

Co-therapist animals as complementary alternatives in the health and human well-being: literature review**Animais co-terapeutas como alternativas complementares na saúde e bem-estar humano: revisão de literatura**

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ABSTRACT

The main goal of Animal Assisted Therapy (TAA) and of the Animal Assisted Activity (AAA) is to promote organic, behavioral and such sentimental changes in human healthy or patients with different types of deficiencies and diseases, by the aid of animal of different species (co-therapists). Therefore, the importance of the correct selection of the co-therapists (mainly the behavioral factor), as well the periodic health attestation, issued by the veterinary doctor. It is clear that helps to control pain, sleep, appetite, stress, mood and aggression. Faced with the numerous advantages described about this activities in improving the quality of life and survival of patients, the purpose of the present final paper was to conduct a literary review emphasizing the objectives of this therapies as complementary alternatives in human medicine and, nevertheless, highlight the most commonly used animal species, type of selection and care with co-therapists, besides the human patients benefited.

Key-Words: Animal assisted activity. Animal assisted therapy. Health promotion. Multidisciplinary.

RESUMO

A Terapia Assistida por Animais (TAA) e a Atividade Assistida por Animais (AAA) tem como objetivo principal promoverem tanto alterações orgânicas quanto comportamentais e sentimentais em pacientes humanos hígidos ou portadores de variados tipos de deficiências e enfermidades, mediante o auxílio de animais de distintas espécies (co-terapeutas). Deste modo, salienta-se a importância da correta seleção dos co-terapeutas (principalmente o fator comportamental), assim como o atestado de sanidade periódico dos mesmos, emitido por médico-veterinário. There are several scientific descriptions about this activities conservatives and complementaries in conventional human medicine, applied in hospitals, nursing homes, special children's schools and rehabilitation and physiotherapy clinics, improving the physical, social, emotional, and cognitive aspects of those involved. Há diversas descrições científicas sobre essas atividades conservadoras e complementares às convencionais na medicina humana, aplicada em hospitais, lares de idosos, casas de repouso, escolas para crianças especiais e clínicas de reabilitação e fisioterapia, proporcionando melhora no aspecto físico, social,

emocional e cognitivo dos envolvidos. É notório que auxiliam no controle da dor, sono, apetite, estresse, humor e agressividade. Diante das inúmeras vantagens descritas sobre essas atividades na melhoria da qualidade de vida e sobrevida dos pacientes, o propósito do presente trabalho foi realizar uma revisão literária enfatizando os objetivos destas terapias como alternativas complementares na medicina humana e, não obstante, destacar as espécies de animais mais comumente utilizadas, tipo de seleção e cuidados com os co-terapeutas, além dos pacientes humanos beneficiados.

Palavras-chave: Atividade assistida por animais. Terapia assistida por animais. Promoção da saúde. Multidisciplinar.

1 INTRODUCTION

Since antiquity, man has enjoyed the functions of animals, seeking his own benefit. Thus, as the human-animal relationship progressed, ideas emerged about the therapeutic resources that different species could awaken in humanity (CALCATERRA et al., 2015).

In this sentid, Animal Assisted Therapy (TAA), also known as zootherapy, pet therapy and therapy facilitated by animals, aims to promote behavioral and organic changes in human patients with different types of disabilities and age groups through the use of animals of various species, both being constantly monitored by qualified health professionals and veterinarians (NORDGREN; ENGSTROM, 2012; CHERNIACK; CHERNIACK, 2014). In contrast, the Animal Assisted Activity (AAA) is characterized by promoting the animal's direct contact with the patient, aiming for entertainment and distractions, without necessarily having therapeutic actions involved (DOTTI, 2005).

The bond of the animal with the patient in both multidisciplinary therapies, provides better quality of life through proximity, being favorable for self-esteem, well-being, relationship and good mood, survival, in addition to performing physical exercises (OLIVA et al., 2010).

The animals that are part of both the TAA and the AAA are designated as co-therapists and are mandatorily subjected to periodic health and behavioral assessment processes, to verify that they are able to work with previously proposed human patients (VACCARI; ALMEIDA, 2007).

