ABSTRACT:

Background: The HIV epidemic is a serious public health concern globally. There are 1,692,242 million known non-citizens in South Africa; this is equivalent to 3.3% of the total South African population (Statistics South Africa [STATS SA], 2011) this reflects global trends relating to number of non-citizens living in foreign countries (Vearey, 2008). Migration is an important demographic process to consider when studying HIV transmission as it increases migrants' susceptibility to HIV (International Organisation for Migration [IOM], 2010). International migration, which is the movement of people across international borders, can result in migrants finding themselves in spaces of vulnerability which may lead to risky sexual behaviour (IOM, 2010). Furthermore, access to healthcare may be limited due to the dynamics of living in a foreign country. Internal migration, defined as the movement of people within the borders of a country (IOM, 2010) may result in 'intra-urban' inequalities that inhibit access to basic services such as housing and healthcare (Nunez et al, 2011). Despite it being the smallest province in the country, Gauteng has the highest level of in-migration, with an estimated net inflow of 367 100 internal migrants as for the period 2006–2011 (STATS SA, 2011). Globally, international migrants are more seriously considered as a concern for HIV transmission. However, in South Africa, internal migrants are equally as concerning particularly due to their circular migratory patterns. Knowledge of one's status is a crucial first step in management of HIV. Voluntary HIV testing remains a challenging aspect of public health interventions, especially amongst key populations such as migrants (WHO, 2010). Although numerous studies have been conducted around migration and HIV, there remained a need for an investigation into the factors that influence HIV testing among Johannesburg residents. This is particularly significant, given the rapidly increasing levels of migration into the city, as well as the high urban HIV prevalence, which has been found to be twice high as that in rural areas and highest within urban informal settlements (Vearey, 2010). Therefore, this study set out to examine factors associated with HIV testing among residents of Johannesburg, in an attempt to determine whether migration status matters or not.

Methods: This is a quantitative study with a sample size of 487 Johannesburg residents. International (n=150) and internal migrants (n=293) were examined in relation to each other and a comparative group of Johannesburg natives (n=44). STATA version 11 was utilised to conduct

secondary data analysis of the RENEWAL survey (2008). This data, which was collected using a cross-sectional study design, was acquired from the African Centre for Migration and Society (ACMS) at the University of the Witwatersrand. Univariate descriptive analysis, bivariate chi-squared test and multivariate, logistic regression models were employed.

Results: Levels of HIV testing were found to be higher amongst internal migrants (56%) when compared to international migrants (42%), ($x^2_{(1)}$ =0.62; Pr=0.004). There was only a slight difference between Johannesburg natives and internal migrants who reported a 55% chance of HIV testing ($x^2_{(2)}$ =8.32; Pr=0.016).These findings were only significant at the bivariate level. Overall, factors that were significantly associated with HIV testing amongst residents are: sex (95% CI 2.01 to 4.88; p=0.000); type of residence (95% CI 0.29 to 0.76; p=0.003); knows where to locate a testing facility (95% CI 1.41 to 3.50; p=0.001) and knows that anti-retroviral treatment (ART) is free (95% CI 1.93 to 4.83; p=0.000). Income was significantly associated with HIV testing amongst migrants (95% CI 0.40 to 0.90, p=0.016). Females were three times more likely (3.14) to test for HIV when compared to males. The odds of getting an HIV test by those who resided in informal settlements were less (0.48) when comparing with those who stay in formal housing. Residents who knew where to locate a HIV testing facility were twice (2.22) as likely to get tested for HIV as compared to those who did not know where to find one. Residents who knew that ART is free were three times as likely (3.05) to get tested for HIV as compared to those who did not. Those who were not earning a salary were less likely (0.61) to get tested for HIV compared to those who were earning a salary.

Conclusion: The fact that migrant status, that is -internal versus international migration as a variable is not significant against HIV testing at the multivariate level indicates that there are far more important mediating factors that determine HIV testing than migration. More importantly, a more detailed and focused exploration into the length of stay of migrants in the city as well as the effect of urban inequalities on health, is needed.

Key Words: Internal and International Migration; South Africa; HIV testing; Duration of stay.