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Should Parent-child Therapy Include Teachers to Treat Depressed Preschoolers When caregiver Shows Affective Disorders?

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Review article

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Summary: *It is known that a child affected by depressive disorders often has a parent affected by the same illness: because of this, it is a difficult procedure to apply Parent Child Interaction Therapy and Emotion Development Therapy combined, if the caregiver feels depressed himself/herself (see: Luby, 2009). Therefore, the main aim of this work is to propose a four people relationship instead of the usual three people relationship, generally present in the course of the mentioned therapy; so we will have: the child, the caregiver, the psychologist and the teacher. Teachers usually spend a lot of time with school or preschool children and with their parents: so they are in a unique position to give a significative emotional support both to caregivers and to children themselves.*

To develop our project, further research is needed, which directly analyses depressed preschoolers' brain function by an f. M. R. I. study, comparing the activation of amygdala, hippo-campus and prefrontal cortex and the degree of depression, when children are viewing facial expressions of negative affect (Gaffrey M. S., Luby J. L., Belden A. C., Hirshberg J. S., Barch D. M.., 2011; Suzuki et al., 2012). If our idea of using teachers who support the caregiver is correct, we should find a slight positive correlation, or no correlation at all, between the severity of depression and the activity of cortical and limbic areas when the teacher is present: this hypothetical result should mean that the child is learning how to deal with negative emotions to fight depression. Of course, the modification of Parent Child Interaction Therapy and Emotion Development Therapy combined and the f. M. R. I. study are just proposals and they might be subjects of future works.

Keywords: *preschoolers, depressive disorders, caregiver, role of the teacher, Parent Child Interaction Therapy and Emotion Development Therapy combined, f. M. R. I. study.*

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Bi li obiteljska terapija trebala uključiti i učitelje u liječenje depresivnih predškolaca kad skrbnik pokazuje afektivne poremećaje?

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Pregledni članak

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Sažetak: *Poznato je da dijete oboljelo od poremećaja depresije često ima roditelja s istim poremećajem: zbog toga je teško primijeniti obiteljsku interakcijsku terapiju (Parent Child Interaction Therapy) kombiniranu s terapijom za razvoj emocija (Emotion Development Therapy) ako je sam skrbnik depresivan (Luby, 1999). Stoga je glavni cilj ovoga rada predstaviti četvorostrani odnos u terapiji umjesto trostranoga, uobičajenoga za spomenutu terapiju: tako imamo dijete, skrbnika, psihologa i učitelja. Učitelji obično provode dosta vremena sa školskom i predškolskom djecom i njihovim roditeljima: stoga oni imaju jedinstvenu mogućnost da pruže značajnu emocionalnu potporu i skrbnicima i samoj djeci.*

Za razvoj našega projekta potrebno je daljnje istraživanje kojim će se funkcionalnom magnetskom rezonancijom (f. M. R. I.) izravno analizirati funkcije mozga predškolske djece oboljele od depresije, uspoređujući aktivnost amigdale, hipokampusa i predfrontalnoga korteksa sa stupnjem depresije dok djeca gledaju negativne izraze lica (Gaffrey M. S., Luby J. L., Belden A. C., Hirshberg J. S., Barch D. M., 2011; Suzuki et al., 2012). Ako je ispravna naša ideja o ulozi učitelja kao potpore skrbnicima, trebali bismo doći do male pozitivne korelacije, ili korelacije uopće ne bi trebalo biti, između jačine poremećaja depresije i aktivnosti kortikalnih i limbičnih područja kad je prisutan učitelj: ovaj hipotetski rezultat trebao bi značiti da dijete uči kako se nositi s negativnim emocijama u borbi protiv depresije. Naravno, modifikacija obiteljske interakcijske terapije kombinirane s terapijom za razvoj emocija i funkcionalna magnetska rezonancija tek su prijedlozi i mogli bi biti predmeti budućih radova.

