

designation and a positive Amplicor PCR test. This study aims to look at elements of a dirty face as individual risk factors for both clinical trachoma and ocular chlamydial infection.

Methods: As part of The Partnership for the Rapid Elimination of Trachoma, we designed a cluster-randomized control trial aimed at optimizing treatment frequency for existing trachoma programs. 48 randomly selected communities in Niger were entered into a 2x2 factorial design, and four villages were also followed longitudinally such that every child aged 0 to 9 was PCR-tested for ocular chlamydial infection. A baseline pretreatment census was performed by masked study personnel to identify the prevalence of ocular discharge, nasal discharge, and the presence of flies on the face. No adjustments were made for missing individuals from the census and all analyses were performed at the individual level on an intention-to-treat basis. Oral consent was obtained from the village leaders, and written consent was obtained from study participants or participants' guardians. Linear regression clustered at the household level was used to study univariate and multivariate associations.

Findings: 24,536 individuals were surveyed from 6,235 households amongst 48 villages. Ocular discharge (3.34, 95% CI 2.74 to 4.06, $p < 0.001$), nasal discharge (2.23, 1.80 to 2.76, $p < 0.001$), and flies on the face (2.13, 1.70 to 2.66, $p < 0.001$) were all shown to be independent risk factors for a clinical diagnosis of active trachoma (TF or TI, according to the WHO grading system) in the multivariate analysis. 555 children from four villages were also followed longitudinally and processed by Amplicor PCR test. Ocular discharge (9.11, 3.93-21.1, $p < 0.001$) and flies on the face (2.48, 1.14-5.34, $p = 0.02$) were shown to be independent risk factors for ocular chlamydial infection.

Interpretation: Ocular discharge, nasal discharge, and flies on the face are significant risk factors for a clinical diagnosis of trachoma (TF or TI). Additionally, the presence of ocular discharge and flies on the face are significant risk factors for chlamydial infection. These results indicate that ocular discharge and facial flies increase the risk of contracting trachoma, although this relationship may be circular.

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Spotlight on lymphatic filariasis and trachoma in Zimbabwe: Assessing baseline data for control program development

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Background: Neglected tropical diseases (NTDs) including Lymphatic filariasis (LF) and trachoma affect nearly 500 million people living in sub-Saharan Africa and cause devastating morbidities. However, in Zimbabwe, current data regarding potential endemicity and communities' knowledge, attitudes, and practices (KAP) about these diseases are scarce. This research is to determine baseline KAP about LF and trachoma to guide control program development in Zimbabwe.

Methods: The study is a cross-sectional KAP assessment of randomly selected households within two highly suspected endemic districts of Kariba and Hurungwe in Zimbabwe. The study population comprised of residents aged 14 years of age or older living in 14 selected administration areas within Kariba and 15 in Hurungwe. A sample size of 435 households was selected based on each district's total population and number of enumeration areas as determined by the 2002 Zimbabwean population census. Participants were asked questions to ascertain their knowledge regarding causes and symptoms of LF and trachoma and to provide local terminology for these infections. Attitudes towards mass drug administration (MDA) for treatment and practices of sanitation were also elucidated through the survey. The study was approved by the Medical Research Council of Zimbabwe (MRCZ study number MRCZ/A/1649), and written informed consent was obtained from all participants.

Findings: Six hundred and fifty (650) participants aged ≥ 14 years responded to the KAP questionnaire. Six-hundred and twenty-one (95.5%) of the respondents could not identify specific signs of LF, and 99.5% did not know the cause of the disease. After symptoms of LF were explained in local language, 288 (42.2%) could provide vernacular terms for 'hydrocele.' Two-hundred and eighty-seven (44.2%) agreed or strongly agreed that LF is a problem in their community and 592 (91.1%) would willing to participate in MDA to control LF. Regarding trachoma, 13.4% of 650 respondents indicated that they had heard of trachoma. Twenty-seven percent (27.1%) of respondents further reported that they knew of someone in the community suffering from blindness and 13.2% stated that they or a family member was suffering from blindness. Six-hundred and four (93.0%) reported that they would participate in MDA to control for trachoma.

Interpretation: These data show there is still limited understanding of LF and trachoma in Zimbabwe. However, the availability of vernacular terms for the diseases' symptoms suggests the presence of LF and trachoma in these areas. Mapping efforts along with health education can build community awareness and encourage participation in the control and elimination of these two NTDs.

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