

PET ASSISTED THERAPY (PAT) LEARNING WITH THEM



PARTNER ORGANISATIONS:

- ✓ **Centro de Educacion Especial Dr Fernando Arce**, Spain
- ✓ **Jó Uton-Lóháton Alapítvány**, Hungary
- ✓ **Asociatia Partes**, Romania
- ✓ **C.IA.O. La Tela di Carlotta**, Italy
- ✓ **Equilibre NGO**, Estonia
- ✓ **Lithuanian Sea Museum**, Lithuania
- ✓ **Red2Green**, UK



Lifelong
Learning
Programme

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Thanks!!!

ABBREVIATIONS

- AAA.-** Animal Assisted Activity
AAE.- Animal Assisted Education
AAI.- Animal Assisted Interventions
AAT.- Animal Assisted Therapy
BC.- Before Christo
DAT.- Dolphin assisted therapy
ICF.- International Classification of Functioning
NGO.- Non-governmental organization
PAT .- Pet Assisted Therapy
PhD.- Doctorado
R.E.A.D.- Reading Education Assistance Dogs
UK. - United Kingdom
USA.- United States of America



CHAPTER ONE

THE BACKGROUND TO THE PROJECT

The European Commission supported this project financially, through the Lifelong Learning Programme, Grundtvig Learning Partnerships, it lasted from August 2013 until July 2015.

This project involved organisations from seven European Union countries who, as a learning partnership, shared the experiences and tools developed in each partner organisation, to support the use of animal assisted therapy with people with diverse needs and disabilities. All partners involve animals in therapeutic intervention although some partners have more significant and structured programmes than others. We all recognize that involving animals can be a valuable element of the services we provide and we hope that by sharing it with others, we will encourage the spread of interesting and rewarding animal assisted therapies.

The **objectives** of the partnership were:

1. To find the best experiences and tools used in Europe in work with animals for the development of people with disabilities
2. To prepare educational materials (handbook, films) that could be used by professionals to improve their work with Animal Assisted Therapies and/ or Animal Assisted Activities
3. To make the results of the partnership available not only to the partner organisations, but to the professionals and the public in Europe and potentially beyond

Animal therapies are a relatively new way of working with disabled people and often, professionals face a lack of information and support or training materials. We hope this project helps to fill this need and provide ideas and methods, both to the project participants and to other professionals in Europe and beyond. We acknowledge that there are different ways of providing therapeutic support and we do not endorse any particular methods.

The use of dolphins in therapy is considered controversial by some and Doctor Brigita Kreiviniene from the Lithuanian Sea Museum, one of our partners in this project, discusses some of the research and knowledge around this in Appendix Two, we suggest that everyone should do their own research to come to a view on this.

We have extracted the most important and the best methods and experiences to create this small handbook and some short films for those that want to work in this field. We are concentrating on Animal Assisted Therapy (AAT), a more rigorous approach using trained therapists and Animal Assisted Interventions (AAI) using more informal activities and approaches.

People with disabilities have been involved in planning and delivering the project at all stages. The partnership organized transnational meetings, seminars and conferences with experts from the Third Sector and organisations specialising in Animal Assisted Therapies (AAT) and Animal Assisted Interventions (AAI) and visits to institutions and organisations working in this field in the partner countries. We also involved local students, specialists and other stakeholders.

We have made the results available to as many people as possible, through web-based www.grundtvigpat1.jimdo.com and regular dissemination channels such as meetings, information and memo releases, press releases and events.

Sharing learning across the project has brought and will continue to bring benefits to people with disabilities who are in need of effective support to help reduce isolation and support development and active citizenship.

THE PARTNERS IN THIS PROJECT

1. C.E.E. Dr. Fernando Arce (Torrelavega-Cantabria, Spain)

C.E.E. Dr. Fernando Arce is a private special education school in Torrelavega (Cantabria), an industrial town of 65,000 inhabitants in the north of Spain. We have 11 units (1 child education, 7 Compulsory Basic Education, 1 Transition to Adulthood and 2 Initial Vocational Training programmes in our special workshop), with a total of 90 students aged 3 to 25 years. We have a range of different services including transport, residence, speech therapy, physiotherapy, social work and counselling provided by a team of 15 teachers, 5 caregivers, two speech-therapists, one physiotherapist, one counsellor and one social worker.

2. Jó Úton-Lóhátton Alapítvány (Szentés, Hungary)

Our mission is to achieve real inclusion, more equal opportunities and better quality of life for people who have special needs. Our organisation gives opportunities to children, young people and adults with special needs to benefit and develop through horse therapy. We sponsor our riders so that they can take part in special festivals and competitions. We accompany and support them all during these activities, aspiring to popularise disability sport, healthy living and caring for animals. Additionally, we organise summer camps, meetings and workshops for families, specialists and volunteers. We also train adults in supporting people with disabilities to assist our organisation.

We provide our adult trainees with a motivating environment - children who need help, a stable with animals and a very cooperative group of staff - that improves their self-confidence and communication skills and strengthens their awareness.

We are one of 70 centres worldwide – the only one in Hungary - who have staff trained, certified and licensed by SpiritHorse International. SpiritHorse International has developed the only specific methods in the therapeutic riding industry to date. It provides monitoring of quality and continuing training for all licensees.

3. Asociatia Partes (Baia Mare, Romania)

Partes is a very young association made by professionals working in the field of social services. Most of them have many years of experience working with people with disabilities.

Partes was created to support as to stimulate the participation off the citizens in the life of the community through social responsibility, civic participation, and social cohesion.

The organization cooperates very closely with the Esperando Association, bringing solutions and activities that can improve the life off the individuals who have disabilities or special needs.

The present project is also made in cooperation with Esperando Association and the animal assisted interventions and therapies are offered to the children and youth who are coming Esperando. They have also been involved in the project mobilities and activities, including the project meetings.

Our intention is to develop in the future the activities and the opportunities that will improve the lives of people with disabilities and also to involve the community in such activities and to make room heart people with disabilities in the community. Both the community and the people with special needs can benefit from the active participation off these people in the life and activities of the community.

4. Centro interventi assistiti con gli animali olistico (C.I.A.O.) “La Tela di Carlotta” (Schio-Vicenza, Italy)

This association's objectives are to deepen the knowledge and improve the training and application of educational and psychological treatments in the educational, re-educational and therapeutic fields. We carry out studies and research and organise training in the field of Assisted Animal Interventions (AAI) better known as Pet Therapy, referring to the therapeutic fields (AAT), educational fields (AAE), recreational fields (AAA) with the aim of disseminating valuable research and experience. We raise awareness and disseminate knowledge of AAI through conferences, seminars and debates. We collaborate with public and private bodies, associations, cooperatives, public administrations and private and public enterprises in Italy and abroad.

5. Equilibre NGO (Roosna-alliku parish, Estonia)

Equilibre is developing riding therapy as a psycho-social approach. We have formed an official partnership with a local hospital, our therapist is part of their rehabilitation team as a psychological counsellor/riding therapist and most of our clients come through the hospital rehabilitation plan. Our main target group is children with emotional-behavioural problems and their parents – usually depressed and often with severe burn out symptoms. Also some of our clients are children with autism and some have learning disabilities.

6. Lithuanian Sea Museum (Klaipėda, Lithuania)

Lithuanian Sea Museum is a governmental organization and have provided dolphin assisted therapy for people with special needs since 2001. From 2003 to 2006, collaborating with Klaipėda Seamen's Hospital and Klaipėda University, we launched biomedical research to investigate the impact of dolphin assisted therapy for children with autism. From 2007 to 2011 we investigated the reactions of families' raising children with severe cerebral palsy to dolphin assisted therapy. Each year, collaborating with NGOs, Klaipėda University and Klaipėda Seamen's Hospital, we organise animal assisted therapeutic activities for people with various disabilities.

Dolphin assisted therapy is science-based with a health-orientation. The methodology was created after the first scientific research in collaboration with variety of professionals: social workers, doctors, a rehabilitologist, a psychiatrist and a psychologist. An individual program is run by Dr. Brigita Kreiviniene (Klaipėda University, Health Faculty) who created her own methodology. The scientific consultant is Prof. dr. Mindaugas Rugevičius (Klaipėda University, Faculty of Pedagogy). Specialists working with children and adults are: dolphin trainer, social worker, psychologist and physiotherapist. An individual programme is constructed for each participant based on their personal needs, additional educational programs are organised in the dolphin assisted therapy centre including sandplay, art activities, sensory integration, dance and drama. Self-supporting parental groups are organized based on need. Students and specialists can take internships, courses and other training programmes. Our participants are usually between 5 and 15 years old, however, special programmes are organised for adults with mental disabilities. Each year special group therapy sessions take place for people that are at risk. From 2001 participants included children and adults with diagnoses including autism, Asperger syndrome, Down's syndrome, cerebral palsy, Landau Clefner syndrome, emotional disturbances, enuresis, child victims of sexual exploitation and women with post natal depression.

7. Red2Green (Turning the Red Lights Green). (Cambridge, United Kingdom)

This institution provide opportunities for people with disabilities and disadvantage in Cambridgeshire so that they can reach their own goals, 32 staff and 50 volunteers support over 300 people.

We provide innovative, personal and achievable opportunities in a safe environment. We work with partners, both national and local, who share our concern for our clients and their futures. We strive to break down barriers and remove ignorance and fear, so our clients can achieve their ambitions and enjoy their lives. Aspirations provides a social learning programme for adults with autistic spectrum conditions. Options provides stimulating social and development opportunities for people with profound learning disabilities. People take part in activities such as drama, computing, swimming, cookery, Tai Chi and community visits. Although we don't have our own animals, clients in both services get great value from times when we are able to offer activities involving animals. Additionally we have Health for Life supporting people with mental illness, Advance providing job skills coaching and we provide practical horticultural experience for young people at Anglesey Abbey.

INTRODUCTION TO THE HISTORY OF THERAPY WITH ANIMALS

Animals have always been important in people's lives (All and Loving, 1999; Hatch, 2007), we may see them from a mystical- religious viewpoint - as gods, from an economic and utilitarian view - to be used or as our equals. In many countries, animals have rights including the right to have their needs respected and are seen as active participants in their relationship with us, where there can be mutual benefits.

The domestication of animals began 2,000,000 years ago and continues to develop, as it is important for working together and the impact on each other (Šinkariova *et al.*, 2008, 239). The history of mankind has always been intimately linked to the history of animals.

As far back as ancient Greece, it was recognised that contact with animals helps to improve the emotional and physical health of people (Macauley, 2006; Nimer and Lundahl, 2007) despite this early awareness, animals have only been used for therapeutic purposes since the end of the 18th century (All and Loving, 1999; Heimlich, 2001; Velde *et al.*, 2005; Macauley, 2006).¹

Various scientific discoveries over the years have enabled the development of programmes where animals are partners with us - in special education, healing processes, social support mechanisms, and residential care. Altschiller (2011, 3-4) states that various programmes in which animal assistance was used, show that animals can have a significant impact on positive human change as they can "awaken social and benevolent feeling".

1. A brief history of therapy with horses

The domestication of horses started in 6000 BC in Ukraine. The first man who rode a horse was a brave one but moving from one place to another on horseback enabled faster travel so civilisation could expand, later the invention of the wheel made this expansion even faster. In 2000 BC the chariots towed by horses were magnificent vehicles. In the middle ages a king on horseback was the symbol of power and wealth.

In the 21st century, we value horses as sporting and leisure partners and for work in some areas but the connection between human and horse is not only confined to sport and leisure however we don't know exactly when therapeutic horse riding began. What we know from some records is that in 460 BC the Greeks used horses in order to improve patients' movement. This activity would become hippotherapy.