In view of the promising results scientifically described about TAA and AAA, both for patients and their caregivers, the purpose of this study was to carry out a literary review emphasizing the objectives of this therapies as a complementaries alternatives in human medicine and, nevertheless, to highlight animal species most commonly used, type of selection and care with co-therapists, in addition to the benefited human patients.

2 LITERATURE REVIEW

The interaction between humans as been described for thousands of years, since ancient civilizations in Prehistory, since, according to Peixoto (2009) and Ferreira et al. (2016) numerous archaeological sites were found where the bodies of the animals were buried in prominent positions, alongside their possible guardians.

The animals have always had significant value for man, since in addition to being used as a source of food, they were described as important beings expressing evident transmutation, protection, feeling, companionship, work and spiritual growth (LEVINE, 1999). In this sense, by means of powers, the spirits of animals were commonly worshiped and invoked in countless cases of disease to bring health and intercede in the healing of humans (DOTTI, 2005).

For Hart (1985), ancient men always submitted to maintain relations with other species and this connection, modified and protected by the needs presented during its evolution, described the correlation of powers and healing and social status and, later, domestication.

The first animals to be domesticated between 10,000 and 20,000 years ago were dogs descended from wolves (DOTTI, 2005). It is believed that felines have been voluntarily introduced into domestication through Neolithic peoples as well as horses, cows, goats, sheep, foxes, pigs and deer (LEVINE, 1999; VIGNE et al., 2004). It is believed that the animal species that coexisted better with man, had more chances of generating offspring, when compared to the others, in a method that naturalists called "artificial selection". In this context, in Brazil there is evidence of 27 million dogs and 11 million cats as pets, with dogs being the first to be domesticated (FARACO; SEMINOTTI, 2004).

Even with animal domestication, diversifies species are used for different and essential human modalities such as food, clothing, guard and guard, field work, transportation, sport, leisure, company, models for academic studies and experiments. In this way, the direct relationship between man and animals has become increasingly friendly, making them supportive in the expansion of religion, science and human medicine (LEVINE, 1999; NUSSBAUM, 2006).

With regard to human health, since ancient times, there are records about Asclepios (Greek God of health) who believed that sacred dogs with divine power, when licking a blind individual, would provide healing at the same time (DOTTI, 2005). Still in this context, was assumed that proximity to animals could bring bodily and mental benefits; for example, Hippocrates (considered medicine fathers) already stated that direct human contact with horses promote advantages over the neurological system, mainly healing at the same time (DOTTI, 2005).

2.1 ANIMAL ASSISTED THERAPY

Animal Assisted Therapy (TAA) is characterized by a conservative (non-pharmacological) human medical alternative and complementary in the treatment of several affections (MATUSZEK, 2010), aiming to provide a promising improvement in the physical, social, emotional and cognitive aspects of the affected patients, having as main member, animals (co-therapists or co-educators) of different species (KOBAYASHI et al., 2009; FERREIRA et al., 2016; HOAGWOOD et al., 2017).

Initially, TAA was ridiculed and belittled by some medical professionals; in contrast, it is now known that animals positively influence the lives of humans, especially children and seniors, and this is evident even in environments such as schools and hospitals, with wallpapers and toys, designed to represent myriads of countless animals and are often valued as family members, emphasizing the important interaction between man-animal (EVANS; GRAY, 2012).

Over time and studies, Marinho and Zamos (2017) stated that TAA encompasses mechanisms of action such as affective-relational (strength of the human bond with the animal), psychological stimulus (the bond established acts on the human psyche, favoring improvement in socio-relational, character and cognitive behavior), recreational (games that stimulate self-esteem, reduce social isolation and positively alter mood), psychosomatic and physical (action on the participant's body). Furthermore, it facilitates interaction and involvement between patient and social worker and caregivers in general (EVANS; GRAY, 2012).

