Effectiveness of school based psychodrama in improving mental health of Palestinian Adolescents

Thabet A.A., Consultant Child and Adolescent Psychiatrist & Senior Researcher
Abu Tawahina A., Clinical Psychologist
Eyad El Sarraj, Consultant Psychiatrist,Gaza Community Mental Health Programme
Panos Vostanis, Professor of Child and Adolescent Psychiatry, University of Leicester, Greenwood Institute of Child Health, Westcotes House, Westcotes Drive, Leicester LE2 OQU, UK

abdelazizt@hotmail.com - thabet@gcmhp.net - pv11@le.ac.uk

Abstract

Background: There are few psychosocial interventions programs to address adolescent's psychosocial needs among Palestinian adolescents area of war and conflict.

Aim : The aim of the study was to evaluate the effectiveness of school based psychodrama program in improving mental health status of Palestinian children in the Gaza Strip.

Method : Participants of the study were 84 school adolescents aged 12-17 (Mean age = 13.7 years) from grades one tenth from three schools selected randomly from schools registration lists provided by the Ministry of Education. From each school, classes were randomly assigned to the prevention.

Pre-test and assessment scales (Sociodemographic scale and Gaza Child Mental Health Scale) were applied to children one week before starting the psychodrama sessions on April and May 2008 by 6 psychologists and psychiatric nurses working the field of children victims of trauma and war and at the end of scholastic year on May 2008.

Results: According to adolescents report, the results showed that there was statistically significant decrease in total scores of child mental health problems and hyperactivity symptoms after psychodrama program. According to parents, the results showed that there was statistically significant decrease in obsessive and overanxious symptoms after student the intervention program. However, teachers did not report improvement in most of adolescent's mental health problems.

Conclusion: Our findings showed that psychodrama program in time of war and conflict was effective and improved adolescents' mental health. However, there were discrepancies between the adolescents, parents, and teachers reports of improvement in mental health problems. Parents and adolescents agreed that the program improved the adolescent's mental health. However, teachers said no effect. This highlighted the need for increasing the number of psychodrama sessions and time between each session. Also, other factors could be studied instead of only studying the mental health such as resilience and social skills.

Key words: Adolescents, Psychodrama, Mental health, Gaza Strip

Introduction

Psychodrama's method is a kind of non-scripted theater and requires extensive training to implement. In brief, it uses action with auxiliaries (specially trained actors) and externalizes inner reality in concrete scenes. This allows for the catharsis of abreaction (emotion releasing), as well as for catharsis of insight (cognitive restructuring). Moreno called it a "science which explores the truth by dramatic means" and deals with interpersonal and private worlds" (Moreno, 1951, p. 102). Witnessing oneself in action does often penetrate defense mechanisms to make subconscious processes a matter of conscious experience (and thus accessible to the free will function.)It is true that in general, empirical data on the effectiveness of psychodrama have been generated infrequently and have often been based on methodologically weak experimental designs. The explanation given for this trend has been that psychodramatists are clinical practitioners and hence are disinclined to be engaged in scientific research. J. L. Moreno, the founder of psychodrama, himself was not an avid advocate of the traditional scientific research. It has also been suggested that the absence of courses on psychodrama from academic curricula has been. Psychodrama is an umbrella name for a series of techniques presented by the late J.L. Moreno (1977). During a psychodramatic exploration in action, the client and director can together precisely identify the moment at which maladaptive thoughts arise. But psychodramatic treatment does not necessarily target the thought itself. Rather, psychodramatic action evokes the affective packaging or accompanying emotional sequences that make the thought so durable. Because persistent thoughts coil inextricably with their emotional imprint, they will often not easily extinguish until the affective packaging shifts and reprints.

Katz et al (2004) found not different from the controls who received treatment as usual consisting of psychodynamic group and individual therapy. These results indicate that suicidal adolescents might benefit from different types of intervention

Xianchen (2004) using psychodrama found that frequent nightmares were associated with both suicidal ideation and suicide attempts. During treatment, it happened in several cases that by accessing the material of the suicidal state in wakefulness the feelings and images transformed into familiar nightmares. Focusing on the experiences during a nightmare could also suddenly transfer the client into the state experienced during daytime suicidal ideation.

Kipper and Richti (2003) in meta-analysis of studies measuring the effectiveness of psychodramatic techniques found that the overall treatment effect size for the 25 studies was 0.95, above the cutoff level of 0.80 that customarily indicates a large effect (Cohen, 1992). This effect size is slightly higher than the comparable results commonly reported in the group psychotherapy literature for the effectiveness of group therapy in general (0.50–0.70; Fuhriman & Burlingame, 1994). Arguably, the elevated effect size might be partly due to the halo effect often associated with psychodramatic interventions. Nonetheless, the overall effect size is certainly congruent with the tendency reported for group psychotherapy in general, a fact that lends credence to the conclusion that the available research demonstrated the empirical validity of the basic psychodramatic techniques (i.e., role reversal and doubling).

