

Human and horse behaviour during veterinary treatments

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Veterinary treatments are often aversive or painful, resulting in stress, avoidance, or aggressive behaviour. This preliminary study investigated which behaviours horses and humans display during veterinary examinations or treatments and if specific behaviours are shown more often during particular situations. Moreover, possible links between human and equine behaviour were investigated.

Behaviours of horses, veterinarians, and assisting people were recorded at 5 clinics during 49 routine treatments that were divided into 111 situations (assigned to 7 categories: giving injections, waiting, leading horses, inspections with light body contact, invasive inspections, leg inspections, spraying/shaving). Behaviours of humans present during a situation were summarised. Behaviours (frequencies/minute) were analysed by Kruskal-Wallis tests and Spearman rank correlations.

Horses showed insecurity (stopping, baulking, defecation) with different frequencies in the different categories ($\text{Chi}^2=23.38$, $\text{df}=6$, $P=0.001$), e.g., often during leading. In humans, activating behaviour (e.g., arm waving, whistling, tongue clicking) was displayed with different frequencies ($\text{Chi}^2=20.42$, $\text{df}=6$, $P=0.002$), e.g., frequently during leading. Restlessness in horses (e.g., stepping, head movements) tended to occur with different frequencies ($\text{Chi}^2=12.37$, $\text{df}=6$, $P=0.054$), e.g., often during invasive inspections. Humans applied restraining techniques considered to be painful (e.g., ear twisting) with different frequencies ($\text{Chi}^2=26.20$, $\text{df}=6$, $P<0.001$), e.g., mostly during invasive inspections. Restlessness in horses correlated with negative human interactions (e.g., hitting, talking impatiently, shouting: $r_s=0.28$, $P=0.002$, $n=111$) and neutral human interactions (e.g., slight hits, talking dominantly: $r_s=0.45$, $P<0.001$, $n=111$) as well as with the use of painful restraint techniques ($r_s=0.46$, $P<0.001$, $n=111$). Moreover, avoidance behaviour of the horses (turning and stepping away) correlated with negative human interactions ($r_s=0.30$, $P=0.002$, $n=111$).

Thus, humans and horses showed certain

behaviours in different situations with differing frequencies. Moreover, links between human and animal behaviour were found. Future studies should analyse causal connections, i.e., if the observed animal behaviour is the result of/or the reason for human interactions by sequence analysis.

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