

THE PARENT AS CO-THERAPIST IN ABA THERAPY - ALTERNATIVE FORM OF THERAPY FOR CHILDREN WITH AUTISM APPLIED IN THE CLINIC OF PEDIATRIC PSYCHIATRY CLUJ – NAPOCA(II)

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Abstract: The present study aims to evaluate the effectiveness of the intervention programs in the recovery process for children with autism. These programs should cover the functioning environment of the child so the parent's active involvement is very important. Specific treatment costs for families of children with autism in Romania are very high, since services are covered by the health insurance only in hospitals, clinics and mental health centers, which cannot provide therapy for all the patients, so most children are working with therapists in private. The Clinic of Pediatric Psychiatry from Cluj Napoca offers behavioral intervention (ABA) to children with autism. One of the clinic programs proposed the parents involvement as co-therapists for a more effective intervention.

Cuvinte cheie: autism, terapia ABA, intervenție comportamentală, recuperare

Rezumat: Studiul de față își propune să evalueze eficiența programelor de intervenție în procesul de recuperare a copilului cu autism. Aceste programe trebuie să privească cadrul de funcționare al copilului, astfel încât implicarea activă a părintelui are un rol foarte important. Costurile terapiei specifice pentru familiile copiilor cu autism din România sunt foarte ridicate, deoarece serviciile sunt decontate de CAS doar în cadrul spitalelor, clinicilor și centrelor de sănătate mintală, acestea neputând asigura terapia pentru toți pacienții, majoritatea copiilor lucrând cu terapeuți în regim privat. Clinica de Psihiatrie Pediatrică din Cluj Napoca oferă servicii de intervenție comportamentală (ABA) copiilor cu autism. Într-unul din programele clinicii s-a propus implicarea părinților ca și co-terapeuți pentru a crește eficiența intervenției.

INTRODUCTION

Autism affects how a child perceives and processes sensory information, having a varying severity. Some children need a companion in almost all areas of their daily lives, while others may be able to operate at a very high level and can even attend a normal school. Although the disorder lasts throughout life, causing varying degrees of social isolation, the treatment can make a significant improvement in the lives of the persons with autism. Early diagnosis and appropriate treatment have increased the number of people with autism who are able to live independently when they reach adulthood. Parents of children with autism should have a proactive approach, to learn about this disease and about its treatment, to work closely with the people involved in their child care. The best treatment for a child with autism is represented by a team approach and a structured program constantly applied.

parent. Also, the study aims to evaluate the extent to which the parent involvement in the child recovery increases the effectiveness of the behavioral intervention.

The parents and caregivers will know how to manage crisis situations that occur frequently in the lives of children with autism.

MATERIAL AND METHOD

The study was conducted over a period of 12 months (November 2009 - November 2010). The children were assessed at enrollment, at 6 and 12 months. There were studied two groups of subjects, aged between two and five years:

- 10 children received behavioral intervention involving the parent and the psychologist, weekly;
- 10 children received behavioral intervention only at home with the parent who has been trained regularly how to work with the child.

The study *inclusion criteria* for the experimental sample were:

- 1) children diagnosed with autism;
 - 2) to receive behavioral intervention only in The Clinic of Pediatric Psychiatry from Cluj Napoca and at home, for six months;
 - 3) to not have other disorders than autism.
- The study *inclusion criteria* for the control sample were:
- 1) to be diagnosed with autism;
 - 2) to correspond in terms of mental and chronological age to the children in the other group;
 - 3) to not have other disorders than autism.

THE AIM OF THE STUDY

To compare the effectiveness of two types of recovery programs, in a longitudinal study. Children have benefited from ABA therapeutic intervention conducted by a psychologist with the parent as co-therapist or ABA therapeutic intervention applied only by the parent at home, the parent being regularly trained by the therapist. The aim of this paper was to demonstrate that, following the therapy program (six months), the children who benefited from ABA therapy with the psychologist and the parent as co-therapist, will be more closely to the normal level of cognitive development for age than the children who benefited from the intervention only with the

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All parents gave their consent to participate in the study by signing the informed consent form, having at all times the opportunity to refuse further participation in the study.

Measuring Tools: CARS Diagnostic Scale (Child Autism Rating Scale)

CARS scale was developed in 1980, for the diagnosis of autism by Schopler E., Reichler R. J. and Rochen B. and allows the symptoms in normal, mild autism, moderate autism and severe autism. The scale includes 15 items: the relationship with other people, imitation, emotional response, use of the body, objects use, adaptation to change, visual responses, auditory responses, taste, touch, smell response and use, fear, verbal and non verbal communication, activity level, level and consistency of intellectual response, the overall impression.

The therapeutic intervention was conducted 2:1, over a period of six months, under the guidance and training of the therapist in The Clinic of Pediatric Psychiatry from Cluj-Napoca.

RESULTS

After the initial assessment of the data (T1), we analyze the correlation between the demographic variables and each criterion variable used (severity of symptoms and mental age) to see if there are demographic variables significantly influencing the criterion variables that must be controlled. This was followed by the analysis of each instrument on the normality distribution (skew indices and vaulting), extreme values registration and standard error to determine what type of statistical analysis will be used when comparing the groups of subjects.

Initially (T1), the groups showed no significant differences since the factors that could influence the children's progress have been controlled (the type of intervention, associated symptoms) in order to evaluate whether the intervention provided by a psychologist and parent as co therapist is better than that provided solely by parents following the therapist's training.

