

Abstract

OBJECTIVE: To determine the prevalence of Xerophthalmia among Kenyan children aged four to seven years in high risk using Conjunctival Impression Cytology and transfer. **DESIGN:** A cross sectional community based study. **SETTING:** Mathare slum in Nairobi and Tiva/Ithiani area of Kitui. **SUBJECTS:** Children aged four to seven years residing in the above areas were assessed for both clinical and cytological features of vitamin A deficiency. **RESULTS:** Of the 342 children included in this study, 316 (92.0%) were normal, five (1.5%) had XN, 19 (5.9%) had XIA and two (0.6%) had XIB. No signs of corneal Xerophthalmia were seen in this study. Conjunctival impression cytology and transfer (CICT) was used to assess for squamous metaplastic changes associated with Vitamin A deficiency (VAD). Seventy five (23.1%) of the children were normal by CICT while 249 (76.9%) were abnormal. In comparing the two areas of study, only 13.2% of the children in Mathare had normal CICT compared to 50% in Kitui. For each of the age groups studied there was significant difference between the two areas with children from Mathare being more deficient than those from Kitui. **CONCLUSION:** VAD is a significant health problem in the high risk areas assessed by CICT in this study.