

What Treatments are Available for Childhood Sexual Abuse, and How do They Compare?

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Abstract

Child sexual abuse (CSA) is frequent, with rates for significant abuse estimated at 15-20% of the female population and 8-10% of the male population. Such CSA frequently leads to significant short-term and long-term sequelae including a multitude of psychiatric conditions such as post-traumatic stress disorder, anxiety disorder, and depression. However, treatment of CSA remains uncertain, with even the most widely recommended types of treatment, cognitive behavioural therapy (CBT) and trauma-focused cognitive behavioural therapy (TF-CBT), having not always been found to be statistically beneficial in studies of adult survivors. Furthermore, treatment of children and youth has been even less well researched. Many types of treatment have been recommended, including CBT, TF-CBT, eye movement desensitization and reprocessing (EMDR), play therapy, art therapy, and pet therapy. The aim of this review is to examine the various treatments recommended for CSA to date, and determine whether one specific treatment or a combination of treatments may be the most appropriate therapeutic approach for child and youth victims of CSA.

Keywords

Child; Sexual; Abuse; Incidence; Prevalence; Treatment; Therapy

Introduction

Child sexual abuse (CSA) is a highly prevalent social problem that impacts many children with the age from 2–17 regardless of race, socioeconomic status or ethnicity. Estimates of the rate of CSA from retrospective prevalence studies report a wide range, from 2%-45% (Finkelhor, 1994; Bolen & Scannapieco, 1999). A recent review of 39 retrospective prevalence studies concluded that the most frequently reported rates for girls with the age from 2-17 are between 10%-20%, and for boys being slightly below 10% (Pereda et al., 2009), which is consistent with an earlier review estimating the rate for girls at 15% and boys at 7% (Gorey & Leslie, 1997). Nonetheless, it needs to be recognized that the “true” incidence of CSA is difficult to accurately report as the vast majority of all victims of CSA never report it (Finkelhor et al., 2005).

There are sometimes significant psychological impacts from CSA, although it should be noted that not all CSA victims exhibit symptoms, with approximately 40% of CSA victims being asymptomatic (Kendall-Tackett et al., 1993; Finkelhor & Berliner, 1995). For the majority of individuals, however, there are frequent short-term and long-term psychological, emotional, physical, and social consequences including anxiety disorders, depressive disorders, eating disorders, sleep disorders, post-traumatic stress disorders (PTSD), substance abuse, depression, sexual promiscuity, sexual perpetration, academic underachievement, and increased risk of suicide attempts (Costas & Landreth, 1999; Corcoran & Pillai, 2008; Chen et al., 2010; Misurell et al., 2011). Of these conditions, the most frequent psychiatric diagnosis is PTSD, although only 36% of CSA survivors meet the diagnostic criteria (Berliner & Elliott, 2002). Thus, many victims do not receive a psychiatric diagnosis despite significant symptomatology. This difficulty in establishing a diagnosis makes comparing possible treatment approaches more difficult. For these reasons, attempts have been made to describe the full developmental effects utilizing a proposed diagnosis of Developmental Trauma Disorder, which more fully captures the consequences of interfamilial, early, chronic and often extreme exposure to trauma (Kolk, 2005; Goodyear-Brown et al., 2012). There have been changes in the Diagnostic and Statistical Manual, 5th Edition (DSM-V) which address some of these diagnostic issues and sexual assault is specifically mentioned.

Despite the lack of a clear consensus on diagnosis, there are a number of different treatment models which have been proposed as being useful to treat survivors of CSA. Of these, the most widely studied is cognitive behavioural therapy (CBT), although a recent review noted that “CBT may have a positive impact on the sequelae of child sexual abuse, most results were not statistically significant” (Macdonald et al., 2012). However, Gillies et al., (2012) found in

their review that the best effectiveness of evidence for treating PTSD in children resulted from CBT interventions. When CBT is used to address CSA symptoms, it is sometimes focused differently and can be termed Trauma-Focused Cognitive Behavioral Therapy (TF-CBT). Other treatments have also been suggested as being effective, and these include eye movement desensitization and reprocessing (EMDR), play therapy, art therapy, and pet therapy, and there is some evidence for each of these approaches improving symptoms related to CSA (Deblinger et al., 2001; Eggiman, 2006; Jaberghaderi et al., 2004; Cohen et al., 2005; Pifalo, 2006). In addition to individual therapy, a variety of group therapies have also been reported as being effective in reducing CSA symptomatology (Kruczek & Vitanza, 1999). Nonetheless, to date there is no gold standard treatment that exists to treat the wide range of possible symptoms that survivors of CSA may face.

To date, there has been one recent review considering a broad range of treatments for PTSD in children (Gillies et al., 2012). PTSD may manifest as a result of CSA. However, the review does not explicitly focus on PTSD resulting from child sexual abuse and includes sexual abuse, civil violence, natural disaster, domestic violence and motor vehicle accidents. Also, rarely considered are the potential benefits, and weaknesses, of individual therapy compared to group therapy. There isn't clear evidence to determine whether a specific therapy may be best, or if combinations of treatment approaches may yield better outcomes. This latter approach is used in several fields in medicine, where combination therapies are well accepted, but has not been widely examined in psychiatric research. Another aspect that is not commonly considered is how different treatments might have different benefits depending upon the age at which CSA was suffered, and the nature of the CSA. Additionally, the age at which individuals decide to seek treatment, or have treatment offered to them, may impact outcomes since it has been suggested that early intervention is beneficial in children, possibly since in part disruptive behaviours may increase the risk of peer rejection (Reiss & Price, 1996; Bagwell et al., 2011; DeSocio & Hootman, 2004). Therefore, the objective of this review is to examine the current evidence for the effectiveness of various interventions including various forms of CBT therapies, EMDR, play therapy, animal-assisted therapy, and group therapies for youth survivors of CSA. It is expected that this review will help provide evidence-based guidance to clinicians treating children

and youth who have been sexually abused. It should be noted, however, that there are large gaps in the research literature to date, which makes categorical advice difficult to give.