At the turn of the 20th century, it was recognised in England, that horse riding improved the condition of disabled people. After this, Oxford Hospital offered the possibility of horse riding therapy for soldiers who had been wounded in World War I. In 1919 in the Saint Elizabeth Hospital in Washington (USA), animals (cats, dogs, horses) were involved in mental health programmes. During World War II, when pilots in the German air force found it very difficult to sleep after an air battle, they were encouraged to try horse riding, which helped calm them down and they could finally sleep.

Horse-assisted programmes and therapeutic institutions have spread, mostly in the USA and in the UK. This method is used to improve the health and wellbeing of people with a variety of conditions including depression, autism and learning disability.

Levison (1962) pointed out the positive effects of keeping animals in early childhood which can develop self-confidence, responsibility, pride, empathy and reduce social isolation. Taking care of horses can help older people feel useful and helpful.

The official horse therapy organisations were established in 1969 in the USA and in England. The Hungarian Horse Therapy Association was founded in 1997.

¹ Kreiviniene, B. 2011, p.75.

2. A brief history of therapy with dogs

The dog was an early part of man's life, becoming the first domesticated animal. In the Natufian site of Ein Mallaha, Israel, in a tomb dating back about 14,000 years, an old man lies with one hand resting on the chest of a puppy, to represent an early emotional bond. (SJM Davis and Valla FR (1978) *Evidence for domestication of the dog 12,000 years ago in the Natufian of Israel*. Nature, 276, 608-610). The history of human evolution is believed to be intimately related to canine evolution, possibly leading towards the functional changes in the architecture of the prehistoric human mind (the theory of anthropomorphism) and allowing a connection between the forms of intelligence in humans of the paleolithic period, which until then operated independently one from the other. (James Serpell, Anthro-zoology, 2003).

Bonas, McNicolas and Collins (2000) at Warwick University in England have examined man-animal interaction, using a questionnaire called the Network of Relationship Inventory as a tool to encourage people to describe and evaluate the different types of social support that derived from human and non-human relations. The researchers found that, although human social relations reach the highest global score in terms of social aggregate support, eventually the dogs reach a higher score than humans in a number of specific social links such as "reliable alliance", "support" or "friendship".

As early as the Middle Ages, in Belgium, we find a therapeutic approach with animals in care centres for disabled people; in England in 1772 a psychologist began to treat their patients with mental illness, taking advantage of the presence of farm animals. As with horses, one of the first uses of dogs for therapeutic purposes in hospitals was carried out in 1919 at St. Elizabeth's Hospital in Washington to treat patients who, following the World War 1, suffered from severe forms of depression and schizophrenia.

If today, medicine and science have decided to explore the theme of human-animal relationship, it is in large part due to psychiatrists Levinson and Carson. In particular, Boris Levinson was able to establish a relationship with his patient, a child with autism, thanks to the random presence of his dog in the studio. After this Levinson used a dog or cat in a systematic way, according to the type of patient and in the 1960's he developed his theory of "*pet -oriented child psychotherapy*". Two other psychiatrists, Samuel and Elizabeth Carson studied the interaction between a group of young patients suffering from mental illness and a group of dogs present at the hospital where they worked.

An important milestone in the development of pet therapy is the establishment in 1977, in the USA, of the Delta Society, a non-profit organisation, where pet owners, volunteers, educators, professional health workers and veterinary doctors joined together in order to promote the use of animals to improve the health, independence and quality of human life.

Today, pet therapy is widespread in Europe and most of the interventions involve horses or dogs and to a lesser extent donkeys, dolphins, cats, rabbits among others.

3. A brief history of therapy with dolphins²

It is known that dolphins were considered in ancient times to be "closest to human beings" because of their ability to keep contact with humans for very long periods, as well as because of their intelligence and social life. Written material on the therapeutic impact is only from the twentieth century. In the 1960s American scientist John C. Lilly was the first person in the world to hypothesize that communication between humans and dolphins could be beneficial to human beings. This theory was referred to as the ability of dolphins in teaching communication, other research followed (cited in Humphries, 2003).

² Kreiviniene, 2013.

It is believed that various research papers in this new field of animal assisted therapy enhanced the status of the therapeutic impact on the participant's medical, social and psychological wellbeing (Curtis, 2000; Brakes and Williamson, 2007; Kreivinienė and Rugevičius, 2009; Acquaviva *et al.*, 2003; Brensing *et al.*, 2005).

Professor Nathanson of Florida University, noticed that children with disabilities react to dolphins more positively than to any other animals. On this basis he started scientific research (Nathanson, 1980; 1989; 1998; Nathanson *et al.*, 1997; Nathanson and deFaria, 1993). His researches are very broadly published and discussed both in the USA and Europe.

Various theories analyse the impact of dolphins on the participant, starting from the echolocation effect on the structure of the human cell to using sound in therapeutic healing (McKinney *et al.*, 2001; Brakes and Williamson, 2007). There are three main theories on the impact of dolphins that are currently under discussion and research:

- *Reinforcement theory.* The main idea is that dolphins may be used as a motivator or reward for improving attention span. (Sokolov, 1963, Zeaman & House, 1963; Lewis & Harwitz, 1969, Moskowitz & Lohmann, 1970; Kurtz, 1996; Miller, 1980, Foxx, 1982; Tof, 1998 all cited in Nathanson *et al.*, 1997, Nathanson, 1998; 2007).

- *Theory of the impact on brain waves.* The main idea is that communication with dolphins may have a positive impact on brain waves (De Bergerac, 1998, Walter & Walter, 1949, De Bergerac, 1998, Robbins, 2002, cited in Brakes, Williamson, 2007 cited in Nathanson, 1989; 1998; Nathanson and deFaria, 1993; Nathanson *et al.*, 1997).

- *Sound impact theory.* The main idea is that dolphins emit high frequency sounds that are outside the human hearing range. Such sound emissions have a positive impact on human neurophysiologic hormones (Chengwei *et al.*, 2005; Vanderbilt, 2005; Verfuß, 1996, Au, 1993, Moore and Pawloski, 1990, Foot, 1980, cited in Brensing & Linke, 2003 and Brensing, 2004; Cole, 1995; 1996; Birch, 1995; 1996).

Other less popular theories can also be found and analyzed. In addition to many theories, there are many methodologies in dolphin assisted therapy that are applied in different centres, aquariums, sea museums and dolphinariums.

DEFINITIONS

➤ **Animal Assisted Interventions (AAI):** services with a therapeutic, physical and recreational benefit that involve pets. Such interventions are mainly applied with patients affected by physical problems and mental, psychic, neurologic and motor-control disorders, from any cause, but they can be applied to healthy people too.

Before implementing an AAI, it may be necessary to have an evaluation of possible contra-indications by a general doctor or a specialist.

Implementation of AAI may require the involvement of a multidisciplinary team with different tasks and responsibilities according to the kind of intervention.

At the moment AAI is divided into:

➤ **Animal Assisted Therapy (AAT)** Intervention to support other therapies (co-therapy) focusing on treatment of physical problems and mental, psychic, cognitive, emotional, relational, neurologic and motor-control disorders applied to patients affected by physical, psychic and sensory or multiple pathologies of any origin.

➤ **Animal Assisted Education (AAE):** Educational and/or rehabilitation intervention addressed both to healthy people or disabled people with behaviour disorders. AAE aims at improving psycho-physical and social welfare and the quality of life of the person, reinforcing self-esteem and re-creating a sensation of normality for the person involved. Through the mediation of animals, behavioural re-education paths are implemented.

AAE is therefore applied in different situations such as: prolonged hospitalisation or repeated admissions to health facilities; relational difficulties in childhood and adolescence; emotional distress; behavioral difficulties and socio-environmental adaptation.

➤ **Animal Assisted Activity (AAA):** Episodic recreational intervention used with both healthy and disabled people, aimed at improving the quality of life.

In AAA the relationship with the animal is a source of knowledge and sensory and emotional stimulation, such activities are applied to individuals and/or groups of people (older, with learning and/or physical disability, young people in rehabilitation centers or at school, in hospitals).

AAA in some cases is preparatory to AAE and AAT and aims at the development of skills through the support of the animal, the increase in openness and the stimulus of motor activity. AAI, in particular AAT and AAE, generally involves a multi-disciplinary team, the selection of the team will be determined by the intended areas of intervention and all the members of the team must have specific training and competence relating to AAI.

Our Italian partners **La Tela di Carlotta**, have a team of professionals who are responsible for AAI, they are listed below with details of how they assure themselves that the animals are properly trained and their health monitored:

The project manager is the expert who is responsible for the client during the therapy session and ensures that project objectives are achieved (as far as possible). The person in charge of the animal during the sessions is responsible for the correct relationship between the person and the animal and monitors the animal's health according to the indications given by the vet and refers any disease symptoms or behavior disorders back to the vet.

A veterinarian expert in AAI collaborates with the project manager in selecting the animal and animal trainer. They evaluate the health requirements and behavior of the animal and are responsible for the health, welfare and correct management of the animal.

The chosen animals are submitted to a health check by the vet, after a successful check, they are considered appropriate for the therapy and their suitability is constantly monitored during the interventions. The animals' behavior is assessed by the team vet. All the animals involved, especially when AAI requires contact and a relationship activity, must attend specific educational and training to acquire the necessary skills and competences.

Assisted interventions can be source of stress for the animals, therefore it is necessary to protect and monitor the welfare of the animal both during the sessions and during periods of inactivity, through clinical and behaviour visits where any physical and/or behavioral change is recorded.



CHAPTER TWO

WHY DO WE INVOLVE ANIMALS IN THERAPEUTIC WORK?

Working with animals is a wonderful experience enjoyed by every organization involved in this project. We believe that interacting with animals produces far more benefits than problems. Several studies show that pet ownership, both long and short term, has benefits for the human partner's cardiovascular system. Altschiller (2011, 11; cited in Kreiviniene & Perttula, 2014) writes that there are various animals, such as rabbits, dogs and cats that are found to have a positive effect in animal assisted therapies with children. One famous example is the **R.E.A.D.** (Reading Education Assistance Dogs), a comprehensive literacy program involving children reading aloud to dogs who are a nonjudgmental audience. The results were, not only improved reading skills, but also psycho-emotional development and better contact with other children, less anxiety and greater confidence. Altschiller (2011) claims that even though development in medicine and healthcare is real and people are aware of it in everyday life, a holistic attitude towards health is needed. He (ibid) describes various events from the history of animal assisted therapy when children who were labeled for instance as "severely disturbed, uncommunicative and psychologically disturbed" reacted positively to the presence of animals. For example, a study made by German scientists (see Breitenbach *et al.*, 2009) on dolphin assisted therapy revealed that it can be seen as a whole family therapy programme that gives a positive emotional experience and improves interaction between family members.

Long-term studies show the relationship between animal ownership and a reduction in minor health problems. These include improvement in the health of older women living alone. The short term health effects have also been investigated by several authors. Although studies have been done with different animals, dogs are the most studied as they are generally easy to handle and readily available.

Researchers have observed and evaluated the responses of individuals in three settings involving animals:

- *Looking at or observing animals or pictures of animals*

The positive influence of animals on the mood and perception of the person is seen in the reactions of the parasympathetic nervous system – which slows the heart rate, increases intestinal and gland activity and relaxes sphincter muscles in the gastrointestinal tract - and in moderating the effects of stress, increasing calmness and serenity. After real-contact therapy with an animal, the specialist working with a child can use the image to raise positive emotions and enhance motivation enabling the specialist to see the positive results achieved while participating in animal assisted therapy.