The aim of the study was to evaluate the effectiveness of psychodrama program in improving mental health status of Palestinian children in the Gaza Strip.

Methods

Subjects

Participants of the study were 84 adolescents aged 12-17 years (Mean age= 13.79 SD= 1.05) from three schools selected randomly from schools registration lists provided by the Ministry of Education. From each school, classes were randomly assigned to the prevention.

Procedure

After receiving authorization for the intervention program from the Ministry of Education, participant's schools were recruited on the base of the consent of school headmasters and administrators, who acquired written consent from parents. In each school, 4 adolescents from each class were allocated randomly to the intervention group. Pre-test assessment was applied to adolescents one week before starting the psychodrama sessions on April 2008 by 6 psychologists and psychiatric nurses working the field of children and adolescents victims of trauma and war in the area.

Psychodrama sessions

Psychodrama model

The psychodrama model, described by Carbonell and Parteleno-Berehmi (1999), focused on giving adolescents the opportunity to process the trauma through their senses, using a reenactment dramatization which each girl directed. The warm-up phase was a time for the girls to bond, develop a group culture, and learn theatrical skills and core concepts. During the action phase, each girl was given the opportunity to stage, direct, and act out what happened to her. During this reenactment, the therapists had opportunities to reframe the events of the trauma in more adaptive ways. Each client was also given the opportunity to create new, positive endings to her story, in hopes of restoring a sense of personal control to the clients. Alternative formats were offered when a reenactment seemed too overwhelming for a client. During the final phase of each session, the girls had the opportunity to share their experiences of the dramatization and any feelings it brought up for them. Carbonell and Parteleno-Berehmi (1999) advised that, in the sharing phase, it is important for therapists to allow for emotional processing of material without becoming overly analytical about it.

As a treatment process, psychodrama concerns itself with the way an individual responds to a particular situation by focusing on the individual's behavioural responses, his belief system about himself, the other and the world in which he inhabits, his feelings and the consequences of such a response. The process begins by establishing a contract with the client as to what is

wrong and what needs to be addressed in the session;

- moves on to examining the present problem as it relates to the adolescent in the here and now, examining the client's responses to the specific situation in which other persons and objects are involved. It is at this stage that a role analysis is made;
- finds similarities in the recent past in order to check the role analysis and confirm the internal working models operating;
- discovers linkages in the deep past;
- helps the adolescents understand his or her own process in life;
- achieves a catharsis if necessary with regard to repressed emotions;
- concretizes the issues: the choices and action that keep the client in the dysfunctional state;
- helps the adolescent see the choices and option in life;
- aids integration of the cognitive and the affective states;
- achieves closure so that the client can apply what he has learnt within the therapeutic situation.

On May 2008 after finishing the semester the children were assessed again with the same instruments.

Instruments of assessment the program

Sociodemographic data:

The adolescents demographic data was collected by questionnaire include sex, age, class, and place of residence.

Gaza Child Health Study Scales (Miller et all, 1999)

The Gaza Child Health Study Scale was developed and validated in the Gaza Strip and West Bank in a sample of Palestinian children (Miller et al, 1999). The original OCHS assesses problem behavior symptoms associated with DSM-III childhood psychiatric disorders (Boyle, Offord, Racine, Szatmari, & Sanford, 1993) and contains items adapted from the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1981). The modified GCHSS contains 42 symptom items for teachers and 62 items for parents and child himself rated on a 3-point Likert-type scale ranging from 0 (*rarely applies*) to 2 (*certainly applies*). Broadband scales are computed to assess internalizing (e.g., worries about things in the future; needs to be told over and over that things are okay) and externalizing (e.g., kicks, bites, or hits other children; defiant, talks back to adults) symptoms. This version consists of 34 items measures (conduct – 15 items, hyperactivity- 6 items, depression-5 items, obsession-4, and

overanxious-3 items) the emotional and behavioural problems of children rated by parents if the children 6-11 years and by children themselves if the were 12 years and more. The score range from 0= not true,

1= sometimes, 2= true. The reliability test of the scale was Cronbach's alpha = 0.87 and split half was 0.86 .

Statistical analysis

In this study we used SPSS ver. 11 for data entry and analysis. Frequency and percentages of the demographic variables were obtained. T- Paired test to compare the intervention program before and after was used.

Results of the study

Sociodemographic characteristics data

The total number of adolescents was 84 children age ranged from 12-17 years, the average age was (13.79 years). There were 56 boys (66.7%) and 28 girls (33.33%). According to class, 33.3% enrolled in the 7th class, 32.1% in the eight class, and 34.5% in the ninth class. Most of them live in cities (71.1%), 24.1% live in villages, and 4.8% live in camps. According to family monthly income, 54.3% had monthly income less than 350 US $, 25.9% had monthly income 350-740 US $, and 19.8% had monthly income more than 750 US $.