Ključne riječi: *predškolska djeca, poremećaji depresije, skrbnik, uloga učitelja, obiteljska interakcijska terapija (Parent Child Interaction Therapy) kombinirana s terapijom za razvoj emocija (Emotion Development Therapy), funkcionalna magnetska rezonancija (f. M. R. I.).*

1. Introduction

Depressive disorders are particularly devastating when strike a child at an early age: the child may get lost in his/her depression since he/she has no sufficient life experience and appropriate cognitive skills to make a proper distinction between illness and health (see Shuchter *et al.*, 1997). In 1984, Kashani and collaborators found 4% of preschoolers in a child development unit who met the DSM III criteria for depression (Kashani J. H., Ray J. S., Carlson G. A., 1984; A.P.A., 1980); in a 1997 study by the same author, 2.7% of 300 preschoolers met the DSM-IV criteria for dysthymia (Kashani J. H., Allan W. D., Beck N. C. Jr, Bledsoe Y., Reid J. C., 1997; A.P.A., 2000). Nevertheless, although Kashani identified depression in preschool children already in 1984, the study of this illness arising during preschool period is relatively new.

Luckily, as Luby has pointed out: "... over the past decade, empirical data have become available that refute traditional developmental theory suggesting that preschool children would be developmentally too immature to experience depressive affects" (Stalets & Luby, 2006.). Basic developmental studies, serving as a framework and catalyst for these clinical investigations, have also shown that preschool children are far more emotionally sophisticated than previously recognized. While some of these emotion developmental findings are new, others have been available for some time but never previously applied to clinical models of childhood affective disorders. These findings on early emotion development, obtained using narrative and observational methods, provide a key framework for studies of early childhood depression, as they establish that very young children are able to experience complex affects seen in depression, such as guilt and shame. Indeed, guilt and shame have been observed to occur more frequently in depressed than in healthy preschoolers (Luby, 2009).

In a recent review by Mocinic and Feresin (2012) the symptoms of depressive disorders are precisely defined for primary school children; but as Luby pointed out in 2009, symptoms of depression in preschool children look like those already found in school children, and, sometimes, in adults (Luby, 2009; Luby *et al.*, 2003; States & Luby, 2006). "Sadness is one of the most significant emotional-cognitive symptom among depressed children (usually, bi-polar children often show more irritability than sadness). During major depressive episode, pupils perceive a deep sadness or cry without being able to understand the reason why they are behaving this way. Depressed or bi-polar children during depressive episodes show a clear emotional-cognitive symptom: they do not feel pleasure in anything, lose their normal desire to play with classmates (*i.e.* they stop participating in games activities). Depressed or bi-polar children during both depressive as manic episodes have their minds busy all day long, while

attention is directed toward themselves, negatively influencing their ability to concentrate on common activities at school. Negative self-evaluation and guilt is also an emotional-cognitive symptom: depressed children feel guilty more often compared to children who do not suffer from depression. Fatigue is a rare condition for healthy children, but it is a very common physical symptom among children suffering from depression or bi-polar disorder during depressive episodes. It can occur in a mild form without changing the child's habits, or can influence daily activities limiting the normal rhythm of life. On the contrary, hyperactivity with an increased energy is a frequent symptom during manic and hypo-manic episodes in bi-polar children.

A decrease in appetite may cause an unbalanced growth of child's body: he/she increases in height but remains equal in weight, with possible serious physical disorders. Abnormal decrease in appetite is considered a physical symptom and is usually connected with depressive disorder or bi-polar disorder (during depressive episodes). The opposite case, an increase in appetite, should not be confused with the normal growth process: it is considered abnormal, if there is a significant overweight, when the child eats food all the time and when the thought of eating interferes with daily activities. Abnormal increase in appetite is again considered a physical symptom and is generally connected with bi-polar disorder during manic or hypo-manic episodes.

The symptom of insomnia occurs when the child sleeps less than his/her necessity and hypersomnia when child sleeps longer than his/her necessity (he/she often has difficulty getting up in the morning). At the same time, insomnia is divided into: initial insomnia and intermediate insomnia during the night" (Mocinic & Feresin, 2012: 99 – 102).

Although many studies have shown the existence of depression in preschool children, a few works of scientific literature are available to guide treatment once the diagnosis of depression is established (Luby, 2009.).

Play therapy, which is a common therapy for very young children, uses techniques engaging children in recreational activities to help them coping with their problems and fears. During this kind of therapy, the psychologist observes the child while he/she is playing with a variety of toys, expressing in this way his/her unpleasant feelings which cannot be communicated verbally. According to many researchers, this kind of therapy requires more experiments to prove its effectiveness as a tool to cope with depression in preschoolers (Luby, 2009).

