THE PREVALENCE AND RISK FACTORS OF MYCOPLASMA GENITALIUM AMONG INFERTILE WOMEN IN IBADAN, OYO- STATE, NIGERIA: A CROSS- SECTIONAL STUDY

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BACKGROUND

Mycoplasma genitalium is an emerging sexually transmitted infection(STI) that has been reportedly associated with infertility. It is often asymptomatic and thus has increasing likelihood for silent infertility sequelae among other complications. *M. genitalium* is difficult to diagnose without the use of polymerase chain reaction(PCR) and the high cost necessitates its use particularly on at-risk groups in developing countries. Understanding factors associated with *M. genitalium* infection will assist in identifying those at risk. The aim was to determine the prevalence of, and risk factors for, *M. genitalium* infection among infertile women in Ibadan.

METHODS

A cross-sectional study involving 2 hospitals, 402 women (267 infertile and 135 fertile) were enrolled between March and November 2015, using random, systematic sampling technique. Information was obtained, using structured questionnaire, on sociodemographic and behavioral characteristics of the respondents and endocervical swabs were obtained for DNA extraction. The presence of *Mycoplasma genitalium* MgpA gene was detected from the extracted DNA by the use of conventional PCR. Bands corresponding to 495kb were documented as positive for *M. genitalium*. All data were analyzed using SPSS version 20.0. Associated risk factors were assessed with logistic regression.

RESULTS

Among the infertile women, 43 (16.1%) had evidence of *M. genitalium* infection as against 3 (2.2%) among women without infertility (p<0.001). Associated risk factors included having more than one lifetime sexual partner (OR=10.13, 95% CI: 3.76-33.97); husbands having other sexual partners (OR=12.88, 95% CI: 2.08-90.63); being a serial monogamist (OR=6, 95% CI: 4.35-8.27) and low socioeconomic status (OR=2.80, 95% CI: 1.28-6.10). There was no association with previous history of STI

Risk factors Associated with *Mycoplasma genitalium*

Variables	Odds Ratio	95% CI	p-value
Family type	Monogamous (Reference)		
Single	1.22	0.49-2.95	0.64
Polygamous	0.31	0.05-1.44	0.105
Serial monogamist	6.0	4.35-8.27	0.027
Monthly income, in naira (dollar)			
≥18,000 (50)-Reference			
<18,000 (50)	2.80	1.28-6.10	0.004
Husband has other sex partners			
Certainly no (Reference)			
Certainly yes	12.88	2.08-90.63	0.00012
Lifetime sexual partners			
One (Reference)			
>One	10.13	3.76-33.97	<0.0001

*Odds ratio was used to explain the logistic regression analysis and p<0.05 was accepted as statistically significant

GEL ELECTROPHORESIS OF PCR AMPLICONS FOR MYCOPLASMA GENITALIUM

CONCLUSION

The prevalence of *Mycoplasma genitalium* was significantly higher among infertile women. This suggests that *M.genitalium* screening should be included in the microbiological evaluation of infertile women. The risk factors for *M. genitalium* infection are similar to those peculiar to other STI