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Cognitive behavioral group therapy for sexually abused girls

ABSTRACT

OBJECTIVE: To assess the effects of a cognitive behavioral group therapy model among female children and adolescents victims of sexual abuse.

METHODS: A non-randomized study with intragroup comparisons over time was carried out. Female children and teenagers from nine to 16 years of age (N=40) were clinically assessed in three individual meetings in the metropolitan area of Porto Alegre, Southern Brazil, between 2006 and 2008. The group therapy comprised 16 semi-structured sessions. Psychological instruments were applied to investigate symptoms of anxiety, depression, post-traumatic stress disorder, child stress, beliefs and perception of the abuse experience before, during and after the intervention. The results were analyzed through statistical tests for repeated measures. A comparative analysis was carried out with the results of the pretest between the groups that received group psychotherapy immediately after the sexual abuse was reported and those who were waiting for psychological support.

RESULTS: The assessment of the impact of the intervention revealed that cognitive behavioral group therapy significantly reduced symptoms of depression, anxiety, child stress and post-traumatic stress disorder. In addition, the intervention enabled the participants to modify beliefs of guilt, low degrees of trust and credibility, and was effective in reducing psychological symptoms and changing distorted beliefs and perception in regard to the abuse.

CONCLUSIONS: Cognitive behavioral group therapy was effective in reducing psychological symptoms in sexually abused girls.

DESCRIPTORS: Child. Adolescent. Adolescent Psychology. Child Abuse, Sexual. Cognitive Therapy. Psychotherapy, Group.

INTRODUCTION

Sexual abuse against children and teenagers is a major public health issue.[12,17] According to estimates, one in every four girls and one in every six boys are victims of some kind of sexual abuse before the age of 16.[20]This kind of violence may unleash a number of adverse effects in the victim's cognitive, emotional and social development. The most frequently cited disorders resulting from sexual victimization according to medical literature are: depression, generalized anxiety, post-traumatic stress, attention deficit and hyperactivity, and conduct disorder.[8,19,21,22]

Sexual abuse violates the law and social taboos, and is defined as inducing a child or adolescent in engaging in sexual activity that he/she does not fully understand, to which he/she is incapable of consenting, or to which her/she is no prepared to engage in due to his/her immature physical development. Therefore, any activity involving a child and an adult or another child, aimed at sexual gratification or satisfying the needs of an individual, whose relationship with the child is based on

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the duty of care, trust or force, can be considered sexual abuse. Sexual activities can include touching, caressing, oral sex or sexual penetration (fingers, genitalia, anus). Sexual abuse also includes situations in which there is no physical contact, such as voyeurism, verbal harassment, pornography, and exhibitionism.[1]

Due to the high rates of sexual abuse and to the adverse psychological effects of this form of violence, there is a need for more studies assessing the effectiveness of psychotherapy in helping victims. A meta-analysis of studies published in English, between 1975 and 2004, assessing the different kinds of psychotherapy for victims of sexual abuse was carried out and identified only 28 studies in the field.[10] The studies that used cognitive behavioral therapy (CBT) as treatment have shown better results when compared to other forms of non-focal therapy for children and adolescents with symptoms of anxiety, depression and behavioral problems resulting from sexual abuse.[5,6,22] In addition, the CBT focused on the trauma has been presenting a high effectiveness rate in reducing the symptoms of post-traumatic stress disorder (PTSD)[4] and in restructuring dysfunctional beliefs in regard to the sexual abuse experience.[3]

In Brazil, two studies assessing therapies for victims of sexual abuse were identified. The first one[18] describes group therapy process carried out with five teenagers who were victims of sexual abuse and were living in shelters. After assessing the subjects through an interview, they were referred to 15 group therapy sessions. The results were qualitatively assessed by the therapists, without the use of psychological tools. The findings suggest that being exposed to the sexual abuse topic gradually and in a group environment made it easier for the subjects to disclose, express and accept the abuse in their life history.[18]

The second study described and assessed the effect of a cognitive behavioral group therapy model for female children and teenagers between nine and 14 years of age who had been victims of sexual abuse within the family environment. In three individual sessions, the ten participants took psychological tests to identify symptoms of depression, anxiety and post-traumatic stress disorder, in addition to questions to identify their beliefs in regard to the sexual abuse. Group therapy took place throughout 20 semi-structured sessions. During and after the sessions, individual assessments were carried out, during which the same psychological tools were applied. A non-parametric statistics analysis was carried out and suggested that the symptoms under investigation had been significantly reduced and the beliefs of guilt, difference in relation to their peers and degree of distrust of the victims had been modified.[9]

The objective of the present study was to assess the effects of cognitive behavioral group therapy in young and teenage girls victims of sexual abuse.

