

Elżbieta BUDZIŃSKA-WRZESIEN¹, Robert WRZESIEN²,
Joanna JARMUŁ-PIETRASZCZYK³ and Agata ŚWITACZ^{1a}

THERAPEUTIC ROLE OF ANIMALS IN HUMAN LIFE – EXAMPLES OF DOG AND CAT ASSISTED THERAPY

TERAPEUTYCZNA ROLA ZWIERZĄT W ŻYCIU CZŁOWIEKA NA PRZYKŁADZIE DOGO- I FELINOTERAPII

Abstract: Pet assisted activities are addressed to healthy people and to those with various developmental, psychological, physical and emotional disorders. Most often pet assisted therapy is used to support treatment of children suffering from cerebral palsy, motricity problems, limb paralysis, muscle atrophy, autism, attention deficit hyperactivity disorders and attention deficit disorders (ADHD and ADD), emotional instability and mental retardation.

This paper is aimed at describing the role the animals played in history and still play in the life of contemporary people and at presenting therapeutic programmes that support treatment of various illnesses in children and adults.

Keywords: pet therapy, dog therapy, felinotherapy

Human being has a need of contact with other members of the group. This is the so-called need for the membership of a definite social group. Social meetings with close people fulfil also the need for security [1, 2]. When social ties started to loosen with time, people began to look for substitutes. Pets being the faithful creatures, able to love, capable of manifesting obedience and gratitude to their master started to play such a role. In many cases they are hold up as a model of discipline, self-control, politeness

¹ Unit of Animal and Environmental Hygiene, Department of Animal and Environmental Biology, Warsaw University of Life Science – SGGW, ul. Ciszewskiego 8, 02–786 Warszawa, Poland, phone: +48 22 493 66 11, email: elzbieta_budzinska_wrzesien@sggw.pl

^{1a} Student of Unit of Animal and Environmental Hygiene.

² Department of General and Experimental Pathology, Medical University of Warsaw, ul. Krakowskie Przedmieście 26/27, 00–927 Warszawa, Poland, phone: +48 602 663 453, email: wrzesienddd@poczta.onet.pl

³ Unit of Zoology, Department of Animal and Environmental Biology, Warsaw University of Life Science – SGGW, ul. Ciszewskiego 8, 02–786 Warszawa, Poland, phone: +48 22 593 66 23, email: joanna_jarmul@sggw.pl

and nobleness for young generation teaching them the ability of living in a group and establishing friendly contacts with its members.

Care of animals helps also building a sense of self-esteem. It is often so, that our low self-appreciation discourages us from undertaking various actions, makes us feel useless and helpless and sometimes gives rise to aggression towards other persons whom we blame for our failures. That is why the faith in man's own abilities and relatively high self-esteem triggers positive emotions which in turn motivate to better functioning and undertaking new challenges. Care of animals may largely increase self-esteem in children and positively change self-perceivability in adults [3, 4]. Based on observations of children's relations with animals one may predict with a high probability what kind of people they will be in the future. Studies performed in American penitentiaries showed a close relationship between harassing animals in the childhood and "dissocial personality disorders". Prisoners who demonstrated not normal attitude to animals being young were more often arrogant, ruthless, aggressive and even cruel towards other people in the adulthood [5, 6]. It was also noticed that the ideal animal for a family with little child was a large, over 3-year-old gentle bitch with fluffy hair which had already lived with the family before [3].

Sum of these experiences changed the current role of pets which began to be used in supporting rehabilitation processes in people or allowed disabled persons to function better in the society, to activate them and to increase their sense of self-esteem. Such method of supporting rehabilitation of disabled persons which is adapted to specific needs of a given person we call zootherapy [7]. Depending on the group of animals involved one may distinguish canine therapy and feline therapy.