According to Dotti (2005), Filan and Llewellyn-Jones (2006) and Jones, Rice and Cotton (2019), TAA is used in different types of disabilities and developmental problems such as cerebral palsy, neurological, orthopedic and postural disorders, genetic syndromes such as Down's syndrome and Alzheimer's disease, autism, West's syndrome, Rett's syndrome, schizophrenia, visual and/or hearing impairments, attention, learning, perception, communication, language and hyperactivity disorders, in addition to people with depression, cancer and stress.

Any individual can enjoy this therapy, be it a child, elderly, cancer patient, hospitalized or even at home, except those allergic to hair, with a phobia of animals (PEREIRA; PEREIRA; FERREIRA, 2007; EDWARDS; BECK, 2010; MATUSZEK, 2010) low immunity, with open wounds and those with aggressive behaviors that can hurt animals (MARINHO; ZAMOS, 2017). Thus, there are several places where TAA can be performed, such as in hospitals, nursing homes, nursing homes, schools for special children, rehabilitation and physiotherapy clinics, among others (KOBAYASHI et al., 2009).

It is worth mentioning that TAA is an adjunct therapeutic alternative to conventional ones and should not be used in isolation (PEREIRA, PEREIRA; FERREIRA, 2007; EVANS; GRAY, 2012). Science has proven that living with animals helps in the systemic release of hormones, increasing the

production of endorphins (referred to as natural analgesics) and serotonin (regulates mood, appetite and sleep) and decreasing cortisol rates (related to stress), predisposing to reduction in blood pressure and heart rate, in the same way that it reduces aggression, encourages memory, learning, diction, reasoning and execution of exercises, thus improving kinesia (DOTTI, 2005; CESJCD, 2007; CHAGAS, 2009 ; HOLT et al., 2015).

In addition, TAA promotes social benefits such as entertainment, coexistence and communication with different animals, which generates incentive, feeling of protection and reliability. Emotionally, there is a decrease in anxiety, greater concentration, moments of joy and demonstrations of exchanges of affection. All physical, mental and emotional benefits of TAA continue even after the therapy session, as it leaves memories and good memories in the lives of patients, thus highlighting the importance of TAA (DOTTI, 2005; CHAGAS, 2009; EVANS; GRAY, 2012; CALCATERRA et al., 2015).

The intersection of the animal therapy also assists in providing better relationship and dialogue between the health professional and the patient, since the involved become relaxed and safe (EVANS; GRAY, 2012; STUMM et al., 2012).

For this therapy to bring promising responses, it is essential to have a permanent presence of qualified health professionals, including the veterinarian, as the latter is the only one able to guarantee the health of the participating animals, to perceive behavioral changes in them, to select the best species, race and individual to serve people in a given establishment, in addition to providing animal welfare during the various activities (SILVA et al., 2017).

Calcaterra et al. (2015) reported that in children hospitalized and undergoing surgery, TAA can reduce suffering and fear during the performance of painful procedures, calming them; consequently, it is also beneficial for parents. In this context, the researchers said that TAA significantly improves neurological, cardiovascular and endocrine responses to stress in the immediate postoperative period, in addition to earlier anesthetic return in pediatric patients.

Owenby (2017) identified benefits of TAA for personal growth as motivation, tolerance to suffering, alternative form of nutrition, soothing, self-acceptance, interactional pleasure, increased confidence and greater incentive to overcome barriers, which directly assist in leadership skills, reflecting customer satisfaction.

The ideal duration of each therapy session varies from thirty minutes to one hour, depending on the needs of each human patient, number of patients/session, the environment in question and the conditions of the co-therapist (SILVA et al., 2011; WILSON, 2018), however, this time and the cumulative effect is not yet fully established (FILAN; LLEWELLYN-JONES, 2006).

The TAA has been described since antiquity, ancient Roman documents already highlighted the healing power of dogs, considered sacred (MARINHO; ZAMOS, 2017); however, it has been standing out and expanding more and more, both nationally and internationally, being constantly explored and studied by trained professionals from multidisciplinary areas such as psychologists, occupational therapists, doctors, veterinarians, sociologists, anthropologists, physiotherapists, neurologists, among other related sciences (SILVA et al., 2017). Such professionals must carry out and supervise the activities proposed in the TAA and, the entire protocol established, must be registered and evaluated individually and regularly (REED, FERRER; VILEGAS, 2012).

