

## Revisão da Literatura

# A systematic review to study the efficacy of cognitive behavioral therapy for sexually abused children and adolescents with posttraumatic stress disorder

Revisão sistemática para estudar a eficácia de terapia cognitivo-comportamental para crianças e adolescentes abusadas sexualmente com transtorno de estresse pós-traumático

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### Abstract

**Background:** Posttraumatic stress disorder (PTSD), one of the possible consequences of sexual abuse of children and adolescents, may be found in about 40% to 50% of the cases. **Objective:** Conduct a systematic review of studies investigating the use of cognitive behavioral therapy (CBT) for the treatment of sexually abused children and adolescents with PTSD. **Methods:** A search for randomized clinical trials that evaluated PTSD in children and adolescents from 1980 to February 1, 2006 was conducted in the following databases: MedLine, EMBASE, LILACS, PsycLIT, PsycINFO, Cochrane Depression, Anxiety and Neurosis Group Database of Trials, Cochrane Controlled Trials Register, Science Citation Index (SciSearch), and PILOTS. References in all clinical trials selected were hand-searched. **Results:** Of the 43 studies initially selected, only three met inclusion criteria. The following comparisons were found in the studies: CBT to treat child and family member *versus* no treatment (waiting list); CBT to treat only child, only parents, or both *versus* community care; and trauma-focused CBT *versus* child-centered therapy (CCT). Results for CBT treatment of PTSD were better than no treatment (waiting list) ( $p < 0.05$ ), community care ( $p < 0.01$ ) and CCT ( $p < 0.01$ ). The comparison of child-only CBT and family CBT (parents or caretakers and children) did not reveal any significant differences in efficacy, and both showed significant improvement of symptoms. A meta-analysis was conducted to compare the efficacy of CBT (child-only and family) *versus* no treatment (waiting list and community care) in the remission of patients who completed treatment. Remission rates in treatment and control groups were 60% and 20%, and this difference in favor of CBT was statistically significant ( $RR = 0.51$ ; 95%CI 0.29-0.88;  $p = 0.02$ ). No controlled studies were found that compared CBT and pharmacotherapy. **Discussion:** Treatment with CBT reduces PTSD symptoms in sexually abused children and adolescents, with no differences between therapy with only the victim or with the victim and a family member. No studies compared CBT and pharmacotherapy or the efficacy of combined treatments.

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**Keywords:** PTSD, sexual abuse, children, treatment, systematic review.

### Resumo

**Contexto:** O transtorno de estresse pós-traumático (TEPT), uma das possíveis consequências de abuso sexual de crianças e adolescentes, pode ser encontrado em aproximadamente 40% a 50% dos casos. **Objetivo:** Conduzir uma revisão sistemática de estudos investigando o uso de terapia cognitivo-comportamental (TCC) para o tratamento de crianças e adolescentes abusadas sexualmente com TEPT. **Métodos:** Uma pesquisa por ensaios clínicos randomizados que avaliaram TEPT em crianças e adolescentes de 1980 a 1º de fevereiro de 2006 foi conduzida nas seguintes bases de dados: MedLine, EMBASE, LILACS, PsycLIT, PsycINFO, Cochrane Depression, Anxiety and Neurosis Group Database of Trials, Cochrane Controlled Trials Register, Science Citation Index (SciSearch) e PILOTS. As referências em todos os ensaios clínicos foram localizadas manualmente. **Resultados:** Dos 43 estudos inicialmente selecionados, apenas três preencheram critérios de inclusão. As seguintes comparações foram encontradas nos estudos: TCC para tratar a criança e membros da família *versus* não tratamento (lista de espera); TCC para tratar apenas a criança, apenas os pais ou ambos *versus* Community Care; e TCC focada no trauma *versus* terapia centrada na criança (CCT). Os resultados para tratamento de TEPT com TCC foram melhores do que não tratamento (lista de espera) ( $p < 0,05$ ), Community Care ( $p < 0,01$ ) e CCT ( $p < 0,01$ ). A comparação de TCC voltada para a criança e TCC familiar (pais ou cuidadores e crianças) não apresentou diferenças significativas em eficácia e ambos apresentaram melhora significativa de sintomas. Uma metanálise foi conduzida para comparar a eficácia de TCC (criança apenas e família) *versus* não tratamento (Lista de Espera e Community Care) na remissão de pacientes que completaram o tratamento. As taxas de remissão nos grupos de tratamento e controle foram 60% e 20%, e essa diferença em favor da TCC foi estatisticamente significativa ( $RR = 0,51$ ; 95%CI 0,29-0,88;  $p = 0,02$ ). Não foram encontrados estudos controlados que compararam TCC e farmacoterapia. **Conclusões:** Tratamento com TCC reduz sintomas de TEPT em crianças e adolescentes abusados sexualmente, não havendo diferença entre terapia com somente com a vítima ou com a vítima e um membro da família. Não há estudos que compararam TCC e farmacoterapia ou a eficácia de tratamentos combinados.