Animal therapy is a new "natural and medical science whose aim is to study the use of animals in solving human problems" [8] which was divided into the following categories:

1. AAA – Animal Assisted Activities which are a form of occupation with an animal oriented to mobilisation of patient's physical activity. Such meetings motivate, relax or help in education of patients with various disorders. AAA is carried out in various places – in nursing homes, medical institutions and private apartments – mainly by volunteers.

The method is specific in that volunteers and therapists do not keep notes, the programme must not closely follow the established plan. Time and proceeding of the visit is not precisely defined and depends on many factors like *eg* predispositions of the patient and the animal. Animal assisted activities may assume various forms. They often consist in a visit of volunteers group paid once a month to residents of a nursing home together with accompanying animals. Meetings take place in a large group under the supervision of the workers of such institution. Another form of such activity is the exercises performed by dog trainers in the young offenders' home [8–11].

2. AAT – Animal Assisted Therapy is the therapeutic programme more precise than the AAA. It has strictly defined goal and animal is an inherent element of treatment supporting process. Aims and occupations are strictly defined for each participant and progress is documented in this therapy. The therapy is led by properly trained specialists like medicine doctors, rehabilitants (physiotherapists) [7, 10, 11].

Advantages and goals of this therapy were divided into psycho-motoric, emotional, social and motivative. Psycho-motoric functions are associated with growth. The main focus is put on motoric and cognitive functions and on mobilisation of short- and long-term memory. Emotional and social behaviours affect the expression of needs and feelings, increase the self-esteem, decrease the sense of fear and loneliness and develop the capability of group communication. Motivative functions of the therapy should first of all increase the interest in group activities, teach cooperation with other group members, develop the interactions with carers and enhance motivation for exercises [8, 9, 12, 13].

There is one more form of animal therapy in the world. It is animal assisted education (AAE). In Poland it does not exist as a separate programme but some of its elements are being included into AAA or AAT. Exercises in animal therapy are directed to healthy people and to people with some developmental, psychic, physical or emotional disorders. Most often animal therapy is used to support treatment in children suffering from cerebral palsy, motricity problems, limb paresis, muscle atrophy, autism, attention deficit hyperactivity disorders and attention deficit disorders (ADHD and ADD), emotional instability and mental retardation [2, 12–14].

One of the most common methods of supporting human treatment and rehabilitation is the therapy with dog assistance named dog therapy. Pet therapy being English equivalent of dog therapy was first applied in 1792 in England in patients of psychiatric wards where traditional methods were replaced with a contact with animals. Taking care over animals the patients had to learn self-control. The experiment brought a great success which resulted in introducing this innovative method to other hospitals [1, 7, 8].

The term “dog therapy” first appeared in Poland in 1996 during the press conference in Warsaw Animal Fair organised on the occasion of “Animal Day”. The term was used by a writer and journalist Maria Czerwinska [15]. She was one of the first to notice the calming effect dogs exerted of blind children during works on a film set in the 1980s. Czerwinska soon became the president of Polish foundation CZE-NE-KA dealing with the natural method of supporting treatment and rehabilitation. In the year 2002 she organised a training course of dog therapy with the participation of 20 persons from all over the country. Three years later there were several similar organisations in Poland including *ia* ALTERI – Association for Supporting Therapy in Krakow, AMA CANEM – Foundation for Disabled Persons in Lodz, CZE-NE-KA – Foundation of the Human and Animal Friendship in Warszawa and DOGTOR – a foundation in Gdynia with branches in Warszawa and Kozminek [15,16].

Most important objective of the contact therapy is to provide patient with conditions, under which he/she will feel safe and will accept him/herself [17].

Four-legged therapist fully accepts clumsy motions of a disabled patient and patiently bears various treatments it is subjected to. It tolerates rapid reactions and noisy behaviour of a child, who may feel satisfied with performed exercise and is eager to undertake next challenges. Well done task and friendly and jolly four-legged therapist motivate little patients to make various works without help which favours acquiring self-reliance by them [17].

It is important that the dog therapy programme be adopted to developmental possibilities and the type of disorder in the patient. This way the improvement of disabled patient's functions proceeds faster.

