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#34 Case Series of Urethrocutaneous Fistulas After Voluntary Medical Male Circumcision for HIV Prevention—15 African Countries, 2015–2019

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Case Series of Urethrocutaneous Fistulas After Voluntary Medical Male Circumcision for HIV Prevention – 15 African Countries, 2015-2019

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The findings and conclusions in this presentation are those of the author(s) and do not necessarily represent the views of the Centers for Disease Control and Prevention

Background

Voluntary Medical Male Circumcision (VMMC)

- Decreases heterosexual HIV acquisition in men by approximately 60%
- HIV prevention strategy in countries with high HIV prevalence
- President's Emergency Plan for AIDS Relief (PEPFAR) has supported >22 million VMMCs (of nearly 27 million performed) in 15 sub-Saharan African countries

Urethrocutaneous fistula

- Abnormal opening between urethra and surface of penile skin which diverts urine flow
- Can occur as a rare, severe adverse event (AE) with male circumcision
- Often very difficult to treat

Methods

Data Source: PEPFAR's Notifiable Adverse Event Reporting System (NAERS)

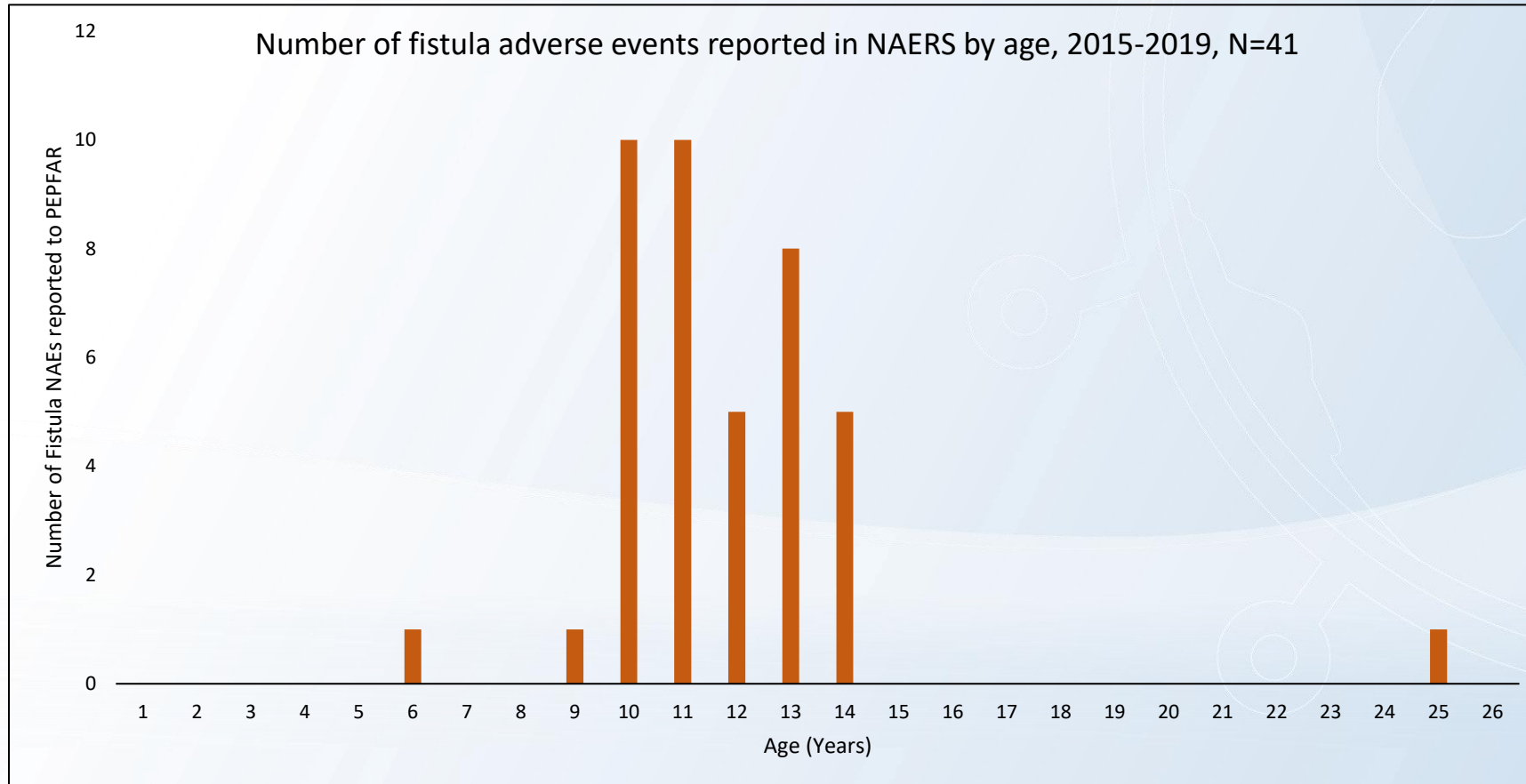
- Standardized in 2015
- Designated investigation forms
- Passive surveillance on specific severe AEs
- All reported fistula cases from VMMCs performed during 2015-2019 reviewed

Analysis

- Descriptive analysis of demographic and clinical program data
- Odds ratio by age (<15 and ≥15 years old)

Results

- 41* fistula cases reported
- Median age: 11 years (IQR 10-13)



*Interval update: 1 additional case compared to abstract

Results

- Increased risk of fistulas in patients <15 years old compared to ≥15 years old with **odds ratio ~50***
- Fistula was the **initial** AE diagnosis in 31/41 (76%)
- A second VMMC-related AE diagnosed in 28/41 (68%) with **infection** being the most common (21/28 (75%))
- Median time from VMMC surgery to **appearance of fistula symptoms** was 20 days (IQR 14-27 days)

	Fistula	No Fistula	Odds Ratio	95% CI	Reported Rate of Fistula Occurrence
<15 years old	40	6,546,926	50.9	8.6-2060.0	0.61 per 100,000 VMMC
≥15 years old	1	8,329,144	-	-	0.01 per 100,000 VMMC

*Fisher's Exact Test (p-value <.00001)

Conclusions

- Fistula AEs significantly more common in younger (<15 years old) patients
- Delay of 2-3 weeks between procedure and symptom onset indicates partial thickness urethral injury, or suture violation of urethral wall, as more likely mechanisms of injury than intra-operative cutting through urethral wall
- Most infections diagnosed after fistula onset and unlikely to be a causative factor

Impact

Findings from this analysis helped inform PEPFAR's recent decision to change VMMC eligibility policy, raising the minimum age for VMMC to 15 years.

Thank You

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