Verbal therapy is not especially helpful in dealing with very young children who haven't developed verbal level to correctly express their feelings, lacking linguistic sophistication to describe any kind of emotional experience.

Regarding antidepressants, there is a general concern among mental health providers about this medical treatment, since they prefer to avoid drug in that

young children. Researchers have different opinions about using antidepressants in primary school children and adolescents (Bailly, 2006; Wagner, 2005): some are *pro* these medicines, others against them. On the other hand, regarding preschoolers, there is a common concern among researchers about the use of this medical treatment (also newer-generation antidepressants). According to Luby: "The use of antidepressants is not a first- or even second-line treatment for early childhood depression at this time"(Luby, 2009). Nulman and collaborators' study (Nulman I., Koren G., Rovet J., 2012) gives relevant information distinguishing the effects of maternal depression from the effects of exposure to a specific antidepressant (*e.g.* venlafaxina): indeed, this study included a group of women with histories of depression who had discontinued antidepressants prior to conception (mothers' depression was defined according to the criteria of DSM-IV). The preliminary conclusion of this study is that exposure to untreated maternal depression *in utero* and during early childhood is associated with worse cognitive and behavioural outcomes of children.

Recently, a parent-child psychotherapy has been developed for the treatment of preschool depression: it combines two separated therapies, that is Parent Child Interaction Therapy (P. C. I. T.) and Emotion Development Therapy (E. D.). The former (P. C. I. T.), originally developed in the 1970s to treat disruptive disorders in preschool children, comes from the common knowledge that the child is not an independent entity at this early age and the caregiver is a fundamental part of the child's psychological world, so this figure is always involved in this kind of therapy. The latter (E. D.) is designed to enhance the child emotional developmental capabilities through the use of emotional education. Parent Child Interaction Therapy – Emotion Development (P. C. I. T. – E. D.) combines the use of emotional education by enhancing the caregiver's capacity to serve as an effective external emotional regulator for the child. The primary goal of this therapy is to enhance the child's capacity to identify emotions in self and other people; the second goal is to teach the child how to develop healthy emotions; the third goal is to enhance the child's capability of experiencing positive affect at high intensity as well as the capacity to recover from negative affect: the hope is that the children will learn how to handle depressive symptoms and parents will reinforce those lessons. All this is based on the hypothesis that depressed children will be less reactive to positive stimuli and more reactive to negative stimuli than healthy children. As Luby explained in one of her articles: "P. C. I. T. – E. D. is a treatment which usually includes fourteen psychotherapeutic weekly sessions. During a single session, the therapist observes the child and the caregiver interaction through a one-way mirror. The setting contains also a microphone and an ear bud which allow more easily the therapist to interact with the caregiver to intervene more effectively on the child's behalf. In the case of

the depressed young child, enhancing positive emotion in response to incentive events and reducing negative emotion in response to frustrating or sad events are targets of treatment by coaching the parent to respond to the child during contrived (and spontaneous) *in vivo* experiences during the therapeutic session" (Luby, 2009: 978).

2. The present project

Parent-child therapy should include teachers when caregiver shows affective disorders: a new clinical approach to treat depressed preschoolers.

It is well known that depression runs in families: children affected by depressive disorders often have a parent affected by the same illness: this occurs probably because the two relevant causes of depression in children are: 1) living with a depressed parent; 2) inheriting depressive traits from him or her.

Our proposal is to include a person who is very affectively close both to the child as to the parent/caregiver: the teacher. He/she spends lots of time with school or preschool children and with their parents; therefore, he/she is in a unique position to give a strong emotional support both to caregivers as to children themselves. The idea to include a teacher, when the caregiver suffers from depression, came to us while reading two interesting studies, one by Vulic-Prtoric (Vulic-Prtoric, 2007) and the other by Mocinic and Feresin (Mocinic & Feresin, 2012) in which the authors emphasized the crucial role played by teachers to collaborate with psychologist for coping mood disorders in primary school children. In the work by Mocinic and Feresin, the researchers suggested a three steps precocious prevention program to be held at primary schools, as a way to fight depression in school children. They underlined the importance of screening kids for possible mood disorders, just as they are screened for visual acuity or other health problems.

