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**Prevalence of *Brucella abortus* among women presented with abortion visiting tertiary care hospitals in provincial capital Lahore, Pakistan****Muhammad Awais**

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**B**rucellosis is a zoonotic disease caused by obligatory intracellular Gram negative bacteria of genus *Brucella* (B.). According to Office International des Epizooties (OIE), it is the second most important zoonotic disease in the world after rabies. Human beings are mostly infected by *B. abortus* and *B. melitensis* which causes high morbidity and socio-economic losses. This study was designed to reveal the impact of brucellosis with a focus on abortion in Pakistani women. In this study, blood samples (n=200) were collected from aborted women from different tertiary care hospitals of Lahore, Pakistan. Sera samples were analysed through Rose Bengal Plate Test (RBPT). For molecular confirmation and species identification, all the samples were subjected to real-time PCR using *Brucella* genus-specific and later on species-specific primers and probes. A sero prevalence rate of 7% (n=14/200) was found via RBPT; whereas, rt-PCR analysis revealed a prevalence rate of 19.5% (n=39/200). Out of 39 rt-PCR positive patients, 31 (79%) were admitted to hospital presenting with fever and joint pain, 23 (58.9%) reported abortion at the end of 2<sup>nd</sup> trimester, 19 (48.7%) consumed raw milk, 8 (20.5%) had a history of joint pain and fever and only 5 (12.8 %) reported previous exposure to animals. No sample was found positive for *B. melitensis* DNA. The outcome of this study should alert health officials to design and implement control strategies for brucellosis in Pakistan including educational work for adolescents and an awareness campaign for women early in pregnancy.

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