

RHSP NEWSLETTER

OFFICIAL NEWSLETTER

COVID-19 TESTING AT RHSP LAB

Following the outbreak of COVID-19 pandemic, laboratory testing was initiated at various sites in Uganda. However, due to overwhelming sample volumes, the Ministry of Health (MOH) enrolled other laboratories with required standards to boost the testing capacity and ensure results are out in time. RHSP Laboratory was accredited by MOH and Central Public Health Laboratories (CPHL) in preparation for rolling out of COVID-19 testing. Results from these audits indicated that RHSP Laboratory was well equipped for testing SARS-CoV2 RT-PCR using the Abbott m2000sp platform with a very low bio-risk score.



Abbot machine processing COVID-19 samples.

In preparation for initiation of testing, laboratory staff received hands-on training on COVID-19 testing at Uganda Virus Research Institute (UVRI) and were certified for competence. They were trained in various areas including filling chain of custody and laboratory investigation forms, patient identification, biosafety considerations, sample packaging and transportation, sample reception in the laboratory, sample processing, sample testing, result analysis and reporting, data management, quality control/assurance and sample archival.

RHSP is excited to partner with the MOH in contributing to Covid-19 laboratory diagnosis as a component of epidemic control.

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- RHSP Lab certification for testing COVID-19.
- US Amb. Natalie Brown's launch of Bukomansimbi District Action Centre as a model centre in masaka region.
- Rakai Community Cohort Study opens up age cap to 50+ years.
- COVID-19 vaccination roll out for RHSP staff and district health workers.
- Social Network Strategy recruitments in identification of new HIV positive persons.
- Voluntary Medical Male Circumcision training support in Nakivale Camp in Isingiro.
- Linkage of new in-migrants to health services in the WIN community cluster randomized trial.
- DREAMS / OVC graduation of girls and boys in various vocational skills from 10 districts in masaka region.
- RHSP's partnership with Ministry Of Health to strengthen Information Technology infrastructure across 179 health facilities.



US Amb Natalie Brown officially launching the Bukomansimbi DAC, looking on are officials from RHSP, MOH, CDC and Bukomansimbi district.

LAUNCH OF BUKOMANSIMBI DISTRICT ACTION CENTRE

The Ministry of Gender, Labour and Social Development through Uganda Child Helpline (UCHL) in partnership with Centers for Disease Control through Rakai Health Sciences Program supports Violence Against Children (VAC) prevention and response activities including strengthening case management at the district level by establishing and strengthening functionality of District Action Centers (DAC) to effectively coordinate child protection responses.

For a long time, support to child protection services have been difficult because of the complex nature of the response which requires a multisectoral approach and concerted coordination and response at the district level. In COP 19, PEPFAR approved the support to establish and functionalize the District Action Centers in Bukomansimbi district by Rakai Health Sciences program to address this challenge.

The Child Helpline works with the District Action Center, an office at the district level that coordinates an integrated response to child protection cases reported through the child helpline or other reporting mechanisms. MoGLSD and stakeholders have developed standards for a 'model one stop center'—and CDC is supporting the first such center in Uganda, which is housed at Butenga Health Center IV in Bukomansimbi district. The inaugural 'model' center is near other vital violence response services.

The DAC was launched by US Amb. Natalie Brown, senior leadership teams from Bukomansimbi district, RHSP, MoH, MoGLSD, CDC, PEPFAR Uganda Coordination Office and well wishers.



Group photo of various officials from CDC, PEPFAR, Bukomansimbi district, RHSP, MOH and MoGLSD, who attended the launch event.

RCCS OPENS UPPER AGE CAP

The Rakai Community Cohort Study (RCCS) is an open population-based cohort study that has been consistently running for the past 32 years in approximately 40 communities with surveys conducted every 12 – 18 since 1994.

Currently RCCS is conducting the 21st round of survey. Traditionally, the RCCS has majorly enrolled persons 15 – 49, an age group that carries the highest risk of HIV that would provide sufficient power to test new HIV interventions. At the start of round 21, the 49 age cap was lifted to allow enrolment of persons 50+ years to support on new research on dynamics of non-communicable diseases and association with HIV and urbanization. This has grown the cohort from 20,000 to 24,000.



