Review Article

Review of Randomized Controlled Trials on Psychological Interventions in Child Sexual Abuse: Current Status and Emerging Needs in the Indian Context

Vandana Choudhary, Sujata Satapathy, Rajesh Sagar

ABSTRACT

Child sexual abuse (CSA) is a critical, psychologically traumatic and sometimes life-threatening incident often associated with sequel of adverse physical, behavioral, and mental health consequences. Factors such as developmental age of the child, severity of abuse, closeness to the perpetrator, availability of medico-legal-social support network and family care, gender stereotypes in the community complicate the psychological trauma. Although the research on the effects of CSA as well as psychological intervention to reduce the victimization and promote the mental health of the child is in its infancy stage in India, the global research in the past three decades has progressed much ahead. A search was performed using MEDLINE, PubMed, PsycINFO, and Google Scholar from 1984 to 2015 and only 17 randomized controlled trials (RCTs) out of 96 potentially relevant studies were included. While nonspecific therapies covering a wide variety of outcome variables were prominent till 1999s, the trend changed to specific and focused forms of trauma-focused therapies in next one-and-half decades. Novel approaches to psychological interventions have also been witnessed. One intervention (non-RCT) study on effects on general counseling has been reported from India.

Key words: Child sexual abuse, psychological intervention, randomized controlled trials, trauma

INTRODUCTION

Children with sexual abuse undergo sequel of adverse physical, behavioral and mental health consequences which profoundly affect their overall development.^[1-3] Depending upon the type, severity of abuse and availability of support, often such difficulties

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DOI:	252,744.5
10.4103/0253-7176.185954	

persists over years.^[4] Literature on psychological treatment of children who have been sexually abused is relatively young. However, some of the recent reviews have been published in the past,^[5,6] focuses on various

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How to cite this article: Choudhary V, Satapathy S, Sagar R. Review of randomized controlled trials on psychological interventions in child sexual abuse: Current status and emerging needs in the Indian context. Indian J Psychol Med 2016;38:279-84.

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integrated approaches along with cognitive behavior therapy (CBT). However, there is a dearth of such efficacy studies based on these therapeutic models in India. Moreover, there has been almost no such specific intervention developed keeping Indian cultural needs in mind. Thus, the aim of this paper is to review the existing reported evidence-based research in this area in last 30 years and to identify the gap exists between intervention studies worldwide and India so as to highlight the need in the Indian context.

MATERIALS AND METHODS

Literature search

An electronic search of the articles was undertaken in PubMed from 1984 to March 2015, to include all studies of psychological treatments for children and their families where a child has been sexually abused. A search was performed using MEDLINE, PubMed, PsycINFO, and Google Scholar from 1984 to 2015. Key search terms used in the search were ("Child Sexual Abuse" OR "Sexual Assault of Children" OR "Child Sexual Abuse Survivors" OR "Childhood Sexual Trauma") AND ("Psychotherapy" OR "Intervention OR "Treatment") AND ("Randomized Controlled Trial" OR "Case Study" OR "Reviews").

Selection of studies

The publications that focused only on psychological treatment of child sexual abuse (CSA) were included in this paper. Titles and abstracts of all potentially relevant articles were reviewed for possible inclusion. Articles were included if:

- 1. It was primarily a psychological intervention,
- 2. The interventions primarily focused on treatment of CSA,
- 3. The study was a randomized controlled trial (RCT) of CSA, assessment, or intervention with at least a no-treatment control,
- 4. It included children below the age 18 years and not with adults or couples with history of CSA, and
- 5. Such studies done in the past 30 years only (with a division of 2 times lines with 15 years of interval, from 1984 to 1999 and 2000 to 2015).

The articles reporting treatment of abuse in general or those including community or group interventions were not included the study.

Data extraction and exclusion criteria

Full texts of the identified literature were obtained. The main outcome measure of interest was improvement in the mental health indicators of children with sexual abuse (e.g., posttraumatic stress disorder [PTSD] symptoms, depressive symptoms, shame, guilt, fear, academic achievement, and behavioral difficulties).

Where data was insufficient or not available in the published paper or by contacting authors, studies were excluded from the relevant analysis. Articles describing the study protocols and dissertations, case reports, case series or reviews describing the psychological treatment of CSA were also excluded from the analysis.

