The Aetiology of Genital Discharge Syndromes in Zimbabwe


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Background

- In resource-constraint countries like Zimbabwe, sexually transmitted infections (STI) are treated syndromically.
- Periodic surveys are necessary to determine current etiology of most prevalent STI syndromes, including genital discharge syndromes (GDS).
- Findings from aetiological studies inform the development of STI syndromic treatment guidelines.

Objectives

To determine the etiology of GDS among men (urethral discharge) and women (vaginal discharge) presenting with these conditions in a regionally diverse sample of clinics in Zimbabwe.

Methods

- Between June 2014 and April 2015, a mobile team recruited 400 men and women with GDS in 6 clinics:
  - Harare
    - H-1 (N=157)
    - H-2 (N=55)
  - Bulawayo
    - B-1 (N=106)
    - B-2 (N=105)
  - Beitbridge
    - D-1 (N=168)
  - G-1 (N=11)
- The following patients were enrolled:
  - 200 women with vaginal discharge
  - 200 men with urethral discharge
  - 200 men and women with genital ulcer disease (GUD)*
- Demographic, and STI/sexual history data were collected using a standardized questionnaire and entered in an online database
- Specimens collected:
  - Blood (all patients)
  - Urethral Smears (Men)
  - Urine (men with GDS)
  - Vaginal Smears (women)
  - Vaginal swabs (women with GDS)
- All specimens were shipped by courier to the study receiving laboratory in Harare (ZICHRe)

Results

- Prevalence of HIV and Treponemal Antibodies Among Men and Women with GDS (N=400):
- Gonorrhea was the most common cause of male genital discharge syndrome, followed by chlamydial infections
- Bacterial vaginosis and yeast infections were the most common causes of female genital discharge syndromes
- The aetiological distribution among men with genital discharge was significantly different among men with lower white blood cell counts on Gram stain
- HIV prevalence was high across STI syndromes

Conclusions

- Gonorrhea was the most common cause of male genital discharge syndrome, followed by chlamydial infections
- Bacterial vaginosis and yeast infections were the most common causes of female genital discharge syndromes
- The aetiological distribution among men with genital discharge was significantly different among men with lower white blood cell counts on Gram stain
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