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## Abstract

**Background:** HIV prevalence and transmission rates remain high in South Africa. Voluntary Medical Male Circumcision (VMMC) is one of the interventions that have been included in the comprehensive package for HIV prevention strategies. Although resources, campaigns and interventions have been directed towards the upscale of this practice, VMMC prevalence still remains low in South Africa. Although studies have shown a reduction in transmission rates among those who are medically circumcised, traditional male circumcisions are more common in South African communities. This preference of traditional circumcision is besides the fact that some scholars have argued that Traditional Male Circumcision (TMC) has not been proven to offer any HIV protective benefits. This study investigates the socio-demographic predictors of type of circumcision and explores the reason or motivation for undergoing male circumcision in South Africa.

**Methods:** This study used data from the South African National HIV Prevalence, Incidence and Behaviour Survey conducted in 2012 to explore the predictors of type of circumcision in South Africa. Frequencies were calculated to determine the levels of male circumcision by type of circumcision and reason for circumcision. Bivariate analysis was conducted to investigate the relationship between type of circumcision and socio-demographic factors, reason for circumcising and perception variables. Bivariate analysis was also conducted to investigate the variations in reason for circumcision by socio-demographic characteristics. Data was analysed at the multivariate level using binary logistic regression analysis to determine the main predictors of the type of male circumcision in South Africa.

**Results:** The study found that 53.5% of the circumcised male population in South Africa is circumcised through TMC. The reasons for undertaking male circumcision included religious reasons, hygiene, prevention of HIV and STIs, traditional practice and other reasons. About 60.1% of circumcised males had circumcision done as part of traditional practice. The majority of males (87.9%) who reported circumcising for traditional reasons had TMC and the majority of respondents who reported circumcising for hygiene and prevention of HIV and STIs had VMMC (88.4% and 90.4% respectively). VMMC is most common in KwaZulu-Natal (70.8%) and Gauteng (59.9%). Males residing in urban formal settings are mostly circumcised through VMMC (52.3%). TMC is more common among the respondents with primary and secondary education (82.5% and 61% respectively). The multivariate analysis found race, age at circumcision, marital or relationship status, education status, province, having access to a radio, magazine and internet and reason for circumcision to be the main predictors of the type male circumcision. All categories of reason for circumcising were significantly associated with type of circumcision.

**Contribution:** This study contributed to our understanding of predictors of type of male circumcision in South Africa. This understanding is helpful in the design of context relevant VMMC upscale interventions that consider race, age at circumcision, marital or relationship status, education status, province, having access to a radio, magazine and internet access. The study is also useful in providing baseline characteristics for use in measuring the success of future interventions.

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