Socio-demographic determinants of voluntary counselling and testing (VCT) uptake in the context of ART among a cohort of adults in rural Tanzania

Introduction

• VCT was offered to residents of Kisesa ward during a serological survey round of an open HIV cohort in 2003-2004, shortly prior to the introduction of ART. Less than 1% of Kisesa residents had previously used VCT services.
• Data on patterns of access to VCT are useful for developing interventions to promote its uptake.
• Information on the influence of HIV status on VCT use is important for assessing whether VCT acts as an efficient entry point to ART services, and for monitoring equity in ART access.

Methods

• 8953 participants of an open HIV cohort, with linked demographic data, were interviewed, provided blood for HIV testing for research and were offered VCT in secluded huts in a temporary village clinic, during a serological surveillance round in 2003-2004.
• VCT results were available at the same site one week later.
• Univariate and multivariate logistic regression was used to describe associations between socio-demographic factors, HIV status, partner HIV status & VCT history and 1) desire for VCT, 2) attendance at VCT and 3) completing VCT.

Results

• 31% (1228/3970) of men and 23% (1170/4983) of women initially expressed a desire for VCT.
• 48% of men and 40% of women who desired VCT, attended the pre-test counselling and had a HIV test.
• 80% of men and 74% of women who attended VCT, returned after one week to collect their results.
• 9% of the total population attending the serological survey completed VCT: 12% of all men and 7% of all women: more women than men drop out at each stage.

Comparison of those completing VCT and those attending the serological survey

For males, the adjusted odds of completing VCT were 40% higher among 25-34 year olds and 35-44 year olds compared to those aged 15-24 (p<0.05). VCT completion was also statistically significantly higher among men who had experienced a recent change in marital status, and those who were from a non-Sukuma tribe.

VCT uptake in males was negatively associated with having no formal education, and with following traditional beliefs.

VCT completion was almost 1.5 times higher among men who were HIV positive compared to those who were HIV negative, and higher among those whose wives had also undergone VCT.

Among women, living in roadside areas was positively associated with completing VCT, as was being polygamously married, or divorced, and being non-Sukuma.

Those aged 45+ were less than half as likely to attend VCT as 15-24 year olds (p=0.02). Those with no education, and those who held traditional beliefs were also less likely to attend VCT.

There was no evidence that HIV positive women were more likely than HIV negative women to attend VCT. VCT completion was highest among women whose spouse completed VCT.

Discussion and conclusion

• Desire for VCT does not always correspond to VCT attendance, even when the service is readily available.
• Socio-demographic factors influence desire for, and uptake of, VCT among males and females in different ways.
• HIV positive males tended to self-select for VCT, while a similar pattern was not seen among females. This may lead to a disproportionate number of women who are in need of HIV treatment, including ART, failing to access HIV testing and appropriate onward referral services.
• Interventions may be required to promote access to VCT and ART, particularly among women who are HIV positive, and living in rural areas. Promotion of couple-counselling may increase uptake among married women.