METHODS

This was a non-randomized clinical trial with intra-group comparisons over time, in which the intervention was carried out in one single group and the outcomes were compared in regard to each participant over different periods.[11] Group therapy was aimed at reducing symptoms of depression, anxiety, and post-traumatic stress disorder, in addition to aiding in restructuring dysfunctional beliefs in regard to the sexual abuse experience. Participants were assessed through psychological tools in four different stages: pre-testing stage (before group therapy), post-testing stage (after the first phase of the group therapy – six weeks), post-testing stage II (after the second group therapy phase – ten weeks) and post-testing III (after the end of the group therapy – 16 weeks). The study was conducted between 2006 and 2008.

The sample was made up of 40 female children and adolescents between nine and 16 years of age who had reported at least one sexual abuse episode inside or outside the family. These episodes included situations of harassment (no physical contact) to situations involving physical contact, such as touching and caressing, touching genitalia, oral and genital sex. The exclusion criteria were: presence of psychotic symptoms and mental retardation. However, these cases were not referred to other services. The victims were referred to the study by child and teenager protection agencies in a city in the metropolitan region of Porto Alegre, Southern Brazil. These entities receive and assess sexual abuse reports (shelter, Child Protection Council, Sentinela Program, District Attorney`s Office and Youth and Juvenile Court).

The entities that make up this network were contacted in order to refer to the study cases of sexual abuse against children. Care was provided in a center for research and psychological care for girls who are victims of sexual abuse. The children and adolescents were invited to take a preliminary interview, during which they were asked about taking place in the study, and were then included in the sample after providing informed consent together with their parent or guardian.

The children and teenagers included in this study were in the waiting list for psychological support in the public healthcare system, and were categorized in three groups according to their respective waiting time: immediately after the abuse was reported, from one to six months after abuse was reported, and more than six months after abuse was reported.

The following tools were used:

- Semi-structured interview – the first part is aimed at establishing a relationship of trust with the participant; the second part follows guidelines to

investigate the sexual abuse history, frequency, and dynamics of sexual abuse episodes.[23]

- Children's Attributions and Perceptions Scale (CAPS) – The CAPS measures specific sexual abuse issues in regard to children.[16] It is a structured interview with 18 items, each one has five alternatives based on the Likert scale and where: (0) corresponds to never and (4) to always. Four aspects are assessed in four sub-scales: feeling different from peers, interpersonal trust, personal attribution for negative events (holding oneself responsible for the abuse), and perceived credibility of others in self. Higher scores mean higher rates of feeling different from peers and personal attribution for negative events, lower perception of credibility and trust. The items of the interview were adapted, translated into Portuguese by a bilingual researcher and then translated back into English by another. The translations were compared, adjusted and applied to five girls between ten and 13 years of age in order to check for understanding.

- Child Depression Inventory[13] (CDI) – The CDI detects the presence and the severity of depression in children and teenagers aged seven to 17. It is made up of 27 items, each of which has three alternatives with scores from zero to two. The chosen alternative is the one that best describes the current status of the participant. The test can be applied to individuals or to groups. The internal consistency proved to be appropriate (α=0.86), and the CDI cutoff point was set at 19.

- Children's Stress Inventory (ESI) – The ESI is made up of 35 items addressing the following reactions to stress: physical, psychological, psychological with a depression component and psycho-physiological. The ESI has been validated to be applied to children between six and 14 years of age. The answers are given according to a five-point Likert scale, where the child fills in a circle divided in four parts, according to the frequency which participants experience the symptoms presented in the items.[15]

- Trait-State Anxiety Inventory for Children (IDATE-C) – IDATE-C is made up of two self-assessment scales. This tool measures two different concepts of anxiety: trait and state.[2] The trait-state subscale shows how the child feels at a certain moment in time, measuring transitory states of feelings of apprehension, tension and concern that vary in terms of intensity. The anxiety-trait subscale assesses how the child generally feels, measuring individual differences that are relatively stable in terms of susceptibility to anxiety. Each subscale is made up of 20 items, for which there are three possible answers which express the differences in intensity of the symptom.

