

**PHARMACOTHERAPY VERSUS COMBINATION  
PHARMACOTHERAPY AND COGNITIVE BEHAVIORAL  
PSYCHOTHERAPY IN TREATING SOCIAL ANXIETY  
DISORDERS**

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**ABSTRACT**

**Background:** *Although social anxiety disorder (SAD) has been demonstrated to be the most common anxiety disorder and despite being associated with high morbidity and significant functional impairment, few data are available on its treatment with a combination of pharmacotherapy and cognitive behavioral psychotherapy. Objective: To test the notion that combining pharmacotherapy and CBT is more efficacious than pharmacotherapy only. Method: 55 patients diagnosed as SAD were collected from the psychiatric outpatient clinic in the period from January 2010 to March 2010. They were subjected to Liebowitz social anxiety scale (Libebowitz, 1987), 2 patients dropped out and the remaining 53 were divided into 2 groups. The 1<sup>st</sup> group (23 cases) received SSRIs only and the 2<sup>nd</sup> (30 cases) received both SSRIs and CBT. Further assessments by Liebowitz scale after 6 months were done. Results :20 males (37.3%) and 33 females (62.3%), 8 (15%) were illiterate, 9.4% finished 1ry school, 24.5% finished preparatory school, 30.2% ended their education at the secondary stage, while 20.8% only were highly educated. 24.5% were singly 56.6% were mained, 11.3% divorced and 7.6% were widows. 13.2% were having comorbid substance used disorder, 30.2% had major*

*depressive disorder, 11.3% with generalized anxiety disorder, 3.8% with panic disorder and the remaining 41.5% didn't have psychiatric comorbidity in Group I (23 cases) 8.7% were classified and having moderated SAD according to Liebowitz scale vs. 26.7% in Gp II (30 cases); 91.3% were having severe SAD vs. 73.3% in Group II. After receiving treatment (pharmacotherapy in Gp I, combination treatment in Gp II) for 6 months. There was statistical difference regarding the outcome of treatment between the 2 Gps. The no. of cases with score  $\leq 10$  in Gp I was 2 (8.7%) vs 15 (50%) in Gp II, no. of cases with score (65-75) was 4 (17.4%) vs. 6 (20%) in Gp II, and the no. of cases with nearly no improvement was 13 (56.5%) vs 9 (30%) in group II . **Conclusion** :SAD is a chronic disorder .It is highly associated with other psychiatric disorders. Combining pharmacotherapy and CBT should be considered as it has better outcome than pharmacotherapy only.*

## **INTRODUCTION**

SAD is one of the most prevalent mental disorders, with estimates of its life time prevalence of over 13% of the general population (**Kessler et al., 1994**). It is a chronic condition (**Reich et al., 1994**) and a major risk factor for other psychiatric disorders (**Schneier et al., 1992**).

In addition, SAD is associated with significant functional impairment (**Witchen et al., 1999**). As recently as 1985, Liebowitz described SAD as the neglected anxiety disorder. Since that time, there has been burgeoning interest in studying this disorder. However, it is under recognized and under treated (**Weiller et al., 1996**).

While a number of psychopharmacological and psychosocial treatment have recently been found useful in controlled trials, it is unclear how pharmacotherapy and psychosocial approaches compare in the treatment of social phobia (**Liebowitz et al., 1999**).

Does combining pharmacotherapy and psychotherapy hypothesis have additive effect, does one of them detract from the efficacy of the other, or combination of both treatments has no added benefit.

### **AIM OF THE WORK**

This study aimed to compare the efficacy of pharmacotherapy versus combination of both pharmacotherapy and cognitive behavioral psychotherapy in the treatment of social anxiety disorder.

### **SUBJECTS AND METHODS**

Fifty five patients were recruited from the psychiatric outpatient clinic in the period from January 2010 to March 2010. they were already diagnosed as social anxiety disorder according to DSM IV diagnostic criteria.

Patients were subjected to Liebowitz social anxiety disorder scale. It has 24 items with a maximum score of 142 2 patients dropped out. The remaining 53 patients were divided into two groups, 1<sup>st</sup> group received pharmacological treatment only (one of the SSRIs) we collected group I and the second group received both pharmacological treatment (one of the SSRIs) and cognitive behavioral psychotherapy (twice weekly sessions of cognitive restructuring and relaxation exercises). Each session lasted from 45 to 60. We called this group as group II. Both groups of patients were followed up for 6 months (until August 2010) and at the end of 6 months, they were reassessed by using Liebowitz scale.

## STATISTICAL ANALYSIS

The SPSS (version 17) statistical software package was used for statistical analyses. The level of significance was set at  $P < 0.05$  Wilcoxon test was used to compare pre and post treatment values in each group while Mann-Whitney test was used to compare between the 2 groups. Chi-square test was used to identify the effect of educational level and marital status on prognosis.

## RESULTS

**Table (1): Comparison between the two groups regarding age, sex, educational level, marital status, SAD and comorbidity.**

	Group I			Group II			Chi-square
<b>1. Age</b>							
Mean age	33.78			29.63			1.761
Standard deviation	7.948			6.86			
	No.	%	No.	%	No.	%	
<b>2. Sex</b>							
Male	11	47.8	9	30	20	37.7	2.417
Female	12	52.2	21	30	33	62.3	
<b>Total</b>	<b>23</b>	<b>100</b>	<b>30</b>	<b>100</b>	<b>53</b>	<b>100</b>	
<b>3. Educational level</b>							
Illiterate	3	13.04	5	16.67	8	15.1	
Primary	3	13.04	2	6.67	5	9.4	
Preparatory	7	30.44	6	20	13	24.5	
Secondary	7	30.44	9	30	16	30.2	
University	3	13.04	8	26.67	11	20.8	
<b>Total</b>	<b>23</b>	<b>100</b>	<b>30</b>	<b>100</b>	<b>53</b>	<b>100</b>	
<b>4. Marital status</b>							
Single	7	30.4	6	20	13	24.5	5.38
Married	14	60.9	16	53.330	56.6		
Divorced	0	0	6	20	6	11.3	
Widow	2	8.7	2	6.7	4	7.6	
<b>Total</b>	<b>23</b>	<b>200</b>	<b>30</b>	<b>100</b>			
<b>5. Substance use disorder</b>							
MDD	4	17.4	3	10	7	13.2	
GAD	9	39.13	7	23.3	16	30.2	
Panic	4	17.41	2	6.7	6	11.3	
No comorbidity	0	0	2	6.7	2	3.8	
<b>Total</b>	<b>6</b>	<b>26.1</b>	<b>16</b>	<b>53.3</b>	<b>22</b>	<b>41.5</b>	
<b>Total</b>	<b>23</b>	<b>100</b>	<b>30</b>	<b>100</b>	<b>53</b>	<b>100</b>	

This table shows no significant difference between the two groups regarding age, sex, education, and marital status.

**Table (2): Comparison between the two groups regarding the severity of SAD.**

	Group I		Group II		Chi-square
	No.	%	No.	%	
Moderate	2	8.7	8	26.7	0.97
Severe	21	91.3	22	73.3	
<b>Total</b>	<b>23</b>	<b>100</b>	<b>30</b>	<b>100</b>	

**Table (3): Comparison between the 2 groups after treatment:**

	Group I		Group II		Chi-square
	No.	%	No.	%	
-ve	2	8.7	15	50	0.002
Mild	4	17.4	0	0	
Moderate	4	17.4	6	20	
Severe	13	56.5	9	30	
<b>Total</b>	<b>23</b>		<b>30</b>	<b>100</b>	

This table shows the statistical difference between the two groups and it also shows that 32 cases from both groups are still having moderate to severe disorder despite of treatment.

## DISCUSSION

Although the concurrent use of medication and psychotherapy is common in clinical practice, few studies have examined the efficacy of this approach to the treatment of SAD. Studies like that of **Heimberg et al(1998)** compared cognitive behavioral therapy versus phenelzine and they found that either modality alone was more efficacious than the controlled groups and they recommended combining both modalities. **Federoff and Taylor** conducted a meta analysis of psychological and pharmacological treatment of SAD, 108 treatment outcome trials were compared, and pharmacotherapies were the most consistently effective treatment.

**Blonhoff et al. 2001**, examined the efficacy of pharmacotherapy or psychotherapy administered alone or in combination. In this randomized double

blind study, 387 patients received pharmacotherapy or placebo for 24 weeks, pts were additionally randomized to exposure therapy or general medical care. The study revealed that pharmacologically treated pts were significantly more improved than non pharmacologically treated pts (Chi (2) = 12.53,  $p < 0.001$ ; odds ratio = 0.534; 95% CI 0.347 – 0.835).

No significant difference was observed between exposure and non exposure treated pts (chi (2) = 2.18,  $p = 0.140$ ; odds ratio = 0.732; 95% CI 0.475 – 1.134). In the pair wise comparison combined pharmacological and exposure, chi (2) = 12.32;  $p < 0.001$ ) and pharmacological (chi(2) = 10.13;  $p = 0.002$ ) were significantly superior to placebo.

On the contrary, **Davidson et al.** in 2004, compared pharmacological treatment, cognitive behavioral therapy (CBT), placebo (PBO) and the combinations CBT/pharmacy and CBT/PBO. In their study, all active treatments were superior to PBO but didn't differ from each other and

Similarly, **Black( 2006)** conducted a literature review to examine studies with random assignment, adequate methods and sample sizes, blind assessments, sufficient dosages and durations of treatment to determine whether combined treatment was superior to monotherapy. There was no evidence of superiority for combined therapy over monotherapy for treatment of SAD

### **RECOMMENDATIONS**

Combination of pharmacotherapy and psychotherapy in the management of social anxiety disorder may improve its prognosis. Further studies are needed.

## REFERENCES

- Black DW (2006):** Efficacy of combined pharmacotherapy and psychotherapy vs monotherapy in the treatment of anxiety disorders.
- Blomhoff S, Hang TT, Holme I et al (2001):** General practice trial of sertraline, exposure therapy in SAD. *Br J Psych*; July; 179: 23-30.
- Davidson JR, Foa EB, Huppert JD, et al. (2004):** Fluoxetine, Comprehensive cognitive behavioral therapy, and placebo in generalized social phobia. *Arch Gen Psychiatry*; Oct. 61 (10), 1005-13.
- Federoff IC, Taylor S (2001):** Psychological and pharmacological Treatment of social phobia: a meta analysis. *J Clin Psychop*. June; 21 (3); 311-24.
- Heimberg RG, Libewitz MR, Schneier FR (1998):** Cognitive behavioral therapy versus phenelzine in social phobia: 12 weeks outcome. *Arch Gen Psychiatry* 55:1133-1141.
- Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, et al (1994):** Lifetime and 12-month prevalence of DSM-II-R psychiatric disorders in the United States, Results from the National Comorbidity Survey. *Arch Gen Psychiatry* 51: 8-19.
- Liebowitz MR (1987):** Social phobia. *Mod Probl pharmacopsychiatry* 22:141-173.
- Liebowitz MR, Heimberg RG, Schneier FR, Hope DA, Davies S, Holt CS, et al (1999):** Cognitive behavioral group therapy versus phenelzine in social phobia: Long-term outcome. *Depress Anxiety* 10: 89-98.
- Reich J, Goldenberg I, Vasile R, Goisman R, Keller M (1994):** A prospective follow-along study of the course of social phobia. *Psychiatric Res* 54: 249-258.
- Schneier FR, Johnson J, Homig CD, Liebowitz MR, Weissman MM (1992):** Social phobia: comorbidity and morbidity in an epidemiologic sample. *Arch Gen Psychiatry* 49: 282-288.