RCCS' Naziwa Rose interviewing an elderly woman in Kabira super cluster, Kyotera.



RCCS staff moving door to door collecting data from individuals and recording GPS details.

PHONE SURVEY STUDY

When the country went into lockdown as a result of the SARs-COV2 pandemic, the traditional RCCS community-based surveys were untenable given the social distancing requirements. The RCCS used a phone survey to determine the prevalence of SARs-COV2 symptoms; assess knowledge of COVID-19 symptoms, prevention and care approaches. We look forward to sharing the results of this survey soon.



RCCS staff doing phone interviews.

COVID-19 VACCINATION

RHSP staff have been at the front line of COVID-19 prevention. On /03/2021, 200 RHSP staff were among the first batch of health workers who were vaccinated at Kalisizo hospital. The team was led by Dr Joseph Kagaayi, RHSP Executive Director and Dr Godfrey Kigozi, RHSP Director of Research plus senior district officials from Kyotera district.

RHSP's Dr Joseph Kagaayi, Dr Godfrey Kigozi and Robert Ssekubugu receiving COVID19 vaccination jabs at Kalisizo Hospital in Kyotera district.



SOCIAL NETWORK STRATEGY HTS AMONG KEY POPULATIONS (KP)

Social network strategy (SNS) is a case-finding strategy that uses social network connections to locate individuals at the highest risk for HIV to improve on the 1st 95. SNS is particularly useful in finding KPs who are at risk for HIV but have not had access to HIV testing services (HTS). The underlying assumption is that people of same social network share similar risk behaviors for HIV.

In this quarter, we identified HIV-positive KPs (Female Sex Workers-FSW in particular) newly diagnosed at the KP outreach, with characteristics that facilitate recruitment of social network members who were willing to:

- refer network members for HTS,
- were comfortable talking about HIV,
- were knowledgeable about HTS and our community testing outreach model too, after a two-day training, recruit individuals from their social and/ sexual networks for HIV testing services.

The first category was labelled initial seeds. These seeds recruited and referred members of their networks for testing. This process continued, creating chains of recruitment that penetrated hidden networks. We identified 1331 seeds. These were able to elicit 3475 social risky peers. Of the 3475 social risky peers elicited, 2915 (84%) received HTS and 214 (7.3%) were newly diagnosed with HIV and 98% (210/214) were linked to ART. RHSP is committed to continue to expand this SNS strategy to identify new HIV-positive persons.



Group photo of trainers from RHSP and trainees plus staff from MTI after the pass-out event in Nakivale IDP camp

VMMC SUPPORT TRAINING

As a novel HIV prevention strategy, RHSP has been carrying out VMMC – Voluntary Medical Male Circumcision services since 2008. To effect this, technical oversight in the scale up of the program to different regions countrywide is provided.

RHSP recently trained 20 medical staff from Medical Teams International – MTI in Isingiro, Nakivaale Camp. At the pass-out event, Dr Opio Justine – MTI Program Manager- informed trainees that the target 5000 circumcisions per year will be easily attained following the training received.

Since January 2021, RHSP has carried out 4 support trainings in surgical, theatre assisting, counselling and shangring skills. 168 health workers benefited from these trainings in the year 2020. In addition to MTI, other organisations that have benefited from this support training are; Uganda Protestant Medical Bureau (USAID/Local Service Delivery for HIV/AIDS Activity), Mildmay Uganda, Infectious Disease Institute (IDI) and Uganda Prisons Services.



RHSP's Kayiwa Daniel supervising trainees during practical sessions

WELCOME INCOMING NEIGHBOR

For about one and a half years, WIN – Welcome Incoming Neighbor study has been collecting data from in-migrants about their health care uptake and linked them to their nearest health facilities. Previous research in Rakai showed that recent migrants were almost twice as likely to acquire HIV compared to longer term residents and less likely to access HIV prevention and treatment services.

This community cluster randomized trial uses community scouts (WIN scouts) to identify and link new in-migrants to health services including Combination HIV Prevention (CHP) services. The WIN scouts in 35 communities in Kyotera, Rakai and Masaka use motivational interviewing skills to identify service needs of new migrants and link them to services. About 7000 in-migrants have been enrolled in the study.

Outcomes of the study include knowledge of HIV status; ART, and VMMC coverage; HIV incidence; HIV viral suppression among in-migrants compared to longer term residents.