- *Observing or being in the presence of animals*

Being in the presence of animals has a direct beneficial impact on physiological responses and psychological health, showing reduced stress levels.

- *Touching animals or interacting with them*

Having a good relationship and compatibility with an animal produces psychosocial benefits. Studies show that, whether or not the person owns the animal and whatever the relationship, talking and stroking has a relaxing effect and moderates stress.

Using salutogenesis as a starting point for taking on responsibility for patients – C.I.A.O. La Tela di Carlotta

The concept of salutogenesis was developed by American-Israeli sociologist Aaron Antonovsky (1923-1994) as a result of a critical review of the health care system, which focused primarily on disease. The innovative question, that Antonovsky raised, was: "*What keeps people healthy, despite the stresses and critical events in life?*" From this new direction the concept of salutogenesis was born, which focuses on the resources people can and do use in resisting illness.

According to the concept of salutogenesis, health and disease aren't two conditions that are mutually exclusive, but rather mark the end points of two opposite poles of one unique continuum. In Antonovsky's opinion, health is not a state of balance, but the result of a dynamic interaction to help "make sense of the world". Health must be re-created and maintained through life's challenges and daily difficulties. From this perspective, it is natural to ask how it is possible to better face and overcome difficulties, and support a movement to the direction of the "health pole". Antonovsky's response to this question is given by the research and description of the resources people use to overcome difficulties, defined as "*general resistance resources*", which include physical, personal, psychological, interpersonal, social, cultural and material resources. This is in short the potential that every individual has, a kind of expertise that allows us to deal with tensions and difficulties constructively.

- The salutogenic perspective is a key aspect of health promotion.

What does it mean in practice? Using a metaphor, Antonovsky compares life to a river full of dangers, in which we swim; it is not about preventing the individual from swimming in the river, but exploring the river, identifying hazards and improving the ability of the swimmer in order to acquire greater confidence in dealing with the hazards.

- How can pet therapy start from the perspective of salutogenesis?

We can start by considering the patient from this point of view. Pet therapy, currently, is generally used with people with psychiatric and significant physical disabilities, which may be found together, or it has been applied in the treatment of people with signs of diseases.

Watching the images and videos about pet therapy, we often encounter people with significant problems such as: autism, quadriplegia, severe cognitive delays, children with cancer, and so on. Such patients may be difficult to help, they may have already tried many rehabilitative, clinical, psycho-educational treatments where the results were not obvious. The approach considered useful by many and the one that La Tela di Carlotta is implementing, starts from the resilience of the patient, by going to look for it even though it may be very well hidden. Look at the person as an individual who can still give and have although their body may have been tortured and their soul thrown in the towel. The presence of an animal, its affective warmth, its specific way of approaching that is so different from that of humans, can reach that part of the patient that has not been explored yet, that part free of defenses that preclude him/her from opening to the world, the relationship ME-YOU.

The ICF (International Classification of Functioning) considers the relationship with animals both as a qualifier of relationships and social support and as a product for culture, recreation and sport. The Ministry of Health (Italy) recognises and defines the role of Animal Assisted Activities and Animal Assisted Therapy.

Where can working with animals be beneficial?

Studies conducted in institutional settings showed that the presence of animals improved the relationship between residents and professionals in the institution.

Dogs are able to interact with people in a friendly way and encourage people to socialise with others.

In hospital settings, work with patients with dissociative identity disorder, found that a therapy dog calmed the patient and the dog alerted the therapist when it detected anxious patients. Also the presence of animals was associated with a substantial reduction in noise levels from patients. Studies with patients suffering from Alzheimer's disease showed a decrease in aggressive outbursts and episodes of anxiety.

In educational settings, animals attracted and held the attention of children with inattention and hyperactivity disorders, the animals directed the children's attention away from themselves and resulted in a decrease in agitation and aggression, improving the educational environment.

In special therapeutic settings, where animals live in, they may support therapeutic services such as psycho-social rehabilitation including communication, special education, physical exercises and language therapy.

What are the benefits and who can benefit?

The groups that may benefit are very varied and the diversity is increasing with time and experience. Fine (2003) presents the following areas and contexts where AAT has been used effectively:

- prisons and juvenile homes
- victims of abuse and sexual abuse
- schools
- centres for people with developmental disabilities
- hospital programs for patients with HIV
- palliative care programmes at home
- centres and projects for older people

Cusack (2008) discusses AAT programs applied to specific groups such as older veterans, psychiatric patients, mentally ill young people, residents of a recovery unit , patients previously confined in institutions, people in hospitals, prisoners, children and young people with different disorders (emotional disorders, abuse, institutionalisation) and families (normal, abusive and dysfunctional etc.).

The development and constant evolution of AAT shows that it is very versatile and adaptable to many fields of treatment.

We know that therapeutically, horses, dogs, donkeys and dolphins are very beneficial for people with disabilities such as cerebral palsy, autism and learning disability, among others. Therapy including these animals is beneficial physically, psychologically and socially. The members of our partnership who involve animals in their day to day work, tend to work with horses, dogs, donkeys and dolphins.

Numerous studies have shown that the sounds emitted by dolphins go beyond oral communication and penetrate our system to the depths of neuronal connections, generating a change in them, thus helping to create a new connection that may involve a significant change physically, for example in children with cerebral palsy. In their work, the Lithuanian Sea Museum therapists have noticed some neuromuscular relaxation that facilitates and improves movement. However, they plan to investigate this brain-wave theory further, this kind of therapeutic theory needs to be researched more before formulating strong scientific statements.

The same goes for equine therapy, since the heat from the horse acts as a muscle relaxant. The vibration caused by galloping also modifies neuromuscular connections, varying postural patterns and improving movement in either hypertonia or hypotonia situations. This complex rehabilitative therapy helps to motivate participants and an interactive link between the horse and the person generates nonverbal communication that can result in improved social skills in people with autism or learning disability among others. Horse riding is physical activity in the fresh air, while doing it you can feel free and independent, whilst enjoying yourself. You can gain confidence from sitting high on horseback. This is particularly true for disabled people who are dependent on other people. Therapy involving horses can have a beneficial effect on the following:

- the nervous system
- automatic patterns of movement
- balance
- coordination of movement
- spatial orientation
- body symmetry
- haptic (non verbal communication), tactile, kinetic perception
- increased attention span

- memory
- speech and thinking
- emotional and will-power abilities stress
- awareness and self-control
- motivation
- socialisation
- independence
- providing adventures
- helping others
- collaboration with therapist, horse, friends
- accepting responsibility
- social integration

Donkeys communicate through body language, facial expression, the position of the tail, the bray, the movements of the body, legs and ears (lowered ears are a bad sign, high and upright ears are a sign of attention and curiosity). Walking with the donkey can improve muscle tone and help to reduce muscle contractions, improve muscle coordination and balance and benefit joints. It also increases cognitive skills: the donkey projects softness, warmth, smell, movement and noise stimulations so it increases alertness. Then it has unpredictable reactions as it reacts to unconscious signals from those who guide it, therefore improving concentration and reaction time. Exercises encourage pre-defined movements when riding, train spatial orientation, create associations between figures and stimulate the memory.

The donkey can boost emotional and affectionate responses. It's a slow and self-confident animal, tending not to have nervous reactions. It's social, curious, patient, small, safe, funny, cautious, routine-bound, faithful, sweet, slow, smart and empathetic. The most important characteristic is its search for physical contact, closeness, and cuddles, a donkey "needs" to be in emotional communication, if it feels neglected, it intentionally pushes the whole body to draw attention.

Considering these characteristics, people with a range of disabilities can benefit including milder forms of emotional instability, difficulty in relationships and communication, hyperkinetic disorder, depression, aggression, addictions, with sleep and attention disorders, learning disability in its different manifestations, and psychiatric patients. Although there are many cases showing improvement, onotherapy isn't recognized by the scientific community yet.

Improved social skills may not be obvious at first if oral communication is difficult. While animals can sense human emotions including excitement, joy or sadness, some people with learning disabilities and autism may not be able to sense these emotions in others, however, contact and interaction with an animal can help people to understand emotions and that they can be transmitted to others. Dogs and dolphins have the potential to react to the various moods shown by humans and adjust to the situation and they have prolonged periods of playfulness and are able to maintain this behaviour for a long time. Therefore, there is the potential to educate, change, improve and adjust models of behaviour or the social interaction of a client. It is possible to apply the newly developed social interaction in everyday settings, such as after therapy where a child learns befriending behaviour with an animal, this can be applied at school with peer relationships.

Therapy with any animal is based on play therapy when a game is seen as a positive environment with specified educational goals, the professional constructs a plan of work based on the main therapeutic aim. Play can be used as a direct working method when it has specific goal, such as building relationships and improving physical health. Therapy involving animals can be highly professional, involving trained therapists and academics but those without professional training can also see the value of a game that

can have emotional benefits. Games developed with a dog create a bond of friendship that can help people with disabilities to improve their social skills.

Engaging with animals can not only benefit physical or cognitive rehabilitation, but may also support greater independence in people with physical disabilities which are either brain or neuromuscular disabilities, for example working with a dog who is a “personal assistant”, including exercising and training the dog to perform basic activities such as opening a door or picking up a key. This can also be very valuable for a disabled child, with the dog or dolphin not only becoming an agent of rehabilitation, but also a friend, improving the quality of their life and their social engagement.

WHAT KIND OF WORK DO OUR PROJECT PARTNERS DO?

The following examples show why our organisations work with animals to support the development of adults and children with disabilities:

- **Centro de Educacion Especial Dr Fernando Arce in Spain** has devised programmes using horses for 14 years and dogs for 3 years in therapy sessions.

A.- INTERVENTION WITH DOGS



The dogs (Zar - Golden Retriever; Suri and Nala - Water Dogs)

The objectives:

- ❖ **General Objective:**

To improve the quality of life of students using dogs as a tool and channel to support the work of school professionals.

- ❖ **Specific Objectives:**

These have been determined by specialists for each of the students involved, all of them have been designed to:

- Encourage physical activity
- Stimulate cognitive ability
- Stimulate sensory ability
- Work on control of emotions
- Strengthen emotional and playful verbal and nonverbal communication
- Promote leisure
- Promote the use of conversation, encouraging the expression of emotions and use of memory
- Better establish relationships involving compassion, love, friendship, loyalty, affection, tolerance, trust and responsibility
- Reduce stress, fear and depression

- Encourage respect for difference and teamwork
- Be empowering
- Improve self-esteem and self-confidence.
- Observe and record individual and group behaviours based on the relationship with animals
- Create fun activities to promote a bond between the student and the animal
- Use animals as an educational resource

They use dogs as part of our speech therapy and physiotherapy programmes, doing individual or group sessions depending on the characteristics of the students.