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**Palavras-chave:** TEPT, abuso sexual, crianças, tratamento, revisão sistemática.

## Introduction

The prevalence of child sexual abuse, which is more frequent against girls, is estimated at 2% to 34%<sup>1,2</sup>. Sexual abuse is associated with severe impacts on the victims' mental health, which persist into adulthood. Adults that were abused sexually in childhood may have problems in interpersonal relationships and are predisposed to the development of physical and mental disorders, such as chronic pelvic pain, personality, eating, psychosexual, affective, and anxiety disorders, and posttraumatic stress disorder (PTSD)<sup>3-15</sup>.

PTSD is therefore one of the possible consequences of childhood sexual abuse<sup>16</sup>. The prevalence of PTSD in sexually abused children and adolescents ranges from 21% to 74%, and mean prevalence rate is 40% to 50%<sup>17</sup>. Some studies show that rates may range from 0<sup>18</sup> to 90%<sup>19</sup> depending on the definition of abuse and the methodology used to collect data. The diagnostic criteria of PTSD for children and adolescents are the same used for adults<sup>20</sup>. The most common symptoms in populations of children and adolescents with PTSD are hypervigilance, irritability, restlessness, and aggressiveness. Children try hard to avoid thoughts, feelings, activities and places associated with the trauma event or that may remind them of the event. They may show difficulties in remembering the event, concentration deficits, and interpersonal isolation<sup>21,22</sup>. Dissociative symptoms may also be found<sup>23</sup>. Comorbidities are frequent<sup>24</sup>, and the most common are depressive and anxiety disorders<sup>25</sup>, attention deficit and hyperactivity, often confused with PTSD in children, and substance use, particularly by adolescents<sup>26</sup>.

Four reviews analyzed the treatment of sexually abused children and adolescents. King *et al.*<sup>27</sup> conducted a conventional review of CBT treatments of sexually abused children<sup>27</sup>. They included studies published from 1980 to 1999: four randomized clinical trials, two open clinical trials, one multiple baseline investigation, and two case reports. They concluded that CBT is effective in the treatment of sexually abused children. Ramchandani and Jones<sup>28</sup> published a systematic review of psychological treatments for sexually abused children<sup>28</sup>. Their review included 12 controlled clinical trials using different treatment modalities published from 1997 to 2002. CBT was found to be effective, particularly for symptomatic children. Hetzel-Riggin *et al.*<sup>29</sup> conducted a meta-analysis of the outcomes of therapies for sexually abused children and adolescents to investigate the efficacy of different types of individual and group treatments. They included 28 open and randomized studies published from 1975 to 2004, and concluded that psychological treatment yields better outcomes than no treatment, and that individual CBT is most effective for symptoms of psychological distress, whereas group CBT is most effective for low self-concept.

The purpose of this study was to conduct a systematic review to investigate the efficacy of CBT to treat sexually abused children and adolescents with PTSD symptoms.

## Methods

Studies selected for the systematic review should meet the following inclusion criteria: a) controlled clinical trials of CBT treatment, either alone or combined with pharmacotherapy, for sexually abused children and adolescents with PTSD; b) trials whose patients met DSM-IV<sup>30</sup> or ICD-10<sup>31</sup> PTSD diagnostic criteria and were 0 to 18 years old; c) clinical trials that used a comparative group and that reported remission rates, clinical improvement and drop-out rates according to objective measurements and statistical analyses; d) randomized clinical trials that scored at least 2 points in the Jadad scale<sup>32</sup>, a system to evaluate the methodological quality of trials. Studies were excluded if they had a low methodological quality, represented by a score below two points in the Jadad scale, or drop-out rates equal to or greater than 30% in any of the study arms.

A search was conducted for randomized clinical trials that used pharmacotherapy, psychotherapy or both for children and adolescents with PTSD published from 1980 to February 2006 regardless of language, source of publication, and origin of the study. The general

search strategy was adapted to the characteristics of each database. The keywords used in this systematic review were: "posttraumatic stress disorder/stress disorder", "treatment/psychotherapy/pharmacology/drug therapy", "children", "adolescents", "randomized trials" and "clinical trials", "combined treatment/associated treatment". The following electronic databases were searched: MedLine, EMBASE, LILACS, PsycLIT, PsycINFO, Cochrane Depression, Anxiety and Neurosis Group Database of Trials, Cochrane Controlled Trials Register, Science Citation Index (SciSearch), and PILOTS.