In England, in the middle of the 18th century, at the York Retreat Psychiatric Hospital (founded in 1792, by the English philanthropist William Tuke), patients walked freely in the common area of the infirmary, accompanied by animals and birds, in order to help them in the treatment of psychic disorders, stimulating the patient's communication and movement. In 1867, in the city of Bielefeld in Germany, the Bethel Institute was founded, a hospital dedicated to the treatment of people with epilepsy, mental and physical problems, which offered complementary activities in an equestrian center, located in the countryside with the participation of numerous animals, among them horses, dogs, cats and birds (CHERNIACK; CHERNIACK, 2014).

In 1944 year, in the city of Pawling, New York, doctors used animals in a military recovery hospital to help soldiers who suffered psychological trauma during Second World War. Soldiers were also taken to a farm to relate directly to horses, oxen and chickens (FLEISHMAN et al., 2015).

In the 1950s to 1960s, child psychologist Boris Levinson, performed his therapies with and without the help of dogs to encourage autistic children, arguing that the animal presence as a co-therapist demonstrated excellent results and in an early manner. For this reason, this professional was considered the pioneer in the use of TAA. In 1962, Boris Levinson published the article 'The dog as a co-therapist', reporting the first records of the use of dogs within psychology, in which, his dog da Labrador breed, had an important participation. In this work, the alternatives of intercessions to be practiced with the dog and the advantages during therapies with children with this syndrome were exposed (DOTTI, 2005).

At the same time, Brazilian Nise da Silveira, a psychiatrist, was considered the pioneer in TAA in Brazil, starting this practice in a psychiatric hospital in Rio de Janeiro, using dogs and cats, aiming to improve patients through the care they should have with these animals. From then on, the psychiatrist developed several projects and researches in this area, saying that dogs have qualities that make them capable of improving human health, especially unconditional affection without aiming at anything in return and, in addition, they do not cause frustration, providing well-being, being and joy to the hospital environment and to all patients, bedridden or not. On the other hand, reported that cats

are more discreet and elusive, being similar to schizophrenic patients in their peculiar way of loving (MENGARDO, 2009).

In this context, according to the creator and coordinator of the Social Project For Next, TAA works as a catalyst in stimulating and accelerating beneficial changes, being able to change the entire treatment environment of the human patient, providing the exposure of all feelings, whether of happiness or sadness. In view of the several promising results already described scientifically, TAA should be used as a tool for the growing awareness of public health services, contributing to the reduction of national health costs (MENGARDO, 2009).

2.1.1 TAA with seniors

According to Dotti (2005), the effects of TAA in the elderly are exceptional, including with regard to cardiovascular health. Results have shown that this therapy is able to provide physical health, reducing loneliness and depression in these patients, improving communication and socialization, as well as reducing anxiety and increasing the willingness to perform physical activities, facilitating physical therapy.

The TAA demonstrates satisfactory results, especially when instituted throughout the course of conventional treatment and with depressed elderly people who were distant from their own pets when they moved into nursing homes, alleviating the feeling of abandonment (DOTTI, 2005).

The elderly can use their own pets during the proposed therapies to undergo physical therapy and other recommended activities (MATUSZEK, 2010).

The TAA is successfully used in cases of Alzheimer's neurodegenerative disease, which progresses irreversibly, with the main symptoms, memory loss and cognitive disorders that progress to dementia (CHERNIACK; CHERNIACK, 2014). Damon and May (1986) carried out a study with three elderly people over 78 years old, with Alzheimer's, aiming to analyze the benefits that dogs would provide to the elderly when they held the animals' collars for fifteen minutes, and in the meantime, anyone could approach of the dog petting him, even in the presence of the patient under observation; the researchers concluded that the dogs aroused courage and calm to socialize with other people in the institution, in addition to improving mood and communication, reducing behaviors of depression, aggression and agitation.

Colombo et al. (2006) stated that elderly people who had contact with and cared for birds and plants for three consecutive months, in a nursing home in Italy, conferred psycho-cognitive benefits when compared to those who did not have such an opportunity.

