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Program/Project Purpose: Mobile health (mHealth), the delivery of healthcare via mobile communication devices, has been shown to improve HIV treatment adherence in East Africa. Despite the growth of mHealth and the gender gap in mobile phone ownership and use in Africa, few studies have examined gender as it relates to mHealth. In this study, we will examine data from an ongoing trial of a text-messaging intervention to improve retention in early HIV care. Our objectives are to determine whether gender disparities in mobile phone access affect the ability to participate in an mHealth trial, and whether gender influences responses to and perceptions of the intervention.
Structure/Method/Design: Between April 2013 and October 2014, participants were recruited from two comprehensive care clinics in Nairobi, Kenya. Patients were eligible to participate if they were over 18 years old, HIV-positive, had mobile phone access, and could text-message or have somebody text-message on their behalf. Upon enrolment, participants were randomized in a 1:1 ratio to an intervention or control arm. Intervention arm participants received the weekly WelTel text-message 'check-in' to which they were instructed to respond within 48 hours. A clinician followed-up participants who identified a problem. In this observational study, only intervention arm participants were followed up, with one follow-up study visit coinciding with the participant's 6-month clinical visit. Patients provided written informed consent to participate, and the University of British Columbia and Amref Ethics and Scientific Review Committee approved the trial protocol.
Outcomes & Evaluation: As of October 2014, 648 patients have been screened for trial participation and 422 have been recruited. A chi-squared test will be used to determine whether the proportion of males and females excluded from trial on the basis of phone-related criteria differs. Participation in the mHealth intervention will be evaluated using the following outcomes: the proportion of okay ("Sawa."), problem ("Shida."), or non-responses to the weekly outgoing text messages. A negative binomial regression model will be built to analyze response rates by gender. Participant perceptions will include the greatest perceived barriers to and benefits of the intervention, disaggregated by gender.
Going Forward: With a sample size of 648, the study has 87.58% power to detect a significant difference between males and females excluded from the trial due to not meeting phone-related criteria. Once a sufficient number of participants have reached 6-month follow-up.
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Monitoring the HIV treatment and services cascade in Asia and the Pacific: A metric framework analysis

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Background: 'Getting to Zero', UNAIDS 2011-2015 strategy establishes an ambitious goal in the HIV pandemic response. With sustained incidence and often increasing HIV prevalence among key populations (sex workers, men who have sex with men and people who inject drugs [PWID]), examination of the HIV treatment cascade from diagnosis of infection to achievement of reduction in viral load demands comprehensive data collection, analysis and presentation through application of a public health approach. The aim of this study was to employ a public health metrics framework to examine gaps in data and treatment coverage among people living with HIV (PLHIV) in the western pacific region.
Methods: We employed a conceptual metrics framework as per the World Health Organization (WHO) guideline released in 2014 with 21 indicators measuring parameters from HIV treatment, TB/HIV co-infection, PMTCT (Prevention from mother-to-child-transmission) services, and HIV among key populations (KP). We then constructed a database outlining relevant indicators from 2009-2013 among eight countries in the region (Cambodia, China, Lao PDR, Malaysia, Mongolia, Papua New Guinea, Philippines and VietNam). Consequently, we extracted relevant cross-sectional and aggregate national level data from key reports, publications and unpublished sources, and through consultation with WHO country offices, and mapped against the indicators. The results were cross-validated for accuracy by two reviewers, time-trend cascade graphs were constructed by categories and key findings were interpreted.
Findings: The results across eight countries over five years suggest that indicators measuring enrolment in care and achievement of suppressed viral load (< 1000 copies/ mL) are under reported in the region. Furthermore, while Philippines and Mongolia showed the greatest increase in the number of PLHIV, others showed plateauing or reduction in incidence. PMTCT services across the region showed poor data quality and treatment coverage with Philippines performing the poorest with 4% of HIV diagnosed pregnant women receiving ARV in 2013. Results of TB/HIV co-infection services were generally well documented with Cambodia showing the greatest and VietNam showing the poorest retention of TB/HIV patients along the continuum of care. Finally, study of KP suggested that PWID were the least studied group with testing rates as low as 6% in the Philippines in 2013.
Interpretation: While metrics framework and construction of cascade graphs can be a significant tool in providing a visual snapshot of HIV epidemic on a large scale, it provides limited scope for asking comprehensive questions and distinguishing differences between cross-sectional vs. cohort data; both factors can impact the interpretation of data. Despite these shortcomings, this approach is a valuable tool with results suggesting a strong need for complete data collection, increased emphasis on linking HIV positive pregnant women with care and active intervention to increase testing rates among PWID in the region.
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Elements of a dirty face as individual risk factors for trachoma, from a cluster-randomized trial in Niger

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Background: Trachoma is the leading infectious cause of blindness worldwide and a neglected tropical disease caused by the bacteria Chlamydia trachomatis. Facial cleanliness has been shown to be associated with lower prevalence of trachoma, but it is not clear whether having a clean face is protective against trachoma or just an indicator of the absence of disease. Additionally, previous studies indicate that there is a weak correlation between a clinical trachoma