

Uptake, accuracy, safety and linkage into care over two years of promoting annual self-testing for HIV in Blantyre, Malawi: a community-based prospective study

DOI

10.17037/DATA.7

Data Creators

Augustine Choko, Emily Webb & Liz Corbett

Data Description

A set of anonymised datasets produced in a community-based study to investigate self-testing for HIV in Blantyre, Malawi. Taken together the datasets enable replication of findings from the study including estimation of uptake of HIV self-testing (HIVST), analysis of sensitivity/specificity of self-reported self-test results compared to nurse-performed finger prick testing, and investigation of self-reported coercion to self-test.

Methods

HIVST was made available to 14 neighbourhoods of ~1,200 adult residents each, two of whom were responsible for implementation of recruitment between February 2012 and April 2014. In general, paper-based data collection followed by electronic processing using optical mark reading software (OMR) with Microsoft Access database was used for all data collection tools. A register of all neighbourhood residents who requested (were given) an HIVST kit was kept by the volunteer neighbourhood counsellor. These data were later extracted and electronically processed and gave rise to the HIVST uptake dataset.

For the quality assurance dataset, a systematic sample of HIVST participants was selected for home-visit by study nurses aiming for minimum 5% coverage. Checks included age, confirmation of residency, whether or not HIVST kits had been used, and self-read result with offer of confirmatory testing (finger-prick blood parallel testing with Determine 1/2, Alere, Waltham, USA and Uni-Gold Recombigen HIV, Trinity Biotech, Bray, Ireland).

A self-completed questionnaire (SCQ) was given to all participants at the time a HIVST kit was given. The participant was requested to return both the SCQ and the used kit, and to drop them in a sealed ballot box. A self-reported self-test result was then recorded by the participant along with acceptability indicators and whether or not they had been forced to self-test. The returned used kit and the SCQ were sent to the laboratory where technicians re-read all used kits and recorded the result on the SCQ.

Spatial Coverage

Blantyre, Malawi.

Temporal Coverage

Census enumeration: Between April and June 2011.

HIVST data collection: Between February 2012 and April 2014.

Quality Controls

~5% systematic sample of all HIV self-testing participants re-tested with finger-prick parallel testing by a study nurse.

Species:

Human population

Privacy:

Data collection was completely anonymous due to the nature of the study design i.e. involving neighbours to provide access to HIVST kits. Therefore, the SCQ which contained HIV results was completely unlinked to any other data collection tools and indeed from the entire process to ensure confidentiality. All the data were anonymised before undertaking any analysis by removing participant identifiers.

Ethics

Ethical approval was obtained from the College of Medicine Ethics Review Committee, University of Malawi; London; School of Hygiene and Tropical Medicine; and Liverpool School of Tropical Medicine. All participants opting for HIVST provided written (or witnessed thumbprint) informed consent.

Keywords

HIV, HIV self-testing, home-based; community-based.

Language of written material

English

Additional Information

Data collection tools used in the study available upon request by emailing Liz Corbett (liz.corbett@lshtm.ac.uk).

Project Information

Project

Intensified HIV/TB prevention linking home-based HIV testing, including the option of self-testing, with HIV care: a cluster-randomised trial in Blantyre, Malawi (ISRCTN02004005).

Funder/Sponsor

Wellcome Trust, UK

Grant Number

WT091769

Associated Roles

Role	Forename	Surname	Faculty / Dept	Institution
Data Creator	Augustine	Choko	Epidemiology and Population Health / Infectious Disease Epidemiology	London School of Hygiene & Tropical Medicine, UK
Data Creator	Emily	Webb	Epidemiology and Population Health / Infectious Disease Epidemiology	London School of Hygiene & Tropical Medicine, UK
Principal Investigator / Data Creator	Elizabeth	Corbett	Infectious and Tropical Diseases / Department of Clinical Research	London School of Hygiene & Tropical Medicine, UK
Researcher	Peter	MacPherson	Department of Public Health and Policy (UoL) Department of Clinical Sciences (LSTM)	University of Liverpool, UK & Liverpool School of Tropical Medicine, UK
Project Member	Barbara	Willey		London School of Hygiene & Tropical Medicine, UK
Project Member	Helena	Feasy		Malawi-Liverpool Wellcome Trust Clinical Research Programme, Blantyre, Malawi
Data Collector	Rodrick	Sambakunsi		Malawi-Liverpool Wellcome Trust Clinical Research Programme, Blantyre, Malawi
Project Member	Aaron	Mdolo		Malawi-Liverpool Wellcome Trust Clinical Research Programme, Blantyre, Malawi
Project Member	Simon	Makombe	HIV Unit	Ministry of Health, Lilongwe, Malawi
Researcher	Nicola	Desmond	Department of Public Health and Policy	University of Liverpool, UK
Sponsor	Richard	Hayes		London School of Hygiene & Tropical Medicine, UK
Researcher	Hendramoorthy	Maheswaran	Division of Health Sciences (WMS) Malawi-Liverpool Wellcome Trust Clinical Research Programme, Blantyre, Malawi	Warwick Medical School, Coventry, UK

File Description

Title	Filename	File type	Description
Data dictionary	DataDictionary_pdf.pdf	PDF 1.4 (PDF/A)	For each dataset, gives variable name, variable data type, meaning of codes and description of the variable
Data Dictionary - Excel	DataDictionary_excel.xlsx	Microsoft Excel	Same as above
Sex-age denominators	census.txt	Tab-delimited text	Age and sex denominators from enumeration of households in neighbourhoods included in the study between April and June 2011.
HIV self-testing uptake-crude	self_testing_individual_crude.txt	Tab-delimited text	Data on people accessing HIV self-testing participants, including socio-demographic information and a variable to identify period of HIVST availability.
HIV self-testing uptake-revised	self_testing_individual_revised.txt	Tab-delimited text	Revised numbers of HIVST participants estimated by capping the denominator in each neighbourhood-sex-age stratum so that uptake does not exceed 100% in each any neighbourhood-sex-age stratum.
Quality assurance	quality_assurance.txt	Tab-delimited text	Contains two variables to enable estimation of sensitivity and specificity of self-reported HIVST results when compared to finger prick nurse-performed testing in parallel (using two rapid HIV diagnostic kits).
Self completed questionnaire	self_completed_questionnaire.txt	Tab-delimited text	Data from self-testing participants who completed questionnaires given at the time of collecting HIVST kits from a volunteer neighbourhood resident. It contains socio-demographic data, self-reported coercion to self-test, self-reported self-test result and a laboratory technician re-read of returned used kits.
UserGuide	UserGuide.pdf	PDF 1.4 (PDF/A)	This document