- Structured questionnaire based on DSM-IV for assessing post-traumatic stress disorder – the criteria for diagnosis established by the Diagnostic and Statistical Manual of Mental Disorders were used as a basis to identify the presence of the symptoms of the disorder (reliving the trauma, avoidance of stimuli associated to the trauma and increased excitability).[7]

The research subjects were clinically assessed through individual interviews carried out by a previously capacitated team of psychology undergraduates and psychologists. The assessment took place during three meetings lasting one hour each on a weekly basis. The order the instruments were applied was randomly changed in the second and third meeting in order to avoid the effect of the order on the results. During the first meeting, an initial semi-structured interview was applied, recorded and transcribed; in the second meeting, the CDI, the IDATE-C and the CAPS were used; and in the third, the interview was structured based on the DSM-IV and the ESI.

After individual psychological assessment, participants were referred to group therapy. Ten groups were formed over three years, according to date of arrival and age. Each group was formed by four to six participants. The groups were coordinated by a psychologist with experience in treating children and teenagers victims of sexual abuse. Cognitive behavioral group therapy was organized in 16 weekly sessions, during which semi-structured activities were carried out for 1.5 hours. All the sessions were reported by the coordinators of each group. The group therapy process was divided in three stages according to the techniques employed: 1 – psychoeducation (six sessions), 2 – stress inoculation training (four sessions), and 3 – relapse prevention (six sessions). The description of these sessions can be found in Table 1.

All the participants were reassessed individually during the psychotherapy process, at the end of each stage of group intervention. The instruments used during initial assessment were also employed during the reassessments. Members of the team who were not involved in coordinating the therapy groups carried out the clinical assessments and reassessments. In addition, clinical follow up of participants was carried out weekly. The therapists reported on the difficulties faced and progress achieved during therapy by each participant at the end of the sessions.

At the end of the group therapy, all the participants were reassessed individually. During this reassessment, the instruments applied in the initial assessment were used again in search for symptoms of depression, anxiety, post-traumatic stress disorder and dysfunctional beliefs concerning sexual abuse. After the end of the therapy period, all participants were followed up for a year,

through reassessments taking place every six months, in order to observe whether the effects of the intervention were maintained.

The results of the instruments used and the interview for PTSD were initially used in descriptive analyses, in which the mean and the standard deviation were found for each instrument on the different occasions. After the descriptive analyses, Kolmogorov-Smirnov test was performed to verify the normality of the sample ($p>0.05$). Repeated measure analysis was carried out at the three distinct times of the process: pre-testing (preliminary assessment), post-testing 1 (after psychoeducation), post-testing 2 (after stress inoculation training), and post-testing 3 (after recurrence prevention).

This study was approved by the Research Ethics Committee of the *Universidade Federal do Rio Grande do Sul* (Report 2004299).

RESULTS

A small number of participants were treated immediately after the sexual abuse was reported, and the majority was waiting for psychological treatment. For this reason the results of the psychological instruments (depression, anxiety, stress, perceptions and attributions concerning the abuse and post-traumatic stress disorder) were analyzed, thus comparing those participants who had access to the service to those who were in the waiting list. The results of these instruments were compared through t test and no significant difference in the psychological symptoms assessed were found (Table 2).

The combination of all the measures of each instrument was analyzed (pre and post1; pre and post2, pre and post3, post1 and post2, post1 and post3 and post2 and

Table 1. Description of the activities carried out during group therapy. Metropolitan area of Porto Alegre, Southern Brazil, 2006-2008.

Stage	Session	Activity
Psychoeducation		Group dynamics that enables participants to introduce themselves: interviews in pairs and introduction to group
	1st	Group dynamics to build trust. Tool: pairs walking together blindfolded Establishing the therapy contract (therapy hours, attendance, duration) Discussing group identity Mapping participants' expectation. Tool: making a poster Discussing and establishing the goals of the group
	2nd	Showing and discussing about the documentary "*Canto de Cicatriz*" ["*Scar song*"] Talking about the sexual abuse experience: individual testimonies Being free of guilt Therapeutically addressing the emotional impact of disclosure in the group
	3rd	Addressing the reaction of the family and of other significant people after reporting the abuse and mapping the possible changes in family structure Cognitive restructuring beliefs connected to guilt and shame (making cards with alternative explanations for the abuse that frees participants from guilt)
	4th	Psychoeducation in regard to cognitive-behavioral model – addressing emotional states. Tool: the game of emotions Therapeutically addressing the feelings towards the abuser. Tool: making a representation of the abuse in play dough and role-playing between the participant and the abuser Self-monitoring: recording problem-situations and identified feelings
	5th	Discussion on self-monitoring; Psychoeducation concerning the cognitive-behavioral model – addressing thoughts and physiological reactions and their relationship with emotions Identifying thoughts concerning the abuse (cognitive triad) and cognitive restructuring of dysfunctional behavior Identifying physiological reactions Learning relaxation and breathing techniques to overcome anxiety Self-monitoring: recording problem-situations, thoughts, physiological reactions and related feelings
	6th	Discussion of self-monitoring reports Psychoeducation concerning the cognitive-behavioral model – addressing behaviors and their relationship with thoughts, feelings and physiological reactions Mapping, in writing, of the main changes in behavior, thoughts and feelings as a result of the sexual abuse experience Psychoeducation concerning the problem (establishing the connection between abuse/trauma with the changes mapped) Drawing comic strips based on the situations recorded, identifying emotions, thoughts, behaviors and physical reactions to build the cognitive-behavioral model