Unfortunately, our present situation is more complicated than the mentioned ones (Vulic-Prtoric, 2007; Mocinic & Feresin, 2012): indeed preschoolers are younger than school children, so the caregiver is more affectively fundamental for them than for primary school children. Thus, we suggest that the teacher himself/herself needs to interact with the caregiver in order to help the caregiver to participate effectively in the treatment. Instead of the usual triadic relationship (child, caregiver, psychologist), we propose a different relationship (child, caregiver, psychologist and teacher), in which the four people follow a short-term program which generally may last 14 weeks (similar to Luby's program). During the first period of the program, the teacher must educate himself/herself attending specific classes, reading scientific papers and books on mood disorders in children; then the teacher can be trained by the psychologist to help the caregiver

in participating positively in the treatment, while the caregiver is following a personal psychotherapy (*e.g.* cognitive therapy). During the treatment itself, the teacher helps effectively the caregiver to encourage his/her child to obtain a normal emotion regulation, to work against the feeling of guilt, and to learn how to handle symptoms of depression.

To develop our project and have a direct confirmation of the validity of this kind of psychotherapy which includes the presence of a teacher, further research is needed which directly studies depressed preschoolers' brain function by using f. M. R. I., and compares experimentally the first condition, in which the teacher is present, with the second condition, in which the teacher is absent.

Researchers are starting to study brain functions in depressed preschoolers by means of f. M. R. I.: for example, a paper by Gaffrey *et al.* (2011) has indicated that "depressed preschoolers exhibited a significant positive relationship between depression severity and right amygdala activity when viewing facial expressions of negative affect... The results suggest that, similar to older children and adults with depression, amygdala responsivity and degree of depression severity are related as early as age 3" (Gaffrey *et al.*, 2011: 369). A more recent work by Suzuki *et al.* (2012) indicated that "smaller bilateral hippocampal volumes were associated with greater cortico-limbic activation to sad or negative faces versus neutral faces." It is known, indeed, that amygdala, hippo-campus and prefrontal cortex are strongly connected to perception of emotions in mammals. Further studies are needed to explore the relationship between degree of depression, emotions and activations of cortical and limbic areas; however, these findings are interesting because they show how developed emotions are and how sophisticated their perception is in children less than three years of age, even if they do not have the linguistic capacity to verbally express themselves.

To develop our project, we need to analyse depressed preschoolers' brain function by f. M. R. I. directly, comparing the activation of amygdala, hippo-campus and prefrontal cortex and the degree of depression when children are viewing facial expressions of negative affect, as Gaffrey and Suzuki recently did (Gaffrey *et al.*, 2011; Suzuki *et al.*, 2012). If our idea of using teachers together with the caregiver in the treatment is correct, we should find a slight positive correlation or no correlation at all between the severity of depression and the activity of cortical and limbic areas in case in which the teacher is present: this hypothetical result should mean that the child is learning how to deal with negative emotions to fight depression. Of course, the modification of P. C. I. T. – E. D. therapy and the f. M. R. I. study are just proposals and they might be subjects of future works.

References

1. Bailly, D. (2006.): "Safety of selective serotonin re-uptake inhibitor antidepressants in children and adolescents", *La Presse Medicale*, (35): 1507 – 1515.
2. *DSM III: Diagnostic and statistical manual of mental disorders* (3rd ed.) (1980): Washington, DC, USA: American Psychiatric Association.
3. *DSM IV-TR: Diagnostic and statistical manual of mental disorders* (4th ed., Text revision) (2000): Washington, DC, USA: American Psychiatric Association.
4. Gaffrey M. S., Luby J. L., Belden A. C., Hirshberg J. S., Barch D. M. (2011.): "Association between depression severity and amygdala reactivity during sad face viewing in depressed preschoolers: an fMRI study", *Journal of Affective Disorders* 129 (1 – 3): 364 – 70.
5. Kashani J. H., Allan W. D., Beck N. C. Jr, Bledsoe Y., Reid J. C. (1997.): "Dysthymic disorder in clinically referred preschool children", *Journal of the American Academy of Child Adolescent Psychiatry* 36 (10): 1426 – 33.
6. Kashani J. H., Ray J. S., Carlson G. A. (1984.): "Depression and depressive-like states in preschool-age children in a child development unit", *American Journal of Psychiatry* (141): 1397 – 1402.
7. Luby J. L. (2009.): "Early Childhood Depression", *American Journal of Psychiatry* (166): 974 – 979.
8. Luby J. L., Heffelfinger A. K., Mrakotsky C., Brown K. M., Hessler M. J., Wallis J. M., Spitznagel E. L. (2003.): "The clinical picture of depression in preschool children", *Journal American Academy of Child Adolescent Psychiatry* (42): 340 – 348.
9. Močinić S., Feresin C. (2012.): "The importance of collaboration between teachers and school psychologist for helping children to cope with mood disorders", *Occasional papers in education and lifelong learning (OPELL): An international Journal.* 6 (1 – 2): 98 – 108.
10. Nulman I., Koren G., Rovet J. (2012.): "Neurodevelopment of children following prenatal exposure to venlafaxine, selective serotonin reuptake inhibitors, or untreated maternal depression", *American Journal of Psychiatry* (169): 1165 – 1174.
11. Shuchter S. R., Downs N., Zisook S. (1997.): *La depressione: conoscenze biologiche e psicoterapia*, Italian translation, Milano: Raffaello Cortina Editore.
12. Stalets M. M., Luby J. L. (2006.): Preschool depression, *Child & Adolescent Psychiatric Clinics of North America,* 15 (VIII – IX): 899 – 917.