Methodology

We searched the PsycINFO and PubMed databases from 1970 to 2012 inclusive for potentially relevant articles, using the search terms "Child Sexual Abuse" combined with either "Treatment", "Therapy", "TF-CBT", "Play Therapy", "EMDR", "Pet Therapy", "CBT", or "Psychotherapy". Our initial search gathered approximately 200 articles; we then examined all articles which considered youth or children, and also the references from all these articles to give a more comprehensive review of the current literature.

It is important to note that the information in the published literature does not allow a formal meta-analysis to be carried out which would have compared these potential approaches in a more statistically rigorous manner.

Treatments and Interventions

Cognitive Behavioural Approaches

Cognitive behavioral therapy (CBT) has been suggested for use in adolescences for over 25 years (Adams, 1986). Over the past 10 years, a variation on this therapy, trauma-focused cognitive behavioural therapy (TF-CBT), has been proposed as more appropriate for youth, particularly in the short-term aftermath of child sexual abuse (Cohen, 2003). The core difference is that in TF-CBT therapy gradual exposure to the child's traumatic experience is central to the treatment process (Cohen & Mannarino, 2008), while exposure to traumatic events is not a requirement of standard CBT treatments. For this reason, studies examining these two treatment approaches are discussed separately.

Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)

TF-CBT is an intervention designed to decrease problems associated with childhood trauma such as CSA (Cohen & Mannarino, 2008). TF-CBT focuses on the trauma narrative and overcoming fears and anxieties related to the trauma history. The acronym PRACTICE has been used to describe TF-CBT and stand for Psycho-education and parenting skills, Relaxation skills, Affective regulation skills, Cognitive

coping skills, Trauma narrative and cognitive processing of the traumatic events, In-vivo mastery of trauma reminders, Conjoint child-parent sessions, and Enhancing safety and future developmental trajectory (Cohen & Mannarino, 2008).

A review of TF-CBT outcomes in 9 studies found that it significantly improved a variety of symptoms related to CSA, as measured by standardized behavioral questionnaires and checklists. Thus, there has been reported to be a reduction in PTSD symptoms (Cohen et al., 2007; Cohen et al., 2011; Feather & Ronan, 2006; Feather & Ronan, 2009), a reduction in anxiety (Cohen et al., 2005; Cohen et al., 2011; Deblinger et al., 2011; Mannarino et al., 2012), fewer behavioural problems (Stovall-McClough, 2004; Deblinger et al., 2011; Mannarino et al., 2012), decreased sexualized behaviour (Cohen et al., 2005; Deblinger et al., 2011; Mannarino et al., 2012), decreased child depression (Mannarino et al., 2012; Deblinger et al., 2011; Cohen et al., 2005; Stovall-McClough, 2004), reduced fear (Mannarino et al., 2012; Deblinger et al., 2011), reduced feelings of shame (Mannarino et al., 2012; Deblinger et al., 2011; Stovall-McClough, 2004), reduced dissociation (Cohen et al., 2005), increased coping skills (Mannarino et al., 2012; Deblinger et al., 2011; Feather & Ronan, 2006, Grasso et al., 2011), and increased credibility and trust (Stovall-McClough, 2004). In addition, there have been positive parental effects with studies demonstrating reduced parental depression (Mannarino et al., 2012; Deblinger et al., 2011), less parental distress surrounding their children being sexually abused (Deblinger et al., 2011; Mannarino et al., 2012), and increased positive parenting practices (Mannarino et al., 2012; Deblinger et al., 2011).

However, while research to date has demonstrated that TF-CBT treatment for adolescents who have suffered from CSA improves a wide range of symptoms, there has been considerable variation between studies in terms of outcomes measured, and this can make it difficult to compare results. For example, some researchers measured anxiety while others measured depression, even though it is quite possible that TF-CBT may improve symptoms of both conditions. Additionally, there is not a clear understanding of whether specific aspects of various treatments are more, or less, helpful. Additionally, the effects of age and gender upon the success of treatment, and the most advantageous time at which TF-CBT should occur following CSA, remain uncertain and these are all areas which need further research.

For this reason it is recommended that future studies administer a wider range of measures to better understand the full therapeutic benefits of TF-CBT, and more closely examine issues such as age, gender, and timing. It would also be helpful if there are consistent measures used in all studies to allow for comparisons to be made between them. In conclusion, of treatments studied to date, TF-CBT is the one with the greatest amount of research-based support for use in CSA. Nonetheless, there remains much that is unclear about the best approach and timing for individual patients (Feather & Ronan, 2009), as well as lack of clear evidence of effectiveness over the longer-term (Feather & Ronan, 2006), although there is some 12-month data (Mannarino et al., 2012). Also lacking is reliable information about comparative or combination therapies, so that it is difficult to be definitive about the best approach to use with TF-CBT, or whether or not it can usefully be combined with other treatments, for example art therapy or EMDR.

