

ideas that PWAs have supernatural powers that can be obtained by ingesting their body parts, and that having sexual intercourse with females with albinism can cure HIV/AIDS. Improving awareness of albinism is an integral step towards improving quality of life of PWAs in Tanzania. We developed a program to evaluate the use of community health workers (CHWs) to spread awareness of albinism and the challenges faced by this marginalized population in Tanzania.

Structure/Method/Design: We developed an educational program consisting of a video, PowerPoint presentation, and discussion topics and taught it to 33 CHWs trained by Empower Tanzania, an NGO with an infrastructure designed to disseminate public health practices in rural Tanzania. These CHWs delivered the presentation at schools and community gatherings in a rural district of Tanzania throughout February 2014. We administered questionnaires to program attendees before and after the presentation. We also gave questionnaires throughout the community before and after the month-long intervention. These questionnaires were used to assess baseline views about albinism, to evaluate the program's success, and to obtain additional feedback.

Outcomes & Evaluation: A total of 12,007 participants attended presentations. Questionnaires randomly administered to 426 participants demonstrated significantly higher knowledge about albinism after the presentations than before, and indicated that participants intended to share what they had learned with friends and family members. Community questionnaires administered to 896 randomly-selected community members in January and 743 additional community members in March suggested retained, community-wide gains in knowledge about albinism and the unique challenges faced by PWAs. Data analysis revealed the knowledge gains varied based on selected demographic characteristics. We conclude the program to be an effective means to improve awareness of and knowledge about albinism. We hope these knowledge gains can reduce the associated discrimination and stigma towards PWAs in Tanzania.

Going Forward: The UN has identified improving knowledge at a community level as a priority in addressing violence towards Tanzanians with albinism. Public health interventions utilizing CHWs are an effective tool to improve health outcomes in rural populations. Our program demonstrates a promising approach to alleviate the challenges faced by a marginalized population and supports the utility of CHW programs to enact cultural change. This program will continue to be used by Empower Tanzania to maintain the observed gains in knowledge. Potential applications of our findings include dissemination of this program to other areas of Tanzania and utilization of this CHW-based approach to develop interventions addressing other social determinants of health in developing countries.

Funding: Peterson Family Foundation

Abstract #: 01ETC098

Assessing the efficiency of HIV prevention interventions in Kenya – the ORPHEA Project

R. Wamai¹, R. Buzdugan², O. Galarraga³, C. Chaumont⁴, S. Sosa-Rubi⁴, S. Bautista⁴, J. Wang'ombe⁵, I. Ochoa Moreno⁴, H. Nyakundi⁵, M. Mugo⁶, A. Kwan⁷, A. Sassi⁸, G. Bollinger⁹; ¹Northeastern University, Department of African-American Studies and Integrated Initiative for Global Health, Boston, MA/US, ²University of California Berkeley, School of Public Health, Berkeley, CA/US, ³Brown University, Department of Health Services, Policy and Practice, Providence, RI/US, ⁴National Institute of Public Health, Division of Health Economics, Center of Evaluation Research and Surveys, Cuernavaca, Mexico, ⁵University of Nairobi, School of Public Health, Nairobi, KE, ⁶University of Nairobi,

School of Economics, Nairobi, KE, ⁷National Institute of Public Health, Division of Health Economics, Center of Health Systems Research, Cuernavaca, Mexico, ⁸Northeastern University, College of Science, Boston, MA/US, ⁹Northeastern University, College of Social Sciences and Humanities, Brookline, MA/US

Program/Project Purpose: Despite limited resources for HIV prevention interventions, few empirical studies investigate the efficiency of HIV prevention interventions. Reliable data on costs and efficiency is critical to best inform the choice of service delivery model, budget allocation and financial decisions. Optimizing the Response of Prevention: HIV Efficiency in Africa (ORPHEA Project) assessed determinants of efficiency for three interventions in Kenya in 2012-2013: HIV testing and counseling (HTC), prevention of mother-to-child transmission of HIV (PMTCT), and voluntary medical male circumcision (VMMC).

Structure/Method/Design: Input data were collected retrospectively from a nationally representative sample of government and non-governmental health facilities for calendar year 2011 or 2012 and for the month prior to data collection. Multi-stage sampling was used to determine the sample of health facilities by type, ownership, size, and interventions offered totaling 175 sites in 78 health facilities in 33 districts across the country. Data sources included registers and time-motion methods. Process quality estimating provider competence and performance was assessed using cross-sectional provider 283 vignettes and 489 client exit interviews with randomly respondents. Total costs of production were computed using both the quantity and the unit price of each input. Average cost was estimated by dividing total cost per intervention by the number of HIV clients accessing that intervention.

Outcomes & Evaluation: Facilities differed by type (hospitals, 48%; health centers, 34%; dispensaries, 13%; medical clinics, 5%), ownership (government, 72%, non-governmental, 10%; private, 18%), size (personnel and patient clients) and number and cost of services. Most facilities (88%) offered more than one intervention. Average annual costs for HTC, PMTCT and VMMC samples were, respectively, US\$36,617 (s.d. \$72,145), \$36,617 (s.d. \$72,145) and \$26,232 (s.d. \$24,616). The average cost per client tested were, respectively, \$20.6 (s.d. \$38.4; weighted, \$21.2), \$63.5 (s.d. \$77.2; weighted, \$55.0) and \$80.4 (s.d. \$118.0; weighted, \$102.2). Across all interventions staff costs accounted for between 75% and 82% of total costs. Variation in average cost for HTC and PMTCT was evident for only private facilities while it is cheaper to perform VMMC at primary health centers. Scale and quality together explain approximately 30% of the variability in average costs.

Going Forward: It is possible to employ a complex package of methods to assess technical efficiency of HIV prevention interventions in low-income countries, but attaining perfect designs is challenging. Much cost variation is evident across the Kenyan HIV services system. Economies of scale are seen with increasing volume especially at lower level facilities. Analysis of provider competence and performance suggest that higher levels of quality are not associated with higher costs. There is large potential to increase efficiency within the current constraints particularly in altering staff costs and composition.

Funding: Funding was provided by Gates Foundation/INSP-CISIDAT

Abstract #: 01ETC099

Health in the age of globalization: Combining theory, practice and social justice in global health teaching

D. Weksler¹, N. Davidovitch²; ¹Ben Gurion University of the Negev, New York, NY/US, ²Ben Gurion University of the Negev, Beer Sheva, IL