

## **Abstract**

**Objective:** To assess the prevalence and distribution of trachoma and dirty faces prior to implementation of the SAFE strategy (Surgery, Antibiotic treatment, Facial cleanliness and Environmental improvement) in the Upper Eastern Kenya region.

**Methods:** A pre-survey trachoma risk assessment was conducted followed by division of the region into three geographical areas (survey segments). The sample size was 800 children aged 1-9 years old and 600 adults aged >40 years per segment.

**Results:** A total of 2,400 children were examined. The prevalence of TF in the region was 9.2% (95%CI: 8.0%-10.4%) and Marsabit was the only segment with prevalence >10%. The prevalence of a dirty face in the region was 17.5% (95%CI: 16.0%-19.1%) and Masabit was the only segment with prevalence >20%. A child with a dirty face was more likely to have TF than one with a clean face. The Odd's ratios were: Marsabit 12.1(95%CI: 8.1-18.1), Isiolo 7.5(95%CI: 4.4-12.8) and Moyale 1.9 (95%CI: 0.7-5.6).

A total of 1,797 adults were examined and 54 (3.0%, 95%CI: 2.2%-3.8%) had TT. Women had higher prevalence of TT than men. Ten out of 13 persons with CO were from Moyale. The backlog of TT in the region was 2,369 people and TT surgical services were poor. Moyale had the lowest prevalence of TF but the highest prevalence of TT.

**Conclusion:** The survey methods used allowed differentiated interventions as follows: Marsabit needed full SAFE strategy; Moyale "S" component and Isiolo repeat sub-district surveys. A Knowledge Attitude and Practice (KAP) was needed to explain the distribution of trachoma in the region.