Edwards and Beck (2002) examined the influence of TAA in 62 elderly people with Alzheimer's, using aquarium fish, and observed that there was a significant increase in the food intake

of these patients after the introduction of complementary therapy, delaying muscle loss that decreases the incidence of falls, prevents skin infections, decubitus ulcers and sepsis; in addition, they required less nutritional supplementation, which reduced treatment costs. In this sense, several nursing homes have already installed aquariums to improve the performance of special individuals, especially those with psychological deficits.

It is important to note that not all elderly patients will benefit from TAA, especially those who are mentally disabled or bedridden (MATUSZEK, 2010).

2.1.2 TAA with cancer patients

Complementary therapies normally applied to cancer patients include acupuncture, imaging, aromatherapy, meditation, massage, music therapy, nutritional supplements, therapeutic touch, Reiki, water therapy and yoga. In the case of the use of animals in cancer hospitals, especially dogs, TAA aims to help reduce sadness, fear and loneliness, common feelings in patients undergoing chemotherapy, a treatment that causes numerous side effects and weakness. In this sense, dogs are able to encourage communication, strengthen self-confidence and divert the focus of the disease, so that the use of medications can be reduced, improving the vital signs and the quality of life of the patient (MARCUS, 2012; CHERNIACK, 2014).

The first records of the benefits of TAA in cancer patients were from a study dated in 1984, in which 15 patients with terminal cancer who received 10 weekly sessions with the presence of dogs, lasting 90 minutes each, observing decreased anxiety and discouragement (FLEISHMAN et al., 2015).

2.1.3 TAA with visually impaired

The start of TAA with visually impaired people occurred shortly after the First World War, with the preparation of dogs to lead soldiers who lost their sight during battles (FLEISHMAN et al., 2015).

This therapy with the visually impaired remains solid, as an example of the guide dog, which, even over the years, with current modernities and advanced technologies, still plays a fundamental role in helping transport these patients to any location, with the beneficial work considerably recognized and appreciated by society (TOMKINS et al., 2012). In addition, animals can be trained to avoid obstacles and holes, collect utensils and objects, turn off the light, open and close doors and windows, drive wheelchairs, among other activities that favor the quality of life of the visually impaired (RINTALA et al., 2008; ANDERLINI, 2009; WINKLE et al., 2012).

The training of the guide dog, in addition to having a high cost, must be continuous, however, the benefits stand out, since they promote more agility and speed in locomotion, in addition to self-confidence and autonomy (DOTTI, 2005). It should be noted that according to Law No. 11,126, the visually impaired have the right to frequent and stay in places of collective use, together with their guide dog (BRASIL, 2005).

2.1.4 TAA with patients with autism spectrum disorder

Regarding autistic patients, Viau et al. (2010) analyzed the levels of salivary cortisol (stress hormone) in 42 autistic children submitted to TAA with dogs; before the introduction of the dogs in the treatment, 58% of cortisol was detected and shortly after contact with the animals, this hormone reduced to 10%. In this sense, Barker et al. (2005) researched the benefits of the dog's relationship with health professionals and found that with just five minutes of contact with the animals, it is enough to reduce cortisol levels and, consequently, stress. In addition, such researchers have reported that TAA can also increase substances such as endorphins and dopamine.

Other researchers said that TAA with dogs favored the enthusiasm, joy and physical contact of 11-year-old children, in addition to reducing their aggressiveness (SILVA et al., 2011).

2.1.5 TAA patients with heart problems

Marinho and Zamos (2017) compiled that animal guardians, especially dogs, had a higher survival rate against cardiovascular disease compared to those who did not, mainly due to the non-elevation of systolic and diastolic blood pressure and greater physical activity. In this sense, walking with dogs can encourage the performance of beneficial physical activities and leisure, preserving physical health.

Dotti (2005) and Matuszek (2010) reported that TAA favors the reduction of triglycerides and cholesterol, thus reducing the risk factors for cardiovascular diseases. The same authors stated that the reduction in blood pressure is indicative of a decrease in the activity of the sympathetic nervous system and that TAA as a complement also improves the immune system.