Cognitive Behavioral Therapy (CBT)

There have been several studies that have examined the use of CBT in improving the symptoms caused by CSA. In 6 CBT treatment studies, there is evidence of reduced behavioural problems (Deblinger et al., 1999, Deblinger et al., 1990; Stauffer & Deblinger, 1996), decreased sexualized behaviour (Stauffer & Deblinger, 1996), reduced depression (Deblinger et al., 1999, Deblinger et al., 1990; Habigzang et al., 2009), decreased PTSD symptoms (Deblinger et al., 1999; Habigzang et al., 2009; King et al., 2000), decreased anxiety (Deblinger et al., 1990; Habigzang et al., 2009; King et al., 2000), increased coping and safety skills (Deblinger et al., 2001), the ability to shift feelings of guilt and challenge beliefs and perception in regard to sexual abuse (Habigzang et al., 2009), increase trust and credibility (Habigzang et al., 2009) and reduced levels of fear (King et al., 2000). There is also evidence that CBT can reduce parental distress (Deblinger et al., 2001; Stauffer & Deblinger, 1996).

Thus, findings from CBT studies are comparable to those of TF-CBT studies, and it remains unclear if one approach is consistently better than the other. Again, there are not studies which clarify treatment issues around gender, sex, timing, and standardized outcomes, as well as possible combinations of treatments. Longer-term follow-up studies are also lacking.

It is also unclear if other forms of CBT may be effective in this patient population, particularly for younger children. Thus, recently a game-based cognitive

behavioural therapy (GB-CBT) group program has been proposed for younger children who have experienced CSA (Misurell et al., 2011). Preliminary findings suggested improvements in both internalizing and externalizing symptoms, and a reduction in sexually inappropriate behaviours. It remains to be determined if variants of CBT may prove to be more helpful than more traditional CBT approaches in a younger population.

Eye movement Desensitization and Reprocessing

There is currently little research on the effects of eye movement desensitization and reprocessing (EMDR) in adolescents who have experienced CSA. This is in contrast to studies using EMDR in adult populations, where it has been used to treat adult survivors of CSA (Edmond et al., 1999; Edmond & Rubin, 2008; Rothbaum, Astin & Marsteller, 2005). To date, there has only been one study which compared EMDR with CBT in a sample of sexually abused Iranian girls (Jaberghaderi et al., 2004). The findings from this study found that both treatments had large positive effects in terms of reduction of PTSD symptoms, with some smaller additional benefits on reducing behavioural problems. Although there were no statistically significant differences between the two treatments, self-reports generally favoured the use of EMDR over CBT. Additionally, the group treated with EMDR required fewer sessions than the CBT group. This was similar to findings in adults with PTSD, where both treatments were effective, but EMDR led to a more rapid recovery (Nijdam et al., 2012). It should be noted that currently there is also little research on the possible combination of EMDR and CBT, either in adults or in terms of youth who have experienced childhood sexual abuse.

A number of studies have found EMDR decreases post-traumatic stress related symptoms in adolescents (Ahmad et al., 2007; Chemtomb et al., 2002; Fernandez, 2007, Greenwald, 1994; Hensel, 2009; Oras et al., 2004; Tufnell, 2005; Adler-Nevo and Manassis 2005). It would be presumed that since CSA survivors demonstrated such stress-related symptoms, studies would have examined how EMDR benefited youth who have experienced CSA. However, there have been no studies specifically examining the effectiveness of EMDR in the CSA population, and so it isn't clear if this effectiveness of EMDR in traumatized youth also applies to traumatized youth who have experienced CSA. One of the reasons for concern that EMDR may not be as effective is that in

the studies of EMDR in youth to date, the patient population experienced primarily extra-personal trauma resulting from natural disasters (Chemtomb et al., 2002; Fernandez, 2007; Greenwald, 1994). The trauma of these events is different to the interpersonal trauma experienced from CSA. For example, issues of trust, space and boundaries are not violated when children have been exposed to natural disasters. Thus, there is a definite need for future research to be conducted to determine whether or not EMDR can be used to reduce traumatic symptoms in adolescents who have experienced CSA.

Play Therapy and Related Treatments

For over 30 years, it has been proposed that Play Therapy may be an important component of treatment, particularly for younger children (Delson and Clark, 1981). It is suggested that Play Therapy allows traumatized children to work through their problems in part because Play Therapy doesn't rely strictly on verbal communication, and thus it is able to address some issues in a way that talk therapy cannot (Miles, 1981; Bratton et al, 2005). Since it has been proposed that disclosure of CSA is an important part of the therapeutic and healing process (Arata,1998; Paine & Hansen, 2002; Schönbucher et al., 2012), it has been suggested that Play Therapy may help since children may lack the appropriate emotional and intellectual capabilities to disclose such abuse verbally, but may do so during play (Scott et al, 2003; Corder et al, 1990).