Characteristics of dog therapy

The following dog races are now trained in Poland for the dog therapy: Labrador retriever, golden retriever, samoyed, Syberian husky, malamute, collie, Alsatian sheepdog and cross-breeds of these races of specific features [1, 8, 18]. The first stage of training the dog therapist is the course for the 1st degree Accompanying Dog (PT1). Decision on having a dog for therapy must be responsible since its training is a multi-stage and multi-aspect process that lasts since the puppy period till the animal's "retirement". One has always to remind the dog what it has learned before and to introduce new elements. Dogs have to learn basic commands like "sit" and "give a paw" (which is not included in PT1 training), to lay motionless and to work in the company of other dogs. To be able to cooperate, dogs should at least once a week meet for common play and learning [3, 4, 9, 17]. One has to remember that a dog may work up to 2 hours a day with a 20 minutes break during training. After work the dog should have a long walk [17]. When dogs work in a group, they need to have time (c. 15 minutes) to welcome each other. Carer should always have water and dogs' favourite titbits which would not make harm to children participating in training. All this contributes to better working conditions for an animal which motivated by good food and caresses eagerly returns to people and places with which it will have positive associations [17].

Dog therapy activities affect mental, emotional, social and physical zone of man. Constant element of these activities is stroking, cuddling and feeding the dog during plays which are prepared individually for each patient. An important element that should not be omitted is relaxation which may consist in laying patient by a dog and listening to calm music or a story [2, 9].

Two methods are used when carrying occupations with autistic children. The first is a "free contact" during which a child is not forced to close contact with an animal. In this case the trainer plays retrieving or jumping with a dog and encourages the child to play with. Occupations last c. 45 minutes and their aim is to open the child to world and to break its fear from the contact with the dog. This approach has to be the first step for future cooperation with therapist – psychologist [2]. The second methods relies on traditional rehabilitation exercises together with a dog and persons close to the child. Contact therapy gives autistic children many positive impressions. After getting used to and getting rid of fear of animals, children gained confidence and were able to relax in animals' company thanks to which they easier responded to therapists' orders.

The next group in which dog therapy brings visible effects is the children with the Down's syndrome. Basic task of dog therapy is to break fear of animals in children and to initiate contact with them. The therapy releases in such children a greater physical activity and independence, enlarges vocabulary, affects concentration and develops all senses in a little child [3, 5]. The animals have to fulfil some conditions and must possess the features like: absolute obedience, intelligence, calmness and protectiveness.

The races which possess such features and have appropriate body building are Labrador retrievers, Alsatian sheepdogs, Australian sheepdogs, Scottish collie and sometimes more calm Dobermann. Well trained dogs, apart from responding to basic commands (lifting the dropped items, opening and closing door), are able to react to c. 80 orders given under different conditions by different people. This is a result of long systematic training supervised by instructors [18].

The next group of dogs assisting people is the animals of rather specific abilities which warn people against near epileptic fit. They were discovered in the 1980s and now the organisation “Support Dogs” performs observations and audio-visual records of dog’s behaviour before epileptic fits in their charges. In the Institute of Epilepsy in the USA the EEG records are used to check how a dog knows of the coming fit. It appears that individual dog’s features like its concentration on a person and sensitivity to human behaviour and smell count most. Dogs are able to recognise the coming attack based on very subtle changes in human behaviour or smell. Practically all races fit for this type of work but the best are golden retrievers, setters, samoyeds, border collie and mongrels [1, 9, 18].

The use of dogs’ or cats’ smell becomes still more important in the prophylaxis of cancer diseases. The animals with a keen nose are able to find pathological changes in the skin or in deeper situated organs of human body. Studies on this very useful animal feature are carried out in the Institute of Genetics and Animal Breeding PAS in Jastrzębiec, Poland. Professor Tadeusz Jezierski makes tests on the recognition of lung, breast and skin cancers in which “his” dogs obtain 60–97 % accuracy in the identification of samples taken from a group of both healthy and ill persons [19].