A WIN Scout interviewing an in-migrant client in the field.



RHSP team led by Dr Joseph Kagaayi during a field visit to WIN fishing communities.

CDC SIMS SUPERVISION IN MASAKA

Site Improvement Monitoring System – SIMS - is a facility focused PEPFAR initiative that provides a standardized approach to monitoring the quality of program and service delivery against internationally recognized standards. Its major intention is to ensure that HIV and TB implementing partners deliver high quality HIV services.

Delivered through a standardized tool, SIMS site visits consist of a rapid assessment of services provided at CDC funded health facilities. Using a 4-color code scoring criteria of red, yellow, light green and dark green to score service quality.

SIMS has formed a platform for standardizing health care delivery, addressing gaps and strengthening human resource capacity . It has led to tangible and sustainable changes that have positively impacted facilities' delivery of care services and improvement in staff adherence to guidelines.

During a recent CDC SIMS visit to Uganda Cares and TASO Masaka, the teams assessed the following.

- HTS services that involve general testing, Key Populations, PrEP, HIV self-testing, and HIV recency.
- Care and treatment areas of ART optimization for children and adolescents, TLD transition, management of non-suppressed clients and client tracking. On-the-spot training was offered to facility staff where current treatment protocols were not reflected in patient records.
- The accuracy of data processes and how they can be utilized to make programmatic decisions.
- Laboratory services and commodity management.
- PMTCT services focusing on care for HIV exposed infants.
- Quality of TB services, right from screening, testing, turnaround time for TB results, TB infection control program, documentation of results in the registers, treatment, follow up of TB patients, and TB preventive therapy.
- General issues that involve the staffing levels, facility financing, waste management, infection prevention, supply chain management.



CDC Michelle Adler with RHSP and Uganda Cares staff during SIMS supervision at Uganda Cares, Masaka.



RHSP's Jessica Basiima with Uganda Cares staff during a virtual SIMS visit with colleagues at CDC.



RHSP's JB Ssemanda during a virtual SIMS visit with staff from Uganda Cares and others from CDC online.



DREAMS- OVC GRADUATIONS

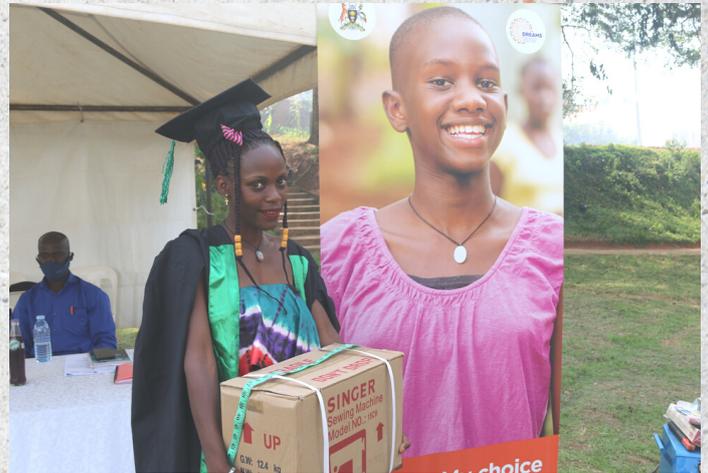
DREAMS is a social intervention that aims at reducing HIV acquisition amongst adolescent girls and young women. They are empowered through vocational skills and social behavioral change interventions. With the aim of building stability and resilience in children and families who are exposed to HIV, living with, or at risk of acquiring HIV, OVC – Orphans and Vulnerable Children is another program that RHSP has been implementing with DREAMS with funding from PEPFAR through CDC. In February, over 90,000 girls and boys were graduated from both programs in the districts of Lyantonde, Mpigi, Bukomansimbi, Lwengo, Kalungu, Rakai, Kyotera, Masaka, Gomba and Sembabule. RHSP works closely with local implementing partners like; Salama Shield, Katovu Child Development Centre, Mountains of Hope, Kitovu Mobile, CARITAS MADDO, Action for Young People, CHEDRA and Child Aid.

