UCSF Center for Tobacco Control Research and Education

The African cigarette price data landscape: gaps & opportunities

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Background

Africa has the lowest cigarette taxes of any region. Cigarette price data is needed to produce evidence that encourages tax policy change.

Objectives

To locate and describe datasets that provide information on cigarette prices in African countries.

To identify opportunities for expanding the region's cigarette price information base.

Method

Three data repositories, and literature available on Pubmed and EconLit, were searched to locate datasets that:

- Contain information on manufactured cigarette prices (retail-level or self-reported), or
- Provide information on both the amount spent on cigarettes, and the number of cigarettes purchased during a specified time frame.
- Were collected in one of the 47 WHO AFRO countries.
- Were accessible free of charge.

The search strategy centered on locating datasets that include any information on cigarettes (generally) and then assessing whether the dataset provided information that allowed for the derivation of cigarette prices, specifically.

Eleven categories of information were extracted from each dataset. Among them were:

- The type of data collected (self-reported versus observational).
- Whether the dataset provides information on the cigarette brand, the retail-outlet type, and the cigarette-packaging type associated with the price observations.

The number of outliers and summary statistics, for the price of 20 cigarette sticks in constant international dollars, was calculated using the most recent year of data available from each data collection project.

T-tests compared these statistics for the 14 countries that have both self-reported and observational price data available, amounting to comparisons amongst 50 datasets.

Results

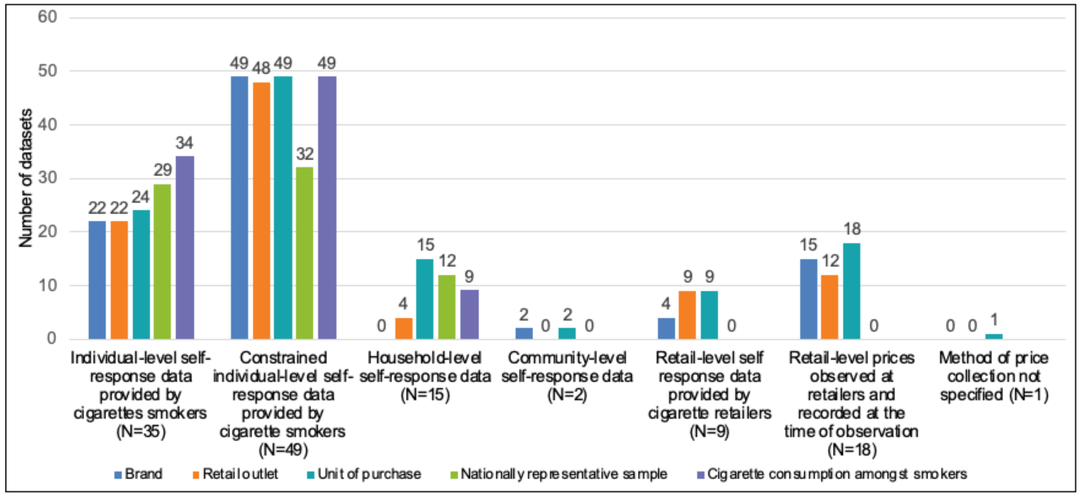
Information on cigarette prices is available in 129 datasets that cover 39 of Africa's 47 countries: 51% of the data collected comes from countries in Southern Africa, 26% comes from countries in Eastern Africa, 17% comes from countries in Western Africa, and 6% comes from countries located in Central Africa.

Features of available African cigarette price data (N=129):

Most datasets (N=110/129) provide self-reported information.

Ninety-two datasets (71%) provide information on the cigarette brand corresponding with each price observation, 95 (74%) provide information on the type of retail outlet at which the prices were paid/observed, and 118 (91%) collect information on the packaging-type associated with each price observation.

Among the 14 countries that had both observational and self-reported cigarette price data available (N=50 datasets), prices collected through observation at retailers exhibit proportionately fewer outliers than self-reported prices ($p<0.05$).



Observations made during the dataset search process:

Three surveys are implemented repeatedly in most African countries to monitor health behaviours, including cigarette smoking: WHO STEPwise, Multiple Indicator Cluster Surveys (MICS) and Demographic and Health Surveys (DHS). Yet only 11 countries have utilised these surveys to collect information on cigarette prices.

Other than the constrained self-response data collected in the pre-2012 waves of the Global Youth Tobacco Survey (N=48), no datasets that collect self-reported information on cigarette prices amongst the youth (aged <15) were found.

Conclusion

Africa's cigarette price data landscape is populated, but gaps exist.

A broader base of cigarette-price information for the region could be attained through proactive efforts by the tobacco-control community.

These efforts should include lobbying governments to leverage existing surveys that already collect information on cigarette smoking behaviour, to also collect information on the prices that people pay for the cigarettes that they smoke.

However, this does not represent a stand-alone solution for expanding Africa's cigarette price information base since current surveys of cigarette smoking behaviour do not sample from the youth.

Expanding observational price-data collection efforts would address the existing information gap concerning the prices that young people pay for cigarettes and improve understanding of the degree of misreporting in self-response surveys implemented in African countries.

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