Feline therapy

The name of the youngest branch of animal therapy is a combination of two words: Latin felis (cat) and Greek therapeia (care, treatment). Feline therapy usually assumes two forms: when a cat lives in a given institution and its presence affects patients or when it is brought by its carer (most often a volunteer) to weekly meetings with residents of the nursing home [1, 7].

Feline therapy is a form of contact therapy based on similar principles as dog therapy but applied to people who are afraid of dogs or have an allergy to their coat. Despite its independent nature, cat often becomes a catalyser of social ties since it provides the subject of a conversation. As a rule it is an animal of even-tempered character and pleasant to the touch which makes children like to play with, talk to and confide in cat. Such a company develops empathy and care over a small and helpless kitty sensitizes children to the needs of the others and teaches responsibility and gentleness. This is particularly important for children with emotional disorders [3, 7, 11].

Cat may substitute other persons for elderly and lonely people, may divert their attention from suffering and loneliness and initiate contacts with the surrounding. Feline therapy is efficient in supporting the treatment of such diseases as: arthritis, Alzheimer’s disease, muscle atrophy, multiple sclerosis, eyesight and hearing disorders, cardiovascular diseases or depression [2, 7, 9, 14].

Now, feline therapy is applied in more and more medical institutions all over Europe. In Great Britain and the United States feline therapy has become popular for the last several years. It was noted that stroking a cat has a soothing effect on the psyche of the diseased and moreover, it reduces stress and relaxes [8, 10].

In Poland such a supporting therapy is in the initial phase and functions in a few institutions. One of them is a school for disabled children in Toruń where occupations with a cat-therapist Gucio have taken place for 3 years.

Every programme of animal therapy is based on cooperation between a person and properly trained animal. Training dog, cat or any other animal requires the engagement, patience and devotion from the owner. As in the case of dogs, cats have also their own individual features which, irrespective of race, age or sex, predestine them for or excludes them from working with people. Therefore, organisations dealing with animal assisted therapy such as “Pets and People” established some requirements which have to be fulfilled by a cat-therapist. Such a cat has to be more than one year old which allows for checking whether the cat is sociable and able to easily develop contacts with a group of people. Moreover, its immune system has to be stable enough to cope with possible infections by hospital microorganisms. It has to be familiar with various situations like the presence of dogs or other cats, noise and crowd which guarantees that it will not react with fear or escape in a new situation and that occupations with its participation will not pose a threat for a person. It should not be afraid of travelling in the public transport means. To be allowed to visit hospitals and other medical institutions the cat should be well-groomed and clean so it has to be accustomed to frequent hygienic treatments: to hair brushing, washing and cutting claws. It is also suggested to keep health certificate, to observe the terms of injections and worm controls and to pay regular visits to a vet.

Ragdoll is the race most often used in the therapy supporting the treatment of disabled children. The race was raised from cross-breeding of Burma cats with white Persian cats. The name reflects cats' nature since “when taken on hands they loosen their muscles, get flabby and resemble a plush toy”.

Summary

Company of animals gives people a great psychological support. Observation of their exuberant nature is an amusement and makes people smile leading to relaxation and mitigation of pain in people suffering from various diseases. Visits of four-legged pets in nursing homes and hospitals are the impulse to make contacts with other patients and personnel and withdrawn persons even start to confide in volunteers. A person having close contact with non-evaluating and non-judging creature raises his/her self-esteem and physical and mental state. Such contacts improve general health status of patients with cardiovascular problems, decrease the rate of heart-beat and the survival of patients after myocardial infarction or heart transplantation is higher under such circumstances.