- The *objectives of the **speech therapy programme*** are as follows:

General objectives

- The development of language, improving those areas that present difficulties
- To use language as a means of communication and social interaction
- To show interest in the use of language and its different manifestations including enjoying communication with others
- To interact with people to express opinions, desires, needs and ask questions to get information
- To gain more initiative and self-confidence
- To improve motivation to perform different activities

Specific objectives

- Develop practical communication
- Acquire and improve language prerequisites such as attention, memory, imitation and eye contact to aid language development
- Develop understanding of stories, texts, commands, phrases and words through listening
- Improve oral expression
- Improve breathing capacity and breath
- Properly articulate all the sounds of speech
- Structure sentences with increasing complexity
- Extend understanding and use of vocabulary
- Improve understanding of generally acceptable social standards
- Transmit feelings, ideas, interests and desires spontaneously
- Develop a taste for reading and writing
- Improve literacy
- Improve fine motor skills and coordination



(Example of speech therapy session with a student with Down's syndrome)

- The objectives of the **physiotherapy programme** are as follows:

- Using the paretic side of the body with two students with hemiplegic cerebral palsy
- Keeping the focus on students with learning disabilities
- Participation in a structured programme for a student with neuromuscular disease and two students with hemiplegic cerebral palsy activities



- Increased self-esteem and life satisfaction of students with learning disabilities
- Providing a sense of satisfaction for students with multiple disabilities within their families and social environments

(Example of physiotherapy session)

Methodology

Before they started, the project was presented to and approved by the school's senior managers and board. The professionals - teachers, speech therapists and / or physiotherapists - selected individual students subject to their needs and proceeded to create clusters to intervene with them effectively. The professionals defined the objectives for each of the participating students.



They involve dogs at different stages of the programme. Throughout the implementation process we try to analyze the development of the participants, to see if the activities help to deliver the objectives. We design each session based on the observation of students in the previous session, including the contributions of professionals who work directly with them and ensuring that we are working towards achieving their objectives.

The structure of the sessions has basically been the same at all sites: Presentation / Activity around a theme / Dismissal. After each session, the professionals have recorded how they went and carried out a small evaluation, to check whether the methodology has been adequate, if the activities have contributed to achieving the objectives and see if the activities are contributing to improving the quality of life of the participating students.



(Suri went to find Cristina to the classroom)

- The evaluation process uses the following methods and parameters:
- Direct observation of the development of activities and how well they are fulfilling the objectives
 - Video recording and photographs of the sessions
 - The progress of students who are on the project
 - Level of overall satisfaction with the results, and possibilities of continuity.
 - Enhanced ability to focus and relax and decreased anxiety and stress of the students

- Assessment of the improving student experience
- Improvement in fine motor skills and coordination
- Developing ability to care for animals
- Improved communication and communicative intention
- Positive and respectful attitude toward others
- Improved social relationships between students and animals

B.- ASSISTED THERAPY WITH HORSES IN C.E.E. FERNANDO ARCE

Introduction

The Therapeutic Horse is part of an educational project at C.E.E. Fernando Arce and we have run one session per week between October and May since 2000. It was decided that a very specific group of students would take advantage of spending time in this activity instead of their usual lesson. We have maintained a regular group of between five and eight students, and usually closer to five. It is a decision that we believe is consistent with our approach to complementary therapy. This was also defined from the beginning as a trans-discipline activity, which combined objectives related to the physical ability of the students with objectives around communication, social integration, meeting the needs of families, intellectual development and pleasure.



Methodology

The school provides very strong support for the logistics of this activity: seeking volunteers to support the activity, providing transport, applying to the Association of Parents of Students, working with social work agencies and providing financial support to the families of participating children. As a result, families have practical and financial help in preparing children and making sure they are safe and comfortable during the sessions, this helps a family to work together.

The criteria for selecting students are varied, but in summary, focus on providing a diverse and comprehensive experience for students with difficulties in social interaction or with attention deficit and whose response will be significant activity.

After selecting the group of students and organizing all the logistics, the first session is used to assess the student's reaction to the activity and consider the necessary variables to ensure effective participation:

- The type of horse.
- Use of saddle or surcingle
- Use of stirrups
- Individually or with a monitor
- Support for different parts of the body - ankles, knees, hips, lower back, full support
- Order of mounting (wait your turn, preparing other activities prior to mounting, follow simple instructions)

It is important to recognize that this is an activity with large and very strong animals that takes place outside in the open and there is a process of adjustment for the student and probably a growing tolerance to discomfort (cold, wind, rain, strong smells, sudden contacts) that helps to avoid a tendency to overprotection that can be usual because they are students with disabilities.

Objectives

The objectives chosen and the pace and intensity of the activity are individual for each student, but overall, these are the most frequent:

- Experiencing a rhythmic, symmetrical movement affecting the hip, trunk and spine

- Motivating the student to experience the physical and social environment with an attractive activity
- Providing the family with a socially valued activity and respite from what may be a difficult life situation
- Providing an inclusive image to society of people with disabilities enjoying the same exercise and leisure opportunities
- Providing positive experiences that enhance the self-confidence of students and their ability to focus on a potential challenge
- Providing stimulating experiences and satisfaction
- Encouraging regular cycles of wakefulness and rest resulting from energetic activities

Factors limiting the activity

- Transport to the equestrian center
- Time spent on travel
- The weather
- The cost of the activity due to maintenance of the horses and the centre
- Equestrian technicians and knowledgeable staff to support the activities
- Small groups of students because of transport and staff limitations
- The risk of falling
- The size and weight of the horse

Conclusions

The Therapeutic Horse programme at Fernando Arce School is an additional resource to support our general objective of strengthening participation by students in meaningful and satisfying life activities. However, the complexity and cost of the activity requires us to decide wisely which students can benefit. We review our activities with horses and dogs to make sure that our work is based on scientific evidence and is cost effective.

C.I.A.O. La Tela Di Carlotta, Italy - The encounter with the animal

Pet therapy is a clinical, educational tool, which allows the "encounter". It's a very special encounter: meeting the animal encourages the encounter with the therapist and then, as the therapy process goes on, the encounter with oneself. The animal is a truly amazing emotional activator and, if the moved energies are well channeled through the presence and work with the therapist, they can become the engine of different ways of being in the world. They can help the patient to look at him/herself from another perspective, to have self-esteem, to believe in their own abilities and possibly support a better quality of life.

Meeting a donkey, a dog or a horse, is an experience that leaves an impression: their spontaneous ways of living in the world seem to create some sort of plot in which it becomes possible to "belong". When illness undermines the confidence we have in ourselves, to the point of making us wary of our own body and considering it an obstacle to the realisation of our potential rather than enabling opportunities, here's the dog or donkey, who come and greet us, curious and affectionate and interested in that body we felt betrayed by (Reinger Cantiello P., p. 12).



The animal conveys emotions, allowing us to listen to ourselves. It's communication without words but at the same time with a great emotional impact. Borgogna states "what makes the emotional life and affection, a prerequisite for every treatment is the fact that in it, there is always a relationship that is building up, albeit sometimes in a fragile and fragmented way, a dialogue and listening, a silence, a contact, an inter-subjectivity: a continuous flow between the one who cares and the person cared for" (Borgna E., 2002 p. 188).



When our patient is a person with autism and we cannot use words to communicate, or a drug addict with a chaotic life, or a schizophrenic who has split from his/her own feelings and whose behaviours demonstrate "acting out", it is unlikely that, especially at certain times, classic therapy may work, as it is difficult to build a relationship and a genuine communication. The animal then represents another opportunity for communication and relationship that does not involve mental and verbal processes, but expresses on the instinctive and physical level. In the presence of the animal we immediately get in contact with our bodies, with our impulses; reactions are visceral, from tenderness to fear, from desire to approach and touch, to the need to get away. Our primary processes are moved (Reinger Cantiello P., p. 38) and the word, as a means of communication, has a very low value: thanks to the animal we "speak" through the body, as the animal allows us a relationship in a profound, instinctual and archaic dimension, it activates emotional and irrational responses, awakens affectivity and sensitivity allowing a patient to find the will, the joy of doing. All these aspects are clearly visible in the triangular relationship of patient, therapist, and animal and therefore they offer important potential for the therapist to work clinically with their patient.



The applications of AAI with psychiatric disability - La tela di Carlotta

AAI, in particular, if we relate to projects or educational or therapeutic work with patients, involve working in a network to create a treatment that will benefit the patient. We work closely with professionals including general practitioners,

child psychiatrists, psychiatrists, geriatricians, psychologists, psychotherapists, professional educators, speech therapists and physiotherapists. Therefore, if the patient who wants to pursue a treatment of this type, is already involved with other professionals, the treatment process through the AAI intersects with the overall care of that person.

Taking on a patient involves steps useful to the planning of the therapy and the objectives to work on:

- meeting with professionals who are leading the care of the patient, in case he/she is following a therapeutic process
- detailed personal and family medical history
- psychological or physical assessment
- identification of objectives and a treatment plan
- ongoing meetings with family members
- sharing with other professionals



They generally work with video recordings and photographs so that sessions can be reviewed calmly. Of course, this means having signed consent from the patient or the person with authority.



It is important to collect clinical data that will provide scientific evidence to support AAI.

In the case of people with learning disabilities, the animal acts as an educational mediator, allowing a closer relationship between the therapist or educator and the patient. In working with learning disability, the nonverbal channel may be preferred and animals are not only effective mediators to engage the affective and sensory sensitivity of people with learning disabilities, but also positively affect cognitive processes.

Another very important aspect of disability, especially physical, has to be taken into account, which is the lack of motivation to move; patients may have problems in exploring the environment not only because of paralysis, but also due to major difficulties in perception. This often implies giving up, what Ferrari, A. defines (The dog rescuing man. Proceedings 1999, p. 60 Il cane in aiuto all'uomo. Atti del convegno 1999, p. 60) the "paralysis of intention, much more serious and difficult to treat than the physical disability itself.") A dog may help a patient to find a strong motivation to play and move and achieve a gradual awareness of themselves compared with their limits and resources. A disabled person demotivated by the monotony of therapeutic exercise, can activate, through the animal, perseverance and improve their concentration skills.



THE LITHUANIAN SEA MUSEUM - towards the quality of life for the family from social support to a holistic approach

We provide a dolphin assisted therapy programme which is aimed at supporting the whole family. It is believed that the issues of one family member tend to increase stress in the whole family and the family requires social support. Disability in a family setting often results in higher than average stress levels, especially in cases of chronic illness. Family members can be overtired because of never ending fatigue, an unchanging disability situation and trying to get the support they need. Animal assisted therapy with a professional team can give a family much needed social support. Participation in dolphin assisted therapy is filled with positive emotions and common family experiences. The dolphin can act as a great friend who can support a child or adult to achieve positive results and increase motivation to achieve the aims of a therapeutic process. Learning together with dolphins is a joyful activity.



We run a research-based dolphin assisted therapy programme to assist psycho-social rehabilitation. Close collaboration with scientists from Klaipeda University has allowed us to develop a general work programme with individually applied, differentiated aspects for each disability. Due to the scientific input and the relevance of dolphin assisted therapy as a method of support for people with a disability, dolphin assisted therapy was officially approved as a method of wellness by the Ministry of Health in 2013. Lithuania became the very first country in Europe to legalize this type of animal assisted therapy. The norm of hygiene HN 133:2013 (LR Sveikatos apsaugos ministro įsakymas, 2013 m. balandžio 15 d. Nr. V-374) was released at the same time, which regulates safety and quality of dolphin assisted therapy.

An individual programme for a dolphin assisted therapy participant is usually planned for ten intensive days (two weeks with a two-day break after the first 5 sessions). The personnel working with children or adults are: social worker, psychologist, physiotherapist, and dolphin trainer.

The new Dolphin Assisted Therapy centre, opened in 2015 is fully accessible for children and adults with disabilities. Dolphin assisted therapy is organised in three different pools with varying depth of the water to ensure the comfort of participants. Each therapy session can be held from the mini platform-step or inside the pool. When the condition of the therapy participant and the dolphins are favorable, sessions can take place in the pool (swimming). However, swimming is not generally the basis of this kind of therapy as swimming takes place in a deep pool and requires better physical abilities in the participant.



