

«Элита» соединили полезные, но скучные тренировки с захватывающими компьютерными играми, которых создано уже более 20. Важный этап обратной связи и возможности непрерывных занятий – создание Интернет-системы домашних игровых тренировок. Информация о ходе игровых сессий, их длительности и результатах доступны на веб-странице. Инструктор осуществляет дистанционный контроль, корректирует программу и дает рекомендации.

Ключевые слова: аутизм, система интенсивной нейрофизиологической реабилитации (СИНР), компьютерные игры, Интернет-система домашних игровых тренировок.

and the rehabilitation center «Elita» useful but boring training was combined with exciting computer games. For patients with impairments in psychomotor sphere more than 20 specialized computer games were developed. It is important to form the effective feedback and the possibility of continuous employment – creation of an Internet system home trainings. Information on the game sessions, their duration and the results are available on the web page. Instructor provides control adjusts the program and make recommendations.

Key words: autism, INRS, computer games, home web-based rehabilitation.

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APPLICATION OF ANIMAL-ASSISTED THERAPY IN CHILDREN WITH AUTISM SPECTRUM DISORDERS

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Summary.

The diagnosis of autism spectrum disorder (ASD) has steadily increased in recent years. Families of children with autism often pursue different interventions in the hope of ameliorating particular aspects associated with ASD. Animal assisted intervention (AAI), which has been defined as the use of an animal to provide therapeutic benefit based on a positive relationship between the client and the animal, is a therapeutic measure for children with autism spectrum disorder (ASD). Used on the basis of the Centre's psychosocial rehabilitation of children and adolescents, Feldman Ecopark animal-assisted therapy for children with autism spectrum disorder provides a number of perspectives to the child's benefit: the psychological aspect; the social aspect and the technical aspect. The article describes new combinations of disability treatment called Equine Assisted Therapy and Canistherapy in Ukraine. The results of this study indicate that combined EAT and Canistherapy may have a wide range of therapeutic benefits for children with ASD; such program is a unique form of therapy as it can influence so many areas of physical and psychological functioning.

Key words:

autism spectrum disorder, animal-assisted therapy, equine-assisted therapy, canistherapy.

Introduction

The diagnosis of autism spectrum disorder (ASD) has steadily increased in recent years, with estimates indicating that one in every 88 children is on the spectrum. Evidence compiled by the World Health Organization [1] has

suggested that by 2020 "childhood neuro-psychiatric disorders will rise by over 50% internationally to become one of the five most common causes of morbidity, mortality, and disability among children" [1]. This statistic is particularly disturbing when added to the reality

that most of the treatments and services children and adolescents typically receive have not been evaluated to determine their efficacy across developmental periods, and that even when clinical trials have included children and adolescents, the treatments have rarely been studied for their effectiveness in the diverse populations and treatment settings that exist in this country.

ASD is characterized by deficits in social communication and restricted, repetitive behaviors [2]. Most experts agree that with early behavioral intervention, children can make exceptional gains in functioning [3]. However, the etiology of ASD remains unknown.

Perhaps influenced by this, there are a multitude of intervention choices available for children with ASD. In a survey conducted by Green and colleagues, over 100 different interventions for ASD were identified. Unfortunately, not all available interventions have demonstrated empirical evidence of effectiveness, but continue to be used [4– 7].

Families of children with autism often pursue these interventions in the hope of ameliorating particular aspects associated with ASD. Unfortunately, the implementation of interventions lacking empirical support often result in families of children with autism wasting precious time, money, and resources.

The international charity fund «Alexander Feldman's Foundation» in the territory of Feldman Ecopark creates the Center of psychosocial rehabilitation for children and adolescents with psychological, emotional and behavioral disorders (further – the Center). Priority task is restoration of bio-psycho-social harmony of the person in conditions of the modern urbanistic deformed habitat. The feature of the Center is that developed in common Department of Psychotherapy of the Kharkov Medical Academy of Postgraduate Education (KMAPE) and National League of Psychotherapy, Psychosomatic and Medical Psychology of Ukraine (NLPU) the Program of rehabilitation in children and adolescents considers their age features, interests and requirements. To each age group special approach is applied that, certainly, makes the process of rehabilitation – most interesting and informative for all family members besides its undoubted medical influence.

The main objectives of the Center are:

1. To provide psychosocial correction of violations of the emotional, personal and behavioral sphere in children with psychological disorders.
2. To optimize mental health and living standards for the purpose of increase of social adaptation of children in a family, collective and society.

3. To form effective skills of social interaction.

4. To prevent early boundary disorders of mental development in children of preschool and school age.

5. To organize a psychoeducational program for «Child – parental relationship» within social and psychological trainings and seminars.