Due to the ongoing COVID-19 pandemic, model graduations of about 40 graduands were held in each district and were presided over by district leadership and other stakeholders. Other graduations were held at sub-county level across all districts. Girls and boys graduated in skills like; tailoring, bakery, hairdressing, mechanic and electrical artistry.

GALLERY



Prof. David Serwadda handed over a certificate and welding kit to an OVC graduand during the Sembabule graduation. Looking on are members of Sembabule district leadership led by RDC Hajji Ramathan Walugembe.



Namaganda Eva graduated in tailoring and urged people to support her new business located in Mpigi town.



A girl in Gomba district congratulates her friend upon graduating.



A group of DREAMS girls received a hairdressing kit during the Lyantonde graduation.



A display for various kits that were given away during Lyantonde graduation ceremony.

DREAMS- OVC GRADUATIONS GALLERY



Kyotera district leadership handed over a bakery kit to a group of DREAMS girls during the graduation ceremony in Kaasali, Kyotera.



Nassali Noeline is an artisan who has taught girls and boys in OVC various skills over the years.



RHSP's Dr Joy Kuslima with Bukomansimbi Vice Chairperson Christine Mukiibi handed a certificate and kit to an OVC boy who had graduated in car mechanic skillling.



During the Lyantonde graduation, Stella Nagayi and Jessa Arinaitew sharing their testimonies of how DREAMS program empowered them.



Kiggundu Edrisa and his wife Winnie Nakaweesi graduated in electrical and hairdressing skills respectively. Edrisa who's living positively urged fellow graduands to always test for HIV and stay faithful to their partners.



RHSP'S Prof David Serwadda and Prof Nelson Sewankambo welcoming Sembabule RDC Hajji Walugembe Ramathan who presided over the graduation ceremony.

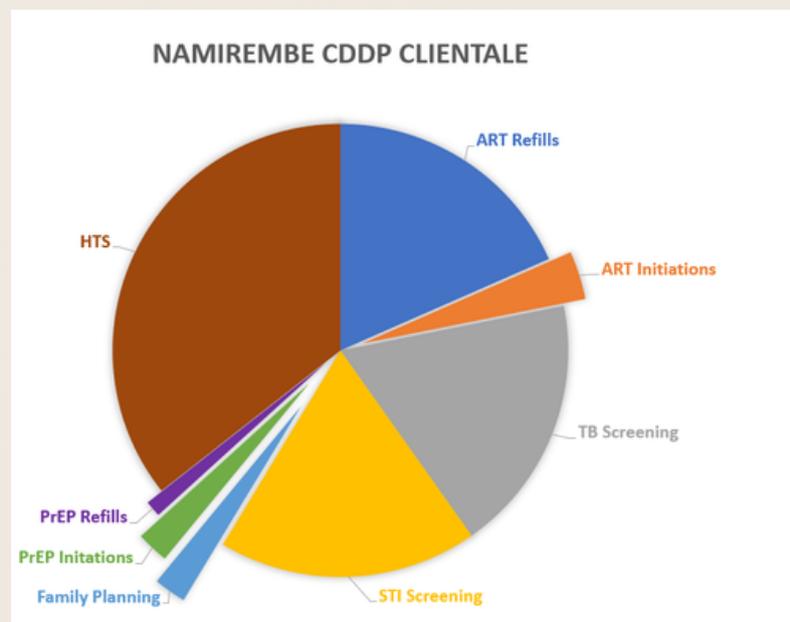
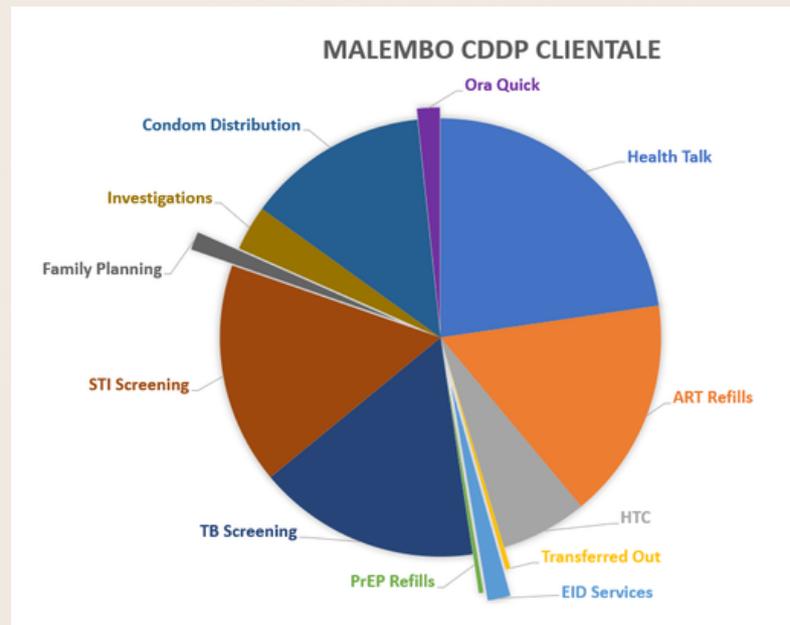
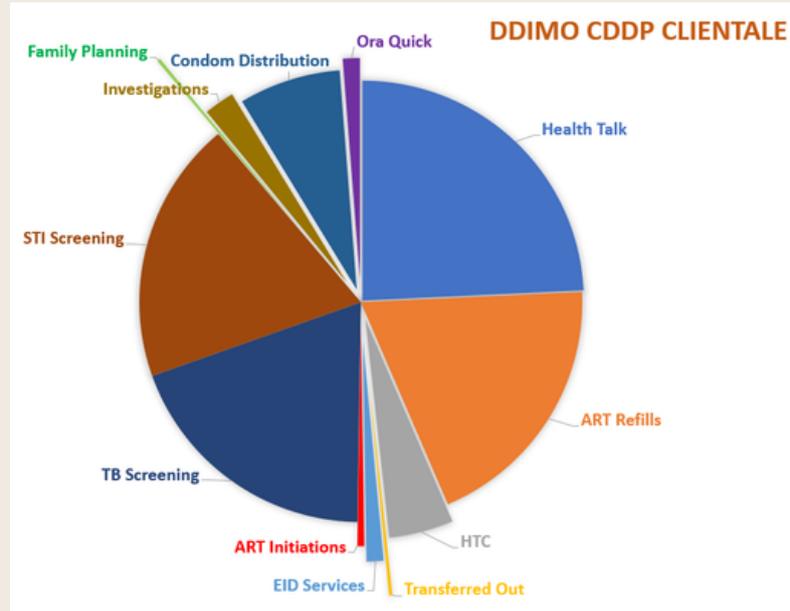
COMMUNITY DRUG DISTRIBUTION POINTS OUTREACHES

