PREVALENCE OF ABNORMAL PAP-SMEAR AMONG SEX WORKERS IN HILLBROW, JOHANNESBURG, SOUTH AFRICA

Tiisetso Petunia Motloung

ABSTRACT

Introduction

Sex workers are considered to be a high risk group in the acquisition and transmission of sexually transmitted infections which include Human Immunodeficiency Virus (HIV) and Human Papillomavirus (HPV). Infection with HPV has been clearly established as a causative agent that infects the cells of the cervix and slowly causes cellular changes (dysplasia) or abnormal cells that can later develop into cancer. Women who are HIV positive are thought to be at higher risk of having HPV infection, and subsequently also at higher risk of having abnormal cervical lesions.

Objectives

The main focus of this study is to describe the prevalence of abnormal Pap-smears among sex workers and to further identify the difference between Pap-smear results of sex workers who are HIV-positive and HIV negative.

Methods

This is a retrospective descriptive study, where data was obtained from sex workers records from January 2004 to December 2006. The study population included all sex workers who attended the Esselen Street Clinic and sex worker outreach clinic in Hillbrow, in the inner-city of Johannesburg. Three hundred and nine records were randomly selected, of which 200 met the

inclusion criteria. Data was collected on socio-demographic information including the age and place of residence, laboratory results (Pap-smear and HIV) and history of sexually transmitted infection at the last physical examination. Extracted data was captured in excel spreadsheet and transferred to Stata Computer Package software version 9.0 for data management and analysis. Descriptive analysis included frequency distributions of categorical variables (e.g. residence, Pap-smear results, HIV status and age group) and summary statistics of continuous variables (e.g. age). Pearson chi-square test or Fisher Exact test when necessary, where conducted to obtain proportions of the sex workers with abnormal Pap-smear results corresponding to each category of the explanatory variables for example age, HIV status and place of residence or business or business transactions. For continuous explanatory variables, such as age, two sample t-tests were used to determine differences between sex workers in terms of abnormal and normal Pap-smears. In all statistical considerations, a probability level of ≤0.05 was used.

Results

There were 200 records which were analysed to achieve the study objectives. These included 146 records of HIV positive (73%) and 54 of HIV negative sex workers (27%). Their ages ranged from 18 to 45 years with a mean of 26.85 years and median of 26.0 years. More than 70% (n=141) of the sex workers were below the age of 30 years. More than two thirds of sex workers lived in hotels and almost 90% was considered to be symptomatic for STIs. Eighty-eight (44%) of the sex workers were found to have had an abnormal smear result, of whom 58 (65.9%) were below the age of 30 years. Age, as a continuous variable, and place of residence (living on the street) was found to be statistically significantly associated with having an abnormal smear result. However, age (being older than 30), having symptoms of an STI and being HIV positive

was not found to be statistically significantly associated with having an abnormal Pap-smear result.

Conclusion

This study has shown that the prevalence of abnormal Pap-smears among Hillbrow sex workers was high, especially in young sex workers. Sex workers who operated from the street were found to have a higher percentage of abnormal smear results as compared to those operating from the brothels and flats, signifying a need for a controlled environment and to improve sex workers access to health care services. No significant association was found between HIV status and abnormal Pap-smears. Further studies are required in this area. The study indicates that they may be a need to review the National Cervical Cancer Screening Policy to take into consideration the needs of high risk population, such as sex workers.