References of studies found in the electronic search, book chapters and recently published theses were hand-searched to identify other trials. Study authors and PTSD specialists were contacted by e-mail to explain unclear methodological data or results. Controlled clinical trials that used CBT as a form of treatment of PTSD symptoms in sexually abused children were selected for individual evaluation of methodological quality by two investigators (CMP and DDM).

The search retrieved 565 studies. The first author (CMP) evaluated the studies and excluded those that did not investigate PTSD, or whose population was not composed of children and adolescents. Open trials, reviews, case reports, editorials and letters were also excluded. A total of 522 articles were excluded, and 43 were selected for individual analysis according to methodological quality and inclusion criteria by two independent investigators (CMP and DDM). Each investigator's findings were compared and, in case of disagreement, the inclusion or exclusion was decided by a third investigator (JJM).

## Results

Of the 43 studies selected, 3 met inclusion criteria<sup>33-35</sup> and 40 studies were excluded<sup>36-75</sup>. No controlled trials were found that used drugs or combined treatments (pharmacotherapy and psychotherapy).

The studies included (Table 1) reported data on 329 participants that completed treatment. The total sample was composed of 260 girls (79%) and 69 boys (21%) aged 5 to 17 years. Of the studies included, 2 were conducted in the United States<sup>33,34</sup> and 1 in Australia<sup>35</sup>. Data about ethnic status were obtained for 293 individuals only because one of the studies<sup>35</sup> did not report on ethnicity. Of the 293 individuals, 187 were white (64%), 74, black (25%), 14, Hispanic (5%), and 18 had other ethnic statuses (6%).

Most participants were recruited at sexual violence centers, healthcare units and community centers, or through contacts with mental healthcare professionals and school officials. Parents or caretakers nonoffending participated in all studies. Main exclusion criteria were psychotic disorders, severe developmental disorders, mental retardation, lack of consent from parents or guardians to participate in the study, risk for the participant or others, continuous unsupervised contact with perpetrator, current psychotherapy or use of medication, and suicidal behavior.

Sexual abusers in the studies analyzed were: parents (biological or adoptive), stepfathers, other members of the family, adults not in the family (neighbors, friends, and professionals), strangers, older adolescents (in the family or not). The types of sexual contact described in the studies were: touching/sexual contact (with or without clothes), simulated intercourse, oral-genital contact, vaginal-anal intercourse with penis or digital penetration.

The studies included in the analysis used CBT to treat sexually abused children and adolescents with PTSD symptoms. The 3 studies were controlled and only one used a waiting list<sup>35</sup>. The most frequent comorbidities associated with PTSD were anxiety and depressive disorders.

The studies included in this review conducted the following comparisons: CBT to treat child and family member *versus* waiting list; CBT (to treat only child, only parents, or both) *versus* community care; and trauma-focused CBT (TF-CBT) *versus* child-centered therapy (CCT). The main CBT techniques used in the 3 studies were: coping, psychoeducation, gradual exposure, body safety skills and role-play. Similar protocols were used for the treatment of children and family members<sup>34,35</sup>. CBT sessions were weekly and lasted

**Table 1.** Methodological characteristics of the studies reviewed

Study	Individuals	Types of treatment	Controls	Treatment duration	PTSD scale employed	Results
King <i>et al.</i> <sup>35</sup> , 2000	25 girls 11 boys 5-17 years	Child-only CBT Family CBT	Waiting list	20 weeks 1 session/week	Child Version of the ADIS	Improvement of PTSD symptoms in 60% of participants in the CBT group and in 20% of the control group; this difference was statistically significant ( $p < 0.05$ )
Deblinger <i>et al.</i> <sup>34</sup> , 1996	83 girls 17 boys 7-13 years	Child-only CBT Parental CBT Family CBT	Community care	12 weeks 1 session/week	K-SADS-PL-PTSD	Improvement of PTSD symptoms in 84% of participants in the CBT group and in 70% of the control group; this difference was statistically significant ( $p < 0.01$ )
Cohen <i>et al.</i> <sup>33</sup> , 2004	160 girls 43 boys 8-14 years	Child TF-CBT	CCT	12 weeks 1 session/week	K-SADS-PL-PTSD	Improvement of PTSD symptoms in 75% of individuals in the CBT group and in 49% of the control group; this difference was statistically significant for re-experiencing ( $p < 0.01$ ), avoidance ( $p < 0.001$ ) and hyperarousal ( $p < 0.01$ )

ADIS: Anxiety Disorders Interview Schedule for DSM-IV; CBT: cognitive behavioral therapy; CCT: child-centered therapy; K-SADS-PL-PTSD: Schedule for Affective Disorders and Schizophrenia for School-Age Children Present and Lifetime Version PTSD Section; PTSD: posttraumatic stress disorder; TF-CBT: trauma-focused cognitive behavioral therapy.

from 45 min to 1 h 30 min. Treatments lasted a mean number of 12 sessions.

Community care and waiting list were classified as no treatment. In the waiting list group, no contact was made with participants for 24 weeks<sup>35</sup>; in the community care group, parents were told about their children's symptoms and encouraged to seek therapy<sup>34</sup>.

Treatment in the CCT group lasted 12 weeks. In this type of treatment, frequently used by child sexual abuse response centers, a therapeutic relationship of trust is established, and parents and children are encouraged to direct the content and structure of their own treatment and to validate their experiences during treatment<sup>33</sup>.

The first study included in the analysis<sup>35</sup> had 36 participants aged 5 to 17 years, 24 in the CBT group and 12 in the waiting list group. It compared efficacy in a CBT group only for children, a family group (child and parents) and a no treatment group (waiting list). Of the 36 participants, 25 met PTSD criteria (69.44%) in the evaluation before treatment. In the CBT group, 15 of the 24 participants had PTSD symptoms in the evaluation before treatment (62.5%). At post-treatment assessment, the rate of participants with symptoms decreased significantly to 40% (6 of 15). In the waiting-list group, 10 of the 12 participants had PTSD symptoms before treatment (83.3%). At post-treatment, 80% still had symptoms (8 of 10). This difference between results was statistically significant ( $p < 0.05$ ). The rate of drop-outs in the child-only CBT group was 25% ( $N = 3$ ), in the family CBT group, 25% ( $N = 3$ ), and in the waiting-list group, 16.66% ( $N = 2$ ). No significant differences in outcomes or socioeconomic variables were found within groups or between participants that completed and those that did not complete the treatment.

Mean adjusted overall and partial scores in the child version of the Anxiety Disorders Interview Schedule for DSM-IV (ADIS) for PTSD were also obtained after treatment. In the CBT group, overall score was 7.03, significantly lower than the 11.3 found for the waiting-list group ( $p < 0.05$ ). Statistically significant differences were also found for partial scores: scores for re-experiencing symptoms were 1.61 in the CBT group and 2.93 in the waiting-list group ( $p < 0.05$ ); for avoidance symptoms, 2.94 in the CBT group and 5.01 in the waiting-list group ( $p < 0.05$ ); and for hyperarousal symptoms, 1.97 in the CBT group and 4.05 in the waiting-list group ( $p < 0.05$ ).

The second study included in the analysis<sup>34</sup> was conducted with 100 participants aged 7 to 13 years, and compared the efficacy of CBT treatment (children, parents, children and parents) and community care (control group) to evaluate the importance of parents in the treatment. Total drop-out rate was 10% (10 participants), but drop-out rates per group were not described. No differences were found in age, sex, ethnic group and pre-treatment scores in the comparison of the 10 individuals that dropped out with those that completed the treatment. Ninety participants were evaluated after treatment, and 71 met criteria for PTSD at pre-treatment assessment (78.89%), 38 in the CBT group (53.52%) and 33 in the control group (46.48%). At post-treatment, 16% of the participants in the CBT group and 10% of those in the community center group still had a diagnosis

of PTSD, and this difference, favorable to CBT, was statistically significant ( $p < 0.01$ ). The rate of improvement in treatments in which the children participated (groups with only children or parents and children) were greater than that found for the group in which they did not participate (parental group) ( $p < 0.01$ ).

The last study included in the analysis<sup>33</sup> compared the efficacy of trauma-focused CBT *versus* child-centered therapy (CCT) for PTSD. It included 229 participants, 114 in the CBT group and 115 in the CCT group. Of the 229 participants, 180 initiated treatment, and 158 had PTSD symptoms (87.78%), 75 in the CBT group (84.27%), and 83 in the CCT group (91.3%). In the post-treatment evaluation, the rate of patients that still had PTSD symptoms in the CBT group was 25.33% (19 of 75 participants), and, in the CCT group, 50.60% (42 of 83 participants). Improvement of PTSD in the CBT group was greater than in the CCT group for the symptoms of re-experiencing ( $p < 0.01$ ), avoidance ( $p < 0.001$ ) and hyperarousal ( $p < 0.01$ ). Children and parents treated in the CBT group had better outcomes than the control group, and differences were statistically significant ( $p < 0.001$ ). There was no difference in efficacy between children-only CBT and family CBT group results. The overall drop-out rate at post-treatment was 10.53 ( $N = 56$ ): 10.52 ( $N = 12$ ) in the CBT group, and 12.17 ( $N = 14$ ) in the CCT group. No significant differences in social and demographic characteristics were found between children and parents that dropped out and those who completed the treatment.