Table no. 1. CARS results from experimental and control group (T1)

Experimental group			Control group		
mild	moderate	severe	mild	moderate	severe
10%	10%	80%	0%	20%	80%

Descriptive analysis of data shows a normal distribution, data are collected independent, groups are equal and do not require a variance homogeneity analysis. For the group comparison we used the t test for independent samples.

There are differences between the environmental factors of the two groups, but they are not significant. The results obtained in the Levene test (indicating the two groups variance) are not significant (sig = .522, > .05), so the variance of the two groups is equal. The t test results revealed no significant differences between the two groups $t(10) = -.467, p = .646, \alpha = .05$.

Table no. 2. CARS results from experimental and control groups (posttest-T2)

Experimental group			Control group		
mild	moderate	severe	mild	moderate	severe
30%	40%	50%	0%	40%	60%

Comparing the two groups in the posttest phase (T2), there was a significant difference between the CARS scores for the two groups, the scores decreasing significantly more in the experimental group than in the control group, the difference being of 8 points for the experimental group and 4 points for the control group.

Figure no. 1. Evaluation experimental group

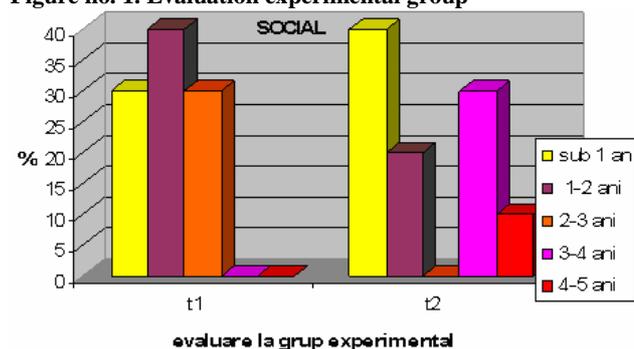
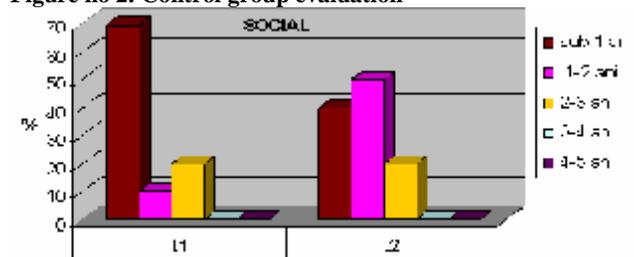


Figure no. 2. Control group evaluation



In terms of social interaction, the two groups have achieved increased age level, but for the control group these acquisitions were not very important, the increase observed being from under a year to 1-2 years. From the experimental group, 30% of the children reached the age of 3-4 years and 10% at the age of 4-5 years.

CONCLUSIONS

Our results show that the symptoms severity decreased significantly more in the group who received therapy with the psychologist, although the group, who benefited from the therapy only with the parent, improved too. Because the parent is trained in autism as a disorder, in how behavioral intervention is done and gets some goals to reach at home, it is expected to appear changes in the symptoms reduction. However it seems that this is not enough, an effective treatment assuming specialized intervention to create a coherent recovery plan, with gradual skills development and specific strategies to reduce stereotypes, sensory integration, communication development, goals difficult to accomplish by the parent, even if he is monitored by a specialist.

An important aspect is that after six months of intervention, even if the symptoms severity reduced, the reduction was not spectacular. The best results were seen in the cases with severe autism that passed to a moderate autism, fewer cases reaching the mild autism level. In the control group, the children have passed only from severe autism to moderate autism and in a smaller percentage.

This is important because parents expect miraculous results, but the visible results are the crossing from severe to moderate autism, because children are more present in the environment, stereotypes are reduced, can be independent in tasks, make progress in reaching personal autonomy. Improvements in moderate and mild autism are more difficult to achieve because that involve language and cognitive skills, subtleties related to the theory of mind and socializing, so that apart from the behavioral therapy intervenes also the developmental capacity of the child.

The children, who benefited from ABA therapy with the psychologist and the parent as co-therapist, will have better acquisitions on the levels of development compared to the

children receiving the intervention only with the parent at home. With regard to language acquisition and cognitive development, the parent does not have sufficient knowledge and skills to do an effective intervention; his role is simply to generalize the skills already developed by the therapist in 1:1 therapy. Important is that the parents can develop the motor and socialization skills of the child by understanding the nature of the problems associated with the autism and receiving specific guidelines for intervention. Therapy with the parent is better than no intervention, the parent may be guided by a therapist and receive feedback to help him understand the difficulties associated with the autism and the need for his involvement in the therapy. The expected results should be communicated to the parent and should be as shown by our study, improvements in the level of interaction, motility and personal autonomy. If the parent wants language development and progress in terms of cognitive development, he should appeal to specialized intervention.

BIBLIOGRAPHY

1. Schopler, E., Reichler, R.J., DeVellis, R.F., Daly, K. (1980). Toward objective classification of childhood autism: Childhood Autism Rating Scale (CARS). *J Autism Developmental Disorders* vol 10, p. 91–103.
2. Smith, T., & Lovaas, O.I. (1998). Intensive, early, behavior analytic intervention: The UCLA Young Autism Project. *Infants and Young Children*, 10, 67-78.
3. Thompson, R.J., Gustafson, K., Hamlett, K.W., Spock, A. (1992). Stress, coping and family functioning in the psychological adjustment of caregivers and adolescents with cystic fibrosis. *Journal of Pediatric Psychology*, 17, p.741-755
4. Theo Peeters – *Autismul, teorie și intervenție educațională*, Iași, edit. Polirom, 2009