Table 1: Sociodemographic data for adolescents in the sample (N= 84)

	No	%
Sex		
Male	56	66.7
Female	28	33.3
Class		
Seven	28	33.3
Eight	27	32.1
Ninth	29	34.5
Type of residence		
City	59	71.1
Village	20	24.1
Camp	4	4.8
No. of siblings		
Less than 4	15	17.9
5-7	42	50.0
8 and above	27	32.1
Family Monthly income		
Less than 350 $	44	54.3
351-750 $	21	25.9
751 $ and above	16	19.8
Paternal education		
Uneducated	3	3.6
Preparatory	8	9.5
Primary	22	26.2
Secondary	12	14.3
University	18	21.4
Master degree	16	19.0
PhD	5	6.0
Paternal job		
Unemployed	31	37.8
Simple worker	8	9.8
Skilled worker	5	6.1
Employee	27	32.9
Merchant	4	4.9
Others	6	7.3
Maternal education		
Uneducated	5	6.0
Preparatory	2	2.4
Primary	19	22.6
Secondary	33	39.3
University	15	17.9
Master degree	10	11.9
Maternal job		
House wife	81	96.4
Simple worker	1	1.2
Employee	2	2.4

Results of Gaza Child Health Study Scales report

Differences in child mental health between the two stages of psychodrama using Paired T test of GCHSS – parents form

In order to find the effectiveness of the psychodrama, a paired T test was done to find the differences between pre assessment and post assessment period according to parents report. The results showed that there were statistically significant differences between the mean of total scores of mental health before and after psychodrama. This mean differences between the two times were 9.56 (t=7.6, p = 0.001), conduct (t=3.0, p = 0.001), oppositional deviant disorder (t=3.0, p = 0.001), separation anxiety (t=2.9, p = 0.001), and depression (t=3.0, p = 0.001). However no changes in overanxious and hyperactivity scores after intervention. Table 2.

Table 2: Differences in child mental health between the two stages of psychodrama using Paired T test of GCHSS -parents form

	Mean	SD	MD	t	p
Gaza Child Health Survey Scale					
Pre-assessment	26.2	16.3	9.5	7.6	0.001 **
Post-assessment	16.6	11.4			
Conduct					
Pre-assessment	1.3	2.1	0.5	3.0	0.001 **
Post-assessment	0.8	1.8			
Oppositional deviant disorder					
Pre-assessment	4.2	3.8	1.1	3.0	0.001 **
Post-assessment	3.2	3.7			
hyperactivity					
Pre-assessment	3.5	2.7	0.4	1.7	0.10//
Post-assessment	3.1	2.7			
Overanxious					
Pre-assessment	5.7	4.3	0.8	1.8	0.10//
Post-assessment	4.9	3.9			
Separation anxiety					

Pre-assessment	4.8	3.6	1.1	2.9	0.001 **
Post-assessment	3.7	3.4			
Depression					
Pre-assessment	6.1	4.9	1.3	3.0	**0.001
Post-assessment	4.8	4.2			

Differences in child mental health between the two stages of psychodrama using Paired T test of GCHS–teachers' form

In order to find the effectiveness of the psychodrama, a paired T test was done to find the differences between pre assessment and post assessment period according to teachers report. The results showed that there were statistically significant negative differences between the mean of total scores of mental health before and after psychodrama. This mean differences between the two times was -4.4 (t=-4.6, p = 0.001), conduct (t=3-4.1, p = 0.001), hyperactivity (t= -3.2, p = 0.001), and depression (t=-2.7, p = 0.001). While, there were no significant differences in overanxious problems. Table 3.

Table 3 :Differences in child mental health between the two stages of psychodrama using Paired T test of GCHSS -teachers form

GCHSS -teachers form	Mean	SD	MD	t	p
Gaza Child Health Survey Scale					
Pre-assessment	15.5	10.4	-4.4	-4.6	0.001 **
Post-assessment	19.9	9.8			
Conduct					
Pre-assessment	1.1	1.9	-0.8	-4.1	0.001 **
Post-assessment	1.9	2.2			
Oppositional deviant disorder					
Pre-assessment	4.5	3.5	1.0	2.9	0.001 **
Post-assessment	3.5	2.4			
hyperactivity					
Pre-assessment	2.8	2.1	-0.9	-3.2	0.001 **
Post-assessment	3.7	2.0			
Overanxious					
Pre-assessment	3.5	2.4	0.3	1.1	//0.3
Post-assessment	3.2	2.2			
Depression					
Pre-assessment	4.0	4.4	-1.1	-2.7	0.001 **
Post-assessment	5.1	3.7			

