

Community based study of sexually transmitted diseases in rural women in the highlands of Papua New Guinea: prevalence and risk factors

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Objective: To estimate the prevalence of sexually transmitted diseases (STDs) and determine their risk factors/markers among a rural population of women in the highlands of Papua New Guinea.

Methods: Community based random cluster sample of women of reproductive age were interviewed and examined and had specimens collected for laboratory confirmation of chlamydial and trichomonal infection, gonorrhoea, syphilis, and bacterial vaginosis.

Results: *Chlamydia trachomatis* was detected in 26%, *Trichomonas vaginalis* in 46%, *Neisseria gonorrhoeae* in 1%, syphilis in 4%, pelvic inflammatory disease (PID) (diagnosed clinically) in 14%, and bacterial vaginosis in 9% of 201 women. 59% of the women had at least one STD. In a multivariate logistic regression analysis taking the clustered sampling into account, independent risk factors for chlamydial infection were age < 25 years, < four living children, visualisation of yellow mucopurulent endocervical secretions on a white swab, and bacterial vaginosis. Being married to a man who did not have other wives was protective. For trichomonal infection, independent risk factors were having no formal education, infertility, more than one sexual partner in the previous 12 months, treatment for genital complaints in the previous 3 months, abnormal vaginal discharge detected on examination, and chlamydial infection. Similar levels of trichomonal infection were found in all age groups. Among married women, rates of infection correlated with their perception of their husband having had other sexual partners in the previous 3 months, and this relationship was significant for chlamydial infection among women over 25.

Conclusion: STDs are a major problem in this population, with the risk factors varying by outcome. Current treatment regimens are inappropriate given the high prevalence of trichomonal infection, and the available services are inadequate. Effective interventions are required urgently to reduce this burden and to prevent the rapid transmission of HIV.