EPIDEMIOLOGY OF *TRICHOMONAS VAGINALIS* INFECTION IN THE MIDDLE EAST AND NORTH AFRICA: SYSTEMATIC REVIEW, META-ANALYSES, AND META-REGRESSIONS

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Background:
Trichomoniasis, caused by the parasite *Trichomonas vaginalis (TV)*, remains an underappreciated sexually transmitted infection (STI), primarily due to inadequate understanding of its epidemiology and public health implications. This study aimed to characterize TV epidemiology in the Middle East and North Africa (MENA).

Methods:
Systematic review and analysis of evidence sourced from international, regional, and national databases were conducted. Findings were reported following PRISMA guidelines. Random-effects meta-analyses and meta-regressions were performed to determine pooled mean prevalence, investigate associations with prevalence, and identify sources of between-study heterogeneity.

Results:
The review identified 250 relevant publications, encompassing 416 TV prevalence measures. The pooled mean TV prevalence was estimated as follows: 4.6% (95% CI: 3.7-5.5%) in the general population of women, 17.2% (95% CI: 5.4-33.6%) among intermediate-risk populations, 10.3% (95% CI: 6.2-15.3%) among female sex workers, 13.3% (95% CI: 11.7-15.1%) among symptomatic women, 7.4% (95% CI: 1.9-15.5%) among infertility clinic attendees, 2.3% (95% CI: 0.1-6.3%) among women with miscarriages or ectopic pregnancies, and 1.6% (95% CI: 0.8-2.7%) among STI clinic attendees. Limited data were found for men. Multivariable meta-regressions explained >40% of the prevalence variation, unveiling a hierarchical prevalence pattern by population type, an inverse correlation with national income, and a prevalence decline at a relative rate of 1% per year.

Conclusions: Despite conservative sexual norms, MENA has a substantial TV prevalence, comparable to the global TV prevalence. The unexpectedly high prevalence of this curable infection may, in part, be attributed to limited access to and underutilization of STI screening and treatment services.

Disclosure of Interest Statement: