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Intervention as an Adjunct to Drug Therapy for Childhood Depression

R. Kannappan
Vinayaka Mission Medical College, Salem.

The sixty female children who had the symptoms of depression such as tension, irritability, social withdrawal, weeping spells, sleep disturbance, loss of appetite, forgetting, fear of examination, low activity level, palpitation, and diminished ability to concentrate came for treatment. Children's Depression Rating Scale (CDRS) was used at the assessments of before, after, and follow-ups of the therapeutic intervention. Pharmacotherapy (PT) and combination of Pharmaco and Psychological Therapies (PPT) - Parental counseling, cognitive behavioral program - were used for 18 sessions, each 50 minutes for the improvement of depressive disorder. Statistics such as percentage, and t-test were calculated for analyzing the data. Results indicate a significant reduction of depressive symptoms in female children and better maintained at follow-ups in Pharmacotherapy (PT) and combination of Pharmaco and Psychological Therapies. Further the combination of Pharmaco and Psychological Therapies is significantly more effective than the PT in treating the depressive features of children.

Keywords: Depressive disorder, Cognitive behavior therapy, Drug therapy

Experiences of "ups" and "downs" are common in one's life. Some people have the "downs" over two weeks causing problems with everyday activities such as eating, sleeping, working, and getting along with friends. They indicate the temporary sadness, loneliness, or blues that everyone feels from time to time and lead a medical condition called depression. The condition affects a person's physical health, as well as feeling, thinking, and acting toward others. It brings about a combination of feelings and thoughts which leads one to depart from his usual behavior. Such symptoms of depression are treatable (Johnstone, Cunningham Owens, Lawrie, Sharpe, & Freeman, 2004; Sarason, & Sarason, 2002; Kaplan, & Sadock, 1999) and it is the most common psychiatric problems in primary care (Mc Daniel, Mussleman, & Proter, 1995). This appears at an earlier age, even young children (Lash & Weissman, 1990). New episode can occur abruptly with same symptoms or more severe symptoms (Hales, Yudofsky & Talbott, 2003). Its recurrence is most common and 6.5% women and 3.3% men suffer from depression each year. The illness affects all people, regardless of sex, race, ethnicity, or socioeconomic standing.

Depressed children tend to be socially withdrawn (France, Cristoff, Crimmins, & Kelly, 1983) and have minimal conversational skills, no friends and longstanding socially isolated life style (France, Cristoff, Crimmins, & Kelly, 1983). Their peers do not accept depressed children as non depressed children (Faust, Baum, & Forehand, 1998). The present study attempts to examine the remission of depressive symptoms using by the use of drug therapy and the combination of drug and psychological therapies for depressed children.

Objectives:

They were i) to use appropriate intervention strategies for the management of disorder ii) to use psychological scales to assess disorder and iii) to assess the qualitative changes in depressive patient after the intervention and at follow-ups.

Method

Design:

Pre and post research design was used for the study. The children who had depressive features for one month came to the hospital. Antidepressants and psychological therapies - Parental counseling, cognitive behavioral program - were given. The duration of the therapies was 18 sessions, each for 50 minutes session. Data were collected before, after, and follow-ups by using the Children's Depression Rating Scale (CDRS).

Sample:

Sixty female children out of 250 who had the symptoms of depressive disorder, were randomly classified into two groups- namely Pharmacotherapy (PT) group (n=30), and combined Pharmaco and Psychological therapy (PPT) group (n=30). The former group received only drugs and the latter group received both drugs and cognitive behavior therapy with parental counseling. The duration of the therapies was 18 sessions, each comprising 50 minutes. The follow-ups were done once in a month by using the CDRS).

Majority of them belonged to the age group of 11-12 years (53%) followed by the age group of 9-10 years(47%), and belonged to Hindu (83%) followed by Christians (13%). Majority of them were doing 6th standard and they had moderate depression (70%). Majority of the children's father had education less 8^{th} standard followed by 10^{th} standard (25%). 5% of the father had no formal education. and 15 % of the children had suicidal risk.

Measures:

Description of the Scales: Children Depression Rating Scale (CDRS), developed by Ponznanski, Cook and Carroll (1979) is a 16 item scale used to evaluate the severity of depression in children in the age of 6 to 12 years. Each items is rated on either a 0-3 spectrum (0=no information and 3= most severe) except the last item which was answered by a yes or no. The total score of the CDRS consists of the sum of the items. Statistics such as percentage, and t-test were calculated for analyzing the data.

Pharmacological Management:

Antidepressant drugs-Cap. Fluoxetine 20mg 1-0-0. and tab. Imipramine 25 mg 0-0-1, - were given to all the patients by the psychiatrists for the entire sessions to arrest the symptoms of the depressive disorder. After a couple of days, the patients found a relief from the symptoms such as pain, insomnia, and loss of appetite. Later on they relieved from all other symptoms.

Psychological management:

It was primarily a psychosocial intervention used for the parent(s) to understand the child's depressive features and related problems. The parents point of view and of their hardship of living with the child was crucial for therapeutic intervention. Parental serious problems merged into the way for individual treatment of the parent and to modify practices that seemed to be contributing to the current difficulties. Parents deserved education in selecting treatment and management difficulties. Parents spent far more time with their children and powerfully assist or impede treatment. In therapeutic sessions, the parents learned about normal development and understood their child adjustment and difficulties.

Initially patient was assigned reading material on coping with depression and a weekly activity schedule (self-report) of home

work assignment emphasizing on active learning approach. Carefully selected reading materials were extremely useful to parents (Lytryn, McKnew, & Cytryn, 1996; Beck, Rush, & Shew, 1979). Parents become skilled to cope with depression and they observed the child while engaging in selected activities like reading, writing, doing homework, not refusing to something, etc and these observation made parents feel good. Parents had active learning in vivo exposure such as doing home work, checking progress and assisting her, giving feedback, teaching and enhancing coping skills, encouraging play and parental communication training. They increased the frequency of parental positive reinforcements, reducing punishment and teaching social skills had been used to improve behavior associated with depression.

