The clinical significance of few infections on fertility viz. Chlamydia trachomatis, Neisseria gonorrhoeae have been established but the role of other common urogenital tract infections is still being debated. Although some studies have shown the adverse effects of these infections on sperm parameters in vitro but the relationship between the presence of infectious factors and fertility remains to be actively studied. Therefore the present study was carried out highlighting the effect of the strains of Staphylococcus aureus and Escherichia coli known to cause immobilization/agglutination of spermatozoa in vitro on fertility outcome in mouse model. Intravaginal administration of these strains at different doses viz. 10^4, 10^6, 10^8cfu/20µl for 10 consecutive days could efficiently colonise mouse vagina and thereby on mating with proven male breeder mice, resulted in complete impairment of fertility as compared to control mice. Complete eradication of these strains following an antibiotic treatment lead to revival of fertility. However, when a non-spermagglutinating/immobilizing standard strain of S. aureus (MTCC6625) and E. coli (MTCC 1687) were inoculated intravaginally followed by mating after 24h, all the female mice remained fertile. Further, apart from infertility, no other clinical manifestation could be observed by histological examination. Thus it could be hypothesised that infertility observed could be an outcome of vaginal colonization with spermagglutinating/immobilizing strains of S. aureus and E. coli.