Abstract

Title: Extreme violations of cattle welfare in road transportation in Bangladesh: A pre and post transport assessment

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I. Abstract Body (up to 250 words)

A mismanaged transport of animal can confer to poor animal welfare. Therefore, this study was conducted to assess health conditions of cattle transported to a long distance (≈648 km). A total of 100 adult cattle, regardless of breed and sex, were selected at Benapole live cattle market in Jessore between August and September 2015 for the study. Blood samples were taken from 50 randomly selected cattle at 0 hours before transportation, just after transportation (at 12-16 hours) and 24 hours after transportation. The external health conditions and injuries of the cattle were assessed by close inspection. Animals were fasted and remained standing within a small space allocation (8-10 sq feet/animal) in the vehicle during transportation. The overall frequency of cattle injuries varied significantly (26% before vs. 47% after transportation; $p<0.001$). The frequency of different cattle injuries also significantly varied by type such as abrasion (11% vs. 21%; $p<0.05$) and barbed wire injury (9% vs. 18%; $p<0.05$). Cattle health conditions varied significantly (nasal discharge: 15% vs. 28%; $p<0.05$; diarrhea: 15% vs. 23%; $p<0.05$ and severe dehydration: 8% vs. 20%; $p<0.001$). The values of hemoglobin, Total erythrocyte count, Total leukocyte count, lymphocyte (L), neutrophil (N) and eosinophil varied significantly ($p\leq0.01$). The values of serum total protein, creatine kinase, triglyceride, calcium, phosphorus and alkaline phosphatase significantly differed ($p\leq0.05$). The identified status of external and internal health conditions of the cattle for trading purpose due to long distance transportation in the present study indicates a high degree of transport stress and poor animal welfare.

II. Image:

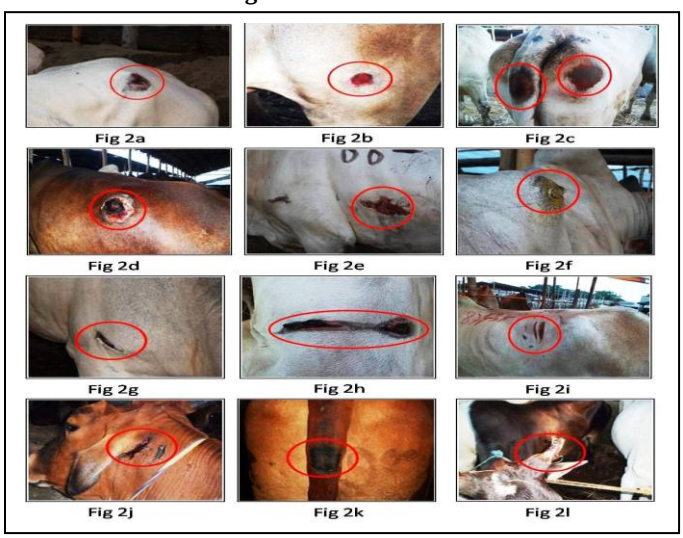


Figure: Different types of injuries during transport of cattle

III. Reference:

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IV. Biography:

Mahabub Alam obtained his DVM degree in 2011 and MS is Animal Science in 2014 from Chittagong Veterinary and Animal Sciences University (CVASU), Bangladesh. He joined as a Lecturer in the Department of Animal Science and Nutrition in March 2014. Now, he holds a position of Assistant professor from 2016 to till in the same institution. He published 16 scientific articles in national and international peer-reviewed journals. Now he is a research student at the Department of Biochemistry in Tohoku University, Japan (As study leave from CVASU). Hopefully he will enroll as doctoral student at the same institution in April 2018. He has immense interest to research on animal science.

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