

Interpretation: The findings show substantial early losses along the PMTCT cascade. Even where 75% of HEI presented on time, almost half (46%) did not receive same-day testing. Similarly, nearly half of HEI tested (42%) did not have EID results available 3 or more months after receiving the test. These findings may be due to stock-out of DNA PCR test kits and lack of systematic PHC to lab processes for tracking results. The consequence is then delays in testing and result provision, and ART initiation for infected infants. Client confidence is reduced in the efficiency of PMTCT services and thus encourages poor compliance.

Innovative, systematic, widely-implemented public health approaches are needed in order to improve rates of same-day EID testing, result receipt, and linkage to care for infected infants. This will have lasting impacts on the health of HIV-exposed infants and the value of EID programs in resource-limited settings.

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Abstract #: 2.022_INF

Cutaneous Leishmaniasis Knowledge, Attitudes and Practices (KAP) Survey of an Endemic Rainforest Population in Northern Ecuador

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Background: Cutaneous leishmaniasis (CL) is endemic throughout the Pacific coastal rainforest region of Ecuador. We conducted a survey in the same endemic region to examine CL-related KAP. We also compared these findings with those from prior studies we conducted two decades ago. We did so because extensive primary rainforest destruction and intensive economic development activities have changed the region's ecology and disease distribution patterns. In addition, many subsistence farmers who originally settled have been replaced by migrants from non-endemic areas of Ecuador. We hypothesized that these changes would decrease community familiarity with CL, its vector, disease transmission, and disease prevention and control methods. Tropical disease education and control program acceptability and effectiveness can be enhanced through better understanding of community KAP.

Methods: The survey was conducted during a 24-month period (2013–2015). Grid sampling was used to randomly select 10% of households in 21 rural hamlets. A subsample of 351 adults (> 18 years) from each site participated in face-to-face interviews which collected closed- and open-ended data on household and community characteristics, clinical and laboratory indicators of past or current CL, and CL-related KAP. The study received institutional review board approval and participants provided their informed consent.

Findings: One-third of participants had a positive CL history, 75% reported familiarity with CL and 82% with the sandfly vector. Nearly 80% said they knew how CL is transmitted. The most

frequent CL transmission theory identified was infection (bacterial, viral, infected snake venom) transmitted by mosquito or sandflies. Of participants familiar with CL, most reported knowing about (85%) or personally practicing (81%) at least one prevention method. Bednets and insect repellants were most frequently reported. Nearly 60% said an effective vaccine was needed when asked to give suggestions for community-based CL prevention programs.

Interpretation: Although familiarity with CL, its vector, and some CL-related KAP has either stayed the same or decreased since the 1990s, knowledge about/use of bednets and insect repellants was increased suggesting that governmental mass media campaigns against dengue, malaria, and other mosquito-borne diseases appear to have produced a beneficial spill-over effect for CL, another vectorborne disease.

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Tick, Tock, Clock: When is the best time to post on Twitter?

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Background: Social media can be utilized for health-related advocacy. Twitter users post “tweets” which are limited to 140 characters. Within a Tweet, users can use hashtags which can later be searchable and utilized to advocate for issues like Tuberculosis. World TB Day which happens annually on March 24 was started in 1882. This day was started to build awareness and advocate for those living with Tuberculosis. This year the #worldTBday was added to the Symplur database. When conducting a social media campaign, businesses often identify when to post to maximize reach. This principle can also be utilized in health related advocacy. This study aimed to look at a 24 hour period to see when the greatest number of posts occurred.

Methods: Utilizing Symplur, a website that collects information on healthcare based hashtags, we viewed the trend of #worldtbd day over the period of 03/23/16 (17:00 PT) – 03/24/16 (17:00 PT). For this hashtag, we searched the number of tweets per hour and converted it into Central Standard Time given our location. We then analyzed the data by using frequencies and created graphs using Excel.

Findings: From March 23–March 24, 2016, we found that there were a total of 22,795 tweets posted with the #worldtbd day. This translated into a total of 11,484 twitter users that posted during this time period. The highest Tweet frequency occurred at 5:00AM CST on 3/24 with 1,852 tweets. This translated into 10:00 AM in London and 3:30 PM in India.