RESULTS

Ten out of a total of 219 identified potentially relevant records were reviews or meta-analysis. A total of 96 studies evaluating the role of psychological interventions in CSA were included in this review. The summary of the process of obtaining the studies for review and its further division are mentioned [Figure 1].

FINDINGS

A total of 17 (11 studies during 1984-1999 and 6 studies during 2000-2015) studies evaluating the role of various forms of psychotherapy in CSA with rigorous RCT methodology were included. The characteristics of the studies and participants, results of the quality assessment and key findings are described in the following sections.

CHARACTERISTICS OF STUDIES

Recruitment

As summarized in Table 1 out of 17 studies, 14 studies are solely from the United States, one in Australia, and two in the United Kingdom. The study recruited

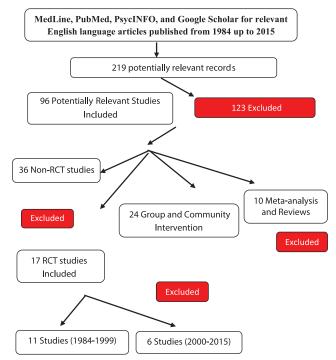


Figure 1: Comprehensive data search flowchart

participants from a variety of sources, mental health practitioners, child protection services, etc. Most studies included in their selection criteria children who experienced sexual abuse recently, which is verified by relevant child protection and youth justice agency. Children with severe neurodevelopmental disorder, learning disability, psychosis or intellectual disability were excluded.

Description of studies

Details of the nature of child participation, type of intervention used and the outcome are elaborated in detail in Tables 2 and 3.

DISCUSSION

Methodological description of studies

Of the 17 studies included in the review, five described

Table 1: Country specific RCT setting and exclusion

Number of studies	Country where conducted	Setting of recruitment of sample	General exclusion criteria
14	The USA	Mental health	Severe
		practice clinic,	neurodevelopmental
2	The UK	child protection	disorder, learning
1	Australia	services, etc.	disability, psychosis or intellectual disability

the method of randomization. Only one study^[13] described masking of therapist's assessment by clinicians. One study^[22] described a multisite RCT and clustered RCT.^[20] The attrition rate varied from study to study. Risk of selection bias also varied across studies.

Age and gender of the participants

The review reveals that the lowest age at which intervention has been carried out is 2 years^[11,20] and the age ranged from 8 to 15.^[13,15,16,22,23] Only 4 studies have focused exclusively on one gender and the female, and male ratio was 3:1.^[7,8,13,21] However, other 13 studies have taken participants from either gender and have not particularly distinguished between two.

Nature of intervention

Intervention type and techniques

Most of these interventions since the early 1990s adopted integrated therapeutic module where combined counseling sessions for children and parents were the key focus in symptoms reduction. Some of the major skills that most of these studies have highlighted progressed from rapport building, teaching rules about sexual behavior, identifying stimuli and context that increases risk, explaining cycle of abuse, emotional regulation skills, cognitive coping skills, relaxation, sex education, self-control skills, abuse prevention skills, graded exposure, attachment with parents and

