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MIGRATION, SEXUAL BEHAVIOUR, AND HUMAN IMMUNODEFICIENCY VIRUS INFECTION IN RURAL SOUTH AFRICA.

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A research report submitted to the faculty of health sciences, University of the Witwatersrand, Johannesburg, South Africa, in partial fulfillment of the requirements for the degree of Master of Science in medicine in epidemiology and biostatistics

JUNE 2007

DECLARATION

I, Louis Adolphe Muzinga Lumfwa declare that this research report is my work. It is being submitted in partial fulfillment for the degree of Master of Science in Medicine in Epidemiology and Biostatistics in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other university.

……

……15 th……day of …June…. 2007.

To my father Leopold Lumfwa, for your inspiration,

To my wife Josephine Kenga Lumfwa and my daughters Dora Muzinga Lumfwa and Jessica Kaji Lumfwa for your love and support,

To God Almighty because all glory is yours.

ABSTRACT

HIV has been linked to many risk factors such as sexual behaviour, gender, gender based violence, poverty, migration, conflicts, sexually transmitted diseases and circumcision. In this project, the role played by migration was particularly underscored. The aim of the study was to estimate and to compare the prevalence of HIV infection among migrants and non-migrants and to investigate whether migration leads to increased high risk sexual behaviour among migrant workers aged between 14 and 35 years from Limpopo Province.

This study was based on a secondary data analysis from a large community intervention study. A random sample of 2860 participants were selected in a cross sectional study after pair matching a community of villages set for an intervention. Data were collected using a questionnaire in English with a version in Sotho. HIV test was performed on oral fluid using Vironostika HIV Uniform oral fluid. The study was approved by Wits University and Informed consent was previously obtained by the original study. Stata was used for the statistical analyses of the data.

This study found that the HIV prevalence among migrants was not statistically different from the prevalence among non-migrants (10.04% versus 10.97%; p =

0.662), that the slight association between migration and HIV infection was not significant (Adjusted OR = 1.19; 95% CI: 0.7 – 2.01) (p = 0.520). There was no association between migration and sexual behaviour such as sexual experience, age at first sexual relationship, have ever had sexual relationship and used a condom. However the study showed an association between migration and the number of sexual partners. These striking findings suggest that migration does not always lead to an increased risk of HIV infection even though it can lead to an increase of number of sexual partners.

The study concludes that migration did not prove to be a risk factor for HIV infection. However, other underlying structural factors need to be examined for a better understanding of the conditions that lead to HIV infection. It recommends interventions that cover information (Knowledge, attitude and belief), risk perception and change of sexual behaviour.

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