In the effort to provide comprehensive HIV care and treatment services to clients in Masaka Region, provision of ART to clients in care was individualized due to respond to unique needs of clients. Three years back, the program started implementing differentiated Service Delivery Models which include both facility and community models, with a major aim of improving retention.

Community Drug Distribution Points (CDDPs) is one of the community models where clients select a convenient place within their community to receive their ART refills at a regular (mostly quarterly) basis. At the facility, the health workers prepare the drugs and client charts before and meet clients at an agreed place on the appointed date. Only stable clients, without advanced HIV disease, are eligible for this arrangement.

Currently, there are 443 community drug distribution points in the Region serving 8% of the total clients in care. They have significantly contributed to improvement in retention of clients in care and quality of services offered.

This month RHSP had CDDPs in the fishing communities of Namirembe, Ddimo and Malembo. 788 clients benefited from these outreaches and were recipient to various services as shown in the graphs.



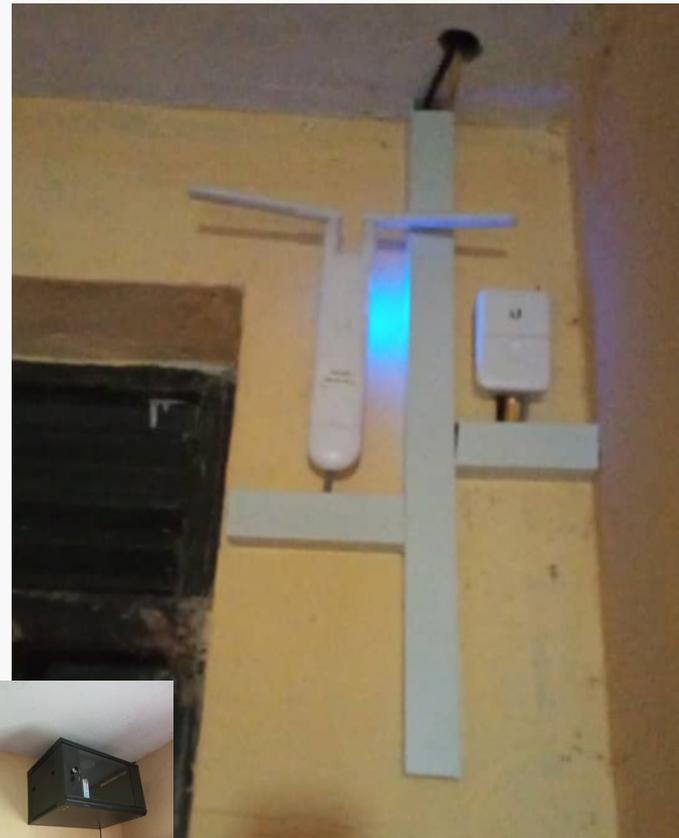
IT SUPPORT OF 179 LAN SITES IN MASAKA REGION

As one of the strategies to improve the quality of patient data management, track patient referrals, aid timely reporting and improve patient clinical care; with funding from PEPFAR through CDC_Uganda, RHSP has partnered with MOH to strengthen the Information Technology infrastructure across 179 health facilities in 12 districts of Masaka region.

RHSP is providing internet to 11 sites in Kalangala island and the rest are in different health facilities across masaka region. RHSP has made LAN installations across the region with the use of the Ubiquiti technology which supports a Wi-Fi mesh technology architecture which allows access to Wi-Fi in all corners of health facilities.

Ubiquiti controller servers located at RHSP Head office in Kalisizo enable Ubiquiti devices to be enrolled to the server from where internet usage is monitored, and timely remote support is given to users. The internet is remotely monitored using dashboards to provide timely alerts on breakdowns.

LAN will support 616 computer system to support a Point-of-Care information system that captures data and information at every location a patient makes contact while receiving treatment at a health facility.



Equipment installed at BUKasa HCIV in Kalangala district.

CAB MEETING

The Community Advisory Board (CAB) is a group of volunteers representing the public in various research study communities. CAB was set up in 2000 to foster partnerships between RHSP and the local study communities by linking researchers with residents. The RHSP CAB is a member of the National Cross CAB Network – an umbrella that brings together different CAB institutions from different research institutions within the country.

Recently, the CAB attended a scientific day at RHSP, where RHSP scientists shared recent research findings with the CAB. This occasion was used to discuss simpler approaches of communicating the same results to the communities.



Dr Kigozi Godfrey addressing CAB members during the scientific day.



VICINITY STUDY

[Epidemiology and Impact of the HIV, Non Communicable Diseases, and Urbanization Syndemic in Africa]

Increased access to antiretroviral therapy in Africa has remarkably extended the lives of Persons Living with HIV - PLHIV - and is shifting morbidity and mortality among PLHIV towards Non-Communicable Diseases - NCDs that affect the lungs, and heart/blood vessels i.e., cardiopulmonary - CP-NCDs. In addition, Africa is experiencing rapid urbanization with its associated increases in air pollution and changes in lifestyle and the social, structural, and health service environment. This remarkable convergence of HIV, CP-NCDs, and urbanization has profound implications for the future of global health.

Unfortunately, there is a scarcity of data on the impact of urbanization and air pollution on CP-NCDs, and whether this impact differs by HIV status. For example, PLHIV may be more vulnerable to urban ills due to existing chronic inflammation despite undetectable virus in the blood or from consequences of past lung infections. In addition, little is known about HIV and CP-NCDs health service utilization patterns as people migrate to urban settings and how HIV and CP-NCD care might be better integrated. Also, HIV and CP-NCDs research in Africa has primarily been at single time points and often without HIV-negative comparison groups, with major limitations in understanding contributory factors. Longitudinal, population-level approaches are needed to better guide future research, programs, and policies.