Studies of the use of Play Therapy in children who have experienced CSA showed a significant reduction in internalizing problems, such as anxiety and trauma, as well as in reframing feelings of self blame, shame and embarrassment and a reduction in nightmares (Corder et al., 1990; Pifalo 2006; Rocha & Prado 2006). Additionally, following Play Therapy children were more verbal about their experience (Corder et al., 1990; Rocha & Prado, 2006), and they showed increased intellectual understanding of the abuse and developed skills to recognize and avoid future abuse of themselves and others (Corder et al., 1990). Other positive findings from Play Therapy include reports of a reduction in externalizing behaviours, particularly a reduction in aggressive and psychopathic symptoms, antisocial and sexually inappropriate behaviours and anger (Pifalo, 2006).

Although most of the articles reviewed supported the efficacy of Play Therapy, one study found no statistically significant improvement in self-esteem, self-concept, social competence or adjustment, the

authors did note that the “children’s sense of competency increased over time and during the course of this therapy modality” (Scott et al., 2003). It has also been noted that Play Therapy is not regarded as a particularly effective method of treatment, since most Play Therapy research compares this to the absence of intervention (Bratton et al., 2005).

It is clear that there are several questions regarding Play Therapy, including the optimal treatment length, best age of intervention, a more standardized interventions, outcome measurements to allow studies to be compared, comparison to other treatments, and possible use in combination with other treatments (Delson and Clark, 1981). Thus, before being able to confidently recommend Play Therapy as a treatment modality, more research is required.

Animal Therapy

The first clinical use of animal-assisted therapy (also sometimes referred to as “Pet Therapy”) is credited to the child psychologist, Boris Levinson in 1961 whose primary rationale for introducing animal-assisted therapy was to use the animal as a motivator for patients resistant to therapy (Reichert, 1998; Hamama et al., 2011; Cirulli et al., 2011).

It has been suggested that the presence of an animal contributes to a positive, friendly and safe perception of a situation (Friedmann et al., 1983; Parish-Plass, 2008). It has been proposed that this perception might facilitate a child’s disclosure of the abuse, with the animal acting as a “bridge”, enabling a better and more therapeutic connection between the child and therapist (Eggiman, 2006; Ewing et al, 2007).

Several studies have explored the possible benefits of animal-assisted therapy, but several issues arise when studies are compared, including significant differences in the animal used, and the method, timing, and length of any interactions with the animal. Nonetheless, it has been reported that animal-assisted therapy can reduce externalizing behaviour problems seen in CSA victims, including inattention, hyperactivity, oppositional disorder, and conduct disorder (Eggiman, 2006; Ewing et al, 2007; Schultz, 2005). Other studies utilizing equine-assisted psychotherapy have found improvements in a wide variety of areas including progress in psychological, social, and school functioning which have also included improvements in standardized assessments of functioning (Schultz et al., 2007). One of these studies reported that younger children, and children

with a history of intra-family violence, showed the greatest improvement in scores (Schultz et al., 2007). Studies to date have suggested that animal-assisted therapy may improve feelings of anxiety, depression, fearfulness, and hopelessness, and also decrease the frequency of nightmares, the feelings of intrapersonal distress, and thoughts of self-harm (Eggiman, 2006; Ewing et al, 2007).

In two publications, equine-assisted therapy was found to improve cognitive abilities, peer acceptance and physical appearance in individuals who had CSA (Ewing et al., 2007; Eggiman, 2006). It should be noted that one of these was a case study describing how the therapist was able to address the victim’s lack of hygiene: the girl was taught how to groom the therapy horse and shown how to do the same with herself (Ewing et al, 2007).

In the same way that Play Therapy has been proposed to help children disclose that CSA has occurred, another proposed advantage of animal-assisted therapy is that at times when a therapist is not able to express sympathy directly to a patient, an animal has no such reservations, and for example, a dog may put its head on the patient’s knee (Lefkowitz et al., 2005; Reichert et al., 1998). Interestingly, animal-assisted therapy can conceivably also have a wider role, since one study found that the presence of the animals impacted hospital staff, where an overall increase in self-awareness and staff morale occurred (Rossetti et al., 2008).

Additionally, there have been suggestions that interactions with animals may have physiological effects relevant to any psychological changes. Thus, it has been found that interactions with dogs significantly increase levels of oxytocin, a neuropeptide which is proposed to play an important role in pair bonding social affiliation and trust in many species (Cirulli et al., 2011). Other studies have shown that the presence, or even the observation, of animals can buffer physiological and psychological responses to stress and anxiety, lowering both blood pressure and heart rate. (Cirulli et al., 2011; Barker et al., 2003; Berget et al., 2011; Lefkowitz et al., 2005; Eggiman, 2006; Friedmann et al., 1983; Grandgeroge et al., 2011). Thus, there may be some physiological role for any psychological benefits.

Despite these studies of animal-assisted therapy, several issues remain. It is clear that despite a long history of use, research supporting the efficacy of animal-assisted therapy remains rather limited. There

is no standardization about the type or duration of interaction (Berget et al., 2011), and how this may best be potentially integrated with other therapies. Intriguingly, in this area there are a small number of reports suggesting that it may be most effective when it is combined with other accepted forms of therapy (Eggiman, 2006; Dietz et al., 2012). One final point that has been noted is the issue of publication bias, and questions have been specifically raised about the lack of publications reporting the absence of effects, or negative effects, of this approach. (Grandgeroge et al., 2011).