6. To get students acquainted with the concept of work with children with the above mentioned disorders to students.

7. Development and deployment system of social and psychological trainings for parents with use of elements of an animal-assisted therapy.

8. To coordinate and develop the methodical guide to work with children who have disorders of psychological development, emotional and behavioral disorders.

9. To carry out advisory works for teachers (making training at home), practical psychologists of average educational institutions and parents (or persons who replace them) concerning development, training and education of the child.

The basic principles of work of the Center offer:

- complex psychocorrective assistance to children and family as a whole;–
- long duration of carrying out program and subsequent maintenance of a family as social unit (opportunity to participate in young naturalist programs which include: carrying out competitive creative competitions, volunteer actions, scientific activity on the basis of work with animals; carrying out the closed parent groups as feedback which are directed on maintaining results of correction and psychoprevention of new difficulties in family and social relationship);
- the principle of a multimodality (simultaneous and versatile approach to the solution of psychological problems in advised families such experts as psychotherapist, psychologist in practice, the neuropathologist, the logopedist, the speech pathologist is carried out);
- all system of rendering medico-psychological correction for children and families is based on an ecosystem with primary use in animal-assisted therapy work.

Animal assisted intervention (AAI) is an alternative intervention that has developed into a diverse field with practitioners in occupational, speech, behavioral, and cognitive therapies, treating individuals with a range of medical issues and developmental disabilities [8–10].

AAI is an umbrella term that includes animal-assisted therapy (AAT) and animal-assisted activities (AAA). AAT is an intervention in which the animal is an essential part of reaching a specified goal. On the other hand, AAA refers to activ-

ities in which animals are involved for potential benefit, but specific goals are not identified and the activities do not have to be conducted by trained personnel. Given the broad scope of the terms, the practice and implementation of AAI is not standardized and difficult to evaluate [11].

The human-animal interaction theory suggests that the relationship between humans and animals results in positive physical and psychological benefits. Specifically, this theory postulates that humans view animals as sources of non-judgmental social interaction [12; 13]. There may be other mechanisms at work, such as the animal serving as a mediator or translational object for social needs [13]. Families of children with ASD may select AAI as an intervention so that their child can be in close proximity to and interact with trained, therapeutic animals, yet evidence supporting the efficacy of these programs is limited [14]. AAI have become increasingly popular for individuals with developmental disabilities, giving rise to programs with dogs, horses, dolphins, and more, both nationally and internationally [14–19]. These programs focus on a variety of goals and are utilized throughout varying disciplines [20]. As an intervention gains popularity, it is imperative that evidence supporting its therapeutic benefits, or lack thereof, be identified so that families and practitioners can make informed decisions regarding intervention selection. The purpose of the review is to describe the characteristics of interventions involving animals as well as evaluate the results on symptoms associated with ASD. With AAI being promoted as an ASD intervention, it is imperative that the effectiveness to improve symptoms specific to ASD is known [21; 22].

The purpose of the article

In the Center, we have studied 27 patients with ASD (diagnoses of autism, Asperger's Disorder, or Pervasive Developmental Disorder, Not Otherwise Specified were included.). The ages of participants ranged from 4 to 8 years old. Of the 27 participants, 16 participants were male (59,3%) and 11 were female (40,7%). Among the participants, 13 (48,1%) were diagnosed with autism, 3 (11,1%) with Asperger syndrome, and 2 (7,5%) with PDD-NOS. An additional 9 participants (33,3%) were having ASD. In addition to ASD diagnoses, 10 participants (37,1%) were having an additional diagnosis. This most frequently included a hyperactivity disorder.

Methods used during research

Each child took a three-month rehabilitation course – half course in the form of equine-assisted therapy and half course as Canistherapy.

The Dependent variables were Social Skills, Behavior and Communication. Participants were not blind to treatment purposes; several participants simultaneously received treatments such as speech-language therapy, physical therapy, and psychomotor rehabilitation during the study. During Canistherapy participant simultaneously received special education course.

The measurement of the effectiveness of the study was included: parent interview, direct observation of social contacts, researcher-created questionnaire and Vineland Adaptive Behavior Scales (VABS).

AAT is not a style of therapy like cognitive-behavioral or rational-emotive therapy, as a therapist can incorporate the animal into whatever professional style of therapy the therapist already enacts. The presence of the animal can facilitate a trust-building bond between the therapist and client. The animal relieves some tension and anxiety of therapy and interacting with the animal can be entertaining and fun. Through this interaction animals can help clients focus on difficult issues by aiding in the client's ability to get in touch with the associated feelings. Sharing these feelings with or about the animal can initiate the emotional sharing process with the therapist. For the client, the animal is seen as a friend and ally, thus presenting a safe atmosphere for sharing. The animal offers nurturance through a presentation of unconditional acceptance.