The interventions during the therapy are developing the following:

- * Physical motor functions.
- * Psycho-social abilities.
- * Psychological elements.
- * Social life.

The program is orientated towards enhancing the quality of life of a family where a family member has a disability and strengthening their sense of coherence. There are up to 15 dolphins who interact, depending on their willingness, their mood and their choice of participant.

There are three main principles of dolphin assisted therapy:

- * *Dolphin wellness*. It means that we treat the dolphin as an equal partner in the therapeutic process we do not force it to do something and we avoid tricks or training during the therapy process, ensuring willing participation.

* *Holistic approach.* It means that the family is a meaningful part of the therapeutic process. The client is not only the child or adult with a disability, but the whole family and our approach is tailored to each family. Individual needs are met in the therapeutic process. The therapy process is orientated towards seeking a physical and psychological sense of coherence with nature and oneself.

* *Ethics.* It means that ethical values and norms underpin the programme, these will include confidentiality, not being judgmental, acceptance and attitudes.

Before the programme starts, the legal representative of the therapy participant signs the Agreement form and presents the form completed by the participant's doctors, this information is essential for the therapy specialist in order to design a useful programme and define individual goals.

Each session lasts for 30 minutes. During the session each participant is treated individually. During the first session no additional aids are used. The therapist together with a child get acquainted with the dolphins' pool, they observe the jumping dolphins. Each dolphin is presented to a child. After the adaptation period, a participant together with a therapist gets on the platform (step) and touches a dolphin's tail. If a participant reacts adequately, they can pet the dolphin, "count" his teeth, find the dolphin's breathing hole, etc.

During the further sessions various toys could be used: rings, balls, hoops. At first, the participant together with a therapist revises the names of the dolphins and pets them. Then the games start. Each game aims to achieve individual goals such as improving behaviour, relaxation, understanding sharing, using language, activating positive feelings and positive emotions and learning gentle touching methodology. These activities can last during the 2nd to 8th sessions. The two last sessions could proceed along the same lines or can be organized as swimming with dolphins. During swimming, immediate contact with a dolphin is established – first, mutual reliance and a wish to communicate, secondly, the participant can feel like a dolphin themselves. If during the first sessions the dolphin came to a child to communicate, now a child can get into the dolphin's environment. Being in water, the participant touches, pets the dolphin and swims together holding onto his flippers. In some cases, they play with rings. The participant's relaxation and positive emotions are the greatest concern.

During the last session, the participant says good bye to the dolphins.



One of the most important aspects of this therapy is contact with client and siblings. The majority of time is spent on understanding individual needs and achieving specific goals. Professional supervisions are organised after each session (if needed) or at least twice a week - the beginning and the end. Due to the individual programme, the participants can use other facilities after the therapy - join educational programmes and events, join a dolphin show, visit the

museum, or be in self-supporting groups.

The programme is based on human values, supporting the experience of positive emotions and mutual contact with dolphins. Playing with balls, hoops, rings, swimming in a boat, a participant learns the dolphin training terminology and commands, finds out about the characters of the dolphins, gets in touch with them and listens to the dolphins' speech and songs.

The therapist takes a moderator's role between a participant and the dolphin helping them to get into contact and make friends. The participant, his parents or legal representatives coming to dolphin therapy have to arrange accommodation and catering themselves. If the swimming suit and water-boots provided by the museum do not fit the participant, their parents or legal representatives have to supply them.

CASE STUDIES

Deivydas

This 10-year old boy came to the dolphin assisted therapy centre because of a psychological barrier to speaking aloud. The main issue was that he was frightened to hear his own voice and preferred to use sign language. At the age of 7, he had cochlear implant surgery for both ears and heard his mother's voice for the first time in his life. However, for the three years after this, he still used only sign language and did not speak. The major problems occurred at school; he attended a mainstream school not a special school. He was unable to talk to friends although some of his peers learned signs in order to interact with him, but mainly he was a shy boy who had very few friends because of this different language culture.

During the dolphin assisted therapy he made great progress in developing his psychological strength and reducing stress because he started to speak. He went home using words and as a result his relationship with his peers improved. The main aspects of this intervention were:

- working in partnership with the family
- relaxing & stress free environment
- programme approach and learning environment encouraging speech

Julija

She came with her parents to the dolphin assisted therapy program. She was a 12-year old girl with severe cerebral palsy and considered to have severe disability from the medical and psychosocial point of view. She couldn't speak, hold her head up or sit. Sometimes she looked differently at people, could express herself vocally and produce some sounds. The family had very high stress levels because of Julija's disability and limited support for their situation. The family changed schools several times as none of the schools seemed ready to accept this child and meet her needs. Dolphin assisted therapy did not change her physical disability; however, the positive impact on the family was considerable.

Her mother said: "you know, we mothers of such children are seasoned and overstressed because of this hard situation... And dolphins are like a miracle. I had such a good rest here for the first time in my life. And my heart jumps when I see that she is lying on the platform and communicating with the dolphins in *their* language... Nobody understands her even us, but I see that dolphins can." The main aspects during this intervention were:

- working in partnership with the whole family
- family involvement in the direct communication with dolphins
- social support and stress relief

Gytis

He has diagnosis of autism spectrum disorder. He came to the dolphin assisted therapy at the age of 5. At that time he did not speak at all, could not concentrate, slept badly and was aggressive. During his visits it was difficult to end the sessions because he wanted to stay longer and longer. He played with the dolphins very actively, after the second session he started to pronounce his first logical sounds - short names of the sea lions he saw on the way to the dolphins and dolphins. After ten sessions his mother said that his sleep was much improved and his concentration was very much better and the aggression was absolutely reduced. The boy started to speak very fluently. During the participation period and a year afterwards, the family additionally used the services of a speech therapist and a behaviour specialist, so we can't attribute all of the impact to the dolphins. The important aspects during this intervention were:

- high emotional impact
- active family consultation
- child behaviour analysis and improvement
- avoiding use of gestures
- supportive verbal communication

What their clients say about the dolphin assisted therapy:

- *"We all were very happy to be here... marvelous emotions".*
- *"After seeing the dolphins she looked at me... for the first time in our lives her glance was different... I saw a meaning in this glance".*
- *"Specialists require my child to use many chemicals to calm her down and it's really bad. When we were in the Dolphinarium she just fell asleep as the dolphins act as a relaxant and here she does not need any chemical interventions".*
- *"Drugs suspend his development, dolphin therapy is a natural "drug" that does no harm".*
- *"After the dolphin therapy my boy became very concentrated on his activities, teachers say he is more orientated towards learning new things at school".*
- *"He plays now with his cat differently and stopped abusing".*
- *"She started to vocalize a lot and spell first words".*
- *"His adaptation in a group of children is much better now, as he understands how to communicate with other children, also he knows that he needs to share things, not be aggressive and he is more stable with his reactions, it is easier to accept new things appearing in life".*
- *"Her physical development is much better - she can do many things without my support - climb the stairs, started to dress, use the toilet and many other things".*
- *"I noticed a huge psycho-emotional impact after the dolphin therapy, with the child is feeling much stronger as a personality, he has more courage and more willingness to participate in social life. He grew as a personality here".*

- **Red2Green in the UK** does not offer any formal therapy but we have several informal ways of involving animals with our clients.

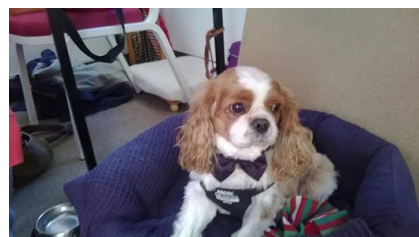
A member of staff brings their dog Dylan (after Dylan Thomas not Bob) to work in Aspirations with people with high functioning autism and we have observed that grooming and petting Dylan soothes and settles the clients and some clients will communicate via him, telling him about their day and their experiences. This section was written by the clients and staff of Aspirations.



DYLAN

What Dylan means to their clients:

- I have enjoyed training him and I feel like he is my dog. Every Tuesday and Thursday I am responsible for giving Dylan his denta stik to help look after his teeth. Andrew
- Enjoyment and a dog to talk to and help cheer you up when you are down. He doesn't talk back and just listens to you and you get to cuddle him. Donna
- He is good company. Becky
- He is missed when he not around. The PAT training group.



- He is a lovely dog and I would be lost without him. I especially like taking him for walks. Marc
- He is a good dog. Chris

Training sessions

Objectives:

- Encourage Gemma to talk and feel comfortable at Red2Green.
- Increase Gemma's confidence and assertiveness.
- Train Dylan for the PAT assessment.
- Teach the learners the importance of looking after small animals and basic hygiene when looking after pets.
- Teach the learners how to train dogs using clicker training.
- Encourage teamwork by getting the learners to work on specific projects: creating a booklet on how to look after Dylan which will be used when Dylan goes to doggy day care, creating a facebook page for Dylan. Please check him out at – dylanthepatdog@hotmail.com on facebook.

Case studies

Gemma's story

Gemma came to Red2Green through the mental health team but has recently been diagnosed with Asperger syndrome. She is afraid of saying the wrong thing or being judged as boring and as a result is an elective mute. We have used training Dylan to be a PAT dog as a way of encouraging Gemma to talk.

Gemma is now confidently giving Dylan simple instructions and engaging in conversations of one or two sentences. Gemma has a very limited diet consisting of mashed potato or bread but recently enjoyed her first trip to a pub and even had lunch. These are significant changes for Gemma.

We have a volunteer, Brian, who is responsible for taking a small group to the local park to train Dylan for his PAT assessment. When asked to comment on Gemma's progress he said, "Gemma is no longer "invisible" to the group". I have also observed that the group are very accepting and include Gemma in the conversations whether they get a response or not. Gemma knows that she is in control and will take steps at her own pace.

Kay

Kay came to Red2Green but struggled for months to progress from standing outside in all weathers, to coming in the building with us. When Dylan was introduced, it was as if he became a shield for Kay. It was as if he felt the dog deflected attention from him, which made it easier to cope with being among people. He was able to have people approach without freezing up and personal interaction seemed more natural. Dylan may help Kay to think about something outside himself and direct his attention toward Dylan instead looking inwardly so much. He seems concerned about the dog's well-being and wondered if he was taking care of him well enough. Dylan helped Kay progress more in a few weeks than he had in several months previously.



The clients are so animated when they are working together, chatting excitedly about Dylan and swapping photos they have taken. Dylan of course, is the centre of attention and lapping it up! They are creating a very useful booklet using their IT skills, communication and compromising skills.





- **Jó Úton- Lóháton Alapítvány – Irén Kézsmárkiné Piti** - My field is special needs riding and vaulting. We deal with many kinds of challenged children, but most are learning disabled.

Before lessons the horse has to be trained and warmed up by the therapist or a good rider. We start the lessons grooming the horse together.

When we have finished grooming, we do some exercises but not yet on horseback, following the animal in a circle one after the other, to take a ring and pass it to each other.



When the rider sits on horseback, first we ensure correct seating, so that it is safe. When they can ride without slipping, they do some exercises with a ball, or little and big rings. At the beginning we work with a girth only, without the saddle. This way the rider can hold on in a more secure position.



In another kind of lesson, children do vaulting exercises on horseback. Before doing these exercises on horseback we practice on an artificial horse (barrel) to save Kajás' back. Later we try some routines with classical music.



➤ **Asociatia Partes – Romania**



PARTES Association is not a social service provider, but more an organization for community involvement, which aims to contribute to the development of the community and to the improvement of the quality of life of the citizens through responsibility, civic participation and social cohesion.