Table 2: Treatment outcome studies from 1985 to 2000

Study	Participants characteristics	Interventions	Outcome of therapy
Baker ^[7]	39 females aged 13-17 years	Individual therapy (<i>n</i> =15) Group therapy (<i>n</i> =24)	Group therapy better than individual on self-concept measures, no other differences
Friedrich et al.[8]	4-16 years old, 33 sexually abused boys	TF-CBT + family psychotherapy	Improvement on depressive symptoms
Monck et al.[9]	47 aged 8-16 years	Family therapy versus family therapy + group therapy	No significant difference between groups
Berliner and Saunders ^[10]	103 aged 4-13 years (80 completed)	Structures group (n =32), Stress inoculation and exposure (n =48)	No differences between groups
Stauffer and Deblinger ^[11]	2-6 years old, 19 children with sexual abuse	TF-CBT psychotherapy versus supportive	TF-CBT led to improvement in depressive and PTSD symptoms
Cohen and Mannarino ^[12]	86 aged 3-6 years (67 completed)	Abuse specific CBT (<i>n</i> =39) versus NST(<i>n</i> =28), both 12 sessions	CBT led to more improvement in SB and overall behavioral problems
Celano et al.[13]	32 females aged 8-13 years old	Abuse specific program (<i>n</i> =15) versus nondirective supportive sessions (<i>n</i> =17), both 8 sessions	No difference on child scores Less maternal self-blame in treatment group
Cohen and Mannarino (1998a) ^[14]	82 aged 7-14 years (49 completed)	Abuse specific CBT (<i>n</i> =30) versus NST (<i>n</i> =19), both 12 sessions	CBT led to better outcome on depressions scale
Deblinger et al.[15,16]	100 aged 7-13 years with PTSD	CBT, 3 conditions (<i>n</i> =68), 12 sessions versus community control (<i>n</i> =21)	CBT led to better outcome in depression and behavior
Pithers et al.[17]	85 children, 3-7 years old	Group for children with caregivers group: Expressive Therapy and RPT	Significant improvement in sexual behavior and other behavioral problems
Bonner et al. ^[18]	147 eligible children with age range of 6-12 years; only 69 completed treatment and posttreatment	Group for children with caregiver groups: Play therapy group CBT group	Significant improvement in both groups, however for play therapy it was maximal

CBT – Cognitive behavior therapy; TF-CBT – Trauma focused-cognitive behavior therapy; PTSD – Posttraumatic stress disorder; NST – Nondirective supportive therapy; RPT – Relapse prevention therapy; SB – Sexualized behavior

Table 3: Treatment outcome studies from 2000 to 2015

Study	Participants characteristics	Interventions	Findings
King et al.[19]	36 aged 5-17 years with PTSD	CBT family (n=12) and CBT child (n=12) versus wait list controls, 20 sessions	CBT led to improvement on depression and anxiety scales
Deblinger et al.[20]	67 aged 2-8 years (44 completed)	Group CBT (n =21) versus supportive group (n =23), both 11 sessions	Some better outcome for CBT, but had higher scores in the start, unclear significance
Trowell et al.[21]	94 females aged 6-14 years old (66 completed)	Family therapy versus Family therapy + group	Individual therapy led to greater improvement on some PTSD measures, no other differences
Cohen et al. ^[22]	229 sexually abused children aged 8-14 and their parents/ caretakers (<i>n</i> =189)	Trauma-focused CBT (<i>n</i> =114), each group received 12 weekly individual sessions of 45 min, with+3 joint sessions of 30 min for TF-CBT group	Treatment outcome better for TF-CBT group where comparison group participants were about 1.5 times more likely to develop PTSD
Cohen et al. ^[23]	82 sexually abused children ages 8-15 years	TF-CBT or NST	TF-CBT group evidenced significantly greater improvement in anxiety, depression, sexual problems and dissociation at the 6-month follow-up and in PTSD and dissociation at the 12-month follow-up
Foa et al.[24]	61 adolescent girls with sexual abuse related PTSD symptoms	Prolonged exposure therapy (<i>n</i> =31) Supportive counseling (<i>n</i> =30)	Participants receiving prolonged exposure demonstrated greater improvement on the PTSD symptom severity scale and on all secondary outcomes

 ${\tt CBT-Cognitive\ behavior\ therapy;\ TF-CBT-Trauma\ focused-cognitive\ behavior\ therapy;\ PTSD-Posttraumatic\ stress\ disorder;\ NST-Nondirective\ supportive\ therapy;\ RPT-Relapse\ prevention\ therapy}$

caregivers, parent and child management skills, working on self-esteem, shame, fear, sexual urges, arousal, and reconditioning. Many of these therapies also included components of stress inoculation therapy, group therapy, and family intervention.

From 2000 onward, however, trend clearly shifted toward utilizing specific CBT framework of child CBT and trauma-focused CBT to teach children new skills of managing their affective, cognitive, and behavioral responses to the traumatic events. Key components in this module were coping skills, types of touch, abuse response skills, ways to doing disclosure, deal with postabuse distress and PTSD symptoms, dealing with self-blame/stigmatization, betrayal feelings, traumatic sexualization, and powerlessness. Some of the studies have also utilized various expressive techniques along with supportive counseling techniques. The CBT therapy has been usually augmented with sessions with parents and caregivers on child behavior management skills, supporting them enough and working on building bonding and communication skills between them.