Peculiarities of equine-assisted therapy. «Equine-assisted therapy» can be described as treatment with the help of a horse, today it is used within the realms of psychotherapy, speech or physical therapy. EAT sessions were held four times a week for 1,5 months with a total number of 24 sessions for each patient. Each session overall lasted about 30 min and included a first phase on the ground (5 min of hand walking the horse) followed by 20 min of horseback riding, and a final phase on the ground (closure, 5 min). A first Phase was aimed at teaching children basic safety rules and improving their knowledge of the horses (i. e. its morphology, behavior). In the second phase, children were encouraged to follow instructions given by the therapist and to interact with the horse in both verbal and nonverbal way. Horse riding activities were introduced from the first session and comprised riding activities with vaulting girth (5–6th sessions). These activities were planned so that children could learn basic riding elements such as position, mounting, dismounting, walk, trot etc. Riding lessons included instructions on how to walk the horse,

hold the reins, and guide the horse around objects. At the end of each riding session a further phase on the ground was planned (closure, 5 min) during which children were dismounted and were encouraged to feed the horses and communicate with them (saying "Thanks" and "Goodbye"); activities included also a brief phase of socialization with the team.

Peculiarities of Canistherapy. Experts define canistherapy as supportive therapy by a dog, therapy with the help of a dog's presence, or therapy using the love of a dog. Any positive effect that a dog has on a man can be considered canistherapy. The participants in canistherapy are the dog owner, the breeder, the handler, the client, the client's family, the interdisciplinary team (specialist physicians, psychologists, psychiatrists, special educators and social workers), the institution in which canistherapy is implemented and the dog-therapist. The dog and the dog handler are called the canistherapeutic team. The contact with the dog has benefits for a child from a number of perspectives:

1) the psychological aspect – the client gets a friend who ignores his handicap (in the case of handicapped clients), shows limitless love and devotion, reduces or even eliminates the feeling of loneliness, and provides some physical stimulation by caressing etc.;

2) the social aspect – the client accompanied by a dog encourages sympathy, he makes contacts with people easier, the dog as a protector increases the client's feeling of safety;

3) the technical aspect – the dog can help the client (e. g. a wheelchair person) be more independent, it can allow him longer walks, it can pull the wheelchair with the help of a special harness, and can carry articles in bags on its back etc.

The feature of this therapy in the Center was not the mere presence of the dog that made the difference, but rather therapist-orchestrated child-dog interactions and child-therapist interactions. The types of child-dog activities started with simple ones and gradually increased to more complex tasks over several sessions. Example activities were modeling and verbally encouraging approaching and exploring the dog through touching, holding, and petting activities; engaging the child to pet and touch the dog identifying body parts; feeding; ball-throwing; bubble-blowing; and grooming. Additionally, having a dog present, elicited a better attitude and increased frequency and duration of on task behaviors. The addition of a therapy dog becomes a useful agent to help a child engage in a therapeutic activity. If cre-

atively planned, some goals may be achieved while a child interacts with a therapy dog.

The presence of a dog has brought about a greater use of language, social interactions, and decreased problematic behaviors in children with autism.

A repeated measure analysis of variance of animal-assisted interventions with 27 children with ASD demonstrated significant improvements in behaviors with fewer autistic behaviors (for example, hand posturing, humming and clicking noises, spinning objects, repetitive jumping and roaming) and more socially appropriate ones (for example, joining the therapist in games, initiating activities by giving the therapist balloons to blow up or balls to throw, reaching up for hugs, and frequently imitating the therapist's actions).

Results and discussion

After carrying out AAT program the following results were received:

Positive «+» the marker of Social Skills, Behavior and Communication demonstrated stabilization of family relationship, positive educational progress and normalization of interpersonal relationship with peers.

Neutral «+ \-» the marker of social adaptation testified to stabilization of family relationship, the average level of educational progress and possible instability in interpersonal relationship with peers.

Negative «-» a marker of social adaptation testified to stabilization of family relationships, low level of educational progress and unstable positive interpersonal relationships with peers.

The results received after carrying out medico-psychological correction at a primary stage of work of the Center showed the efficiency of 74,5% in children with hyperkinetic disorders, of 86,0% in children with disorders of social functioning, of 50,0% in children with specific disorders of development of school skills and of 48,1% in children with specific disorders of motivation.