Individual Therapy versus Group Therapy

One other area to consider in terms of the most appropriate forms of treatment (or combination of treatments) for CSA is the issue of individual therapy compared to group therapy. A potential theoretical advantage of group therapy is the interaction with other victims that have been through the same or similar problems. Baker (1985) tested the efficacy of both individual and group therapy in specific sexual abuse symptoms including self-concept, anxiety and depression. Although group therapy was found to be more effective in improving self-concept, both therapies showed similar results in decreasing anxiety and depressive symptoms.

Others have also suggested that group approaches are best. Thus, it has been proposed that knowing that other participants of a group have been through similar experiences facilitates the building of trust amongst members helping, among other things, with disclosure and exploration of feelings (Knittle & Tuana, 1980). Others support the idea that a group is a safe and effective place for children and youth to develop and practice appropriate social skills (Knittle & Tuana, 1980; Boatman et al., 1981; Kruczek & Vitanza, 1999). This issue of safety has been further emphasized by others suggesting that children have the chance to learn from others about different types of abuse and how to protect themselves (Perez, 1987). Certainly, group therapy appears to be widely used (Kruczek & Vitanza, 1999), and has clear cut economic advantages (Kruczek & Vitanza, 1999; Tourigny & Hébert, 2007; Baker, 1985), but others have suggested using individual or group therapy according to the age of the individual and/or their specific response to trauma (Boatman et al., 1981).

Conclusion

Overall, the current review shows that both individual

and group therapy can be helpful, but multiple questions remain about what is the best form of therapy for an individual child or youth, and how this may vary depending upon their age, gender, and type of CSA. Other key issues also remain about the length of treatment and how this could be standardized (Baker, 1985; Tourigny & Hébert, 2007).

It is interesting that while some of the therapies used in the treatment of CSA were proposed over 30 years ago, the research on the effectiveness for many of these is poor. This makes recommendations difficult. This review finds that many types of treatment have been found to have some therapeutic benefits for child survivors of CSA. This is similar to the findings by Gillies et al., (2012) in their review of psychological therapies for PTSD, who concluded that there was not enough evidence to clearly demonstrate that one treatment is more effective compared to another. Our conclusion is similar.

Nonetheless, of the various modalities, TF-CBT is the most researched treatment, while CBT, Play Therapy, EMDR and animal-assisted therapy all show some level of evidence for efficacy in reducing some of the symptoms associated with CSA. Much of the research on these various treatments specifically dealing with child CSA victims is in its infancy and further research is required to understand more about how different treatments may benefit youth who have been sexually abused. This review also suggests that symptom reduction is not very dependent on the type of treatment received, since many of the different types of treatment appeared to improve a similar range of symptoms. Thus, there is a compelling need to further standardize therapies for this frequent condition, and in particular to actively explore the possibility of combinations of therapy. It is also extremely important to determine if briefer, more intensive forms of therapy (possibly carried out in a dedicated facility) is more, or less, effective than a longer-term, but less intensive, form of therapy.

As noted repeatedly elsewhere, CSA is extremely common with millions of survivors across North America alone. Providing appropriate and effective treatments to children and youth is critically important to try and prevent further longer-term problems. The evidence to date suggests firstly that any of the therapies discussed is better than no therapy at all. There is not enough evidence, however, to confidently recommend one type of therapy as superior to others. The possible combination of therapies is also uncertain, as is a potential benefit of

group therapy compared to individual therapy. Clearly, much work remains before the best type of therapy for each child and youth survivor of CSA is identified.

