

crops, and animal reservoirs, the low CL prevalence did not permit meaningful statistical analysis of potential risk factors for active disease. However, the multivariate statistical model identified three factors associated with CL history: age (> 15 years), non-endemic area birthplace, and residential province.

Interpretation: The prevalence of CL was much decreased compared to two decades ago but is consistent with Ministry of Public Health data. The data suggest that improvements in housing and changes in the ecological characteristics appear to have disrupted disease transmission in this area.

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HIV Self-Testing Values and Preferences in Rakai, Uganda: A Qualitative Study

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Background: HIV self-testing (HIVST) allows people who want to know their HIV status to collect a specimen, perform a test, and interpret the test results themselves; reactive results must be confirmed by health workers through national HIV testing algorithms. The privacy afforded by self-testing may encourage more people to learn their HIV status, but uptake and appropriate use of HIVST depends on communities' perceptions and understandings of self-testing. Using qualitative methods, we examined values and preferences related to HIVST among community members and health care providers in mainland and fishing populations in rural Rakai District, Uganda.

Methods: Interviewers conducted 33 in-depth interviews (IDIs) with health care providers and community members in both high-risk fishing communities (including sex workers and fishermen) and low-risk rural mainland communities. We also conducted 6 focus group discussions (FGDs), stratified by sex and location, to examine social norms in both settings. Questions explored perceived positive and negative aspects of HIVST and implementation preferences. Interviews and FGDs were conducted in Luganda or English and audio-recorded after obtaining written informed consent. Qualitative data were translated, transcribed, coded and analyzed using a team-based matrix approach.

Findings: Most participants had never heard of HIVST before. Participants cited HIVST-specific benefits of privacy, convenience, and ability to test before sex with a new partner. Participants voiced concerns regarding the absence of a health professional during testing, careless kit disposal and limited linkage to care. While many preferred to obtain HIVST kits at nearby health centers, others desired kit distribution more accessible on short notice. Key populations were seen as particularly benefiting from HIVST. Almost all participants reported they would be willing to use an HIVST if provided at a low cost and if educated sufficiently.

Interpretation: Our findings suggest a potential role for HIVST across populations in this setting. Though participants were unable

to base responses off direct experiences, most concluded that the personal benefits of HIVST outweighed the risks. If HIVST programs are introduced into these communities, implementers will need to consider how to balance accessibility with necessary professional support.

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High Spatial Resolution Mapping of Changing Inequalities in Child Mortality Across Africa between 2000 and 2015

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Background: Cross-country studies of trends in child mortality have shown, in average, large declines in nearly every country. At the same time, these successes have been varied. It is unknown though to what extent inequalities in child mortality exists and persists within countries, as there have never been contemporaneous and comparable cross-country subnational estimates.

Methods: Herein, we present a novel synthesis of existing survey data from Demographic and Health Surveys, Multiple Indicator Cluster Surveys, and censuses (in total representing over 330 million child-months of exposure) to produce estimates of neonatal, infant, and child mortality for every 5km by 5km pixel across Africa, for years 2000, 2005, 2010, and 2015.

We combine machine learning and model-based geostatistics methods in novel ways to increase predictive performance at high spatial resolutions. By modelling child mortality in a Bayesian geostatistical framework, we are able to harness the inherent spatial and temporal correlation in our data in order to produce estimates with full uncertainty.

Findings: We present a series of maps which allow for detailed inspection of highly local trends in mortality across the continent at pixel, district, and province levels of aggregation. We found that, despite overall declines, relative subnational inequality in child mortality remained mostly unchanged. Furthermore, across the continent, the top performing 10% in each country were all very similar, while the worst performing 10% in each country varied dramatically across countries. Annualized rates of change over the study period varied from an increase of 1% to a decreasing rate of greater than 8%, indicating that while several localities experienced