Cognitive behavioral program: The children selectively perceived the world as harmful while over looking evidence to contrary. The emphasized on thinking processes and cognitive modalities to reframe, restructure and solve problems and therapy devoted to recognize and modify their distorted thoughts. Children's distortions were addressed by generating alternative ways of dealing with problematic situation. They involved in pleasurable activities (Hughes, 1988). Besides, study skills training was taught for improving study habits and they practiced skills.

Results and Discussion

Table 2: Mean, SD, and t-value for the scores of the Children's Depression Rating Scale (CDRS) of the two PT and PPT groups.

Groups	Sample	Scale	Assessment	Mean	S.D	t-value
PT	n=30	CDRS	Before	27.60	4.20	
PPT	n=30		Before	27.61	2.54	0.01
			Before	27.60	4.20	
PT	n=30		After	20.36	2.07	8.62**
			Follow-up	119.24	1.84	2.24*
			Follow-up	218.70	1.70	.46**
PPT	n=30		Before	27.61	2.54	
			After	18.27	3.31	17.51**
			Follow-up	116.90	2.78	.91**
			Follow-up	216.70	2.60	2.04*

PT-Pharmacotherapy group, and PPT- Pharmaco and psychological therapy group.

**p < 0.01; * p < 0.05

Mean and standard deviation were calculated for each of the group i.e. the Pharmacotherapy (PT) group and the combined Pharmaco and psychological therapy (PPT) group to facilitate the comparison of repeated assessments by Children's Depression Rating Scale (CDRS) (Ponznanski, Cook, & Carroll, 1979). The main analysis of the data was to determine the significance of Mean difference between before and after, after and follow-up1, and after and follow-up2 assessments of each group i.e. PT and PPT groups. Besides, these two groups were compared between after and after, after and follow-up1, and after and follow-up2 for significant differences. t- test was applied in the scores of the children to determine the significant difference between

before and before assessments the two groups -(PT) and (PPT), which showed no significant difference. On comparison of the PT group showed a significant difference between before and after assessments (t =8.62, p < 0.01) and no significant difference between after and follow-up1 (t = 2.24, p < 0.05) as well as between after and follow-up2 (t =3.46, p < 0.01). These showed that the PT group had maintenance of depressive disorder.

The PPT group was compared between before and after assessments and it had a significant difference (t =17.51, P < 0.01) and significant difference between after and follow-up1 (t = 2.91, P < 0.01) as well as between after and follow-up2 (t =2.04, P < 0.05). The findings showed that the PPT group also had significant improvement of

Table 3: Mean, SD, and t-value for the scores of the Children's Depression Rating Scale (CDRS) of the two PT and PPT groups after intervention.

Group	Sample	Scale	*Assessment*		Mean	S.D.	t-value
PT	n=30	CDRS	After		20.36	2.07	
PPT	n=30		After		18.27	3.31	2.94*
PT	n=30		Follow-up1		19.24	1.84	
PPT	n=30		Follow-up1		16.90	2.78	3.90**
PT	n=30		Follow-up2		18.70	1.70	
PPT	n=30		Follow-up2		16.70	2.60	3.51**

PT-Pharmacotherapy group, and PPT- Pharmaco and psychological therapy group.

**p < 0.01; * p < 0.05

When PT and PPT groups were compared, the groups had significant differences between after and after (t =2.94, p < 0.01), between follow-up1and follow-up1 (t =3.90, p < 0.01), and between follow-up2 and follow-up2 (t =3.51, p < 0.01). The follow-ups 1 of the two groups had significant difference but there was no significant difference between follow-up2 and follow-up 2. The significant differences between these two groups showed that the PPT group is significantly more effective than the PT group. These findings imply that therapist/clinician could use PPT for relieving the symptoms and making changes in the depressive patients.

The present study confirms the finding of the previous studies (Conte & Karasu, 1992; Scott, 1998; Scott, 1992; Kocsis, Frances, Voss, & Mason, 1988) for the treatment of depressive disorder by pharmacotherapy. The earlier studies (Kendell, & Panichelli-Mindel, 1995; Kovacs, Rush, Bech, & Akiskal, 1981; Simons, Murphy, Levines, & Garfield, 1996; Dobson 1989; Murphy, Simons, Wetzel, & Lustman, 1984; Blackburn, Bishop, & Glen, 1981)) support the present finding that the combined Pharmaco and psychological therapy (PPT) is significantly more effective in improving depressive disorder and better maintenance at the assessment of follow-ups. The findings reveal that therapist/clinician could use PPT for relieving their symptoms and changing their pattern of coping.

Report of the Family Members:

The children's emotional state of sadness has changed as they had shown interest in moving freely with family member and friends. They laughed and played with others. They had not shown irritability and were alert, energetic. There had been no impairment in social and academic areas of functioning. They managed situations successfully.

Limitation

The present study did have control group to compare with the PT and the PPT groups as the patients need immediate care and treatment due to their suffering of depression. The sample was limited to n= 30 focusing only on female depressed children.

Conclusion

The symptoms of the depressive disorder are arrested significantly by the two therapies, i.e. the Pharmacotherapy (PT) and the combined Pharmaco and Psychological therapy (PPT) but the PPT is significantly more effective in treating female children. The implication of the findings is that the PPT could be used to change the depressive patients in order to relive their symptoms and change their pattern of coping.

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R. Kannappan, PhD, Associate Professor in Clinical Psychology, Vinayaka Mission Medical College, Salem.

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