

ABSTRACT

Bovine tuberculosis (bTB) in cattle is recognized to be associated with several risk factors that include herd size, cattle movement, ownership of other domestic animals, confinement of cattle in enclosures at night, water sources, communal grazing area and proximity to wildlife, especially bTB maintenance hosts. A questionnaire survey was used to investigate the risk factors associated with *Mycobacterium bovis* (*M. bovis*) infection and transmission in traditionally farmed cattle at the wildlife/livestock interface in uMkhanyakude district, northern Kwa-Zulu Natal (KZN), South Africa. The questionnaire comprised of semi-structured questions that were used to gather data on livestock management practices and knowledge about bTB from 71 respondents from households that owned either bTB infected cattle herds or uninfected herds. Multiple correspondence analysis (MCA) was used to explore the association between the risk factors for *M. bovis* transmission and the bTB herd status. Bovine TB positive herds were associated with a herd size of $n > 15$, movement of cattle to areas adjacent to the game parks for grazing, cattle grazing inside the game parks as well as cattle sharing water and pasture with wildlife. The multivariable logistic regression model identified movement of animals to areas adjacent to the game parks and cattle sharing water with wildlife as highly significant risk factors for bTB infection in cattle. The findings of this study emphasized the need for the implementation of bTB control strategies in both cattle and wildlife populations for the successful control of the disease.