

## ANIMALS-ASSISTED THERAPY: A BRIEF REVIEW

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### ABSTRACT

*In rehabilitative setting, the presence of animals can be considered as an important stimulus for verbal and social communication, and for mood regulation. Interaction with an animal is beneficial for children's development and numerous psychological tests have revealed that growing up with pets has a beneficial effect on children's self-esteem and self-confidence, can improve empathy, a sense of responsibility and cognitive development, as well as social status within the peer group.*

**Keywords:** *animals-assisted therapy, neurodevelopmental disorders, dogs.*

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### History of the birth of pet therapy

The presence of a large number of animals in classical Mythology tends to emphasize the ancestral human-animal interaction since the Paleolithic period. In 450 BC the poetry Homer described how Ulysses, on his return to Ithaca isle had not been

recognized either by his wife Penelope or by his son Telemachus but only by his dog Argo. In Egypt, at the time of the Pharaohs, the dog was sacred to the God Anubis, protector of medicine. It was said that some people who had lost their sight went to the God of medicine and asked to be licked by the language of his dogs because of the healing power

they had. The relationship between man and animal has evolved over the millennia, through 3 phases: In the first phase there was an archaic conception of the animal, the man had towards the animal a definite magic-totemic link. Non-human being was perceived as a divine entity. In the second phase there is an economic - functional conception of the animal; the concept of the "dominus" man is affirmed: master<sup>(1-8)</sup>. The animal at this stage is considered a utility, a producer. The third phase is characterized by an ethical - philosophical conception of the animal that corresponds to the vision of the animal that is present in the current historical period. The animal is considered as a sentient being, capable of conscious perceptions of joy and pain.

The term Pet-Therapy was created by the child neuropsychiatrist Boris Levinson after the taking care of a child with autism spectrum disorder who had many improvements in many functioning areas, including social skills<sup>(1-8)</sup>.

### **Animal-assisted Therapy in pediatric age**

Among children the presence of animals can be considered as an important stimulus for verbal and social communication, and for mood regulation. Interaction with an animal is beneficial for children's development and numerous psychological tests have revealed that growing up with pets has a beneficial effect on children's self-esteem and self-confidence, can improve empathy, a sense of responsibility and cognitive development, as well as social status within the peer group.

For children affected by different neurodevelopmental disorders, the animal-assisted therapy may be considered as valid therapeutic support including autism spectrum disorder (ASD), cognition and learning disorders, motor impairment<sup>(9-62)</sup>.

On the other hand, in ASD children, the hippotherapy has been shown to increase positive social behaviors, such as sensitivity, concentration in homework, and social motivation due to the high levels of oxytocin associated with positive interactions with animals and to the consequent reduced aggression, more empathy and improved learning. The Cortisol Awakening Response which was found to indicate stress levels in children with ASD, decreased significantly (from 58% to 10%) when service dogs were present. The ability of animals is to influence children with ASD more than adults can influence them and compared to traditional methods of occupational therapy without animals.

In the Washington School of Medicine a study was carried out on the effects of the interaction of dogs in AAT with children with developmental disorders characterized by lack of communication and motor skills. Children have shown a greater stimulus to play and communication and a growing attention to the outside world in the presence of the dog, compared to control cases<sup>(9-62)</sup>.

The interaction could therefore increase children's ability to concentrate, use the skills of communication learned, and increase social awareness, the promotion of desirable social skills among children who risk otherwise having difficulty in reaching<sup>(9-70)</sup>.

Moreover, the Pet Therapy with dogs seems to be effective for reducing the pain perception or stimulating positive and relaxing feelings that call to mind friends and their home. The children admitted to the surgical interventions reported feelings of increased well-being, which is caused by an increase in the release of endorphins and lymphocytes<sup>(62-70)</sup>.

In children, AAT dogs have decreased the discomfort during painful medical procedures, promoted calm in children with post-traumatic stress disorder and increased attention and positive behavior in children with pervasive developmental disorders. Another demonstration of the positive effects of interaction with the animal is that the mere presence of an animal in a pediatric dental clinic has been shown to reduce the initial anxiety of patients among children in the waiting room. Features of the child relationship -Animal in relation to activities and therapies assisted with animals According to some research, the animal in its morphological and behavioral diversity would urge the child in the formation and wealth of the imaginary, offering more models for its elaboration processes and strengthening its fantasy.

Furthermore, the interaction with the diversity of the animal or the simple reference to the diversity of the animal, would help the child coping with the multiformity, transforming the mistrust into curiosity and tolerance. The animal has a formative role of enormous importance in the mental development of a child or a boy. Through the stimuli that the animal provides to the child, recalling his attention, posing problems and suggesting solutions, he favors a real cognitive gymnastics. According to some authors the pet induces in the child a state of affective security that favors the relationship with the outside world, the expressiveness, the explo-

ration and the emotional balance. Taking care of the animal, taking care of it, favors a global epimeletic disposition that mitigates or inhibits aggressive and careless behavior, lack of availability towards the other, managerial and organizational disorder, lack of attention to others and poor consideration even of his own world and of himself. Getting used to caring for the other, helping the other person, protecting the other person, means taking on positive behavior and availability that is reflected in all the activities that the child will then develop.

The relationship with the pet also strengthens the emotional security, ie the empowerment processes. The life of a child inevitably presents moments of transition such as entering the school world, the birth of a brother, the death of the grandparents, the illness of a relative, a possible divorce of the parents, etc. These moments determine a change in the rules and internal relational processes, as well as the growth process of the child that involves a crisis of passage with a re-definition of the relational patterns and the positioning of the child in them. The animal referent plays an essential role in relieving stress, giving a feeling of continuity during the transition, decreasing the sense of vulnerability and creating environments of intimacy. The animal becomes almost an “emotional bridge” that the child uses in times of transition and difficulty to avoid closing in on himself. In many cases, the AAA nurturing these theoretical elements, they are inserted in difficult school or family situations, favoring the contact between the child and the animal in a series of “spontaneous” activities. Generally, pet animals have accentuated youthful characteristics that result in a strong communication / solicitation for the child. From the observation of these the child operates processes of identification between the infantile and the animal conception, so that often in the relationship with the pet the child plays the role of the adult.

Recent studies conducted on humans have shown how the relationship with an animal induces a greater sense of security, and increases the motivation to interact socially and to learn: the study that highlighted how an autistic girl learned to count up to three to give the way to his dog, involved in the game. The increase in motivation was also highlighted in cases where, for example, animals are regularly held in classes with children with mental retardation. In these cases the animal becomes the pole of attraction with the effect of reducing, at least partially, learning difficulties.

In these examples of TAA, the animal can play a fundamental role, supporting traditional therapies, but only through interventions characterized by a strong theoretical and methodological structuring and that must be supervised by medical personnel<sup>(63-98)</sup>.

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