13. Suzuki H., Botteron K. N., Luby J. L., Belden A. C., Gaffrey M. S., Babb C. M., Nishino T., Miller M. I., Ratnanather J. T., Barch D. M. (2012.): "Structural-functional correlations between hippocampal volume and cortical and limbic emotional responses in depressed children", *Cognitive, Affective, & Behavioral Neuroscience*, Oct 5 [Epub ahead of print].
14. Vulić-Prtorić, A. (2007.): *Depresivnost u djece i adolescenata*, Jastrebarsko: Naklada Slap.
15. Wagner, K. D. (2005.): "Pharmacotherapy for major depression in children and adolescents", *Progress in Neuro-psychopharmacology & Biological Psychiatry* (29): 819 – 826.

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Dovrebbe la terapia familiare includere anche gli insegnanti nella cura dei bambini in età prescolare colpiti dalla depressione nei casi in cui tutore rivela dei disturbi affettivi?

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Articolo compilativo

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Riassunto: *Com'è noto, il bambino che soffre di disturbi depressivi è spesso figlio di genitori che rivelano il medesimo disturbo: per questo motivo l'applicazione della terapia familiare interattiva (Parent Child Interaction Therapy) risulta difficile da applicare, specie se in combinazione con la terapia per lo sviluppo delle emozioni (Emotion Development Therapy) e se il tutore stesso è depressivo (vedi: Luby, 1999). Lo scopo principale di questo lavoro è, quindi, presentare un rapporto a quattro nella terapia invece di un rapporto a tre, usuale nella prassi. Si hanno, dunque, il bambino, il tutore, lo psicologo e l'insegnante. Gli insegnanti solitamente passano molto tempo con i bambini in età scolare e prescolare e con I loro genitori e questo li mette in una posizione unica da cui offrire il supporto emotivo significante ai tutori e ai bambini stessi.*

Per lo sviluppo del nostro progetto si rende necessaria un'ulteriore indagine che, con una funzionale risonanza magnetica, analizzerà direttamente le funzioni cerebrali dei bambini in età prescolare malati di depressione confrontando l'attività dell'ammiddale, ippocampo, e della corteccia prefrontale con il grado della depressione mentre i bambini

osservano le espressioni negative sui volti (Gaffrey et al., 2011; Suzuki et al., 2012). Se la nostra idea circa il ruolo dell'insegnante come supporto al tutore è esatta, dovremmo arrivare ad una piccola correlazione positiva, o ad una correlazione inesistente, tra il livello di disturbo depressivo e l'attività delle aree limbiche e quelle della corteccia quando è presente l'insegnante. Questo ipotetico risultato dovrebbe significare che il bambino sta imparando come gestire le emozioni negative nella lotta contro la depressione. Naturalmente, la modificazione della terapia familiare interattiva combinata con la terapia per lo sviluppo delle emozioni e la risonanza magnetica funzionale sono solo proposte e potrebbero diventare oggetto dei lavori futuri.

Parole chiave: *Bambini in età prescolare, disturbi depressivi, tutore, il ruolo dell'insegnante, terapia familiare interattiva (Parent Child Interaction Therapy) combinata con la terapia per lo sviluppo delle emozioni (Emotion Development Therapy), risonanza magnetica funzionale.*

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