Reference

- [1] Blackshaw JK. *Appl Anim Behav Sci.* 1996;47:1-6.
- [2] La France C, Garcia LJ, Labreche J. *J Comm Dis* 2007;40:215-224.
DOI:10.1016/j.jcomdis.2006.06.010.
- [3] Friedmann ET, Thomas SA. *Marriage Famil Rev.* 1985;8:191-203.
- [4] Willis DA. *Rehabilit Nurs.* 1997;2(22):78-81.
- [5] Ory MG, Goldberg EL. Pet possession and life satisfaction in elderly women. In: *New Perspectives on our Lives with Companion Animals.* Katcher AH, Beck AM, editors. Philadelphia: Uni Pennsylvania Press; 1983:303-317.
- [6] Serpell JA. *Appl Anim Behav Sci.* 1996;47:49-60.
- [7] Bekasiewicz N, Barkiewicz W, Habrowska M. Czy zwierzęta potrafią leczyć: terapie z udziałem zwierząt wspomagające rehabilitację osób niepełnosprawnych. Warszawa: Fundacja Pomocy Osobom Niepełnosprawnym Przyjaciół w Warszawie; 2006.
- [8] Wolff AI, Frishman WH. *Semin Integr Med.* 2005;2:131-134. DOI:10.1016/j.sigm.2005.004.
- [9] Coakley AB, Mahoney EK. *Compl Ther Clin Pract.* 2009;15:141-146. DOI:10.1016/j.ctcp.2009.05.004.
- [10] Coakley A, Somerville J. *Alpha Chi News.* 2003;26(1):4-5.
- [11] Odendaal JSJ. *Psychosom Res.* 2000;49:275-280.
- [12] Churchill M, Safaoui J, McCabe BW, Baun MM. *J Psych Nurs Mental Health Serv.* 1999;37(4):16-22.
- [13] Hall PL, Malpus Z. *British J Nurs.* 2000;9(21):2220-2225.
- [14] Cole KM, Gawlinski A, Streers N, Kotlerman J. *Amer J Critical Care.* 2007;16(6):575-585.
- [15] www.czeneka.pl
- [16] Bialas M, Goleman M. *Przegl Hodow.* 2006;7:27-29.
- [17] Bochowicz K. Pies i dogoterapia – historia. Dogoterapia. Warszawa: Fundacja Pomocy Osobom Niepełnosprawnym Przyjaciół w Warszawie; 2003.
- [18] Kuźniewicz J, Kuźniewicz G. *Przegl Hodow.* 2007;75(4):30-32.
- [19] www.eduskrypt.pl

TERAPEUTYCZNA ROLA ZWIERZĄT W ŻYCIU CZŁOWIEKA NA PRZYKŁADZIE DOGO- I FELINOTERAPII

- ¹ Katedra Biologii Środowiska Zwierząt, Zakład Higieny Zwierząt i Środowiska
Szkola Główna Gospodarstwa Wiejskiego w Warszawie
- ² Katedra i Zakład Patologii Ogólnej i Doświadczalnej
Warszawski Uniwersytet Medyczny
- ³ Katedra Biologii Środowiska Zwierząt, Zakład Zoologii
Szkola Główna Gospodarstwa Wiejskiego w Warszawie

Abstrakt: Zajęcia z animaloterapii skierowane są do ludzi zdrowych oraz osób z różnymi zaburzeniami rozwojowymi, dotyczącymi sfery psychicznej, fizycznej i emocjonalnej. Najczęściej jednak terapie zwierzęce stosuje się dla wspomagania leczenia dzieci chorych na porażenie mózgowe, zaburzenia rozwoju motorycznego, niedowład kończyn, zanik mięśni, autyzm, zespół nadpobudliwości psychoruchowej, deficyt uwagi (ADHD, ADD), niestabilność emocjonalna, opóźnienie umysłowe. Celem niniejszej pracy jest opisanie roli, jaką zwierzęta odegrały w historii oraz nadal odgrywają w życiu współczesnie żyjącego człowieka. Ponadto zaprezentowanie programów terapeutycznych z udziałem psów i kotów oraz metod wspomagania leczenia różnych jednostek chorobowych u dzieci i u ludzi starszych.

Słowa kluczowe: terapie zwierzęce, animaloterapia, dogoterapia, felinoterapia