The association cooperates very closely with Esperando Association, an organisation of parents of people with special needs and disabilities. PARTES Association supports Esperando Association in developing animal therapies or animal assisted therapies, mainly horse and dog therapy.



The horse therapy is provided with the help of a real horse lover, who has a writing and horse therapy farm just 8 km away from Baia Mare. The therapy sessions are held weekly, with a break during the cold season - late in the autumn and winter. Between four and six children and young people with special needs

from Esperando are taken by mini bus to the farm by three or four employees or volunteers.



A few activities are done by the group of young people such as preparing the horses, preparing the stables, the harness and working tools and cleaning. After that the individual riding sessions begin. During this time, the other young people have other activities: they might learn about horses and other animals, or about nature, or have creative activities - drawing, colouring etc., or they write or read, or go into the surrounding area to learn and see animals, birds and plants.

The things we are aiming at through the horse therapy are:

- improving the posture and the general physical status of the young person
- correcting some difficulties (of walking, posture, grip etc.)
- improving some physical capacities
- improving mood
- increasing motivation, the wish to work and participate in activities and rehabilitation
- creating knowledge, skills and abilities related to nature and animals
- strengthening confidence in self and in one's own powers and capacities
- increasing the capacity to relate, to socially participate and to communicate
- creating positive sensations and feelings, well-being and happiness
- strengthening links with the colleagues and the professionals who assist them
- increasing the quality of life

The first part, when the young people participate in the **preparation** of the horse for the work session has a few objectives of its own. We aim to improve skills of collaboration and communication both with the horse and the other people who are involved in the activities and we want to create skills of caring, cleaning and preparation of the horse. During this time we are also building the responsibility and habit of work well-done, taking responsibility and the acknowledgment of the part one has in the entire story taking place. Also it is important to accommodate the needs of the horse, get close to it, begin to touch and stroke and accept the fairly unbalanced difference in size between their body and the body of the horse.



Walking towards the therapy area, an enclosure or open field, represents the passage to the second stage. The knowledge from the first session are completed, the young person has new knowledge about the habits, the needs and the characteristics of the horse, such as which way to approach it or ride it, how to make contact; what it likes or doesn't like and why it reacts in certain ways.

The next step is **riding**. At first, very gently, with help and without forcing the movement or the walking of the horse. There's constant talking to the horse, stroking it, taking time to get used to the height and the sitting position on the wide back of the horse. We encourage the right position - very straight on the central axis of the horse, correcting any lateral balancing and/ or back curving.

In the moment when the horse starts to walk, the magic actually begins: the young person becomes concentrated on the walk of the horse and on continuing to progress, thus forgetting about crying or other thoughts. The young person is very careful at each step made by the horse and begins to harmonise -voluntarily or naturally - his own balance with those of the horse. Communication with the horse is still encouraged and when the first laps are done, we've no other aim but the relationship between the rider and the horse.

At a certain point, we let the young person ride the horse on their own, giving commands and deciding when to start and stop, we are developing self-esteem, confidence in their own strength and acknowledgment of their own power and autonomy. For possibly the first time in their life, the young person, who has been protected and told what to do, is now in full control themselves and not only themselves, but also of an animal that is much, much bigger. The transformation and the feelings that appear in that young person are hard to imagine or to replicate in other situations.



Step-by-step, after the first sessions of working together and increasing confidence, the **exercises** on the horse begin. They can be either gymnastic exercises or movements - releasing one hand, lifting one hand at a time or both simultaneously, rotating the hands - or, slowly, introducing elements which in themselves involve a certain degree of athletic performance: passing one foot on the other side, a complete rotation on the horse, lying on the chest or on the back to embrace the horse.

Generally we have one horse therapy session a week (except during cold weather). During the few hours spent there, the young people are mixing and experiencing direct contact and work with the horse or on the horse as well as other activities. Even these activities (writing, reading, drawing, colouring, walking, learning the plants, animals and birds) are linked to or facilitated by the horse, because they are done with the expectation that they are a step towards horse riding and being on or around the horse. This works perfectly as a stimulus and a motivator for the young person, encouraging them to participate and to work, to get involved more actively and more consciously.

Some parents choose to come back with their children for private sessions of horse therapy. They understand the benefits of this kind of therapy for the young person and choose to have additional sessions in their free time (to the delight of the young person).

What have we observed after the horse therapy sessions?

It is easy to see some immediate changes and others that appear later but there are also some which are more difficult to recognise without deep focus or a consistent and thorough observation.

The first changes we can see are in posture, (adopting a posture with a straight back and prominent chest), balance and walking (they walk with their legs spread wider, without hitting/ touching them during the walk; their back is straighter, the entire posture is better). We also notice changes in attitude (confidence, willingness to cooperate, openness towards the new and towards others), in communication (better and more correct verbalisation, more consistent relations, willingness to express themselves) in fulfilling tasks (with the horse being somehow a reward for a hard and serious time of working), in school results (where applicable) and in the capacity to learn.

Overall we see an improvement in well-being, even happiness, and a better quality of life, shown in an improvement of the mood and a positive attitude.

Many of these changes can be obtained through **dog therapy**. Dog therapy sessions take place when partners/ friends of the organisation come with the dogs to the Esperando day care center to work with the young people there.

Here also, the first part is dedicated to getting acquainted with the dog, becoming familiar with it and first touches. There are young people who are afraid of dogs and who need a longer period of time for a more gradual approach, getting to know each other and only after that touching.

We have small petting activities - brushing, stroking and feeding the dog, but the most pleasant ones may be the direct activities including playing. During these, the young people are stimulated to work on tasks which are more difficult for them and which

they usually don't execute - using the hand, walking, running, throwing an object, saying some sounds/ commands.

We saw some unexpected behaviours from the young people: some were willing to run just to be next to the dog, forgetting about their usual inactivity; some have made huge efforts to maintain a standing position just to be liked by the dog or in harmony with it; some have talked to the dog, even if usually they don't speak to anyone or almost anyone; some have improved their vocabulary and pronunciation just to be able to say the name of the dog and the commands for it; and we can have many many other examples like these.

We still have the opportunity for improvement in our provision of pet assisted therapy, that is using pets to facilitate new learning activities and life skills work. The young people have been always thrilled to have pets in the day care center, they had rabbits which they had taken care of in some situations, guinea pigs, canaries etc.). But until now the personnel have not had the necessary preparation or training to work with animals as facilitators of educational and formative processes. This is an area we wish to develop and improve in the future, beginning with the things we have learned from our partners during this project.

➤ **Equine Assisted Therapy and Learning in a Natural Environment - Equilibre NGO – Estonia**

Equilibre NGO is a social enterprise created 8 years ago to develop two main fields:

- Equine Assisted Therapy
- Natural Building and Sustainable Lifestyle

Both branches support and complement each other. Introducing and practicing two fields at the same place raises interest from a greater number of people and through natural surroundings and a close contact with animals provides a therapeutic atmosphere.

Riding therapy has been provided as a service in Estonia since 2007 after our first therapists were trained by Finnish professionals. Today there are approximately 20 riding therapists in Estonia, mainly physiotherapists. During the last six years Equilibre has been developing the psychosocial approach of riding therapy. Since 2010 it has been done in cooperation with the rehabilitation team of the Järvamaa hospital, offered as psychological counselling or psychotherapy with the help of horses.

Hobukooli Park is the place where our activities with animals take place. It is located in the middle of Estonia, a one hour drive from most bigger cities. In addition to 8 horses and 4 ponies, other animals are also included in the therapy work: donkeys, rabbits, chicken, cats and dogs. They all serve the cause as friendly companions for clients who need the time to adapt with animals. The natural environment provides a retreat and link human and nature.

All three levels of Animal Assisted Interventions are represented here –

- Animal Assisted Activities:
Different group activities for children and for people with special needs
- Animal Assisted Learning:
Horse assisted practical courses in self-development
team building and leadership seminars
- Animal Assisted Therapy –
Horse assisted counseling and psychotherapy.

The target group is wide and the age of the clients can differ a lot.

The general goal behind all the interventions is to create a synergy between the human and the animal. That serves the client's actual need to open up for one's true feelings, to discover his/her inmost thoughts and needs. Due to more specific goals we can work with awareness focused more on the physical, emotional or mental level.

Usually the therapy process combines different techniques to work toward the expected outcome, interaction with the horse is just one part of the process. The horse can also be used in several ways: sometimes the client benefits more from the ground-work, sometimes from riding.



For riding we use a special therapeutic girth which enables the client to feel safer while holding on. This helps to loosen up the body more easily and to follow the rhythmic movement of the horse.

The main aim is not to teach a client to ride but to work with his/her bodily tensions/plasticity and with balance. In some cases we also work bare-back which often impresses with the intimate warmth and softness of the horse's body.

Among many principles there are some basic guidelines to follow during the process:

the need to change the focus from "doing" toward "being" - which brings the attention to experiencing "here and now" – and to remember that "less is more".

All this helps the client to get in touch with his/her inner resources. Experiencing the energetic bond with the horse and playing with the synergy that people feel, enables many changes. Also, learning to notice and use one's body language can sometimes be an eye-opener. Video analysis is often included in the counselling process, enabling the client to reflect upon the experience more deeply.

Below is an illustrative sample of sequenced photos from a self-developmental seminar, which gives a tiny glimpse of non-verbal communication between the human and the horse. These 15 minutes helped to dissolve the client's feeling of separation and offered a deep sense of harmony and gratitude. Described by the person who experienced it: *"Most important insight I got from that experience is that "It is not obligatory to have obligations". That realization gives me now a chance to do the things I desire. I felt that the horse communicated her warm attention toward me although I was ignoring her. That made me feels even more grateful when I realized it. Unbelievable, how exploring yourself changes the perception of your everyday world."*



REDUCING RISKS

Often, particular animals are chosen for AAT and AAI because of their training and social skills, however, proper precautions should be taken to reduce risks and create a safe environment for the animal as well as the participant.

Potential risks include zoonoses – diseases which can be transmitted from animals to humans - allergic reactions, biting and scratching and fleas. A well trained and properly cared for animal has little risk of transmitting a disease.

To minimize the risk:

- animal vaccinations should be up to date
- animals should have regular veterinary checks
- animals should be properly groomed or bathed
- animals should have good diets
- animals should be insured
- animals should not shed hair if possible
- animals should be monitored for signs of stress such as shaking, ears back, tail between the legs and persistent licking
- therapy dogs should be trained not to lick or scratch people
- dogs should remain on a leash while interacting with a child
- ensure proper hand washing before and after contact with an animal
- sometimes hands, shoes and clothes need to be disinfected (dolphin therapy)
- animal handlers should clean and sanitise if an animal becomes ill and vomits, urinates or defecates in an undesignated area
- make sure the organisation you are working with has good health and safety policies and procedures
- parents or legal guardians should sign permission slips for a child or person who may not be able to make the decision themselves
- sessions should be timed to avoid animal exhaustion

To avoid injury or discomfort for both the animal and the participant, the handler should discuss with the participant the best way to interact, talk to, and pet the animal, the handler should always be present, attentive, and engaged during the interaction.

Participation in special needs riding and vaulting should be avoided if the following are present:

- Contra-indications such as allergies (horse hair, hay fever)
- Problems with hip joints
- Diabetes (under 5, over 14)
- Atlanto-dentalis instability (Downs's syndrome, x-ray!)
- Danger of embolism
- Lack of head control
- Hampered respiration
- Spasms
- Bleeding
- Spine bifida
- Serious scoliosis

The therapeutic horse has to have an adequate nervous system and perfect, clear movement.