Hence, in this new study, Rakai Community Cohort Study - RCCS - is being leveraged to conduct longitudinal, population-based research on the HIV, CP-NCDs, and urbanization syndemic. The aim is to;

- Characterize HIV-related and unrelated risk factors for cardiopulmonary non-communicable diseases in a novel Rural to Urban - R2U - African cohort.
- Characterize the impact of air pollution and moderating effects of HIV on cardiopulmonary outcomes among R2U migrants.
- Assess HIV and CP-NCDs health services utilization patterns among R2U migrants.

The R2U cohort will also be directly compared to a matched Rural-to-Rural (R2R) cohort and a matched non-migrating RCCS based cohort. This may be the first population-based, longitudinal cohort study of the HIV, CP-NCDs, and urbanization syndemic in Africa, and will generate vital data needed for designing new research, interventions, and policies to combat the evolving HIV and CP-NCDs epidemic.

ART DIVERSION STUDY

Previous qualitative studies among residents in HIV hyper-endemic fishing communities (hotspots) along Lake Victoria in the Rakai region, Uganda showed frequent, short-term sharing of Antiretroviral Treatment (ART) with coworkers or friends, motivated by the desire to remain adherent despite challenges.

However, we do not know how common ART diversion is at the population level, who is most likely to divert antiretroviral drugs, or whether ART diversion affects HIV treatment outcomes such as HIV viral suppression.

RHSP has embarked on a mixed-methods study to understand the dynamics and consequences of ART diversion. The specific aims of the study include the following:

- To measure the prevalence, distribution, and factors associated with ART diversion.
- To assess the association between ART diversion and HIV viral suppression.
- To explore acceptability and feasibility of a novel intervention among ART-sharing pairs.

The study will be conducted through the Rakai Community Cohort Study - RCCS, a population-based cohort study conducted among residents aged 15 and above in about 40 communities in Rakai and Kyotera districts in southcentral Uganda.



Drugs being shared.

VALIDATION OF THE ASANTE HIV-1 RAPID REGENCY ASSAY FOR DETECTION OF RECENT HIV-1 INFECTIONS IN UGANDA

Published by Dr Ronald Moses Galiwango

Point of care rapid recency testing has been rolled out in Uganda using the Asante™ HIV-1 rapid recency® assay to identify recent HIV infections. However, the validity of the assay in Uganda was unknown. We used archived specimens (serum/plasma), collected from longitudinally observed HIV-1 recently and long-term infected participants to validate the Asante™ HIV-1 rapid recency®.

Previously identified ART-naïve samples with known seroconversions within 6 months of follow-up were tested in independent laboratories: the Rakai Health Sciences Program (RHSP) and the Uganda Virus Research Institute HIV Reference Laboratory (UVRI-HRL).

