

HIV and syphilis in a fishing population in Uganda: Preparation for future HIV prevention trials

G Asiki, A Kamali, J Seeley, P Kaleebu, H Njai,
C Agaba, E Aling, A Abaasa, H Grosskurth
MRC/UVRI Uganda Research Unit on AIDS



Objectives



- To estimate the prevalence of HIV infection and syphilis in two fishing villages along Lake Victoria in Masaka district, Uganda;
- To describe the risk factors for HIV infection among the fishing population;
- To provide capacity development for future HIV prevention research.



Methods (1)



- Two fishing villages on Lake Victoria (Masaka district, Uganda);
- Activities:
 - Community mobilisation;
 - Household mapping and census;
 - Established new VCT centres (1 per village);
 - Screening visit: Informed consent administered, and assessed volunteers for eligibility.



Methods (2)



- Interview: Demographics, risk behaviour, history of STI;
- HIV rapid test (Abbot Determine)
 - HIV +ves confirmed by ELISA and Western Blot;
- Syphilis serology:
 - RPR confirmation by TPHA (Syphilis =both RPR and TPHA +ve at any titre);
- Data entry and analysis:
 - MS Access2003 and STATA 10.0;
- Risk factor analysis:
 - Logistic regression.



E D C T P

Results 1

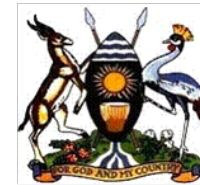


Table1: Prevalence of HIV and associated factors among fisher folk (N=929)

Characteristic	HIV prevalence(%)	Unadjusted OR (95%CI)	Multivariate OR (95%CI)	p value
Over all	29			
Sex				
Male	26	1	1	
Female	33	1.4 (1.1-1.9)	1.5 (1.1-2.3)	0.02
Age groups				
35+	32	1	1	
13-17	6	0.1 (0.1-0.4)	0.2 (0.1-0.7)	0.01
18-24	25	0.7 (0.5-1.1)	0.5 (0.3-0.9)	0.01
25-34	33	1.0 (0.7-1.5)	0.7 (0.5-1.1)	0.17
History of STI				
No	24	1	1	
Yes	46	2.7 (2.0-3.7)	2.3 (1.6-3.3)	0



E D C T P

Results 2



Table1: Continued

Characteristic	HIV prevalence(%)	Unadjusted OR (95%CI)	Multivariate OR (95%CI)	p value
Reported HIV + partner				
No	28	1	1	
Yes	62	4.3 (2.2-8.4)	2.9 (1.3-6.2)	0.01
Positive Syphilis test				
No	30	1	1	
Yes	45	1.9 (1.0-3.6)	2.0 (1.0-4.0)	0.05
Residential status				
Permanent	31	1	1	
Regular visitors	15	0.4 (0.2-0.7)	0.5 (0.2-1.0)	0.06



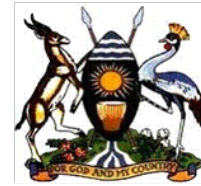
Results 3



- Syphilis prevalence was 6.1%
- 47% reported STI in 3 months(70% genital sores and 30% genital discharge)
- 87% reported 2 or more sex partners and 31% had 1 or more new partners in 3 months
- 83% reported condom use and only 9% reported consistent use
- Alcohol intake (52%) and 34% had sex under its influence and condom use was least among daily alcohol consumers(9.2%)



Results 4



No association between HIV infection and:

- condom use
- marital status
- formal education
- multiple sex partners
- new sex partner in the past 3 months
- exchange of sex for gifts
- Alcohol intake
- Absence from home
- Forced sex



Discussion & Conclusions



- Extremely high HIV prevalence, data reminiscent of mining populations in high prevalence countries
- High HIV prevalence may be explained by high risk taking characterising their lifestyle, declining income from fishing, lack of treatment and prevention services.
- Modest syphilis prevalence but high incidence of reported STI;
 - most of this possibly due to HSV-2 and high rate of partner changes;



Future perspectives



- Additional epidemiological and social science data are being collected;
- Current community engagement and the established clinic and laboratory procedures simulate requirements for large efficacy trials;
- A competent research team is in place;
- On-going capacity building of staff on volunteer tracking and follow up systems for this mobile community.