REFERENCES

- Adler-Nevo, G., Manassis, K. (2005). Psychological treatment of pediatric posttraumatic stress disorder: The neglected field of single-incident trauma. *Depression and Anxiety*, 22(4), 177-189.
- Ahmad, A., Larsson, B., & Sundelin-Wahlsten, V. (2007). EMDR treatment for children with PTSD: Results of a randomized controlled trial. *Nordic Journal of Psychiatry*, 61(5), 349-354.
- Arata, C. (1998) To tell or not to tell: Current functioning of child sexual abuse survivors who disclosed their victimization. *Child Maltreatment*, 3(1), 63-71.
- Bagwell, C. L. & Schmidt, M. E. (2011) The Friendship Quality of Overtly and Relationally Victimized Children. *Merrill-Palmer Quarterly*, 57(2).
- Baker, C. R. (1985). A comparison of individual and group therapy as treatment of sexually abused adolescent females. *Dissertation Abstracts International*, 47(10-B), 4319-4320
- Barker, S.B.; Pandurangi, A. K., Best, M. (2003). Effects of animal-assisted therapy on patients' anxiety, fear, and depression before ECT. *The Journal of ECT*, 19(1), 38-44.
- Berget, B. & Braastad, B. O. (2011). Animal-assisted therapy with farm animals for persons with psychiatric disorders. *Annali dell'Istituto Superiore di Sanità*, 47(4), 384-390.
- Berliner, L. & Elliott, D. (2002). Sexual abuse of children. In J. Myers et al (Ed.). *The APSAC handbook on child maltreatment* (2nd ed.) (pp. 55-73). London, UK: Sage Publications India Pvt.
- Boatman, B., Borkan, E. L., & Schetky, D. H. (1981). Treatment of child victims of incest. *The American Journal of Family Therapy*, 9(4), 43-51.
- Bolen, R. M. & Scannapieco, M. (1999). Prevalence of child sexual abuse: A corrective- meta-analysis. *Social Service Reviews*, 73(3), 281-313.
- Bratton, S. C., Ray, D., Rhine, T., & Jones, L. (2005). The efficacy of play therapy with children: A meta-analytic review of treatment outcomes. *Professional Psychology: Research and Practice*, 36(4), 376-390.
- Chemtob, C. M., Nakashima, J., & Carlson, J. G. (2002). Brief treatment for elementary school children with disaster-related posttraumatic stress disorder: A field study. *Journal of Clinical Psychology*, 58(1), 99-112.
- Chen, L. P., Murad, H. M., Para, M. L., Cobenson, K. M., Sattler, A. L., Goranson, E. N., Elamin, M. B., Seime, R. J., Shinozaki, G., Prokop, L. J., & Ziraqzadeh, A. (2010). Sexual abuse and lifetime diagnoses of psychiatric disorder: Systemic review and meta-analysis. *Mayo Clinic Proceedings*, 85(7), 618-629.
- Cirulli, F., Borgi, M., Berry, A., Francia, N., & Alleva, E. (2011). Animal-assisted interventions as innovative tools for mental health. *Annali dell'Istituto Superiore di Sanità*, 47(4), 341-348.
- Cohen, J. A. (2003). Treating acute posttraumatic reactions in children and adolescents. *Biological Psychiatry*, 53(9), 827-833.
- Cohen, J. A., Mannarino, A. P., & Knudsen, K. (2005). Treating sexually abused children: 1 year follow-up of randomized controlled trial. *Child Abuse & Neglect*, 29(2), 135-145.
- Cohen, J. A. & Mannarino, A. P. (2008). Trauma-focused cognitive behavioural therapy for children and parents. *Child and Adolescent Mental Health*, 13(4), 158-162.
- Cohen, J. A., Mannarino, A. P., Perel, J. M. & Staron, V. (2007). A pilot randomized controlled trial of combined trauma-focused CBT and sertraline for childhood PTSD symptoms. *Journal of the American Academy of Child and Adolescent Psychiatry*, 46(7), 811-819.
- Cohen, J. A., Mannarino, A. P., & Iyengar, S. (2011). Community treatment of posttraumatic stress disorder for children exposed to intimate partner violence: A randomized controlled trial. *Archives of Pediatrics & Adolescent Medicine*, 165(1), 16-21.
- Corcoran, J., & Pillai, V. (2008). A meta-analysis of parent-involved treatment for child sexual abuse. *Research on Social Work Practice*, 18(5), 453-464.
- Corder, B. F., Haizlip, T., & DeBoer, P. (1990). A pilot study for a structured, time-limited therapy group for sexually abused pre-adolescent children. *Child Abuse & Neglect*, 14, 243-251.
- Costas, M., & Landreth, G. (1999). Filial therapy with parents of children who have been sexually abused. *International*

- Journal of Play Therapy*, 1(8), 43-66.
- Deblinger, E., McLeer, S.V., & Henry D. (1990). Cognitive behavioral treatment for sexually abused children suffering post-traumatic stress: preliminary findings. *Journal of the American Academy of Child and Adolescent Psychiatry*, 29(5), 747-752.
- Deblinger, E., Steer, R. A., & Lippmann, J. (1999). Two-year follow-up study of cognitive behavioral therapy for sexually abused children suffering post-traumatic stress symptoms. *Child Abuse & Neglect*, 23(12), 1371-1378.
- Deblinger, E., Stauffer, L. B., & Steer, R. A. (2001). Comparative efficacies of supportive and cognitive behavioral group therapies for young children who have been sexually abused and their nonoffending mothers. *Child Maltreatment*, 6(4), 332-343.
- Deblinger, E., Manarino, A. P., Cohen, J. A., Runyon, M. K., & Steer, R. A. (2011). Trauma-focused cognitive behavioral therapy for children: Impact of the trauma narrative and treatment length. *Depression & Anxiety*, 28(1), 67-75.
- Delson, N., & Clark, M. (1981) Group therapy with sexually molested children. *Child Welfare*, 60(3), 175-182.
- DeSocio, J., & Hootman, J. (2004). Children's mental health and school success. *Journal of School Nursing*, 20(4), 189-196.
- Dietz, T. J., Davis, D., & Pennings J. (2012). Evaluating animal-assisted therapy in group treatment for child sexual abuse. *Journal of Child Sexual Abuse*, 21(6), 665-683.
- Edmond, T., Rubin, A., & Wambach, K. G. (1999). The effectiveness of EMDR with adult female survivors of childhood sexual abuse. *Social Work Research*, 23(2), 103-116.
- Edmond, T. & Rubin, A. (2008). Assessing the long-term effects of EMDR: Results from an 18-month follow-up study with adult female survivors of CSA. *Journal of Child Sexual Abuse*, 13(1), 69-86.
- Eggiman, J. (2006). Cognitive-behavioral therapy: A case report- Animal assisted therapy. *Topics in Advanced Practice Nursing eJournal*, 6(3).
- Ewing, C. A., Macdonald, P. M., Taylor, M., & Bowers, M. J. (2007). Equine-facilitated learning for youths with severe emotional disorders: A quantitative and qualitative study. *Child Youth Care Forum*, 36, 59-72.
- Feather, J. S. & Ronan, K. R. (2006). Trauma-focused cognitive-behavioural therapy for abused children with posttraumatic stress disorder: A pilot study. *New Zealand Journal of Psychology*, 35(3), 132-145.
- Feather, J. S. & Ronan, K. R. (2009). Trauma-focused CBT with maltreated children: A clinic-based evaluation of a new treatment manual. *Australian Psychologist*, 44(3), 174-194.
- Fernandez, I. (2007). EMDR as treatment of post-traumatic reactions: A field study on child victims of an earthquake. *Educational and Child Psychology*, 24(1), 65-72.
- Finkelhor, D. (1994a). The international epidemiology of child sexual abuse. *Child Abuse & Neglect*, 18(5), 409-417.
- Finkelhor, D., & Berliner, L. (1995). Research on the treatment of sexually abused children: A review and recommendations. *Journal of the American Academy of Child & Adolescent Psychiatry*, 34(11), 1408-1423.
- Finkelhor, D., Ormrod, R., Turner, H., & Hamby, S. (2005). The victimization of children and youth: A comprehensive, national survey. *Child Maltreatment*, 10(5), 5-25.
- Friedmann, E., Katcher, A. H., Thomas, S. A., Lynch, J. J., & Messent, P. R. (1983). Social interaction and blood pressure. Influence of animal companions. *The Journal of Nervous and Mental Disease*, 171(8), 461-465.
- Gillies, D., Taylor, F., Gray, C., O'Brien, L., D'Abrew, N. (2012). Psychological therapies for the treatment of post-traumatic stress disorder in children and adolescents. *Cochrane Database Systematic Review*.
- Goodyear-Brown, P., Abbe, F., & Myers, L. (2012). Child sexual abuse: The scope of the problem. In P. Goodyear-Brown (Ed.), *Handbook of child sexual abuse: Identification, assessment, and treatment* (pp. 3-28). Hoboken, NJ: John Wiley & Sons.
- Gorey, K. M., & Leslie, D. R. (1997). The prevalence of child sexual abuse: Integrative review adjustment for potential response and measurement biases. *Child Abuse & Neglect*, 21(4), 391-398.
- Grandgeorge, M. & Hausberger, M. (2011). Human-animal relationships: From daily life to animal-assisted therapies. *Annali dell'Istituto Superiore di Sanità*, 47(4), 397-408.
- Grasso, D. J., Joselow, B., Marquez, Y., & Webb, C. (2011). Trauma-focused cognitive behavioral therapy of a child