A meta-analysis was conducted to compare efficacy according to remission of patients that completed the treatment according to 2 studies<sup>34,35</sup> with a total of 96 participants, 53 in treatment groups, and 43 in control groups. Remission rates in treatment groups was 60%, and in control groups, 20%, and the difference in results, which favored CBT, was statistically significant ( $RR = 0.51$ ; 95%CI 0.29-0.88;  $p = 0.02$ ).

A meta-analysis to compare remission rates in children-only CBT and family CBT groups could not be conducted because data were not reported separately. The authors reported overall remission rates for CBT groups, that is, the sum of child-only CBT and family CBT. In addition, continuous data could not be evaluated because the two comparable studies<sup>34,35</sup> used different instruments to measure outcomes: the ADIS (child version), and the Schedule for Affective Disorders and Schizophrenia for School-Age Children Present and Lifetime Version PTSD Section (K-SADS-PL-PTSD). A meta-analysis comparing the acceptance of treatment in the child-only or family CBT groups and the no treatment groups was also not possible because one of the studies<sup>34</sup> did not report details of drop-out rates.

## Discussion and conclusion

Cognitive-behavioral therapy (CBT) showed to be effective in the treatment of PTSD symptoms in sexually abused children and adolescents according to post-treatment results reported in the studies discussed here. Our analysis suggests that CBT is more effective than CCT or no treatment (waiting list and community care).

Negative beliefs and feelings associated with self-blame for abuse are common in victims and their parents. Information about abuse provided to parents and children, such as data on epidemiology, consequences of trauma, and the role of parents on how their children will deal with trauma, contribute to reducing the distress caused by trauma<sup>21,34,35,46</sup>. Techniques such as gradual exposure enable individuals to evoke trauma memories associated with sexual abuse. Evoked contents may be restructured by means of psychoeducation, coping, and cognitive restructuring, which may reduce anxiety and PTSD symptoms, as well as body safety skills, which teach individuals to protect themselves from future abuse, especially when the victim is still exposed to risk. Response to treatment is associated with type, frequency and intensity of abuse, patient age, degree of relationship between perpetrator and victim, and the way trauma is perceived<sup>75-77</sup>. The presence of parents in the treatment, particularly for younger children, has a positive effect on the prognosis of PTSD and other consequences of abuse. Such participation may help children to express problems caused by trauma and may improve the relationship with parents<sup>46,78</sup>.

Our findings about the efficacy of CBT for PTSD are similar to those reported in other reviews<sup>28,29</sup>. Systematic reviews provide a critical analysis of studies, but are also exposed to bias because authors tend to publish studies with positive results, which are, therefore, easier to locate and be included in reviews. The stringent criteria adopted for the inclusion of studies in this review, such as the requirement that drop-out rates be lower than 30%, excluded important studies. Although included in other reviews, the studies conducted by Celano *et al.*<sup>40</sup> and Deblinger *et al.*<sup>46</sup>, for example, did not meet our inclusion criteria. The use of a validated and well-known scale for methodological evaluation and the use of a cut-off point of 2 in the Jadad scale were useful tools in the preparation of this review.

One of the limitations of the studies analyzed in this review was the inclusion of children and adolescents as part of the same sample. As children and adolescents are at different developmental phases, trauma repercussions and adaptation to treatments may vary significantly. The small sample size in the studies was another limitation.

No randomized clinical trials of pharmacotherapy alone or in combination with CBT were found. Such studies should be conducted to investigate the efficacy of pharmacotherapy and to find out whether combined treatments are more effective than isolated approaches. Patients with diagnosis of sexual abuse and substance dependence should be included in these studies because dependence is a prevalent comorbidity among sexually abused adolescents. Such studies, however, should study boys and girls separately.