2.1.6 TAA with inmates

Scientific research demonstrating the impact of TAA in prisons on the physical and mental health of detainees is still scarce, however, there are promising descriptions of sociability, self-esteem, confidence, discipline, responsibility and patience for prisoners, especially in the rehabilitation of those that have mental problems, chemical dependency and disorders related to various traumas (MATUSZEK, 2010; EVANS; GRAY, 2012; ALLISON; RAMASWAMY, 2016).

According to Allison and Ramaswamy (2016), physical touch and the presence of the co-therapist can replace the lack of social and family support, positively motivating the prison population, without interest in their past actions or mistakes. The beneficial results of social support contribute to smoother correctional operations between prisoners and prison staff and also for a better transition for prisoners upon re-entering the community. In addition, TAA in prisons can change the view of institutions focusing solely on punishment, and begin to create an understanding of rehabilitation for prisoners and invest in a more positive and hopeful future when detainees are released. On the other hand, they believe that the budget and the selection of detainees to participate in TAA may be factors that restrict the application of this complementary technique in the practice of jails.

2.2 ANIMAL ASSISTED ACTIVITY

Animal Assisted Activity (AAA), unlike TAA, does not require face-to-face medical assistance and no concern with analyzing the final results of patients (MATUSZEK, 2010; EVANS; GRAY, 2012; FERREIRA et al., 2016; HOAGWOOD et al., 2017; MARINHO; ZAMOS, 2017), being carried out periodically with trained professionals (from the health area and veterinarians) and animals of different species in nursing homes, schools, universities, daycare centers, dental offices, penitentiaries, homeless people and hospitals, in order to promote visitation, distraction, self-esteem, recreation, joy and motivation through direct contact with animals (DOTTI, 2005).

The activities are spontaneous, of short duration and do not need to happen regularly. The patient's evolution and well-being are not necessarily documented (EVANS; GRAY, 2012; REED; FERRER; VILEGAS, 2012).

The AAA is usually carried out by volunteers (EVANS; GRAY, 2012) and can be associated with music, dance, art, games, among other entertainment. In this sense, music therapy and other recreational activities promote relaxation of the body and mind for older adults with depression and anxiety, as well as social involvement and communication between people with Alzheimer's disease, self-esteem, decreased depression and loneliness and reduced forgetfulness. In addition, involvement in these activities can be useful, especially for elderly people who face challenges associated with aging, such as the transition to a collective residential facility (HOLT et al., 2015).

The AAA and TAA can be applied alone or in association and both are beneficial to both patients and employees who work in healthcare facilities (BARKER et al., 2005; FILAN; LLEWELLYN-JONES, 2006; HOLT et al., 2015).

2.3 EVALUATION AND SELECTION OF CO-THERAPIST ANIMALS

Dogs and horses are the most used in TAA and AAA (HOAGWOOD et al., 2017), and these therapies are called kinotherapy and equotherapy, respectively (BECKER, 2003; ANDERLINI, 2009; MARINHO; ZAMOS, 2017). Dotti (2005) reported that the practice of riding a horse sends the patient to the feeling of dominance over these animals, and with that, the command involuntarily in the face of forces.

Dogs are commonly used because they show natural affection and gratitude for humans, for being easily trained and allowing direct contact (BECKER, 2003; ANDERLINI, 2009; MATUSZEK, 2010; CALCATERRA et al., 2015).

In addition to dogs and horses, there are other types of animals used that pose no danger to humans, being of any age, size and breed, including cats, rabbits, turtles, fish, dolphins, hamsters, birds and even exotic animals, like the iguana (HUMPHRIES, 2003; EDWARDS; BECK, 2010; MATUSZEK, 2010). Exotic animals, including birds of prey, can participate in TAA if they have characteristics of calm and non-reactive behavior and are socialized for this activity, yet some do not allow the act of being touched (HOLT et al., 2015); however, TAA with non-domestic animals is still poorly studied, a factor that makes it difficult to understand possible benefits for human health (MARINHO; ZAMOS, 2017).

