Background N. gonorrhoeae and C. trachomatis are the predominant agents causing infertility. However, role of M. genitalium and U. urealyticum remain to be addressed. In addition, the association of load of these organisms with infertility is still not clear. The aim of the study was to screening and quantification of M. genitalium, Ureaplasma sp. N. gonorrhoeae and C. trachomatis in an infertile patients.

Methods A total of 248 women (98 infertile patients and 150 healthy control) who attended the infertility clinic and antenatal clinic of gynaecology department, were recruited in the study. Endocervical swabs (ECS) were collected from both group based on inclusion and exclusion criteria. For analytical sensitivity of uniplex real-time PCR (qPCR), targeted regions of reference strains were cloned in pGEMT Easy vector and transformed to JM109 E. coli cells. Cloned plasmid DNA were 10-fold diluted to determine the limit of detection for each organism and all clinical samples were tested and quantified.

Results Of 98 infertile patients, M. genitalium and U. parvum, C. trachomatis, N. gonorrhoeae, were detected in 7 (7.1%) and 42 (42.8%), 15 (15.3%), 8 (8.1%), respectively. Of 98 patients, 43.8% (43/98) had single infection and 19.3% (19/98) had mixed infection. U. parvum was the only detected organism in healthy control (30.7%). Our findings also suggest bacterial load of two classical agents (C. trachomatis and N. gonorrhoeae) and M. genitalium was not significantly associated with infertile patients. However, we observed U. parvum load was high in healthy control than in infertile patients but not was not stastically significant.

Conclusion In addition to traditional agents which causes infertility (C. trachomatis and N. gonorrhoeae), M. genitalium is also important cause and should be looked for in infertility cases though organism load was not found to be significantly associated with infertility. More studies are needed particularly in developing countries to study such associations.

Disclosure No significant relationships.

Background Mycoplasma genitalium (MG), an STI of renewed interest, is associated with urethritis in men and cervicitis in women. Epidemiologic studies of MG infection outcomes have been limited by diagnostic capabilities. Recent molecular technologies have been applied to detection of MG-specific nucleic acid sequences. Use of commercially available assays leads to comparability across studies if the performance characteristics of these assays are known. The Aptima MG assay is available in some settings but requires access to assay-specific instrumentation. BioGX (Birmingham AL, USA) offers a custom lyophilized reagent for MG detection that is platform-agnostic and can be used in many clinical diagnostic settings. We compared the performance of the BioGX reagents to the Aptima MG (AMG) assay using specimens collected in support of a study of infertility in Cameroon.

Methods Vaginal samples were collected using Dacron swabs and stored in M4 transport medium. 200 uL of M4 was loaded into an AMG transport tube or a BD MAX SBT