Participation in special needs dolphin assisted therapy should be avoided if the following are present:

- Contra-indications such as allergies (chlorate water)
- Epilepsy
- Open wounds
- Fragile bone system

- Stoma(s)
- Spasms (no swimming allowed)
- Bleeding
- Air/touch-spread diseases

Dolphins are very intelligent and social animals that have a natural interest in interaction with human beings, but it is important to build contact that is trusting and pleasant for both-sides. The therapeutic dolphin must be healthy and enjoy good contact with people that aren't dependent on food as an incentive. The only motivation for the dolphin must be touch, talk, gestures and social contact. In severe disability cases training and reinforcement can be used but it should not be the biggest part of therapy time.



CHAPTER THREE

WHAT HAVE WE LEARNED FROM THE PARTNERSHIP?

- It's important to understand the expertise and perspective of each partner
- It can be difficult to get agreement especially with a large number of partners but constructive discussions work
- Understanding and learning about the diversity of other cultures, other institutions and other people, establishing friendships
- We cherish the people we have met enjoying welcoming them to our country and organisation and visiting theirs
- There are therapies where the animal is considered a co-therapist
- There are therapies, where the animal is a motivator and facilitator
- There are different names for similar therapies
- In some countries, the therapy can be done only by a trained and licensed therapist (maybe a doctor, a psychologist, a physiotherapist) under specific conditions and after being tested and licensed by an official body in a one-time or periodic mandatory test
- The animal may need to be trained, tested and licensed
- In some countries animal therapy can be done almost by anybody (if they have clients...)
- Therapies and animal assisted activity can be done with many animals, reptiles or birds
- There is considerable interest from professionals
- Sharing learning and good practice between countries and professionals
- New and different ideas and ways of working

WHAT RESULTS CAN WE EXPECT WHEN WE WORK WITH ANIMALS?

In Spain we have witnessed an increase in patient participation in group therapy and changes in patients' behaviour. We also found that practical skills such as hygiene and self-care, specifically for patients with severe mental health issues, could be addressed more easily in our dogs' presence.

Animal-assisted therapy can also help individuals develop social skills. AAT helps clients to realise that behavioural cues practiced with a therapy animal can be used beyond the 30 or 45 minutes that they are with the animal and they can apply this skill to other settings.

The relationship between therapy animals and the therapist can also be a model for a healthy relationship. The presence of animals themselves is soothing and can more quickly build rapport between therapist and client. In addition, therapy animals, especially horses and dogs, have built-in survival skills. That makes them able to pick up social cues imperative to human relationships. Therapists then can process that information and use it to help clients see how their behaviour affects others. And they can do this in an immediate way.

The evaluation process can use the following:

- Direct observation of the development of activities and the degree of achievement of objectives
- Recording of video and photographic sessions
- Actual progress of learners who follow the programme
- Level of overall satisfaction with the results and possibility of continuity
- Improved ability to focus and relax and decreased anxiety and stress of learners

- Assessment of the learner experience improvement in its intrinsic and extrinsic motivation
- Attitude of improvement in aspects related to fine motor skills and coordination
- Development of animal care
- Improved communication and communicative intention
- Positive and respectful attitude toward others
- Improved social relationships between learners and animals

WHAT ARE THE PARTNERS DOING IN THE ANIMAL THERAPIES FIELD AS THE PROJECT ENDS?

From Spain:

AAT began a few years ago and is a relatively new field, since then, it has grown in popularity, has gained wide acceptance and is evolving. This is evident in the increasing number of universities that offer a graduate course in animal-assisted therapy and the associations that promote these courses.

Therapists and potential clients may wonder, however, what makes AAT more beneficial than traditional talk therapy. Skeptics may question the lack of research to back up the benefits of AAT. We think that there is a lot of anecdotal information and case studies, but there's a need for a broader long-term study. We are working on two fields, speech therapy and physiotherapy with dogs and are trying to develop these fields, in the educational community, writing articles, participating in conferences as speakers, teaching speech therapy and/or physical therapy in the universities, or helping college students in their final papers on animal-assisted intervention.

Although the research may be sparse, it has been increasing in recent years. Many researchers mention oxytocin, a very important hormone that affects the human-animal interaction, this maybe the reason for improvement in children's behaviour and a reduction in depression for older people with dementia for instance following animal assisted therapy.

One of the most innovative aspects of our interventions is including a special assistant. During our sessions there are 5 different elements: specialist, patient, dog, dog handler and a student with special needs who can help the patient or the dog handler, the special assistant. We have used this model for 3 years and have had very good results with the special assistant because the work increases their motivation and self-esteem, and it is very important for their own development.

From Estonia

Equilibre NGO has created a small centre for AAT, located in the middle of Estonia. Although we are mainly working in riding therapy, we include other animals in our therapy work as well. Besides ponies and horses, there are donkeys, rabbits, dogs and cats who often serve as catalysts or „ice-breakers“ before the client is ready to move closer to big horses. Even our chickens play an important role in developing children's interest and motivation – for example several autistic children are drawn to them and only afterwards are willing to work with ponies.

Our approach is psycho-social including coaching with horses, psychological counseling and psychotherapy with the help of horses. We are working in cooperation with a local hospital, offering counseling and therapy as part of official rehabilitation services. We belong to the Association of Estonian Riding Therapists and work with colleagues towards the acknowledgement of riding therapy as an equal service among other rehabilitation services and paid for fairly. At present it is possible to include horses

in therapy work but it is considered as a regular therapy service because of the therapist's educational background (physiotherapy, speech therapy, occupational therapy or psychotherapy) and the therapist is paid the same as professionals who work in an office but the horse's cost are not covered yet.

Four years ago we developed an introductory course in Animal Assisted Therapy and started to lecture on it in the department of Educational Sciences in Tallinn University. It is meant for the Special Education Masters' students. The course includes theoretical lectures in the university and practical work in our centre. So far we can say that the demand for the course is constantly growing as AAT services in Estonia are more widely recognised. As the therapist at our NGO is writing her PhD on the topic of riding therapy, the evidence-based research work is conducted here on a daily basis.

From Hungary

In Hungary there is a highly efficient system in horse therapy which works well: there is education for the therapist, assistant and horse as well. It ensures that the activity provides wide range of people with a quality service. Horses are trained based on the traditional method. One of the great benefits of this project for us, among many others, is the method of dealing with and training a horse that we learned from our partners. It is a more animal friendly and more open method which results in a better cooperation from the animal.

Riding therapy has been used as a professional method for more than 15 years in Hungary. Specialists need to hold specific qualification. Education includes theory and practice as well. Therapists also need to be qualified and experienced in the different types of challenges the patients may have.

Fields:

- Hypotherapy
- Special needs riding and vaulting
- Horse-assisted psychotherapy
- Para sport

Hypotherapy is a physiotherapy treatment for the neuro-psychological system for physically handicapped people. Specialists doing hypotherapy must hold a degree in physiotherapy and a postgraduate in riding therapy.

Special needs riding and vaulting is used in the treatment and development of people with special needs. It includes not only the horseriding itself but all riding related activities. The therapy should be personal, worked out based on the challenges. The specialist must hold a special needs teacher and a riding therapist degree.

Horse-assisted psychotherapy takes place in the triangle of the horse, the patient and the therapist, where the horse facilitates the therapeutic process as a co-therapist. Specialists are psychiatric therapists holding a postgraduate degree in riding therapy.

Para sport is a sport activity where horse and horserider prepare together for the challenge.

Its sub-fields are:

- Competitive sport
- Recreation – It aims to fill spare time with meaningful content.

From Romania

During and after the animal therapies sessions, we had the chance to witness some significant results and changes in people with disabilities who participated in the sessions. All these were seen, noticed and acknowledged by the therapists, by the

parents/ family of the client/ patient, by the other specialists working with them and by the client/ patient. Here are some of these improvements we have seen:

- improved posture and balance
- improved walking
- development of personal and social responsibility
- better speech
- increased communication skills
- openness and desire to relate to others
- a significant rise in motivation and desire to do the tasks and work assigned
- improved mood and happiness
- increased interest
- improvements in physical capability
- development of the mental capability
- better results in school
- a certain effervescence in their behavior, especially when expecting the animal therapy sessions
- increased learning ability

From Italy

In the last few decades in Italy, the relationship between man and animal has substantially changed, with growing awareness that children, older people and people suffering from physical and psychological problems, can reap significant benefit from the relationship.

Living with pets, can be a source of benefit for society and pets can also play an important role as mediators in educational processes and therapeutic rehabilitation.

The spread in various areas, both public and private, of Animal Assisted Interventions has started a process of ethical, professional and legal reflection.

This new awareness has resulted in two important events in Italy: the creation of the National Centre of Reference for the AAI and the enactment of the National Guidelines. The National Centre of Reference for the AAI is a public body, founded by the Ministry of Health with the aim of:

1. enhancing the national and international network of scientific experiences of excellence, in order to recognize the importance for health of AAI
2. validating standardised intervention protocols in order to credit the work patterns with users and patients
3. Increasing knowledge about using such measures in specific patient groups (older people, children with autism, people with mental illness, neuro-motors patients etc.)
4. promoting research in order to standardise operating control protocols for the health and behaviour of animals used in AAI programs

National Guidelines were issued on 23rd March 2015, with the aim of ensuring correct procedures in AAI in order to protect health and well-being of the client and the animal, in particular:

1. to define operating standards to ensure correct and common application of AAI in the national territory
2. to identify the tasks and responsibilities of professionals and practitioners involved in projects and initiatives involving the use of animals for therapeutic rehabilitation, educational and recreational-leisure purposes
3. to set up training paths for professionals and operators involved

They believe that these guidelines could represent a starting point for further reflection for the project partners.

From Lithuania

The Lithuanian Sea Museum is non-profit organization belonging to the Ministry of Culture of the Republic of Lithuania. The dolphinarium was established in 1994 with the first therapy sessions starting in 2001. These first sessions showed that subjective opinions collected from parents show very high positive impact on children with severe disabilities. Therefore, it was decided to start scientific research to investigate possible changes in children after dolphin assisted therapy (DAT). In 2004-2006 the Sea Museum together with Klaipėda Seamen's Hospital and Klaipėda University conducted biomedical research "The Impact of Dolphin Assisted Therapy for Children's Psychosocial Rehabilitation" (Approval of Lithuanian Bioethics Committee 2004-03-10, Nr. 24). Ministry of Environment of the Republic of Lithuania approved the participation of dolphins in biomedical research (LR Aplinkos ministerija, 2003-08-29, Nr. 11-1-6074; Nr. 242). Research results were presented to the Lithuanian Bioethics Committee (Bioetikos komitetas prie Sveikatos apsaugos ministerijos 2007-01-17, Nr. B-07-09). The Bioethics Committee is a governmental institution, which aims to promote and protect human rights and dignity in the field of healthcare. The Committee was established in 1995 following the provisions of the Law on Health Care System. It has been founded and its Statute approved by the Ministry of Health.

After this research was conducted, the research-based dolphin assisted therapy program was approved as one of the main goals of the Sea Museum. It was important to develop research programmes with normal planned DAT programmes as the main principle of the DAT centre is the wellness of the dolphins and therapy must be a natural communication and contact between the dolphin and human without being determined by food and training.

Regulation and innovation

The Sea Museum seeks to ensure the scientific status of the dolphin assisted therapy centre, therefore, one of the most important element in this field is research and innovation.