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## References

- Ackerman PT, Newton JE, McPherson WB, Jones JG, Dykman RA. Prevalence of post traumatic stress disorder and other psychiatric diagnoses in three groups of abused children (sexual, physical and both). *Child Abuse Negl.* 1998;22:759-74.
- Walker JL, Carey PD, Mohr N, Stein DJ, Seedat S. Gender differences in the prevalence of childhood sexual abuse and in the development of pediatric PTSD. *Arch Womens Ment Health.* 2004;7:111-21.
- Arata CM. From child victim to adult victim: a model for predicting sexual revictimization. *Child Maltreat.* 2000;5:28-38.
- Epstein JN, Saunders BE, Kilpatrick DG. Predicting PTSD in women with a history of childhood rape. *J Trauma Stress.* 1997;10:573-88.
- Fondacaro KM, Holt JC, Powell TA. Psychological impact of childhood sexual abuse on male inmates: the importance of perception. *Child Abuse Negl.* 1999;23:361-9.
- Gladstone G, Parker G, Wilhelm K, Mitchell P, Austin MP. Characteristics of depressed patients who report childhood sexual abuse. *Am J Psychiatry.* 1999;156:431-7 Erratum in: *Am J Psychiatry.* 1999;156:812.
- Hetzl MD, McCanne TR. The roles of peritraumatic dissociation, child physical abuse, and child sexual abuse in the development of post-traumatic stress disorder and adult victimization. *Child Abuse Negl.* 2005;29:915-30.
- Hulme PA, Agrawal S. Patterns of childhood sexual abuse characteristics and their relationships to other childhood abuse and adult health. *J Interpers Violence.* 2004;19:389-405.
- Jonzon E, Lindblad F. Adult female victims of child sexual abuse multitype maltreatment and disclosure characteristics related to subjective health. *J Interpers Violence.* 2005;20:651-66.
- Levitan RD, Parikh SV, Lesage AD, Hegadoren KM, Adams M, Kennedy SH, et al. Major depression in individuals with a history of childhood physical or sexual abuse: relationship to neurovegetative features, mania, and gender. *Am J Psychiatry.* 1998;155:1746-52.
- McLean LM, Gallop R. Implications of childhood sexual abuse for adult borderline personality disorder and complex posttraumatic stress disorder. *Am J Psychiatry.* 2003;160:369-71.
- Nelson EC, Heath AC, Madden PA, Cooper ML, Dinwiddie SH, Bucholz KK, et al. Association between self-reported childhood sexual abuse and adverse psychosocial outcomes: results from a twin study. *Arch Gen Psychiatry.* 2002;59:139-45.
- Ullman SE, Filipas HH, Townsend SM, Starzynski LL. Correlates of comorbid PTSD and drinking problems among sexual assault survivors. *Addict Behav.* 2006;31:128-32.
- Zavaschi ML, Graeff ME, Menegassi MT, Mardini V, Pires DW, Carvalho RH, et al. Adult mood disorders and childhood psychological trauma. *Rev Bras Psiquiatr.* 2006;28:184-90.
- Zoellner LA, Goodwin ML, Foa EB. PTSD severity and health perceptions in female victims of sexual assault. *J Trauma Stress.* 2000;13:635-49.
- Putnam FW. Ten-year research update review: child sexual abuse. *J Am Acad Child Adolesc Psychiatry.* 2003;42:269-78.
- Rodriguez N, Van de Kemp H, Foy DW. Posttraumatic stress disorder in survivors of childhood sexual and physical abuse: a critical review of the empirical research. *J Child Sex Abus.* 1998;7:17-45.
- Sansonnet-Hayden H, Haley G, Marriage K, Fine S. Sexual abuse and psychopathology in hospitalized adolescents. *J Am Acad Child Adolesc Psychiatry.* 1987;26:753-7.
- Kiser LJ, Ackerman BJ, Brown E, Edwards NB, McColgan E, Pugh R, et al. Post-traumatic stress disorder in young children: a reaction to purported sexual abuse. *J Am Acad Child Adolesc Psychiatry.* 1988;27:645-9.
- Carlson EB, Dalnberg CJ. A conceptual framework for the impact of traumatic experiences. *Trauma Violence Abuse.* 2000;1:4-28.
- Carrion VG, Weems CF, Ray R, Reiss AL. Toward an empirical definition of pediatric PTSD: the phenomenology of PTSD symptoms in youth. *J Am Acad Child Adolesc Psychiatry.* 2002;41:166-73.
- Scheeringa MS, Zeanah CH, Myers L, Putnam FW. New findings on alternative criteria for PTSD in preschool children. *J Am Acad Child Adolesc Psychiatry.* 2003;42:561-70.
- Kaplow JB, Dodge KA, Amaya-Jackson L, Saxe GN. Pathways to PTSD, part II: Sexually abused children. *Am J Psychiatry.* 2005;162:1305-10.
- Famularo R, Fenton T, Kinscherff R, Augustyn M. Psychiatric comorbidity in childhood post traumatic stress disorder. *Child Abuse Negl.* 1996;20:953-61.
- Runyon MK, Faust J, Orvaschel H. Differential symptom pattern of post-traumatic stress disorder (PTSD) in maltreated children with and without concurrent depression. *Child Abuse Negl.* 2002;26:39-53.
- Kilpatrick DG, Acierno R, Saunders B, Resnick HS, Best CL, Schnurr PP. Risk factors for adolescent substance abuse and dependence: data from a national sample. *J Consult Clin Psychol.* 2000;68:19-30.
- King NJ, Tonge BJ, Mullen P, Myerson N, Heyne D, Ollendick TH. Cognitive-behavioural treatment of sexually abused children: a review of research. *Behav Cogn Psychother.* 1999;27:295-309.
- Ramchandani P, Jones DPH. Treating psychological symptoms in sexually abused children: from research findings to service provision. *Br J Psychiatry.* 2003;183:484-90.
- Hetzl-Riggin MD, Brausch AM, Montgomery BS. A meta-analytic investigation of therapy modality outcomes for sexually abused children and adolescents: an exploratory study. *Child Abuse Negl.* 2007;31:125-41.

30. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders. 4th ed. Washington: APA; 2000.
31. World Health Organization. Classificação de transtornos mentais e de comportamento da CID-10: descrições clínicas e diretrizes diagnósticas. Porto Alegre: Artmed; 2003.
32. Jadad AR, Moore RA, Carroll D, Jenkinson C, Reynolds DJ, Gavaghan DJ, et al. Assessing the quality of reports of randomized clinical trials: is blinding necessary? *Control Clin Trials*. 1996;17:1-12.
33. Cohen JA, Deblinger E, Mannarino AP, Steer RA. A multisite, randomized controlled trial for children with sexual abuse-related PTSD symptoms. *J Am Acad Child Adolesc Psychiatry*. 2004;43:393-402.
34. Deblinger E, Lippmann J, Steer R. Sexually abused children suffering posttraumatic stress symptoms: initial treatment outcome findings. *Child Maltreat*. 1996;1:310-21.
35. King NJ, Tonge BJ, Mullen P, Myerson N, Heyne D, Rollings S, et al. Treating sexually abused children with posttraumatic stress symptoms: a randomized clinical trial. *J Am Acad Child Adolesc Psychiatry*. 2000;39:1347-55.
36. Baker CR. A comparison of individual and group therapy as treatment of sexually abused adolescent females [Dissertation]. College Park (MD): University of Maryland; 1987.
37. Berliner L, Saunders BE. Treating fear and anxiety in sexually abused children: results of a controlled 2-year follow-up study. *Child Maltreat*. 1996;1:294-309.
38. Burke MM. Short-term group therapy for sexually abused girls: a learning theory based treatment for negative effects [Dissertation]. Athens (GA): University of Georgia; 1988.
39. Carbonell DM, Partelano-Barehmi C. Psychodrama groups for girls coping with trauma. *Int J Group Psychother*. 1999;49:285-306.
40. Celano M, Hazzard A, Webb C, McCall C. Treatment of traumagenic beliefs among sexually abused girls and their mothers: an evaluation study. *J Abnorm Child Psychol*. 1996;24:1-17.
41. Cohen JA, Mannarino AP. A treatment model for sexually abused preschoolers. *J Interpers Violence*. 1993;8:115-31.
42. Cohen JA, Mannarino AP. Factors that mediate treatment outcome sexually abused preschool children. *J Am Acad Child Adolesc Psychiatry*. 1996;35:1402-10.
43. Cohen JA, Mannarino AP. A treatment outcome study for sexually abused pre-school children: initial findings. *J Am Acad Child Adolesc Psychiatry*. 1996;35:42-50.
44. Cohen JA, Mannarino AP, Knudsen K. Treating sexually abused children: 1 year follow-up of a randomized controlled trial. *Child Abuse Negl*. 2005;29:135-45.
45. Deblinger E, McLeer SV, Henry D. Cognitive behavioral treatment for sexually abused children suffering post-traumatic stress: preliminary findings. *J Am Acad Child Adolesc Psychiatry*. 1990;29:747-52.
46. Deblinger E, Stauffer LB, Steer RA. Comparative efficacies of supportive and cognitive behavioral group therapies for young children who have been sexually abused and their nonoffending mothers. *Child Maltreat*. 2001;6:332-43.
47. De Luca RV, Boyes DA, Grayston AD, Romano E. Sexual abuse: effects of group therapy on pre-adolescent girls. *Child Abuse Review*. 1995;4:263-77.
48. Dominguez RZ. Evaluation of cognitive-behavioral and supportive treatments for sexually abused children: analyzing the process of change using individual growth curve analyses [Dissertations]. Houston (TX): University of Houston; 2002.
49. Downing J, Jenkins SJ, Fisher GL. A comparison of psychodynamic and reinforcement treatment with sexually abused children. *Elementary School Guidance and Counseling*. 1988;22:291-8.
50. Farrell SP, Hains AA, Davies WH. Cognitive behavioral interventions for sexually abused children exhibiting PTSD symptomatology. *Behav Ther*. 1998;29:241-55.
51. Friedrich WN, Luecke WJ, Beilke RL, Place V. Psychotherapy outcome of sexually abused boys: an agency study. *J Interpers Violence*. 1992;7:396-409.
52. Grayston AD, DeLuca RV. Group therapy for boys who have experienced sexual abuse: is it the treatment of choice? *J Child Adolesc Group Ther*. 1995;5:57-82.
53. Homstead K. An investigation of a sexual abuse group treatment program for adolescent victims of sexual abuse. Dissertation abstracts International. 1985;46(12-A), 3862 (University Microfilme number 86 - 02644).
