of cattle off-take and the impossibility of test-and-slaughter implementation stress dire need of further mathematical modeling and analysis. Although this epidemiological model is a generalized representation of brucellosis transmission dynamics in cattle, this study illustrates the comparative public health impact of various prevention and control strategies for India. Low resource availability, weak infrastructure, and unique cultural beliefs in India emphasize the demand for enhanced intersectoral collaboration in research and policy.

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Abstract #: *02CD009*

Utilization of GeneXpert MTB/RIF in the Southern Department of Haiti

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Program/Project Purpose: GeneXpert is a transformative new TB diagnostic method that provides specific and sensitive results in 90 minutes. Global implementation of GeneXpert, with the endorsement of the World Health Organization, has begun in Haiti. There are currently four cities in Haitiwith GeneXpert machines: Port-au-Prince, Cap-Haitien, Fond des Blancs, and Les Cayes. This is the first analysis of GeneXpert utilization at Hôpital Immaculée Conception (HIC) in Les Cayes, in the Southern Department of Haiti.

Structure/Method/Design: Investigators conducted semi-structured interviews of clinicians at HIC with access to GeneXpert. Those interviewed included three infectious disease physicians, one TB physician, three TB nurses, one TB laboratorian, and one TB clinic manager. Investigators also reviewed paper and electronic laboratory and patient records for TB suspects tested using AFB sputum smear and GeneXpert. Utilization of GeneXpert, information flow, and impact on patient care were determined. At the end of the data collection period, findings were shared with all interviewed staff at HIC, and feedback on the findings was solicited. This meeting facilitated a discussion amongst physicians, TB nurses, laboratorian, and other clinic staff about ways to streamline clinical processes and maximize GeneXpert utilization at HIC. The findings were also presented to the Director of HIC.

Outcomes & Evaluation: GeneXpert was first used at HIC on 5 December 2013. Since then, lack of electricity made GeneXpert unavailable for 5 weeks. Until 2 August 2014, 64 patients had GeneXpert testing. This represents only 2.6% of Ministry of Health projected utilization. No results returned on the same day. 15 (23%) tests returned No Result: Machine Error, largely due to hyperviscous sputum. Of 49 tests with results (77%), 23 (47%) were TB+. Many tested patients were already smear positive. Among 19 TB+ Rif S patients, the average time from clinical presentation to GeneXpert testing was 73 days. 11 (58%) TB+ Rif S patients were already on anti-TB therapy at the time of GeneXpert testing.

Going Forward: Utilization of GeneXpert at HIC is in accordance with Haitian Ministry of Health guidelines, but far below capacity. Same-day diagnosis is not currently being realized. Key goals include laboratory support for sputum preparation, educating clinicians rega

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Mixed-methods evaluation of a novel community-based support and education intervention for individuals with HIV/AIDS in KwaZulu-Natal, South Africa

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Background: People living with HIV in Sub-Saharan Africa face significant challenges to accessing and utilizing appropriate care. Community-based peer support groups have long been recognized as a key psychosocial intervention to increase linkage to treatment and improve health outcomes. This study aimed to measure the impact of the PEPFAR-supported structured support group intervention Integrated Access to Care and Treatment (I ACT), as implemented by a small community-based organization, on South African clients' knowledge, attitudes, and practice regarding HIV/AIDS, including their experiences of stigma, willingness to disclose, and uptake of and adherence to treatment services.

Methods: This study took place in Okhahlamba Local Municipality, KwaZulu-Natal, South Africa. Data collection proceeded in two stages: a quantitative component utilized pre- and post-intervention tests, and a qualitative component involved interviews with participants. Participants were community members, over 18, living with HIV, who had graduated from I ACT groups. They were sampled consecutively into the quantitative component and purposively into the qualitative component. I ACT is a 6-session, closed, structured support group intervention. In this case, it was delivered at the community level by trained support group facilitators. The pre/post-test measured changes in participant HIV knowledge, stigma, disclosure, treatment adherence, and linkage to care. Interviews focused on participants' perspectives on the I ACT program. Sample size calculations suggested that 44 participants would demonstrate clinically important differences in the quantitative component. Paired t-tests and McNemar's tests looked for significant changes between pre- and post-intervention, while robust multiple linear regression determined whether relevant sociodemographic and clinical variables predicted changes in the outcome variables. Line by line coding according to an inductive approach was used to identify themes in the interview transcripts. This study received ethical approval from the Human Sciences Research Council of South Africa. Clients gave written consent prior to participating in interviews.

Findings: Pre-/post-test data from 66 clients were collected and 17 participants were interviewed. Paired t-tests did not detect significant changes in the five outcomes between pre- and post-intervention. However, McNemar's tests did indicate a significant increase in the proportion of participants with complete HIV knowledge from pre- to post-intervention ($p = 0.03$), and a significant decrease in the proportion of participants experiencing any stigma from pre- to post-intervention ($p = 0.08$). Qualitative results indicated a psychosocial benefit as participants connected with their peers, expressed themselves openly, and re-engaged with their communities.

Interpretation: This study demonstrated that community-based I ACT groups can be a useful, culturally-sensitive complement to clinic-based treatment literacy programs, offering unique psychosocial benefit without requiring intensive financial or human resources. However, the quantitative component of this study was not designed to capture the bulk of this psychosocial benefit. Further, the results have limited generalizability to men.

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Characterization of inpatient admission within a large HIV treatment program in Ethiopia

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