To be continued

Table 1 continuation

Stage	Session	Activity
Stress inoculation training	7th	Each participant gradually presents, orally or in writing, the situations of abuse she suffered; Cognitively restructuring traumatic memories – Self-instruction practice
	8th	Detailed testimony of sexual abuse Mapping the frequency and intensity of the memories of the sexual abuse and the events that trigger these memories Practicing relaxation and breathing
	9th	Detailed testimony of sexual abuse Tool: Replacing positive and negative images (memory drawers)
	10th	Talking about the worst moment of the abuse Pressing the "emergency button" with cognitive and behavioral strategies to deal with intrusive memories of the abuse
Relapse prevention	11th	Sexual education workshop, in which issues involving self-care, physical changes during puberty and birth control are addressed
	12th	Psychomotricity workshop
	13th	Workshop on the Statute of the Child and Adolescent Showing and discussing the video "Estatuto do Futuro" ["Act of the Future"] Role-playing court hearings (addressing the possibility of participants having to be heard, clarifying doubts and preparing participants for hearings)
	14th	Practicing social abilities focused on protection measures (identifying risk situations and cognitive and behavioral strategies against revictimization) Choosing an adult as a reference to turn to help in situations of risk
	15th	Retapping cognitive and behavioral strategies learned within group context Addressing participants' future perspectives and restructuring distorted beliefs
	16th	Written self-assessment reporting the changes noticed before and after group therapy concerning the self, the way one relates to others and vision of future End-of-therapy party

Based on Habigzang et al[9] (2008)

post3) and the significant results ($p<0.05$) are shown in Table 3.

The symptoms of depression assessed by the CDI fell significantly between pre-testing and post-testing 3. The anxiety symptoms assessed by the IDATE-C also fell significantly, in the trait and state scales, between pre and post-testing 3, in addition to between post 1 and post 3, and post 2 and post 3.

The symptoms of child stress assessed by ESI were significantly reduced in the sum of the four subscales (physical symptoms, psychological symptoms, psychological symptoms with a depressive component, and psycho-physiological symptoms) between pre and post-testing 3. There was a non significant increase between pre-testing and post-testing 1. However, after the first group therapy stage there was a significant decrease of symptoms.

The CAPS-assessed perceptions and attributions of the participants also suffered significant changes between pre-testing and post-testing 3. These cognitive distortions were modified through cognitive restructuring techniques. The changes in the perception of guilt were identified, as well as in the perception of how much they can trust people and of how much people believe in them. However, changes in perception concerning their peers were not identified, that is, participants continued to see themselves as different from other girls their age.

There was a significant reduction in the number of post-traumatic stress disorder symptoms across the three symptom categories that make up the framework: reliving the traumatic experience, avoidance, numbness and hypervigilance. The specific traumatic memory restructuring techniques explored in the second stage of the intervention significantly contributed to reducing reliving and hypervigilance symptoms. The symptoms of avoidance decreased as early as the first stage of the intervention.

There was a decrease of symptomatology and the participants elaborated more functional beliefs concerning the sexual abuse experience. Therefore, the intervention model assessed herein was effective in reducing symptoms of depression, anxiety and PTSD, as well as in restructuring the dysfunctional beliefs of participants.

DISCUSSION

Comparing psychological symptoms and waiting period for psychological treatment in the three groups (those who received treatment: right after report of abuse, one

Table 2. Results of the psychological assessment and waiting periods for treatment in preliminary interviews. Metropolitan area of Porto Alegre, Southern Brazil, 2006-2008.

