

0655 **INJURY FROM RAPE AND CONSENSUAL SEXUAL INTERCOURSE: ROLE OF SKIN COLOUR AND TIME TO EXAM**

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Rape is a global health risk for women. We are exploring the role of skin colour in the management of rape injury.

Aims: (1) to estimate the prevalence of genital injury after consensual sexual intercourse (CSI); (2) to determine whether injury prevalence varies by ethnicity and skin colour; (3) to evaluate whether recent (≤ 24 h) CSI increases injury from baseline.

Methods A cross-sectional design was used for phase I (n=120) and repeated measures design for phase II (n=38). In phase I, participants underwent a forensic exam following CSI, and in phase II participants had a baseline exam, followed by CSI and a follow-up exam.

Results In phase I, 55% of the sample had ≥ 1 genital injury; percentages significantly differed for White (68%) and Black (43%) participants ($p=.02$). While ethnicity was a significant predictor of injury occurrence ($OR=3.15$; $RR=2.94$), skin colour confounded the original relationship between ethnicity and injury. In phase II, change in genital injury prevalence and frequency from exam 1 to 2 was modelled using logistic and negative binomial regression. Outcomes included specific injury type and observation of any injury during exam 2. Injury observed during examination 1 was the key predictor, adjusted for age, ethnicity, time since intercourse, duration of intercourse, degree of lubrication, frequency of intercourse, number of lifetime partners and skin colour. Results showed significant increases in redness as well as increased frequency of any external genital injury.

Conclusions The rape forensic examination should be sensitive to skin colour, time since last intercourse, and baseline injury.