



Seroprevalence of Bluetongue virus originating among camels from southern Punjab, Pakistan

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Abstract:

Bluetongue (BT), caused by bluetongue virus (BTV) is a vector-borne disease of small ruminants such as sheep, goat and also persist in camels. Bluetongue (BT) disease has a prospective to spread across borders. In spite of large number of populations of susceptible animals and borders with BTV endemic countries, scant is known of disease implication and prevalent serotype in southern Punjab province in Pakistan. We escort a cross-sectional study to determine seroprevalence of bluetongue virus in selected districts of southern Punjab using a competitive enzyme-linked immunosorbant assay (cELISA). Sera (n = 992) were collected from clinically healthy and non-healthy camels originating from the districts of Bahawalpur (n = 30), Dera Ghazi Khan (n = 207), Multan (n = 100), Muzaffargarh (n = 17), Rahim Yar Khan (n = 255), Rajanpur (n = 152), Taunsa (n = 231). At the individual level, the overall prevalence of BTV was 68% (n = 697/992, 95% CI = 33.11- 38.72%). A higher percentage of seroprevalence was seen in district Muzaffargarh 100% (n = 17/17). Odd ratios of seroprevalence for camels were associated with age type ($\ln^2 = 139.59$, p = .00), body condition ($\ln^2 = 40.61$, p = .00), breed ($\ln^2 = 19.61$, p = .00), feeding status ($\ln^2 = 7.96$, p = 0.19), farming status ($\ln^2 = 24.49$, p = .00), Education status ($\ln^2 = 11.68$, p = .00), pregnancy status ($\ln^2 = 21.80$, p .00). All the risk factors were significant and contribute towards the presence of BT disease. To the best of our knowledge, this study that has been conducted in southern Punjab province and the results of this study designate to instigate intrusion strategies to control the BT disease burden but not only in the area of Pakistan but also in in neighboring countries to whom Pakistan share his border India, Iran, Afghanistan.

Biography:

I am Fariha Altaaf young research in the field of Microbiology belong to Pakistan. I have a passion and learn new expertise in evaluation in improving the health and wellbeing. I am very passionate and hardworking to create new pathways for improving healthcare. I done this



research and built this model after years of experience in microbiology research, evaluation, teaching and administration both from hospital and education institutions. The methodology in this research includes competitive ELISA that illustrates, seroprevalence and association of risk factors. It allows for value-pluralism. This research along this methodology reveals the presence of BT virus that is transmitted from one region to another and still transmitting.

Publication of speakers:

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