Background Male circumcision can protect against sexually transmitted infections, HIV, and urinary tract infections. The procedure is easier to perform during the neonatal period (<28 days), with fewer complications and rarely requiring general anaesthesia. Few studies have estimated the number of circumcisions, or indications for the procedure, in the post-neonatal period (ages 1–18 years). Our objective was to compare these for neonatal and post-neonatal circumcisions.

Methods We analysed MarketScan data, a database of billing claims from commercial health plans. We used circumcision procedural codes to identify all circumcisions in 2010, including neonatal circumcisions of males born to women enrolled in the health plans, and circumcisions of males aged 1–18 years. We assessed reasons for circumcision using diagnostic codes, and stratified the number of circumcisions and associated diagnosis by age. We estimated the neonatal circumcision rate.

Results Overall, 120,994 circumcisions were performed in 2010, with 113,740 (94%) in neonates and 7,254 (6.0%) in post-neonates. Among post-neonatal circumcisions, 67% were performed for boys <5 years of age and of these 28% were elective. In contrast, among males 5 years and older, only 8% were elective. The neonatal circumcision rate was 115,740/182,503 (62%), and 92% were elective. Among 16,457 non-elective circumcisions for both neonates and post-neonates, the most frequent indications were phimosis (92%), balanitis (5%), hidden penis (2%), chordae (2%), and hypospadias (2%).

Conclusion Most post-neonatal circumcisions were performed among males <3 years, and were 8.6 times higher than circumcisions among males 3 years and older. The large number of elective post-neonatal circumcisions in males <5 years suggest that neonatal circumcision might be a missed opportunity for these boys. Delaying elective circumcision results in greater risk for the child, and a more costly procedure. Discussions with parents early in pregnancy might help them make an informed decision about circumcision of their child.

Results Ten number groups of EVY were identified with total of 47,285 in the Western Province. Final results were generated by using the topographic maps of the Western Province. These maps were then scrutinised carefully in a systematic way to read the locations and the number of the population group marked by group ID. Different point layers for each identified EVY was created on digital topographic maps.

Conclusion Ten groups of EVY were identified according to the size and geographical areas. These data will be used future HIV prevention interventions with different approaches.

P.3.384 ESTIMATING THE IMPACT OF COMBINED PREVENTION INTERVENTIONS TARGETING 15–24 YEARS-OLD MEN AND WOMEN IN NYANZA, KENYA


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Background Young males (YM) and especially young females (YFs) (age 15–24) in sub-Saharan Africa are at a higher risk of HIV infection compared to older adults. HIV testing of young individuals facilitates early identification of their HIV status, prompt ART initiation, and provision of male circumcision and PrEP. We hypothesise that youth-prioritised combination interventions could have substantial impact on HIV incidence among them and the wider adult population.

Methods We constructed a mathematical model that represented HIV heterosexual transmission in Nyanza, Kenya and used local data to specify cross-generational sex, risk- and age-dependent behaviours, and school attendance. We estimated the impact of leveraging HIV testing and counselling for condom use among Nyanza youth, prompt ART initiation (at CD4s 350 cells/mm³) for those newly-found infected, and gender-specific interventions for YM and YFs. The former reaching 80% circumcision among HIV-1 YM while the later reaching 40% PrEP coverage among HIV-1 YFs not attending school and halving the proportion of partnerships that YFs attending school form with 20+ years-old men.

Results We predict a reduction in HIV incidence over 10 years among youth by 38% (from 1.6%/person-years) and adults by 29% (from 1.2%/person-years), if the annual testing likelihood for youth increases to 90% with those newly-found infected increasing condom use by 30% and initiating ART promptly. The adult incidence is reduced 34% and 35% by further male and female specific interventions when applied separately. The full package with all interventions combined would decrease incidence among youth and adults by 59% and 40%, respectively, and reduce the lifetime HIV risk experienced by YFs by 24%.

Conclusion In populations where young people are at the highest risk of HIV infection, carefully prioritised, gender-specific intervention can have a substantial impact on the risk of infection, both in that group and the overall population.

P.3.385 COMPARATIVE EXPERIENCE AND OUTCOMES OF CLINIC STAFF VERSUS INTENSIVE RESEARCHER LED RECRUITMENT TO A SEXUAL HEALTH INTERVENTION IN UK PRIMARY CARE


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Background As part of a national randomised controlled trial, we attempted to recruit young people for Chlamydia testing and
partner notification interventions in UK general practises (primary care clinics). Practices were paid for recruitment which was managed by clinic staff. Despite training, there were barriers to testing and recruitment: staff experienced competing priorities, were reluctant to mention testing, perceived that STIs were uncommon in their population, and believed that few young people attended the clinic. We aimed to assess the effect of intensive research-led recruitment on testing rates and compare with prior optimised recruitment by clinic staff.