Conclusions

The results of this study indicate that combined EAT and Canistherapy may have a wide range of therapeutic benefits for children with ASD; such program is a unique form of therapy as it can influence so many areas of physical and psychological functioning. The fact that the children gain experiences that are usually out of their reach is an essential therapeutic benefit of such AAI. The positive influence on the quality of life for both children and parents is an important finding. Another important aspect of this program seen in this study is that it successfully motivates children with ASD to actively participate in the therapy.

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ПРИМЕНЕНИЕ АНИМАЛОТЕРАПИИ У ДЕТЕЙ С РАССТРОЙСТВАМИ АУТИСТИЧЕСКОГО СПЕКТРА

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Аннотация. В последние годы значительно возросло количество детей с расстройствами аутистического спектра (РАС). Семьи детей с аутизмом часто проводят различные вмешательства в надежде облегчить состояние детей с расстройствами аутистического спектра. Психосоциальная реабилитация с помощью животных определяется как использование животного для обеспечения терапевтического эффекта, основанного на положительной связи между клиентом и животным, что служит альтернативным вариантом терапии детей с РАС. Используемая на базе Центра психосоциальной реабилитации детей и подростков «Фельдман Экопарк» анималотерапия для детей

ЗАСТОСУВАННЯ АНИМАЛОТЕРАПІЇ У ДІТЕЙ З РОЗЛАДАМИ АУТИСТИЧНОГО СПЕКТРУ

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Анотація. В останні роки значно зросла кількість дітей з розладами аутистичного спектру. Сім'ї дітей з аутизмом часто проводять різні втручання в надії полегшити стан дітей з розладами аутистичного спектру. Психосоціальна реабілітація за допомогою тварин визначається як використання тварини для забезпечення терапевтичного ефекту, заснованого на позитивному зв'язку між клієнтом і твариною, що служить альтернативним варіантом терапії дітей з розладом аутистичного спектру. Використовувана на базі Центру психосоціальної реабілітації дітей та підлітків «Фельдман Екопарк» анималотерапія для дітей з розладами

с РАС обеспечивает ряд перспектив для благополучия ребенка: психологический, социальный и технический аспекты. В статье описано сочетание новых для Украины методов реабилитации детей с аутизмом: иппотерапия и канистерапия. Результаты этого исследования свидетельствуют о том, что комбинирование иппотерапии и канистерапии значительно расширяет спектр терапевтических преимуществ для детей с РАС. Такая программа является уникальной формой терапии, так как может повлиять на различные области физического и психологического функционирования детей.

Ключевые слова: расстройства аутистического спектра, анималотерапия, иппотерапия, канистерапия.

аутистичного спектру забезпечує ряд перспектив для благополуччя дитини: психологічний, соціальний і технічний аспекти. У статті описано поєднання нових для України методів реабілітації дітей з аутизмом: іппотерапія і канистерапія. Результати цього дослідження свідчать про те, що комбінування іпотерапії та канистерапії може мати широкий спектр терапевтичних переваг для дітей з розладами аутистичного спектру. Така програма є унікальною формою терапії, так як може вплинути на різні галузі фізичного і психологічного функціонування дітей.

Ключові слова: розлади аутистичного спектру, анималотерапія, іпотерапія, канистерапія.

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THE USE OF EQUINE ASSISTED PSYCHOTHERAPY AMONG THE DEMOBILIZED MEMBERS OF THE ANTITERRORIST OPERATION WITH PTSD, LOCATED ON REHABILITATION IN SANATORIUM CONDITIONS

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Summary. Attention is paid to historical background various mental disorders and behavior of psychogenic origin, particularly to post-traumatic stress disorder. The paper approaches problems of definition, etiology and pathogenesis, primary diagnosis of PTSD among the demobilized members of the antiterrorist operation in sanatorium rehabilitation. The emphasis is placed on the basic groups (clusters) of neurotic, pathological personality and psychopathological symptoms of this group of patients. Attention is paid to medical and psychological rehabilitation of demobilized members of the antiterrorist operation in sanatorium conditions, especially to new and innovative approaches to the problem and new forms of intervention including EAP at the premises of Feldman Ecopark Center of psychosocial rehabilitation for children and adolescents.

Key words: Post-traumatic stress disorder, maladaptation, demobilized members of the antiterrorist operation, the program of medico-psychological rehabilitation, sanatorium resort conditions, Equine Assisted psychotherapy.

Introduction

Global civilization processes that occur in the late twentieth century and at the beginning of the third millennium are controversial. Significant role in these processes is played by urbanization factors. In addition, social progress accompanied by increased social tensions

and, consequently, the level of conflict. This negative social potential has accumulated due to catastrophic events – social upheaval, wars and anthropogenic disasters [1–3].

Today, when military operations and forced migration still take place in Ukraine, every day there appear new groups of people exposed