

effective. Limitations in the included studies were low response rate and the inability to generalize findings to other school communities.

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Abstract #: 01CD010

Prevalence and clinical predictors of tuberculosis in severely malnourished Ugandan children

E. Kemigisha¹, V. Katawera², J. Mwangi A³; ¹Mbarara University of Science and Technology, Uganda/UG, ²Mbarara University of Science and Technology, Kampala/UG, ³Mbarara University of Science and Technology/Epicentre Mbarara Research Centre, Kampala/UG

Background: TB contributes to increased morbidity and mortality in children with vulnerable immune systems such as the severely malnourished, HIV infected or the infants. Clinical features might be poor predictors of active TB infection especially in children with severe malnutrition. This study determined the prevalence; estimated additional yield of TB cases on routine screening compared to targeted screening approach and studied the clinical predictors of tuberculosis disease in children between 2 months and 5 years with severe acute malnutrition.

Methods: A cross sectional study of newly admitted children with severe malnutrition aged between 2 months and 5 years was conducted between March and September 2014 at Mbarara Regional Referral Hospital. Written informed consent was obtained from guardians. A detailed history, general physical examination, and investigations which included specimen collection by gastric, nasopharyngeal and or lymph node aspirate methods, as well as TST and CXR were done. Children were classified according to level of certainty of TB diagnosis as “confirmed”, “probable”, “possible” or “TB unlikely”. The proportional yield by routine screening and subgroup of targeted screening was determined. Logistic regression was done to determine independent predictors of TB.

Findings: A total of 172 children had complete TB evaluation. The prevalence of confirmed/probable TB (TB cases) was 6.4% (11/172); Of the 11 TB cases, 4 were confirmed; 3 of whom had a positive smear, Xpert/MTB/RIF and culture results while 1 had a smear positive result only. Although, there was no statistical difference in TB yield between targeted and routine screening of TB in this population (p -value>0.05), there were 4 more TB cases identified through routine screening. Severe wasting, cervical lymphadenopathy and age group below 1 year had a statistically significant association with tuberculosis ($p=0.0002$).

Interpretation: We found a high prevalence of TB cases using NIH criteria, but low rates of Xpert/culture-confirmed TB among severely malnourished hospitalized children. Due to very unspecific presentation of TB in this population, evidenced by lack of statistical associations with documented predictors of TB, routine screening of all severely malnourished children for TB may offer clinical benefits

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Abstract #: 01CD011

Acceptability of latent tuberculosis testing among migrant farmworkers along the US-Mexico border

O.O. Osuchukwu; University of Arizona, Dallas, TX/US

Background: One-third of the world's population is infected with latent tuberculosis (TB). The overall lifetime risk of latent tuberculosis

infection (LTBI) progression to active TB is estimated at approximately 5-10%, with risk increased by underlying immunosuppression, including HIV, diabetes and heavy steroid use. Completing treatment for LTBI reduces the risk of infection by 90%. The migratory agriculture industry in particular is considered to pose one of the most hazardous working environments for adults and children alike. Farmworkers account for more than 5% of all employed TB cases in the United States with an estimated risk six times greater than the general population. LTBI is routinely diagnosed with the tuberculin skin test (TST) along the Arizona-Mexico border. New methods of detection more specific than TST have been developed, such as Quantiferon TB gold In-Tube (QFT-GIT). Our objective was to demonstrate the acceptability of QFT-GIT testing to detect LTBI among farmworker populations.

Methods: A cross-sectional design was used to study migrant farmworkers 18 year and above working on the Arizona-Mexico border. Participants' blood samples were taken for QFT-GIT and TST was administered through a mobile van clinic. We assessed knowledge, attitude and practices concerning LTBI as well as acceptability of the two screening tests through questionnaires administered by trained personnel. Fifty-four participants have been recruited to date. Fisher's exact test was used in bivariate comparison of categorical outcomes.

Findings: Among 54 participants interviewed, 40 (74.1%) saw TB as a very serious disease that results in death and 42 (77.8%) considered TB a health concern in their community. Forty participants (74.1%) stated they would believe QFT-GIT rather than TST results. Fifteen individuals (27.8%) would seek treatment based on a positive QFT-GIT test compared to 3 (5.6%) who would seek treatment based on a positive TST (P -value: 0.004).

Interpretation: Farmworkers considered themselves at risk for TB and saw TB as a health concern although a low proportion would seek treatment for LTBI. The majority of respondents believed QFT-GIT over TST results and a greater proportion would seek treatment based on the QFT-GIT. The small sample size may be a limitation to being adequately powered to assess significance, but we will be continuing the project this winter.

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Ebola outbreak in Nigeria: Volunteer health advisors as information disseminators

U. Patel¹, C. Caius.I Ihesiaba², F.U. Oduenyi², A.T. Hunt³, D. Patel³, J. Pharr⁴, M. Obiefune², N. Chukwumerije⁵, E.E. Ezeanolue³; ¹University of Illinois at Chicago, College of Medicine, Department of Pediatrics, Chicago, IL/US, ²Global Solutions for Prevention, Education, Treatment, Training and Research (PeTRGS), Enugu, NG, ³University of Nevada School of Medicine, Las Vegas, NV/US, ⁴University of Nevada, Las Vegas, Las Vegas, NV/US, ⁵Association of Nigeria Physicians in the Americas, Santa Clarita, CA/US

Background: As the first confirmed case of Ebola reached Nigeria in July 2014, a mechanism was required to disseminate reliable health information and prevent the spread of misinformation especially in rural, hard-to-reach areas. The aim of this project was to assess the baseline knowledge of trained lay Volunteer Health Advisors (VHA) participating in the Healthy Beginnings Initiative (HBI), a community-based program designed to promote maternal-child health, and to determine the feasibility of utilizing them to disseminate information on Ebola.