Differences in adolescents mental health between the two stages of psychodrama using Paired T test of GCHS–children' form

In order to find the effectiveness of the psychodrama, a paired T test was done to find the differences between pre assessment and post assessment period according to children report. The results showed that there were statistically significant differences between the mean of total scores of mental health before and after psychodrama. This mean differences between the two times was 11.8 (t=6, p = 0.001), oppositional deviant disorder (t=4.0, p = 0.001), hyperactivity (t = 2.8, p = 0.001), overanxious (t = 6.10, p = 0.001), separation anxiety (t=4.0, p = 0.001), and depression (t=9.0, p = 0.001). However, there was increase in conduct disorder after the intervention (t = - 3.6, p = 0.001). Table 4.

Table 4 :Differences in child mental health between the two stages of psychodrama using Paired T test of GCHS-adolescent' form

GCHSS -child	Mean	SD	MD	t	p
Gaza Child Health Survey Scale					
Pre-assessment	34.40	17.20	11.80	6.00	0.001 **
Post-assessment	22.60	18.30			
Conduct					
Pre-assessment	1.00	1.70	-1.00	-3.60	0.001 **
Post-assessment	2.00	2.50			
Oppositional deviant disorder					
Pre-assessment	4.30	3.30	1.40	4.00	0.001 **
Post-assessment	2.90	3.30			
Hyperactivity					
Pre-assessment	3.70	2.50	0.90	2.80	0.001 **
Post-assessment	2.80	2.50			
Overanxious					
Pre-assessment	8.20	4.30	3.20	6.10	0.001 **
Post-assessment	5.00	4.10			
Separation anxiety					
Pre-assessment	6.80	3.50	2.10	4.00	0.001 **
Post-assessment	4.70	4.00			
Depression					
Pre-assessment	8.90	5.10	4.30	9.00	0.001 **
Post-assessment	4.60	4.30			

Discussion

The results showed that there were statistically significant decrease in total scores of mental health problems of adolescents according to the adolescents and their parents after one week of psychodrama in schools. However, teachers reported no change in mental health problems after such intervention. This is consistent with similar studies using other types of intervention, Cohen and Mannarino (1992) and Sinclair and colleagues (1995) used trauma-focused cognitive behavioral approaches, and Lindon and Nourse (1994) utilized a multi-dimensional model, which also contains graduated exposure to the trauma, though not labeled as such. Despite lack of controls, these results provide preliminary support for

trauma-focused CBT as an effective intervention for alleviating symptoms of PTSD. Other studies that provided exposure to the trauma did not include PTSD measures. Five studies (Baker, 1987; Carbonell & Parteleno-Barehmi, 1999; Cohen & Mannarino, 1992; Lindon & Nourse, 1994; MacKay et al., 1987) measured anxiety symptoms more generally. Of these, three studies (Carbonell & Parteleno-Barehmi, 1999; Cohen & Mannarino, 1992; Lindon & Nourse, 1994) reported finding significantly reduced anxiety symptoms from pretest to post-test. The study of a psychodrama group (Carbonell & Parteleno-Barehmi, 1999) also found significant improvement in anxiety symptoms in comparison to a control group. The study by Baker (1987) utilized a Rogerian/ humanistic approach and found that anxiety symptoms were reduced by group treatment, but not significantly more than by individual treatment. MacKay and colleagues' (1987) study of a drama therapy group with no control group found no significant improvements in anxiety levels, possibly due to the small sample size. These results appear to indicate that many models of group therapy are associated with decreases in self-reported anxiety symptoms to a moderate degree. Carbonnell & Parteleno-Barehmi, 1999 and MacKay et al., (1987) found significant improvement in depression scores. In their controlled study Carbonell and Parteleno-Barehmi's (1999) psychodrama group was associated with significantly greater decreases in depression than an arts and crafts waitlist group. MacKay et al.'s (1987) psychodrama group also yielded improvements in depressive symptoms from pretest to post-test, as measured by group members' average scores on the Beck Depression Inventory (BDI). There was no evidence that humanistic/Rogerian or trauma-focused CBT groups alleviated depressive symptoms. There may be something about the way the psychodrama allows the girls to create a happier ending for themselves and process trauma with all five senses that contributes to decreased depressive symptoms.

Conclusion

Our findings showed that psychodrama program in time of war and conflict was effective and improved adolescents' mental health. However, there were discrepancies between the adolescents, parents, and teachers reports of improvement in mental health problems. Parents and adolescents agreed that the program improved the adolescent's mental health. However, teachers said no effect. This highlighted the need for increasing the number of psychodrama sessions and time between each session. Also, other factors could be studied instead of only studying the mental health such as resilience and social skills.

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