



One Health: Connecting Humans, Animals and the Environment Video Transcript

Animals for therapy

[Karin Hediger]: In the last decade, research has demonstrated a multitude of positive effects on human animal interactions, on human health and well being, and has pointed to underlying mechanisms that explain why using animals can sometimes be more effective than interventions by humans alone. This represents an important aspect of One Health. Thus, animals are integrated in pedagogical and therapeutic settings, for instance. And all these forms are called animal-assisted therapy, animal-assisted education, or animal-assisted activities. Animal-assisted therapy is not a new or independent therapy form, but rather a method of integrating an animal into for example physiotherapy, speech therapy, occupational therapy, or psychotherapy.

Animal-assisted therapy is an intervention that is increasing rapidly over the last decades, and is provided for example in hospitals, nursing homes, psychiatric and rehabilitation clinics, prisons, and schools. It is a form of performing One Health in practice, since the animal leads to an improvement to the human, biosocial health, and well being. And since the animal can also benefit in the sense of having tasks that lead to an environmental enrichment. However, there is a lot to consider so that both sides-- the patient and the animal - may profit from this form of intervention. It is clearly not a suitable intervention for every patient. And not every animal likes being integrated into therapy and having contact with different people.

Moreover, therapists need advanced training in animal-assisted therapy, and need to have a lot of animal-specific knowledge. Let us show this with an example. At Rehab Basel, a clinic for neuro-rehabilitation and paraplegiology, animal-assisted therapy has been integrated into the therapeutic concept since 2013. Here we do research on the possible effects on patients with brain injuries, but we also investigate the effects on the animals. The clinic has an animal therapy garden, a facility that is built for human-animal encounters with respect to the patients and animal safety and well being. It is the home of horses, sheep, goats, mini pigs, rabbits, guinea pigs, chicken, cats, and two visiting dogs that are specially selected and trained.

In the following pictures, you receive an impression how it looks when an animal is an integral part of a therapy session. This is an occupational therapy with a patient with hemiplegia and brain injury. Here, the therapist stimulates self-initiated behaviour, the use of both hands, and her coordination. Here, we see a physiotherapy session. The aim is to improve the patient's balance and stability while she's doing complex tasks. This patient has multiple cognitive and physical impairments due to a brain injury. Because she sees the guinea pigs and has a relationship with them, she understands what she must do with this carrot.

In animal-assisted therapy, the animal functions as an ice breaker and facilitates the therapeutic bond. The patient can change his role and care for another living being instead of being needed to be cared for the whole time. Integrating an animal creates many opportunities to act. It provides a lot of meaningful and everyday-like situations. And therefore, create situations to learn. And this is what patients in neurorehabilitation need. Moreover, the animal provides the possibility of proximity, tenderness, and physical contact.

The living animal brings patients back to the here and now. And last but not least, animal-assisted therapy means a lot of spontaneity and fun. Often, patients that are not motivated for therapy can be reached. From recent research, we know that interacting with animals can lead to a significant reduction of depression,



stimulate social behaviour, and reduce stress. Also, in our data we see more positive emotions and higher motivation in patients. Of course there needs to be precautions for the patient's safety and a clear hygiene plan. However, the safety and well being of the animal has to be monitored as well.

For example, we did a study investigating behaviour related to stress and comfort in guinea pigs, we coded different standardised therapy sessions on video according to an ethogram. Here we could show that if there is an adequate setting, integrating animals into therapy might be an enrichment. But if for example the guinea pigs have no retreat opportunity, as you see in this picture, stress can be induced. Therefore, we work with such table cages, where the animal can choose to approach and interact with the patient, but has a permanent possibility of retreat. If animal-assisted therapy is done right, it can contribute to the health of both the animal and the human. But it requires a lot of knowledge. It is also important to consider preconditions.