- with posttraumatic stress disorders. *Psychotherapy*, 48(2), 188-197.
- Greenwald, R. (1994). Applying eye movement desensitization and reprocessing (EMDR) to the treatment of traumatized children: Five case studies. *Anxiety Disorders Practice Journal*, 1, 83-97.
- Habigzang, L.F., Stroehrer, F. H., Hatzenberger, R., Cunha, R. C., Ramos, M. S., & Koller, S. H. (2009). Cognitive behavioral group therapy for sexually abused girls. *Revista de Saúde Pública*, 43(1), 70-78.
- Hamama, L., Hamama-Raz, Y., Dagan, K., Greenfeld, H., Rubinstein, C., & Bez-Ezra, M. (2011). A preliminary study of group intervention along with basic canine training among traumatized teenagers: A 3-month longitudinal study. *Children and Youth Services Review*, 33(10), 1975-1980.
- Hensel, T. (2009). EMDR with children and adolescents after single-incident trauma: An intervention study. *Journal of EMDR Practice and Research*, 3(1), 2-9.
- Jaberghaderi, N., Greenwald, R., Rubin, A., Zand, S. O., & Dolatabadi, S. (2004). A comparison of CBT and EMDR for sexually-abused Iranian girls. *Clinical Psychology & Psychotherapy*, 11(5), 358-368.
- Kendall-Tackett, K. A., Williams, L. M., & Finkelhor, D. (1993). Impact of sexual abuse on children: A review and synthesis of recent empirical studies. *Psychological Bulletin*, 113(1), 164-180.
- King, N. J., Tonge, B. J., Mullen, P., Myerson, N., Heyne, D., Rollings, S., Martin, R., & Ollendick T. H. (2000). Treating sexually abused children with posttraumatic stress symptoms: A randomized clinical trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, 39(11), 1347-1355.
- Knittle, B. J. & Tuana, S. J. (1980). Group therapy as primary treatment for adolescent victims of intrafamilial sexual abuse. *Clinical Social Work Journal*, 8(4), 236-242.
- Kruczek, T., & Vitanza, S. (1999). Treatment effects with an adolescent abuse survivor's group. *Child Abuse & Neglect*, 23(5), 477-485.
- Lefkowitz, C., Prout, M., Bleiberg, J., Paharia, I., & Debiak D. (2005). Animal-assisted prolonged exposure: A treatment for survivors of sexual assault suffering posttraumatic stress disorder. *Society & Animals: Journal of Human-Animal Studies*, 13(4), 275-295.
- Macdonald, G., Higgings, J. P., Ramchandani, P., Valentine, J. C., Bronger, L. P., Klein, P., O'Daniel, R., Pickering, M., Rademaker, B., Richardson, G., & Taylor, M. (2012). Cognitive-behavioural interventions for children who have been sexually abused. *Cochrane Database of Systematic Reviews*, 5.
- Mannarino, A. P., Cohen, J. A., Deblinger, E., Runyon, M. K., & Steer R. A. (2012). Trauma-focused cognitive-behavioral therapy for children: Sustained impact of treatment 6 and 12 months later. *Child Maltreatment*, 17(3), 231-241.
- McAdam, E.K. (1986). Cognitive behaviour therapy and its application with adolescents. *Journal of Adolescence*, 9(1), 1-15.
- Miles, M. S. (1981). Play therapy: A review of theories and comparison of some techniques. *Issues in Mental Health Nursing*, 3, 63-75.
- Misurell, Jr., Springer, C., & Tyron, W. W. (2011). Game-based cognitive-behavioural therapy (GB-CBT) group program for children who have experienced sexual abuse: A preliminary investigation. *Journal of Child Sexual Abuse*, 20(1), 14-36.
- Nijdam, M.J., Gersons, B.P., Reitsma, J.B., de Jongh, A., & Olf M. (2012) Brief eclectic psychotherapy v. eye movement desensitisation and reprocessing therapy for post-traumatic stress disorder: Randomised controlled trial. *The British Journal of Psychiatry*, 200(3), 224-231.
- Oras, R., de Ezpeleta, S. C., & Ahmad, A. (2004). Treatment of traumatized refugee children with eye movement desensitization and reprocessing in a psychodynamic context. *Nordic Journal of Psychiatry*, 58(3), 199-203.
- Paine, M. L., & Hansen, D. (2002) Factors influencing children to self-disclose sexual abuse. *Clinical Psychology Review*, 22, 271-295.
- Parish-Plass, N. (2008). Animal-assisted therapy with children suffering from insecure attachment due to abuse and neglect: A method to lower the risk of intergenerational transmission of abuse? *Clinical Child Psychology and Psychiatry*, 13(1), 7-30.
- Pereda, N., Guilera, G., Forns, M., & Gómez-Benito, J. (2009). The international epidemiology of child sexual abuse: A continuation of Finkelhor (1994). *Child Abuse & Neglect*,

