households will include resident and non-resident members. An individual is a non-resident member if they have close ties to the household, but do not physically reside with the household most of the time. They can also be called temporary migrants and they are enumerated within the household list. Because household membership is not tied to physical residency, an individual may be a member of more than one household.

Producers and Sponsors

PRIMARY INVESTIGATOR(S)

Name	Affiliation
Prof Steve Tollman	Agincourt
Prof Kathleen Khan	Agincourt
Dr Kobus Herbst	SAPRIN
Dr Chodziwadziwa Kabudula	Agincourt
Dr Beth Tippett-Barr	Nyanja Health Research Institute

OTHER PRODUCER(S)

Name	Affiliation	Role
Chodziwadziwa Kabudula	Agincourt	Technical Assistance
Kobus Herbst	SAPRIN	Technical Assistance
Daniel Ohene-Kwofie	Agincourt	Technical Assistance
Jean Bashingwa	Agincourt	Technical Assistance
Nkosinathi Masilela	Agincourt	Technical Assistance

Name	Affiliation	Role
Rhulani Silaule	Agincourt	Technical Assistance

DDI DOCUMENT ID
ET041-EXMORTALITY-01

Sampling

Sampling Procedure

This dataset is not based on a sample but contains information from the complete demographic surveillance areas.

Questionnaires

Overview

The data on this Repository is not the result of a single questionnaire but is a result of harmonised data from three different sites longitudinally collected over more than twenty years using different questionnaires that varied over time and site.

Data Collection

Data Collection Dates

Start	**End**	**Cycle**
2015-01-01	2021-12-31	Agincourt

Time Periods

Start	**End**	**Cycle**
2015-01-01		Agincourt

Data Collection Notes

In all the HDSS nodes, data are collected from a household proxy respondent, preferably the head of household or any next available senior adult resident household member, after informed consent was obtained by trained fieldworkers. Respondents are informed of the purpose and confidentiality of the interview, their right to refuse participation or withdraw from the study, and that scientists would be given access to anonymised data to analyse and publish information.

Questionnaires

The data on this Repository is not the result of a single questionnaire but is a result of harmonised data from three different sites longitudinally collected over more than twenty years using different questionnaires that varied over time and site.

Data Processing

Data Editing

The first step in the data preparation process is quality assurance. The Data Management hub team assess the data submitted to ensure it is in the correct format and falls within expected value ranges. Other potential issues checked include: missing data, incorrect data types, unexpected duplicate or orphan records. The principle of the data quality checks is that if the data conversion conducted by the nodes was complete and accurate, there should be little or no difference in the data quality and demographic indicators between the base and versions of the nodal data. If the data submitted by the nodes meets the criteria for inclusion into the consolidated dataset the data moves to the second step of the data production process. However, if the data fail the inclusion checks, this could then lead to another iteration of data submission and quality control checks until Data Management hub is satisfied that they have high quality data.

Data Appraisal

Estimates of Sampling Error

Not Applicable

File Description

Variable List

ET041_RawCensoredEpisodes

Content	
Cases	175805
Variable(s)	13
Structure	Type: Keys: ()
Version	
Producer	
Missing Data	

Variables

ID	Name	Label	Type	Format	Question
V14	recnr	RecNr	contin	numeric	
V15	countryid	CountryId	discrete	numeric	
V16	centreid	CentreId	discrete	character	
V17	individualid	IndividualId	discrete	character	
V18	sex	Sex	discrete	numeric	
V19	dob	DoB	discrete	character	
V20	episode	Episode	discrete	numeric	
V21	episodes	Episodes	discrete	numeric	
V22	startevent	StartEvent	discrete	character	
V23	startdate	Start Date	discrete	character	
V24	endevent	EndEvent	discrete	character	
V25	enddate	End Date	discrete	character	
V26	days	Days	contin	numeric	

RecNr (recnr)
File: ET041_RawCensoredEpisodes

Overview

Type: Continuous
Format: numeric
Width: 12
Decimals: 0
Range: 1-175805

Valid cases: 175805
Invalid: 0
Minimum: 1
Maximum: 175805
Mean: 87903
Standard deviation: 50750.7

CountryId (countryid)
File: ET041_RawCensoredEpisodes

Overview

Type: Discrete
Format: numeric
Width: 8
Decimals: 0
Range: 50-50

Valid cases: 175805
Invalid: 0

CentreId (centreid)
File: ET041_RawCensoredEpisodes

Overview

Type: Discrete
Format: character
Width: 5

Valid cases: 175805
Invalid: 0

IndividualId (individualid)
File: ET041_RawCensoredEpisodes

Overview

Type: Discrete
Format: character
Width: 12

Valid cases: 175805
Invalid: 0

Sex (sex)
File: ET041_RawCensoredEpisodes

Overview

Type: Discrete
Format: numeric
Width: 8
Decimals: 0
Range: 1-2

Valid cases: 175805
Invalid: 0

DoB (dob)
File: ET041_RawCensoredEpisodes

Overview

DoB (dob)
File: ET041_RawCensoredEpisodes

Type: Discrete
Format: character
Width: 11

Valid cases: 175805
Minimum: NaN
Maximum: NaN

Episode (episode)
File: ET041_RawCensoredEpisodes

Overview

Type: Discrete
Format: numeric
Width: 8
Decimals: 0
Range: 1-5

Valid cases: 175805
Invalid: 0

Episodes (episodes)
File: ET041_RawCensoredEpisodes

Overview

Type: Discrete
Format: numeric
Width: 8
Decimals: 0
Range: 1-5

Valid cases: 175805
Invalid: 0

StartEvent (startevent)
File: ET041_RawCensoredEpisodes

Overview

Type: Discrete
Format: character
Width: 3

Valid cases: 175805
Invalid: 0

Start Date (startdate)
File: ET041_RawCensoredEpisodes

Overview

Type: Discrete
Format: character
Width: 11

Valid cases: 175805
Minimum: NaN
Maximum: NaN

EndEvent (endevent)
File: ET041_RawCensoredEpisodes

Overview

Type: Discrete
Format: character
Width: 3

Valid cases: 175805
Invalid: 0

End Date (enddate)
File: ET041_RawCensoredEpisodes

Overview

Type: Discrete
Format: character
Width: 11

Valid cases: 175805
Minimum: NaN
Maximum: NaN

Days (days)
File: ET041_RawCensoredEpisodes

Overview

Type: Continuous
Format: numeric
Width: 8
Decimals: 0
Range: 1-2801

Valid cases: 175805
Invalid: 0
Minimum: 1
Maximum: 2801
Mean: 2015.6
Standard deviation: 868.8