Study Description

Title

The prevalence of Plasmodium falciparum in sub Saharan Africa since 1900

Production Statement

Producer/Author: Snow, RW

Version Statement

Version: 1

Version Responsibility: Snow, RW and/or KWTRP Data Repository

Bibliographic Citation

Snow, RW (2017), "The prevalence of Plasmodium falciparum in sub Saharan Africa since 1900", doi:10.7910/DVN/Z29FR0<http://dx.doi.org/10.7910/DVN/Z29FR0>, Harvard Dataverse, V1

Study Scope

Subject Information

Abstract:

Short term seasonal cycles are a fundamental aspect of the epidemiology of malaria. Longer-term climate anomalies, changing environmental and intervention landscapes also alter the likelihoods of mosquito-human contact or the duration of host infection. The supra-seasonal, long-term cycles of transmission are poorly defined for P. falciparum malaria in Africa.

To provide an empirical basis to define the long-term nature of malaria transmission cycles, we used data on the P. falciparum parasite rate, the proportion of persons positive for malaria infection among those examined. These data were assembled as part of an intensive search lasting 21 years. The data represent the largest ever assembled repository of any parasitic disease in Africa and provide information on over 50,000 community-based surveys across SSA since 1900.

Summary Data Description

Date: Start: 1900
End: 2015
Cycle: N/A

Geographic Coverage: Africa

Georgraphical Unit: Country

Unit of analysis: Administrative Units

Kind of Data: Survey

Methodology and Processing

Data Collection Methodology

Sources Statement: For over 21 years, we sourced unpublished and published materials related to community-based malaria infection prevalence at European, United Nations and African national libraries, archives and ministry of health repositories. We undertook standard electronic data searches of peer-reviewed publications, and contacted malaria scientists, regional health research institutes, government and non-government agencies involved in the delivery and monitoring of malaria interventions. The minimum data requirements for the survey included the date and location, age range, numbers examined, infection prevalence by species and parasite detection method. A total of 50,424 parasite prevalence surveys since 1900 were included.

Data Acess

Dataset Availability

Location: https://dataverse.harvard.edu/dataverse/population-health

Extent of Collection: 1 data files (CSV) + WinBugs analysis code (PDF, .odc) + codebook/data dictionary (PDF) + Readme File

Data Use Statement	
Restrictions:	None. Dataset and documentation is made available under open access. See section on **Notes** below for terms of use/license
Citation Requirements:	Publications based on this data collection should acknowledge this source by means of bibliographic citation. To ensure that such source attributions are captured for bibliographic utilities, citations must appear in footnotes or in the reference section of publications. The bibliographic citation for this data collection is: Snow, RW (2017), "The prevalence of Plasmodium falciparum in sub Saharan Africa since 1900", doi:10.7910/DVN/Z29FR0<http://dx.doi.org/10.7910/DVN/Z29FR0>, Harvard Dataverse, V1
Notes	This data is made available under the Creative Commons Attribution 4.0 International (CC BY 4.0) - https://creativecommons.org/licenses/by/4.0/legalcode. Publications based on these data should acknowledge this source by means of bibliographic citations. For more information on these data, please contact the author via rsnow@kemri-wellcome.org or the data governance office via this email address: dgc@kemri-wellcome.org

Data File Description

File-by-File Description

File Name: **The prevalence of Plasmodium falciparum in sub Saharan Africa since 1900**

File Structure

File Dimensions:	No. of Cases:	517
	No. of Variables:	18
	Size:	9,227,775
	Records per Case:	Multiple *(with reference to variable 'AFRADMIN2Code')*
	Overall No. of Records:	50,425
Type of file:	Raw Data	

Notes

A PDF codebook accompanies the data, which provides complete information for all variables.

Related Files

Dataset(s): None

Publication(s): The prevalence of Plasmodium falciparum in sub Saharan Africa since 1900 (Manuscript)

Variable Description & Frequency

File-by-File Description

File Name: **The prevalence of Plasmodium falciparum in sub Saharan Africa since 1900**

Variable Codebook

Variable Name	Description	Value	Label	Format
ID	record ID			Numeric
COUNTRY	Country			String
AFR ADMIN2 Code	Administrative division number/code			String
AFR Admin name	Name of administrative division			String
AREA_TYPE	Area type	Point	Individual villages, communities or schools or a collection of communities within an area covering a 5-km grid or approximately 0.05 decimal degrees at the equator	String
		Polygon	larger administrative units	
		Wide-area	areas more than 5 km2	
Lat	Latitude			Numeric
Long	Longitude			Numeric
MM	Month survey was done			Numeric
YY	Year survey was done			Numeric
LoAge	Lowest age in surveyed population (decimal years)			Numeric
UpAge	Highest age in surveyed population (decimal years)			Numeric
Ex	Ex			Numeric
Pf	*Plasmodium falciparum*			Numeric
PfPR2-10	*Plasmodium falciparum* parasite rate in children aged 2-10 years			Numeric
METHOD	Methods used to detect infection	LAMP		String
		Microscopy		
		RDT	Rapid Diagnostic Test	
		PCR	Polymerase Chain Reaction	