**Dog welfare in animal-assisted intervention (AAI) in a group of Alzheimer's disease patients**

**Summary**

The study was aimed at assessing the welfare of dogs employed in animal-assisted intervention (AAI) with groups of patients with Alzheimer's disease. The study focused on registering and analysing calming signals and was conducted on two dogs, a 3.5-year-old male and an 8-year-old female, during 19 sessions. Our observations suggest that animal welfare in AAI is influenced by numerous factors, such as individual predisposition, training, skills acquired during the work, the number and duration of sessions, and the number of patients taking part (group size). The less experienced dog was more susceptible to such factors as the number of patients, duration of the session and size of the room. The work of the dog is influenced by its handler's theoretical and practical preparation as well as by practical experience gained during its work. Nevertheless, even the most experienced handler is not able to fully isolate the dog from all stressful situations arising during the sessions. The ability to recognise and interpret calming signals is not easy to acquire and requires an understanding of canine body language and the meaning of the signals, as well as the ability to divide one's attention. The results of our observations suggest that further research on this subject is needed. Ensuring the welfare of AAI dogs requires the preparation of a human-independent system for monitoring the degree of stimulation of the dog during sessions.