South Africa - ZA031 Excess Mortality: Surveillance Episodes Datasets

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

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

Overview

Identification

ID NUMBER
ZA031-EXMORTALITY-02

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
The data are collected from the Agincourt health and socio-demographic surveillance area in rural, South Africa.

The Agincourt site covers approximately 420 km2 in Bushbuckridge district,

Mpumalanga province, close to the Mozambique border.

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
Dr Kobus Herbst	SAPRIN
Prof Steve Tollman	Agincourt
Prof Kathleen Khan	Agincourt
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

FUNDING

Name	Abbreviation	Role
Bill & Melinda Gates Foundation, Seattle, WA	BMGF	Current Funder
South African Population Research Infrastructure Network, South Africa	SAPRIN	Current Funder
Wellcome Trust, UK	Wellcome	Previous Funder

OTHER ACKNOWLEDGEMENTS

Name	Affiliation	Role
SAMRC/Wits Agincourt Team	Agincourt	Data Review
Kobus Herbst	SAPRIN	Data Review And QA
Dr Beth Tippett-Barr	Nyanja Health Research Institute	Reviews

DDI DOCUMENT ID
ZA031-EXMORTALITY-02

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**
1993-01-01	2021-12-31	1

Time Periods

Start	**End**	**Cycle**
1993-01-01		1

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

ZA031_RawCensoredEpisodes

Content	
Cases	191441
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	contin	numeric	
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: ZA031_RawCensoredEpisodes

Overview

Type: Continuous
Format: numeric
Width: 12
Decimals: 0
Range: 1-191441

Valid cases: 191441
Invalid: 0
Minimum: 1
Maximum: 191441
Mean: 95721
Standard deviation: 55264.4

CountryId (countryid)
File: ZA031_RawCensoredEpisodes

Overview

Type: Discrete
Format: numeric
Width: 8
Decimals: 0
Range: 710-710

Valid cases: 191441
Invalid: 0

CentreId (centreid)
File: ZA031_RawCensoredEpisodes

Overview

Type: Discrete
Format: character
Width: 5

Valid cases: 191441
Invalid: 0

IndividualId (individualid)
File: ZA031_RawCensoredEpisodes

Overview

Type: Continuous
Format: numeric
Width: 12
Decimals: 0
Range: 15-271713

Valid cases: 191441
Invalid: 0
Minimum: 15
Maximum: 271713
Mean: 156049.6
Standard deviation: 76623.1

Sex (sex)
File: ZA031_RawCensoredEpisodes

Overview

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

Valid cases: 191441
Invalid: 0

DoB (dob)
File: ZA031_RawCensoredEpisodes

Overview

Type: Discrete
Format: character
Width: 11

Valid cases: 191441
Minimum: NaN
Maximum: NaN

Episode (episode)
File: ZA031_RawCensoredEpisodes

Overview

Type: Discrete
Format: numeric
Width: 8
Decimals: 0
Range: 1-9

Valid cases: 191441
Invalid: 0

Episodes (episodes)
File: ZA031_RawCensoredEpisodes

Overview

Type: Discrete
Format: numeric
Width: 8
Decimals: 0
Range: 1-9

Valid cases: 191441
Invalid: 0

StartEvent (startevent)
File: ZA031_RawCensoredEpisodes

Overview

Type: Discrete
Format: character
Width: 3

Valid cases: 191441
Invalid: 0

Start Date (startdate)
File: ZA031_RawCensoredEpisodes

Overview

Type: Discrete
Format: character
Width: 11

Valid cases: 191441
Minimum: NaN
Maximum: NaN

EndEvent (endevent)
File: ZA031_RawCensoredEpisodes

Overview

EndEvent (endevent)
File: ZA031_RawCensoredEpisodes

Type: Discrete
Format: character
Width: 3

Valid cases: 191441
Invalid: 0

End Date (enddate)
File: ZA031_RawCensoredEpisodes

Overview

Type: Discrete
Format: character
Width: 11

Valid cases: 191441
Minimum: NaN
Maximum: NaN

Days (days)
File: ZA031_RawCensoredEpisodes

Overview

Type: Continuous
Format: numeric
Width: 8
Decimals: 0
Range: 1-2922

Valid cases: 191441
Invalid: 0
Minimum: 1
Maximum: 2922
Mean: 1508
Standard deviation: 953.4