# MAPPING TRICHOMONAS VAGINALIS AMONG WOMEN LIVING IN KISUMU, KENYA 

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A thesis submitted in partial fulfilment for the Degree of Master of Science in Public Health in the Jomo Kenyatta University of Agriculture and Technology


#### Abstract

T. vaginalis is one of the most common occurring sexually transmitted infections in the world. It accounts for 170 million new cases of treatable STIs that occur every year world wide. This infection has been associated with increased rates of HIV transmission and can be used as a surrogate marker for recent risky sexual behaviour. The aims of this study were to evaluate the distribution of $T$. vaginalis among women living in Kisumu in relation to sexual hotspots. The geographical coordinates of the participants' household and sexual hotspots were collected using GPS units. Demographic data and STI test results were obtained from the ARTIS database. Analysis of this data showed that the prevalence rate of T. vaginalis among women in Kisumu aged between 15-49 years was $15.5 \%$. When compared to the other age groups that were included in the analysis, women between the ages of 15-19 years were found to have the highest infection rate. Mapping of the infection showed that Township and West Kolwa locations had the highest numbers of infected participants compared to the other locations in the district. The locations with the highest numbers of sexual hotspots were Township, Kondele and West Kolwa. Multivariate logistic regression analysis showed there was no association between distance to hotspots and $T$. vaginalis infection. However marital status (O.R 1.66 P-value $0.0195 \% \mathrm{CI}$ 1.12-2.48) and age group (O.R 0.48 P-value $0.0295 \%$ CI 0.260 .87 ) was associated with $T$. vaginalis infection. Therefore interventions that are formulated need to target married women and women between the ages of 15-19 as they have the highest risk of infection.