Matuszek (2010) described that in a rehabilitation unit for geriatric patients, the use of TAA with caged birds provided an increase in the physical activities of the elderly, as they left their rooms more to visit and care for the birds.

All animals used in TAA, regardless of species, must be strictly selected, including sanitary management (updated vaccination and decontamination schemes, control of fleas, ticks and lice, regular dental treatment and periodic complementary examinations that rule out suspicion or presence of infectious diseases), in addition to cut and sanded nails (MATUSZEK, 2010; HOLT et al., 2015; MARINHO; ZAMOS, 2017).

The health factors are of mere importance, since such animals visit patients who, in most cases, have decreased immunity and, in addition, TAA cannot compromise the health of co-therapists. Some hospitals establish that in addition to bathing before therapies, antiseptics based on 70° alcohol or chlorhexidine should be sprayed on the entire body of the animal (SILVA et al., 2017).

In TAA, it is also extremely important to value behavioral health, selecting animals that are affectionate, sociable, calm and submissive, that do not show fear, aggressiveness and those that know how to deal with unexpected attitudes of patients, especially aggressive ones. The selected animals must also have the characteristic of not being frightened and exalted by tactile (kisses and squeeze), auditory (intense sounds and screams), olfactory (strong smells) and visual stimuli (walking sticks,

walkers and wheelchairs). In this way, the age of co-therapists is not a limiting factor in their selection, but their physical and behavioral characteristics, however, puppies and senile should be spared from intense and exhausting work (MARINHO; ZAMOS, 2017).

Before each therapeutic session, co-therapists must undergo baths. In longhaired animals, periodic grooming is ideal, followed by daily brushing to remove devitalized hair (KOBAYASHI et al., 2009).

According to Silva et al. (2017), castration in therapy animals is not mandatory, however, females that are in heat should be spared visits.

The food offered to co-therapists must be of good quality and offered at least two hours before the visit and therapy, thus reducing the chances of emesis and defecation on the spot. A small amount of snacks can be used during therapies to facilitate and stimulate the activities proposed to the animals (SILVA et al., 2011).

Animals used in TAA must receive periodic training by trained professionals, especially veterinarians and trainers. Co-therapists also deserve rest between sessions and with the assistance of those assisted, animals should alternate in cases of intensive care, aiming at their well-being (EVANS; GRAY, 2012).

In this context, the active participation of the veterinarian in all activities of TAA and AAA is essential for monitoring the behavioral manifestations of the co-therapist with the trainers, as well as in order to ensure animal health as a whole, avoiding overload conditions (KOBAYASHI et al., 2009; EVANS; GRAY, 2012; WILSON, 2018). The concern with the health and well-being of the co-therapists encouraged studies such as electrocardiographic records of horses to verify initial heart rate values and after TAA (EVANS; GRAY, 2012).

According to Evans and Gray (2012), the co-therapist can also be useful to assist in the diagnosis of individuals with conduct disorders, especially children, who may commit acts of violence and cruelty to animals, which is considered a factor of significant risk for future serious violations, including acts of interpersonal violence.

The support of management and employees (caregivers, nurses, among others) of the establishments visited is essential for the success of a TAA or AAA program (HOLT et al., 2015).

3 CONCLUSIONS

Both therapy and animal-assisted activity, when practiced according to the appropriate ethical guidelines and principles, associated with conventional treatments, demonstrate beneficial and promising results in patients from different areas, such as improving health, quality of life and

preserving the state of health; however, future research is needed to better understand the role that human-animal interaction plays in restoring physical, mental and behavioral health.

Despite the growth of these modalities, they are still little studied in courses in the area of human health and little known by pedagogical coordinators, teachers, parents and caregivers, emphasizing that all scientific experiments should be reported in the literature, contributing to the dissemination of these techniques. It is noteworthy that the expansion of studies related to TAA could encourage the opening of specialized care centers, providing better quality of life and survival for individuals with various diseases.

The co-therapists must be constantly monitored by qualified veterinary professionals (before, during and after TAA and AAA), aiming at promoting their quality of life and well-being so that they are effective in the treatment and/or recreation of humans.

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