Tool	Immediate mean (SD)	1 to 6 months mean (SD)	More than 6 months mean (SD)	p
CDI	16.00 (9.56)	17.77 (8.96)	13.25 (9.89)	0.50
ESI	44.70 (18.42)	51.05 (16.81)	50.88 (14.54)	0.59
ESI – Physical reactions	8.70 (5.14)	10.14 (5.49)	8.63 (2.92)	0.66
ESI – Psychological reactions	14.10 (7.31)	17.60 (5.69)	19.25 (4.71)	0.17
ESI – Psych. reactions comp. dep.	10.80 (7.49)	10.91 (6.39)	11.25 (5.20)	0.99
ESI – Psychophysical reactions	11.10 (4.65)	11.86 (4.47)	13.38 (4.37)	0.56
IDATE – State	33.50 (6.95)	35.36 (7.13)	34.50 (7.58)	0.79
IDATE – Trait	37.80 (7.41)	42.36 (6.82)	39.13 (4.94)	0.17
CAPS – Feeling different from peers	10.20 (3.15)	8.91 (3.85)	8.88 (2.59)	0.60
CAPS – Feeling of guilt	8.90 (3.31)	9.36 (3.06)	8.00 (2.67)	0.56
CAPS – Credibility	11.50 (5.44)	13.18 (3.23)	12.88 (1.96)	0.50
CAPS – Trust	14.40 (4.33)	14.32 (4.30)	11.38 (3.02)	0.20
PTSD – Reliving	2.60 (1.17)	3.27 (1.20)	2.88 (1.36)	0.34
PTSD – Avoidance	3.70 (1.83)	3.55 (1.65)	3.13 (0.99)	0.74
PTSD – Hypervigilance	3.00 (1.41)	3.82 (1.09)	3.00 (1.31)	0.12

CDI: Children's Depression Inventory
ESI: Children's Stress Inventory
IDATE: Anxiety Inventory – trait and state
CAPS: Children's attributions and perceptions scale
PTSD: Structured questionnaire based on DSM-IV

to six months the report, and after six months of the report) group that had immediate access to treatment, group that received treatment after one month of report of abuse, and group that received treatment after six months of report of abuse) did not result in significant differences among them in any of the scales applied. Therefore, it can be inferred that the time elapsed during the period the participant was waiting for treatment does not reduce the psychological symptoms of depression, anxiety, PTSD and stress, in addition to not contributing to changes in the perceptions of guilt, difference from peers, trust and credibility measured by the CAPS. This result corroborates another study[14] that also did not find psychological symptoms to be reduced in the absence of therapy intervention.

The assessment of the effects of the intervention on the symptoms of depression, anxiety and post-traumatic stress disorder, in addition to the assessment of the beliefs concerning the abuse, showed a significant decrease in symptoms. The symptoms of depression decreased significantly between pre-testing and post-testing 3. Anxiety symptoms also decreased significantly between pre-testing and post-testing 3, and between post-testing 1 and post-testing 3, and post-testing 2 and post-testing 3. The significant decrease in the symptoms of depression and anxiety between pre-testing and the end of the intervention points to the restructuring of dysfunctional beliefs related to guilt and family breakdown emphasized during the first sessions. Moreover, understanding of what sexual abuse is and exploring feelings and perceptions concerning the experience had a positive impact on the symptoms. The distorted perceptions of the child, concerning the abuse, are connected to a higher symptomatology of depression and anxiety.[19]

The symptoms of child stress decreased significantly in the sum of the four subscales between pre-testing and post-testing 3. The non-significant increase observed between pre-testing and post-testing 1 can be explained by the fact that it was the beginning of the therapy, which may have caused increased stress in some participants. However, after this first stage of group therapy, a significant decrease of the symptoms was noted. These results suggest that the relaxation techniques, stress inoculation training and cognitive restructuring were effective in reducing stress. In addition, learning self-protection measures during the last stage of group therapy can also have contributed to an increased perception of safety and development of coping strategies.

The perceptions and attributions of participants also suffered significant changes between pre-testing and post-testing 3, probably because of the cognitive restructuring techniques. Changes in participants' perception of guilt, in addition to changes in perception of trust in other people, were observed. The group

Table 3. Results of the tools applied during pre-testing and post-testings 1, 2 and 3. Metropolitan area of Porto Alegre, Southern Brazil, 2006-2008.

