

## Abstract

Brucellosis is major zoonosis that affects health and economy in many parts of the world. Brucellosis remains an uncontrolled problem especially in several regions of high endemicity such as the Mediterranean, Middle East. Transmission of Brucellosis in humans is strongly related to contact with infected animals. Diagnosis of brucellosis is based on microbiological and serological laboratory test. Methodology: A cross-sectional study was conducted between January 2016 to June 2016 to Estimate the seroprevalence of brucellosis in the small ruminants. A total of 315 blood samples collected from sheep, goats and human contacts with animals in the age from 15 to 58 years were tested by Rose Bengal test. Also, bacteriological examination was done for 171 available milk samples small ruminants (134 sheep and 37 goats), one sample of stomach and visceral content from aborted fetus of goat and five blood samples of human contact with a current history of fever. PCR was employed. Results: The prevalence in human was (16) 15.2% and in small ruminants was (40)19% and the risk of infection was associated with increasing age, assistance in labour, presence of infected animal with brucellosis and who giving their animal males for fertilization other flocks. Conclusion: There were 56 positive Rose Bengal test in sheep, goats and human. All recovered isolates of brucella were *B. melitensis* biovar 3 and confirmed by PCR. It is probable that they share the same origin of infection. The general public, especially where brucellosis present has to be made aware of the danger to health.

diagnosis, brucellosis, sheep, goat, risk factors :**Keywords**