Because of considerable scientific input at national level (doctoral theses, over 30 presentations in scientific conferences and science communication events), dolphin assisted therapy was officially approved as a method of wellness by the Ministry of Health of the Republic of Lithuania in 2013. The Norm of Hygiene HN 133:2013 (LR Sveikatos apsaugos ministro įsakymas, 2013 m. balandžio 15 d. Nr. V-374) regulates the safety and quality of dolphin assisted therapy. All dolphin assisted therapy sessions are organized due to approved methods prepared in collaboration with Klaipėda University scientists.

In 2014-05-09 the association for North-West Lithuania was founded for the development of innovative rehabilitation procedures and methods with dolphin assisted therapy (*VšĮ "Šiaurės vakarų Lietuvos vaikų reabilitacijos klasterio asociacija"*). The partners: Lithuanian Sea Museum, Rehabilitation center "Palangos gintaras", Klaipėda university, Šiauliai university.

The main two principles - wellness of dolphins and wellness of human beings is planned to be realized via methodological - research work from 2016 when the research "to help a human not to harm a dolphin" is going to be started. Research will take place in our refurbished dolphin assisted therapy centre. This reconstruction is financed (part funding from the EU, part from the Ministry of Culture and part from our own resources) by the project *2007–2013 m. Sanglaudos skatinimo veiksmų programos 1 prioriteto „Vietinė ir urbanistinė plėtra, kultūros paveldo ir gamtos išsaugojimas bei pritaikymas turizmo plėtrai“ VP3-1.3-ŪM-01-V priemonę „Ekologinio (pažintinio) turizmo, aktyvus poilsio ir sveikatos gerinimo infrastruktūros kūrimas ir plėtra“*. The project was started in 2007, estimated finishing time is July 2015, the cost of the project is 46 million litas (over 13 million Euros).

The Dolphin Assisted Therapy centre is always open for internships, students' research, collaboration in animal assisted therapy and other complementary therapies. At the moment the centre provides: dolphin assisted therapy, an educational programme with reptiles, sand play therapy, art therapy, ceramic educational programme, relaxation therapy, physiotherapy, music therapy, sensory integration therapy (snoozelen), also there is a play room for children, and room for conferences and seminars which are organised by internal or external experts in the field.

From the UK

We want to continue to involve animals in our work, Dylan is more involved with our clients and they have been training him to become a PAT dog. We are exploring working with the University of Cambridge to provide pet assisted therapy sessions for some of their students with Asperger's Syndrome. As a result of this project, we will be more aware of the potential for work with animals and hope to take advantage of all the possibilities.

FURTHER READING. REFERENCES

- Acquaviva, A., Tizzi, R., Accorsi, P.A. 2003. Dolphins and Autistic Children Encounters: The Animal Point of View. *17th Annual Conference of European Cetacean Society*. Las Palmas de Gran Canaria, 1–6.
- All, A.C., Loving, G.L. 1999. Animals, Horseback Riding, and Implications for Rehabilitation Therapy. *Journal of Rehabilitation*. July/August/September, 49–57.
- Altschiller, D. 2011. *Animal-Assisted Therapy*. Oxford: Greenwoon, England.
- Antonovsky A. (1979). Health, stress and coping: New Perspectives on Mental and Physical Well-Being. San Francisco: Jossey Bass.
- Antonovsky, A. (1987). Unraveling The Mystery of Health - How People Manage Stress and Stay Well. San Francisco: Jossey-Bass.
- Birch, S. 1995. *Telemetry Monitoring of Bottlenose Dolphin Biosonar during Dolphin-Human Interaction*. International Symposium on Dolphin Assisted Therapy. Available online at: [<http://www.aquathought.com/idatra/symposium/95/birch.html>], accessed 14 December 2009.
- Birch, S. 1996. *Dolphin Therapy Effects: A Hypothesis*. Second Annual International Symposium on Dolphin Assisted Therapy, Available online at: [<http://www.aquathought.com/idatra/symposium/96/birch.html>], accessed 15 March 2010.
- Bonas, S., McNicholas, J., & Collis, G. M. (2000). Pets in the network of family relationships: An empirical study. In A. L. Podberscek, E. S. Paul, & J. A. Serpell (Eds.), *Companion animals & us: Exploring the relationships between people & pets* (pp. 209- 236). Cambridge: Cambridge University Press.
- Bonas, S., McNicholas, J., Collis, G. M. (2000). Pets in the network of family relationships: An empirical study. In A. L. Podberscek, E. S. Paul, & J. A. Serpell (Eds.), *Companion animals & us: Exploring the relationships between people & pets* (pp. 209- 236). Cambridge: Cambridge University Press.
- Borgna, E. (2002). L'arcipelago delle emozioni. Roma: Feltrinelli.
- Brakes, P., Williamson, C. 2007. Dolphin Assisted Therapy: Can You Put Your Faith in DAT? *Whale and Dolphin Conservation Society*, 1–7.
- Brakes, P., Williamson, C. 2007. Dolphin Assisted Therapy: Can You Put Your Faith in DAT? *Whale and Dolphin Conservation Society*, 1–7
- Breitenbach, E., Stumpf, E., Fersen, L., Ebert, H. 2009. Dolphin-Assisted Therapy: Changes in Interaction and Communication between Children with Severe Disabilities and their Caregivers. *Anthrozoos*. Vol. 22, Issue 3: 277–289.

- Brensing, K. 2004. *Approaches to the Behaviour of Dolphins Tursiops Truncatus during Unstructured Swim-with-dolphins Programs*. Inaugural-Dissertation. Berlin University.
- Brensing, K. Linke, K., Busch, M. et al. 2005. Impact of Different groups of Swimmers on Dolphins in Swim-with-the-Dolphin Programs in Two Settings. *Anthrozoös*. Vol. 18, Issue 4: 409–429.
- Chengwei, L., Xiaoming, H., Limei, Z. 2005. The Study on Brain Paralysis Ultrasonic Therapy Instrument Simulating Dolphin. *IEEE: Engineering in Medicine and Biology 27th Annual Conference*. Shanghai, China, September 1–4.
- Cole, D.M. 1995. *Neuro-electrical effects of human-dolphin interaction and sonochemical hypotheses*. International Symposium on Dolphin Assisted Therapy. Available online at: <http://www.aquathought.com/idatra/symposium/95/cole.html>], accessed 18 January 2009.
- Cole, D.M. 1996. *Electroencephalographic results of human-dolphin interaction: A sonophoresis model*. Second Annual International Symposium on Dolphin Assisted Therapy. Available online at: [<http://www.aquathought.com/idatra/symposium/96/sonophor/sonopho.html>], accessed 19 December 2009.
- Curtis, J. 2000. Dolphin Assisted Therapy or Gimmickry. *Underwater Naturalist*. American Littoral Society. Vol. 25, Nr. 3: 18–21.
- Cusack O. (2008). *Animales de compañía y salud mental. Fondo editorial de la Fundación Affinity*, Barcelona.
- Davis SJM, Valla FR: Evidence for domestication of the dog 12,000 years ago in the Natufian of Israel. *Development*. Vol. 43, Nr. 3, 357–366.
- Davis, SJM, Valla, FR (1978). Evidence for domestication of the dog 12,000 years ago in the Natufian of Israel. *Nature*, 276, 608-610
- Ferrari, A. (1999). *Il cane in aiuto all'uomo*. Atti del convegno, San Patrignano-Rimini, Italia.
- Fine, A.H. (2010). Incorporating animal-assisted therapy into psychotherapy: guidelines and suggestions for therapists. In A.H. Fine (Ed.), *Animal-Assisted Therapy: Theoretical Foundations and Guidelines for Practice* (3rd ed.). (pp. 169–191). San Diego, CA: Elsevier.
- Hatch, A. 2007. The View from All Fours: A Look at an Animal – Assisted Activity. Program from the Animal's Perspective. *Anthrozoös*. Vol.20, Issue 1: 37–50.
- Heimlich, K. 2001. Animal-Assisted Therapy and the Severely Disabled Child: A Quantitative Study. *Journal of Rehabilitation*,
- Humphries, T.L. 2003. Effectiveness of Dolphin-Assisted Therapy as a Behavioral Intervention for Young Children with Disabilities. *Bridges*. Vol.1, No. 1: 1–9.
- Kreivinienė, B., Rugevičius, M. 2009. *Delfinų terapija Lietuvos jūrų muziejuje*. Klaipėda: KU leidykla.
- Krevinienė, B., Perttula J. 2014. Dolphin Assisted Therapy: Innovative Learning for Children with Disabilities. *ATEE: Education in Changing Society*. Vol. 1: 90-98.
- Linee Guida Nazionali per gli interventi assistiti con gli animali (IAA) 2015 Accordo tra il Governo, le Regioni e le Province autonome (IT)
- Macauley, B.L. 2006. Animal-Assisted Therapy for Persons with Aphasia: A Pilot Study. *Journal of Rehabilitation Research & Development*, 43(3) 357-366
- McKinney, A., Dustin, D., Wolff, R. 2001. The Promise of Dolphin Assisted Therapy. *Parks Recreation*. 36 (5): 46–51.
- Nathanson, D.E. 1980. Dolphins and Kids: A Communication Experiment. *Congress Proceedings of the XVI World Assembly of the World Organization for Preschool Education*, 447–451
- Nathanson, D.E. 1989. Using Atlantic Bottlenose Dolphins to Increase Cognition of Mentally Retarded Children. *Clinical and Abnormal Psychology*. Lovibond, P. and Wilson, P. (ed.). North Holland: Elsevier, 233–242.

- Nathanson, D.E. 1998. Long-Term Effectiveness of Dolphin-Assisted Therapy for Children with Severe Disabilities. *Anthrozoös*. 11 (1): 22–32.
- Nathanson, D.E., and deFaria, S. 1993. Cognitive Improvement of Children in Water with and without Dolphins. *Anthrozoös*. 6 (1): 17–29.
- Nathanson, D.E., deCastro, D., Friend, H. et al. 1997. Effectiveness of Short – Term Dolphin Assisted Therapy for Children with Severe Disabilities. *Anthrozoös*. 10 (2/3): 90–100.
- Nathanson, David E. 2007. Reinforcement Effectiveness of Animatronic and Real Dolphins. *Anthrozoös*. 20 (2):181–194.
- Nimer, J. & Lundahl, B. Animal-assisted therapy: A meta-analysis (2007). *Anthrozoös*, 20, 225– 238
- Reinger Cantiello, P. (2009). *L'asino che cura. Prospettive di onoterapia*. Roma: Carocci Faber.
- Serpell, J. A. (2002). Anthropomorphism and anthropomorphic selection: Beyond the “cute response.” *Society & Animals*, 10 (4), 437-454.
- Serpell, James. 2003. “Anthropomorphism and Anthropomorphic Selection—Beyond the ‘Cute’ Response.” *Society & Animals* 11(1): 83-100.
- Šinkariova, L., Gudonis, V., Trakūnaitė, V. 2008. Naminių gyvūnėlių laikymo sąsajos su įvairiais žmogaus gyvenimo aspektais. *Jaunųjų mokslininkų darbai*. Nr.2 (18).
- Velde, B.P., Cipriani, J., Fisher, G. 2005. Resident and Therapist Views of Animal-Assisted Therapy: Implications for Occupational Therapy Practice. *Australian Occupational Therapy Journal*. 52, 43–50.

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<http://grundtvigpat1.jimdo.com/>

<http://grundtvigprojectpat.blogspot.com.es/p/meetings.html>

<http://suririga.blogspot.com>

<http://www.animalassistedintervention.org/>

<http://www.en.esaat.org/>

Because we are not able to evaluate, monitor or certificate work done in the field of animal therapies in Europe or worldwide, we are not able to recommend places you can go in order to benefit from such therapies or activities.

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