- 33(6), 331-342.
- Perez, C. L. (1988). A comparison of group play therapy and individual play therapy for sexually abused children. *Dissertation Abstracts International*, 48(12-A), 3079.
- Pifalo, T. (2006). Art therapy with sexually abused children and adolescents: Extended research study. *Journal of the American Art Therapy Association*, 23(4), 181-185.
- Reichert, E. (1998). Individual counseling for sexually abused children: A role for animals and storytelling. *Child and Adolescent Social Work Journal*, 15(3), 177-185.
- Reiss, D., & Price, R. H. (1996). National research agenda for prevention research: The National Institute of Mental Health report. *American Psychologist*, 51(1), 1109-1115.
- Rocha, P. K. & Prado, M. L. (2006). Child abuse and therapeutic play. *Revista Gaucha de Enfermagem*, 27(3), 463-471.
- Rossetti, J., DeFabiis, S., & Belpedio, C. (2008). Behavioral health staff's perceptions of pet-assisted therapy. An exploratory study. *Journal of Psychosocial Nursing*, 46(9), 28-33.
- Rothbaum, B. O., Astin, M. C., Marsteller, F. (2005). Prolonged exposure versus eye movement desensitization and reprocessing (EMDR) for PTSD rape victims. *Journal of Traumatic Stress*, 18(3), 607-616.
- Schönbucher, V., Maier, T., Mohler-Kuo, M., Schnyder, U., & Landolt, M. (2012). Disclosure of child sexual abuse by adolescents: A qualitative in-depth study. *Journal of Interpersonal Violence*, 27(17), 3486-3513.
- Schultz, P. N., Remick-Barlow, G. A., & Robbins, L. (2007). Equine assisted psychotherapy: A mental health promotion/intervention modality for children who have experienced intra-family violence. *Health and Social Care in the Community*, 15(3), 265-271.
- Shultz, B. (2005). The effects of equine-assisted psychotherapy on the psychosocial functioning of at-risk adolescents ages 12-18. *Unpublished Masters Thesis. Denver Seminary. Denver, CO.*
- Scott, T. A., Burlingame, G., Starling, M., Porter, C., & Lilly, J. P. (2003). Effects of individual client-centered play therapy on sexually abused children's mood, self-concept, and social competence. *International Journal of Play Therapy*, 12(1), 7-30.
- Stauffer, L.B. & Deblinger, E. (1996). Cognitive behavioral groups for nonoffending mothers and their young sexually abused children: A preliminary treatment outcome study. *Child Maltreatment*, 1(1), 65-76.
- Stovall-McClough C. (2004). Trauma focused cognitive behavioural therapy reduces PTSD more effectively than child centred therapy in children who have been sexually abused. *Evidence-Based Mental Health*, 7(4).
- Tourigny, M. & Hébert, M. (2007). Comparison of open versus closed group interventions for sexually abused adolescent girls. *Violence and Victims*, 22(3), 334-349.
- Tufnell, G. (2005). Eye movement desensitization and reprocessing in the treatment of pre-adolescent children with post-traumatic symptoms. *Clinical Child Psychology and Psychiatry*, 10(4), 587-600.
- van der Kolk, B. (2005). Developmental trauma disorder: Towards a rational diagnosis for children with complex trauma histories. *Psychiatric Annals*, 35,401-408.