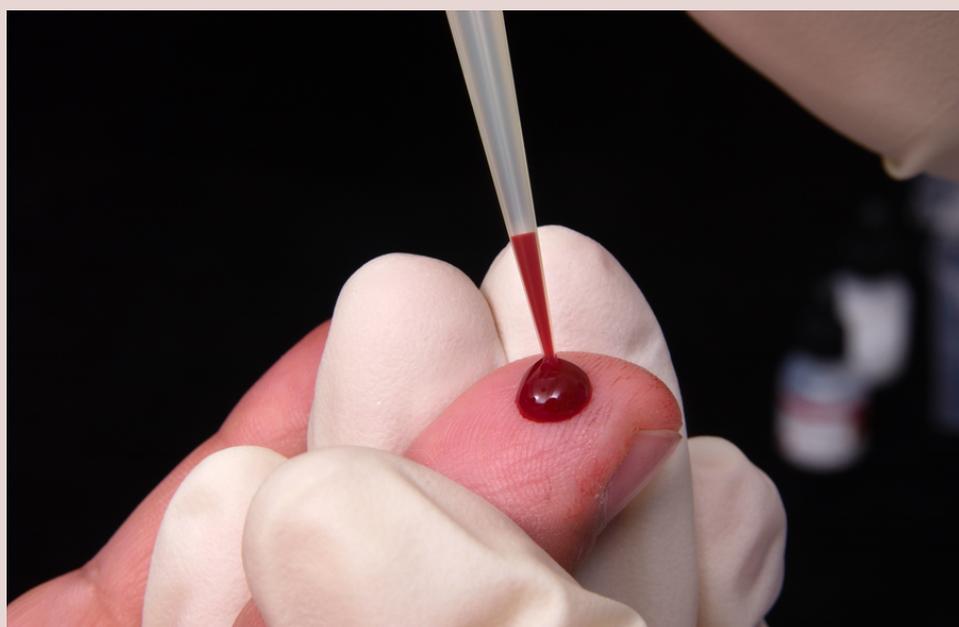
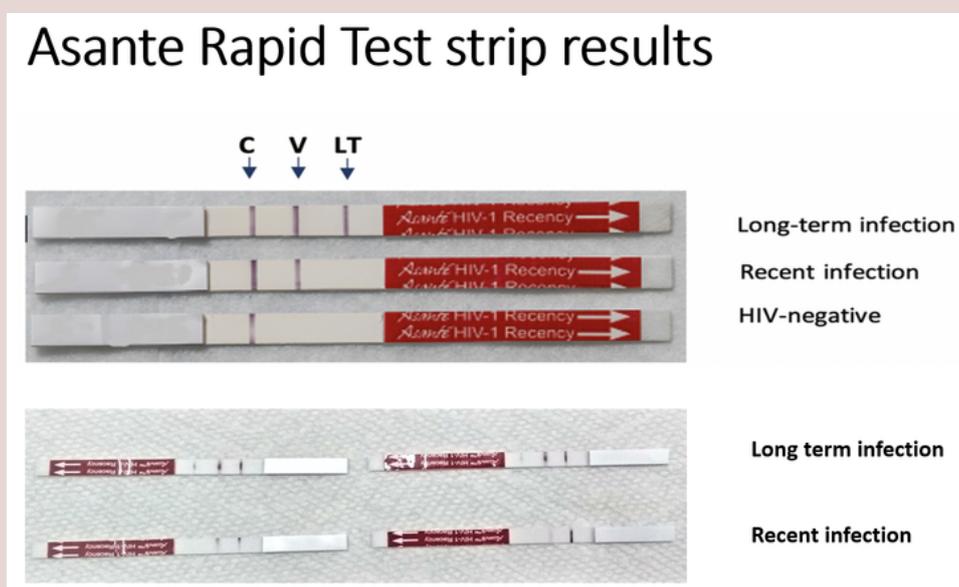
Additionally, samples from participants who seroconverted within 6-18 months and samples from individuals with chronic HIV-1 infection of at least 18 months duration were classified into three categories: ART naïve, ART exposed with suppressed viral loads and ART exposed with detectable viremia.

Of the 85 samples sero-converting in ≤ 6 months, 27 and 42 were identified as 'recent' by the Asante™ HIV-1 rapid recency® test at RHSP lab and UVRI-HRL, corresponding to sensitivities of 32% and 49%, respectively.

There was 72% agreement between the laboratories (Cohen's kappa = 0.481, 95% CI = 0.317 to 0.646, $p < 0.0001$). Specificity was 100% (200/200) among chronically infected ART naïve samples.

These results showed that the Asante™ HIV-1 rapid recency® assay had low sensitivity for detection of recent HIV-1 infections in Uganda, with substantial inter-laboratory variability due to differential interpretation of the test strip bands. Specificity was excellent.

Assessment of assay performance in other settings is needed to guide decisions on test utility.



GALLERY



Ambassador Natalie Brown officially launching Bukomansimbi District Action Centre in Butenga.



RHSP leadership welcomed the new Kyotera RDC - Ddumba Moses. (3rd from right) With him were district officials; Dr. Edward Muwanga, Mr. Ssesaazi, Ezekiel Max Kintu and RHSP's Dr Godfrey Kigozi and Dr Ronald Galiwango.



CDC Director Dr Lisa Nelson planting a mango tree at the launch of Bukomansimbi District Action Centre in Butenga.



Amb Natalie Brown, CDC Dr Lisa Nelson, MOH officials, RHSP senior leadership with Masaka and Kalangala district leadership at the launch of DREAMS program in masaka and kalangala districts.



RCCS team members have had to adhere to COVID-19 SOPs while interviewing participants in the field.

GALLERY



RCCS staff Jessica Nakukumba and Lydia Nampewo during census in kabira super cluster in kyotera district.



DREAMS graduation in bukomsimbi district



Community Drug Distribution Point in Ddimbo fishing community at the lake shore.

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Photo credit - RHSP Publicity Team