Risk factors for curable sexually transmitted infections among youth: findings from a population survey in Zimbabwe

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• Youth are at high risk of sexually transmitted infections (STIs) in Southern Africa.
• Identification of risk factors at population level is important in planning STI control strategies.

To determine risk factors for curable STIs in youth

Population-based survey among 18-24 year olds in sixteen communities in two provinces in Zimbabwe to ascertain outcomes for cluster randomised trial investigating impact of community-based STI testing for youth on population prevalence of STIs.

Procedures: interviewer-administered questionnaire, HIV testing, testing for chlamydia (CT), gonorrhoea (NG), and trichomoniasis (TV).

Risk factors for curable STIs explored using multivariate logistic regression, using a three-level hierarchical conceptual approach.

Background

Selected variables from final model* | Final adjusted OR between variable and CT/NG/TV diagnosis (95% CI)
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Age (years) 21 – 24 (baseline: 18-20) | 1.37 (1.17 – 1.61)
Sex Female (baseline: male) | 2.11 (1.76 – 2.53)
Highest education level Primary or less | 1.00
Secondary | 0.79 (0.65 – 0.95)
Post-secondary | 0.77 (0.54 – 1.09)
Employment status In education or formal employment | 1.00
Informal or no employment | 1.35 (1.13 – 1.61)
History of attempted suicide Yes | 1.58 (1.08 – 2.32)
No. of sexual partners in past year 0 | 1.00
1 | 2.23 (1.73 – 2.88)
2 | 2.39 (1.69 – 3.39)
≥3 | 3.05 (2.09 – 4.44)
Condom use in past year Most of the time | 1.00
Sometimes (about half the time) | 1.34 (1.07 – 1.72)
Rarely or never | 1.22 (0.96 – 1.55)
Been circumcised (males only) Yes | 0.63 (0.45 – 0.88)
HIV status Positive | 1.44 (1.07 – 1.94)
Presence of current STI symptoms Yes | 1.43 (1.11 – 1.84)

*Variables not shown: trial arm, province, time at current address, marital status, accessed trial services, pregnancy planning, been offered PrEP

Results and key findings

5601 enrolled 62.5% female 55.4% no condom use at last sex 7.2% symptomatic 6.3% HIV prevalence 19.8% CT/NG/TV prevalence

STI diagnosis associated with: female sex; lower education levels; informal or no employment; history of attempted suicide; and HIV status

Conclusions

• HIV clinics may be a suitable target for implementation of aetiological STI testing, providing lessons for other clinic settings.
• Broader factors such as mental health, education, and employment opportunities should be considered in STI control efforts.