54. Hyde C, Bentovim A. Some clinical and methodological implications of a treatment outcome study of sexually abused children. *Child Abuse Negl*. 1995;19:1387-99.
55. Jaberghaderi N, Greenwald R, Rubin A, Zand SO, Dolatabadi S. A comparison of CBT and EMDR for sexually-abused Iranian girls. *Clin Psychol Psychother*. 2004;11:358-68.
56. Jenson JM, Jacobson M, Unrau Y, Robinson RL. Intervention for victims of child sexual abuse: an evaluation of the children's advocacy model. *Child Adolesc Social Work J*. 1996;13:139-56.
57. Krakow B, Sandoval D, Schrader R, Keuhne B, Yau CL, Tandberg D. Treatment of chronic nightmares in adjudicated adolescent girls in a residential facility. *J Adolesc Health*. 2001;29:94-100.
58. Kruczek T, Vitanza S. Treatment effects with an adolescent abuse survivor's group. *Child Abuse Negl*. 1999;23:477-85.
59. Lanktree CB, Briere J. Outcome of therapy for sexually abused children: a repeated measures study. *Child Abuse Negl*. 1995;19:1145-55.
60. Mackey B, Gold M, Gold E. A pilot study in drama therapy with adolescents girls who have been sexually abused. *Arts Psychother*. 1987;14:77-84.
61. McGain B, McKinzey RK. The efficacy of group treatment in sexually abused girls. *Child Abuse Negl*. 1995;19:1157-69.
62. Meezan W, O'Keefe M. Multifamily group therapy: impact on family functioning and child behavior. *Fam Soc*. 1998;79:32-44.
63. Monck E. Evaluating therapeutic intervention with sexually abused children. *Child Abuse Review*. 1997;6:163-77.
64. Nolan M, Carr A, Fitzpatrick C, O'Flaherty A, Keary K, Turner R, et al. A comparison of two programmes for victims of child sexual abuse: a treatment outcome study. *Child Abuse Review*. 2002;11:103-23.
65. Oates RK, O'Toole BI, Lynch DL, Stern A, Cooney G. Stability and change in outcomes for sexually abused children. *J Am Acad Child Adolesc Psychiatry*. 1994;33:945-53.
66. Perez CL. A comparison of group play therapy and individual therapy for sexually abused children [Dissertation]. Greeley (CO): University of Northern Colorado, 1988.
67. Reeker J, Ensing D. An evaluation of a group treatment for sexually abused young children. *J Child Sex Abus*. 1998;7:65-85.
68. Rust JO, Troupe PA. Relationships of treatment of child sexual abuse with school achievement and self-concept. *J Early Adolesc*. 1991;11:420-29.
69. Scott TA, Burlingame G, Starling M, Porter C, Lilly JP. Effects of individual client-centered play therapy on sexually abused children's mood, self-concept, and social competence. *Int J Ther*. 2003;12:7-30.
70. Stauffer L, Deblinger E. Cognitive behavioral groups for nonoffending mothers and their young sexually abused children: a preliminary treatment outcome study. *Child Maltreat*. 1996;1:65-76.
71. Sullivan PM, Scanlan JM, Brookhouser PE, Schulte LE, Knutson JF. The effects of psychotherapy on behavior problems of sexually abused deaf children. *Child Abuse Negl*. 1992;16:297-307.
72. Tourigny M, Péladeau N, Bouchard C, Doyon M. Efficacité d'un programme de traitement des enfants abusés sexuellement. *Child Abuse Negl*. 1998;22:25-43.
73. Trowell J, Kolvin I, Weeramanthri T, Sadowski H, Berelowitz M, Glaser D, et al. Psychotherapy for sexually abused girls: psychopathological outcome findings and patterns of change. *Br J Psychiatry*. 2002;180:234-47. Erratum in: *Br J Psychiatry* 2002;180:553.
74. Verleur D, Hughes RE, de Rios MD. Enhancement of self-esteem among female adolescent incest victims: a controlled comparison. *Adolescence*. 1986;21:843-54.
75. Berliner L, Conte JR. The effects of disclosure and intervention on sexually abused children. *Child Abuse Negl*. 1995;19:371-84.
76. Goodman-Brown TB, Edelstein RS, Goodman GS, Jones DP, Gordon DS. Why children tell: a model of children's disclosure of sexual abuse. *Child Abuse Negl*. 2003;27:525-40.
77. Shaw JA, Lewis JE, Loeb A, Rosado J, Rodriguez RA. A comparison of Hispanic and African-American sexually abused girls and their families. *Child Abuse Negl*. 2001;25:1363-79.
78. Stevenson J. The treatment of the long-term sequelae of child abuse. *J Child Psychol Psychiatry*. 1999;40:89-111.