

Thesis Title Association between Gonorrhoea and HIV  
infection in Bangrak hospital, Bangkok.

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#### ABSTRACT

Gonorrhoea is one of the commonest sexually transmitted diseases in Thailand. It is caused by a gram negative diplococci, *Neisseria gonorrhoea*. It is a non ulcerative disease, and some studies have shown that non ulcerative sexually transmitted diseases also appear to increase HIV incidence. Because of their higher prevalence in many population, these STDs may be responsible for a larger population of HIV transmission than genital ulcers.

The general objective of this study was to determine the association between gonorrhoea and HIV infection. The specific objectives were to determine the relationship between gonorrhoea infection and HIV infection, to determine the socio-demographic status of individuals with gonorrhoea infection and HIV infection, to determine the relationship

between the sexual practice of individuals with gonorrhoea infection and presence of HIV infection, and to determine whether individuals with gonorrhoea infection or gonorrhoea infection associated with other STDs are more likely to have HIV infection.

A retrospective case-control study was carried out on 186 HIV positive and 186 HIV negative individuals in Bangrak Hospital, Sathorn road, Bangkok. Data was collected from the hospital records of patients who attended the clinic from January 1991 to December 1991, and the results analyzed by Epi-Info programme.

This study showed that there were 73 individuals with gonorrhoea out of the 186 HIV positive (cases) and 56 individuals with gonorrhoea out of the 186 HIV negative (control). Individuals who had gonorrhoea alone (not associated with any other STDs) were 2.3 times more associated with HIV infection than those individuals with no history of any STDs (Odds Ratio=2.32 at 95% Confidence interval,  $1.24 < OR < 4.3$ ). The uncorrected Chi-square was 8.37 and p-value was 0.003. From this it is concluded that there is an association between gonorrhoea and HIV infection. Moreover it was seen that those individuals who sometimes used condoms were 0.54 times less likely to be associated with HIV infection than those individuals who never used any condoms, Odds ratio = 0.54 (95% C.I.  $0.33 < OR < 0.89$ ). This study also showed that among the individuals with gonorrhoea infection, those who

were prostitutes were 2.36 times more likely to be associated with HIV infection than non prostitutes and those who were single in this group were also 2.17 times more likely to be associated with HIV infection than the married group.

For a more detailed study, it is recommended that a cohort study using a questionnaire based interview be conducted so that there will be more information available to the researcher and more accurate information can be collected.

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