Overall, multidimensional therapy with a flexible and customization approach seemed to be useful in various studies.

Number of sessions

The average number of sessions to complete the recovery program was 11 with a variation in group or individual intervention format (e.g., individual therapy contains 11-12 sessions, while group therapy module contained 6-8 sessions). The key reason behind the variation may be attributed to the target symptoms and outcomes.

Frequency of sessions

Most of the therapy sessions were conducted once weekly for 45 min. Overall, it took 11-12 weeks to complete the entire therapeutic program depending upon the nature of therapeutic module utilized.

Therapeutic benefit

The benefit of intervention has been mostly seen in reduction in PTSD, depression, and other internalizing symptoms. Aspects of self-appraisal sexualized behavior and externalizing symptoms also show significant improvement. Less therapeutic benefit has been seen in coping skill, caregiver outcome, and social skills and competence.

Findings from nonrandomized controlled trial studies

Although non-RCT studies were not primarily within the purview of this paper, a selected number of studies were considered for inclusion to provide a trend in this regard. Among non-RCT studies, various studies were reviewed which included various case studies, case series designs, longitudinal case studies, and single case designs.

Cognitive processing therapy, for example, is emerging as an effective treatment of PTSD symptoms in children.^[25,26] Cognitive behavior group therapy has also been reported to be one of the effective approaches to deal with trauma in CSA.

Psychotherapy for CSA also included various modality specific therapeutic techniques (e.g., animal-assisted therapy). Particularly groups that included therapy dogs showed significant decreases in trauma symptoms including anxiety, depression, anger, PTSD, dissociation, and sexual concerns.^[27] Music therapy also shows a

significant reduction in distress associated with trauma of sexual abuse.^[28] The effectiveness of game-based CBT group program^[29] and group therapy was also reported as effective techniques among children and adolescence.^[30-32]

Current Indian scenario: Identifying gaps and emerging needs

Research on CSA in India is still in infancy. A majority of studies have been reports of government on prevalence rate in India. Some studies have focused on studying the prevalence and characteristics of CSA in vulnerable population such as street children. One such recent study on 189 nondelinquent boys (most of them were runaways) in an observation home at Delhi reported that 38.1% were subjected to sexual abuse with a mean age of abuse between 8 and 10 years. [33] However, no direct study on exploring the trauma or intervention techniques in children with CSA was found.

It was found that the intervention studies in the past 30 years focused on CBT, especially "Trauma focusedand abuse-focused" CBT has proven efficacy across studies. Surprisingly, no RCT is reported from Asian/ SAARC region, therefore, to the authors' interest, no such literature is available on cultural adaptation of these forms of CBT in India. Moreover, among many evidence-based techniques, the impact of one of the expressive techniques, like play therapy has also not yet explored in Indian literature. In addition, integrated group and family interventions have never been tested. Further, limited outcome variables have been measured. Only one reported intervention study which is focused primarily on positive effects of general counseling^[34] on symptom reduction. Thus, interventions available for use in India miss out on parents, family members, and community. Cultural adaptation of trauma and abuse-focused therapy along with integration of culturally appropriate intervention module needs to be developed.

CONCLUSION, LIMITATIONS, AND FUTURE DIRECTION

The review highlights few major implications for future researchers to focus on reducing methodological limitations. Further, the review also outlines the importance of adequate research attention in identifying the issues related to male survivors of CSA. The upcoming researches should also undertake studies on the replication and effectiveness of various novel intervention techniques such as body-oriented therapy^[35] dialectical behavior therapy,^[36] and emotionally focused therapy^[37] which have been studied in adult's survivors of CSA. Variables having treatment implications on overall mental health and

wellbeing of the children, such as therapy discontinuity, gap in treatment-seeking behavior, long-term follow-up in intervention, should also gain attention. There is an emerging need to conduct scientific research studies on CSA, which includes replicating effective trauma based intervention along with including various indigenous variations and it is systematic research implication in the Indian context.

Financial support and sponsorship

Nil

Conflicts of interest

There are no conflicts of interest.

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