Interpretation: This graph shows that from 00:00– 16:00 CST would be the ideal time to post on Twitter to get the maximum audience. If a targeted audience is needed like in time zones in India, and east Asia then tweets can be created and pre-scheduled to post using applications like Hootsuite. While this report presents one data point, it is important to study the trends of post timing in order to maximize reach and engage the desired audience.

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Reimagining Health Communication: A Non-Inferiority Randomized Controlled Trial of Crowdsourcing in China

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Background: Crowdsourcing, the process of shifting individual tasks to a large group, may reimagine health communication, making it more people-centered. We aimed to compare the effectiveness of a crowdsourced versus a social marketing video in promoting condom use.

Methods: Men who have sex with men (MSM) (≥ 16 years old, had condomless sex within three months) were recruited through a nationwide MSM website and randomly assigned to watch one of two videos in 2015. The crowdsourced and social marketing videos were developed through an open contest and designed by a company, using social marketing principles, respectively. Participants completed a baseline survey and follow-up surveys at three weeks and three months post-intervention. Intention-to-treat analyses were used for data analysis, with a non-inferiority margin of +10%.

Findings: Among the 1173 participants, 907 (77%) and 791 (67%) completed the three week and three month follow-ups. At three weeks, condomless sex was reported by 146/434 (33.6%) and 153/473 (32.3%) participants in the crowdsourced and social marketing arms, respectively. The crowdsourced intervention achieved non-inferiority (estimated difference: +1.3%, 95% CI: -4.8 to 7.4%). At three months, 196/376 (52.1%) and 206/415 (49.6%) individuals reported condomless sex in the crowdsourced and social-marketing arms (estimated difference: +2.5%, 95% CI: -4.5 to 9.5%). The two arms also had similar HIV testing rates and other condom-related secondary outcomes, but crowdsourced per unit cost was less than the social marketing arm (\$58 vs. \$84).

Interpretation: Our study demonstrates that crowdsourcing is an effective tool for designing media to promote condom use. Crowdsourcing contests could create more imaginative intervention tools that promote HIV prevention and control.

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HepTestContest: A Global Innovation Contest Soliciting Descriptions of Hepatitis B and C Testing Programs

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Background: Innovation contests provide a structured mechanism to solicit community feedback on important public health issues. Innovation contests have been used to develop public health campaigns, clinical algorithms, and inform policy. The purpose of this innovation contest was to solicit descriptions of hepatitis B and C testing from around the world.

Methods: The innovation contest represented a collaboration between SESH (Social Entrepreneurship for Sexual Health) and the World Health Organization. The contest, called HepTestContest, included the following steps: 1) organizing a steering committee to create the open call; 2) engaging the general public through social media; 3) evaluating contributions based on pre-specified criteria; 4) recognizing finalists and sustaining engagement. Information was collected from each contributor regarding when testing programs started, percent of organization's work devoted to hepatitis, availability of direct acting antivirals (DAAs), providing HIV testing, and barriers to testing.

Findings: The HepTestContest received 64 entries from 27 countries. Thirty-one groups received a commendation of excellence from the World Health Organization. A mean of 9301 individuals were tested for HBV, HCV, or both among the 39 entries that reported. Most (42/64, 66%) entries were from testing programs that started in the past three years. A mean of 44% of each organization's work was devoted to hepatitis. Most entries (49/64, 77%) were from countries in which DAAs were available. Most (45/64, 71%) programs also provided HIV testing and four entries described integration of HIV-hepatitis testing services. The most commonly mentioned barriers were lack of hepatitis awareness among the public and subpopulations (25/64, 39%) and lack of test kits (25/64, 39%).

Interpretation: This innovation contest solicited a wide range of descriptions of hepatitis B and C testing programs. Public policy experts and community health workers alike may benefit from innovation contests that engage end-users of guidelines. As testing for hepatitis B and C programs scale up in many regions, further innovation will be important for achieving WHO service targets towards the elimination of hepatitis B and C.

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Crowdsourcing Designathon: A New Model for Multisectoral Collaboration

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