Tool	Pre Mean (SD)	Post 1 Mean (SD)	Post 2 Mean (SD)	Post 3 Mean (SD)	p Pre-Post1	p Pre-Post2	p Pre-Post3	p Post1-Post2	p Post1-Post3	p Post2-Post3
CDI	16.34(9.42)	14.39(8.01)	13.95(10.06)	12.31(9.10)			0.02			
ESI	49.89(16.89)	51.00(19.24)	47.59(21.86)	41.05(23.10)			0.02		0.01	0.02
ESI – Physical reactions	9.55(5.05)	10.32(5.07)	8.74(4.49)	8.38(5.58)				0.01	0.01	
ESI – Psychological reactions	17.03(6.20)	15.61(6.09)	13.38(6.95)	11.67(7.06)		<0.01	<0.01	0.03	<0.01	
ESI – Psych. reactions comp. dep.	10.95(6.31)	12.50(7.39)	12.59(7.86)	10.41(7.38)					0.03	0.03
ESI – Psycho and physiological reactions	11.98(4.45)	12.53(5.14)	12.13(5.39)	9.79(5.74)			0.02		0.01	<0.01
IDATE – State	34.73(7.03)	34.53(7.94)	33.10(7.43)	31.15(7.52)			0.02		0.02	
IDATE – Trait	40.58(6.80)	39.87(7.70)	38.87(7.10)	35.44(6.31)			<0.01		<0.01	<0.01
CAPS – Feeling different from peers	9.23(3.44)	9.71(4.01)	8.87(3.72)	8.79(4.02)						
CAPS – Feeling of guilt	8.98(3.02)	8.97(3.29)	8.44(3.90)	7.74(2.76)			0.03		<0.01	
CAPS – Credibility	12.70(3.69)	11.74(4.61)	12.08(4.44)	11.13(4.04)			0.01			
CAPS – Trust	13.75(4.17)	12.53(4.27)	13.15(4.98)	11.72(4.52)			0.01			0.03
PTSD - Reliving	3.03(1.23)	2.89(1.50)	2.79(1.54)	1.90(1.35)			<0.01		<0.01	<0.01
PTSD – Avoidance	3.50(1.57)	2.84(1.46)	2.85(1.66)	1.72(1.34)	0.02	0.02	<0.01		<0.01	
PTSD – Hypervigilance	3.45(1.26)	3.18(1.31)	3.13(1.34)	2.41(1.31)			<0.01		<0.01	<0.01

therapy context, in which participants felt respected and experience credibility coming from the group, can contribute to restructure these perceptions. Moreover, the group represented a safe place, in which bonds of trust are developed among participants and therapists, thus promoting a differentiated model of interpersonal relationship. Although participants maintained the perception of being different from other girls their age, this results suggests the importance of intervening more systematically in the belief that girls victimized by sexual abuse have of being different from other children and adolescents.

There was a significant decrease in the number of PTSD symptoms in the three symptom categories: reliving the trauma, avoidance and numbness and hypervigilance. The specific techniques for restructuring traumatic memory applied during the second stage of the intervention significantly contributed to decreasing reliving and hypervigilance symptoms. Stress inoculation training associated to image substitution and relaxation were important in elaborating new meanings for the abuse, as well as in learning tools to control emotional reactions triggered by remembering the abuse. Avoidance symptoms decreased from the first stage of the intervention, due to the fact that the therapy was focused on the abuse from the first session and promoted systematic desensibilization concerning the sexual abuse topic. The video on sexual abuse of children shown to the children and the fact that they shared their life stories with the group may have helped reduce the symptoms of avoidance. The decrease in PTSD symptoms found in this study corroborates the study that reported effectiveness of CBT in improving this disorder.[4]

Considering the results of this study, it can be inferred that the group therapy model was effective in reducing symptoms of depression, anxiety and PTSD, in addition to helping restructure participants' dysfunctional beliefs. Comparing the findings to a control group

would enable us to assess whether symptomatology was reduced only because of the course of time. However, using a control group could pose methodological problems, such as loss of participants of the control group due to the waiting period, and ethical problems, because the study would not provide immediate access to treatment to children and adolescents in risk situations. On the other hand, studies have confirmed that the course of time is not responsible for remission or for reducing symptoms resulting from sexual abuse, and that adults who go through this experience during childhood carry psychological burdens throughout their lives[12,14] The analysis on the duration of the waiting period corroborates these findings, thus highlighting the fact that intervention is necessary to reduce psychological symptoms.

Studies with a larger number of participants may strengthen the findings in this study, since they would enable more robust statistical analyses. In addition, future studies should also address and apply the model to male child and adolescents to assess the effectiveness in boys. Currently, the participants are being followed up on a monthly basis and the psychological instruments are being applied after six months and one year after the end of the intervention to assess whether their improved clinical conditions is being maintained.

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