Methods Ten general practises in North and South East England agreed to participate. We trained research staff on recruitment processes and allocated a researcher to each general practise. The researcher approached potentially eligible young people in the waiting room for a three week period and offered Chlamydia testing and trial enrolment. We compared testing and recruitment rates with those achieved by clinic staff over a period of 3 months.

Results 1145 16-25 year olds were approached in the 10 practises during intensive recruitment periods, of whom 43% consented and tested. Of refusals, 57% had tested elsewhere. Most practises achieved 45-50 tests per 3 week period, compared with 3–4 per month during 3 months of optimised clinic staff recruitment.

Conclusion External research-led intensive recruitment increased testing levels substantially and should be considered as an alternative to clinic staff enrolment in primary care. Even if enrolment targets are met, the impact of sexual health interventions in primary care will be limited unless barriers to engagement in sexual health are overcome.

P3.387 PREVALENCE AND PREDICTORS OF RAPE PERPETRATION AMONG MALE SECONDARY SCHOOL STUDENTS IN PERI-Urban XHOSAS IN SOUTH AFRICA

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Background A 2009 survey of adult men in South Africa found that 27.6% reported ever having perpetrated rape. The majority reported first perpetrating rape before age 20. Intimate-partner violence and rape are associated with HIV. We assessed the prevalence and predictors of reported rape perpetration among in-school, adolescent males at baseline of a cluster-randomised trial.

Methods Grade-nine males at 46 secondary schools in Cape Town and Port Elizabeth townships completed a confidential, self-administered questionnaire on touchscreen mobile phones. The questionnaire assessed structural/demographic, psychosocial, lifestyle, and behavioural/relationship factors, and reported rape perpetration. Multiple logistic regression models were used to identify factors associated with reported rape perpetration, adjusting for school-level clustering and more distal variables in the conceptual framework.

Results A total of 1991 boys were enrolled (median age 16 years, 95.6% Xhosa-speaking). Of these, 342 (17.2%) reported ever having perpetrated rape. Factors associated with reported rape perpetration were older age (AOR = 1.14, 95% CI = 1.01–1.29), having a father with no secondary education (AOR = 1.42, 95% CI = 1.01–1.99), living with one’s father (AOR = 1.37, 95% CI = 1.01–1.86), having been traditionally circumcised (AOR = 2.22, 95% CI = 1.21–4.09), male-dominant gender norms (OR = 1.53, 95% CI = 1.05–2.18), harmful alcohol use (AOR = 2.02, 95% CI = 1.41–2.90), having had sex drunk in the last year (OR = 1.86, 95% CI = 1.26–2.76), and having ever perpetrated physical violence against a partner (OR = 2.80, 95% CI = 1.93–4.07). Rape perpetration was also associated with low self-efficacy to prevent HIV (OR = 2.52, 95% CI = 1.77–3.57), more stigmatising attitudes towards people living with HIV (AOR = 1.44, 95% CI = 1.17–1.78), having had partner 5 years younger in the last year (OR = 2.10, 95% CI = 1.24–3.55), self-reporting having been tricked or raped during one’s first sex (AOR = 1.91, 95% CI = 1.01–4.09), and depressive symptoms (OR = 2.91, 95% CI = 2.09–4.05).

Conclusion Rape perpetration is prevalent among school-going adolescent males. Development and evaluation of interventions addressing stereotypical/traditional masculine norms and behaviours and relevant structural/psychosocial factors is paramount in reducing rape perpetration. Further research should investigate the potential association between traditional Xhosa circumcision and rape perpetration.

P3.388 SEXUAL VIOLENCE AND HIV/STIS IN GIRLS AND YOUNG WOMEN: TRENDS AND ASSOCIATION IN SOUTH WESTERN, NIGERIA

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Most sexual violence perpetuated by young men is against young women. The extent of sexual violence, and its association with STIs/HIV among girls and young women in Nigeria, is not known. In this study, we investigated sexual violence and HIV/STIs among girls and young women in Nigeria.

Methods We used a structured questionnaire administered to 1,214 female students in secondary schools in Peri-Urban towns and rural villages in South Western Nigeria in 2012. The study was a cross-sectional survey.

Results The prevalence of sexual violence among girls and young women was 59.4%. The majority of girls and young women who experienced sexual violence were raped (68.2%) and/or physically assaulted (64.9%). Sexual violence results in increased risk of HIV and STIs. Sexual violence is a contributing factor in HIV and STIs.

Conclusion Sexual violence results in increased risk of HIV and STIs. Sexual violence is a contributing factor in HIV and STIs.