ORIGINAL RESEARCH

Comparison of Escitalopram and paroxetine in the treatment of generalized anxiety disorder

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ABSTRACT
Background: The present study was conducted for comparing the efficacy of Escitalopram and paroxetine in the treatment of generalized anxiety disorder. **Materials & methods:** A cohort of 100 patients diagnosed with generalized anxiety disorder was recruited for the study. Comprehensive demographic and clinical information were collected for each participant. The patients were randomly assigned to one of two treatment groups, with 50 individuals in each: the Escitalopram group and the Paroxetine group. The efficacy and tolerability of the treatments were evaluated at baseline, as well as at 6- and 12-weeks post-treatment. All data were documented in a Microsoft Excel spreadsheet for comparison. Statistical analyses were conducted using SPSS software. **Results:** Mean age of the patients of the Escitalopram groupand Paroxetine group was 41.7 years and 43.9 years respectively. Majority proportion of patients were males. Significant improvement was seen in both the study groups. However; improvement was better in Escitalopram group in comparison to Paroxetine group. **Conclusion:** Escitalopram was more efficacious in generalized anxiety disorder in comparison to paroxetine.
Key words: Escitalopram, Paroxetine, Anxiety

INTRODUCTION
Generalized anxiety disorder (GAD) is a chronic condition that typically emerges during adolescence or early adulthood and can persist throughout an individual's life. It is characterized by widespread and persistent anxiety that spans various aspects of life, affecting approximately 5% of children and adolescents, as well as 3–6% of adults.[1-3] The disorder not only imposes considerable individual, societal, and economic burdens but also heightens the risk of developing secondary conditions, such as major depressive disorder (MDD) and other anxiety disorders, while increasing the likelihood of suicide attempts and completed suicides over a person's lifetime. The management of GAD and related anxiety disorders in both children and adults often involves a combination of psychotherapy and pharmacotherapy. Research indicates that integrating psychotherapy with pharmacological treatments, such as sertraline and fluoxetine, can enhance the overall effectiveness of the treatment. Furthermore, multimodal strategies that incorporate both psychotherapy and pharmacotherapy may specifically address different symptom types, such as cognitive and somatic symptoms, while also improving treatment adherence and reducing the side effects associated with pharmacotherapy.[4-6]Hence; the present study was conducted for comparing the efficacy of Escitalopram and paroxetine in the treatment of generalized anxiety disorder.

MATERIALS & METHODS
A cohort of 100 patients diagnosed with generalized anxiety disorder was recruited for the study. Comprehensive demographic and clinical information were collected for each participant. The patients were randomly assigned to one of two treatment groups, with 50 individuals in each: the Escitalopram group and the Paroxetine group. The efficacy and tolerability of the treatments were evaluated at baseline, as well as at 6- and 12-weeks post-treatment. The inclusion criteria were designed to select physically healthy male and female outpatients with a primary diagnosis of generalized anxiety disorder, as defined by the

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DSM–IV–TR criteria. The Mini International Neuropsychiatric Interview (MINI) was employed to confirm the diagnosis and to assess the presence or absence of comorbid disorders. The primary outcome measure was the adjusted mean change in the Hamilton Anxiety Rating Scale (HAMA) total score from baseline to week 12, analyzed using the intention-to-treat principle and last-observation-carried-forward methodology. All data were documented in a Microsoft Excel spreadsheet for comparison. Statistical analyses were conducted using SPSS software.

RESULTS
Mean age of the patients of the Escitalopram group and Paroxetine group was 41.7 years and 43.9 years respectively. Majority proportion of patients were males. Significant improvement was seen in both the study groups. However; improvement was better in Escitalopram group in comparison to Paroxetine group.

Table 1: Demographic data

Variable	Escitalopram group	Paroxetine group
Mean age (years)	41.7	43.9
Males	31	34
Females	19	16

Table 2: Mean change from baseline to 12 weeks in HAMA score

Time	Escitalopram group	Paroxetine group	p-value
Baseline	29.3	27.5	0.112
6 weeks	20.9	21.8	0.827
12 weeks	14.1	17.9	0.001*

Table 3: Adverse events

Adverse events	Escitalopram group	Paroxetine group	p-value
Nausea	2	1	0.44
Vomiting	2	4	0.79
Headache	3	2	0.64
Insomnia	7	8	0.81

DISCUSSION
Some selective serotonin reuptake inhibitors (SSRIs) and benzodiazepines, and the serotonin–noradrenaline reuptake inhibitor venlafaxine, are efficacious in generalised anxiety disorder. Placebo-controlled double-blind studies demonstrate the efficacy of the SSRIs paroxetine, sertraline and escitalopram.[6-9] Hence; the present study was conducted for comparing the efficacy of Escitalopram and paroxetine in the treatment of generalized anxiety disorder.
Mean age of the patients of the Escitalopram group and Paroxetine group was 41.7 years and 43.9 years respectively. Majority proportion of patients were males. Significant improvement was seen in both the study groups. However; improvement was better in Escitalopram group in comparison to Paroxetine group. Liebowitz MRet al determine the effectiveness and safety of various daily dosages of paroxetine for the treatment of generalized social anxiety disorder.A cohort of 100 patients diagnosed with generalized anxiety disorder was recruited for the study. Comprehensive demographic and clinical information was collected for each participant. The patients were randomly assigned to one of two treatment groups, with 50 individuals in each: the Escitalopram group and the Paroxetine group. The efficacy and tolerability of the treatments were evaluated at baseline, as well as at 6 and 12 weeks post-treatment. The inclusion criteria were designed to select physically healthy male and female outpatients with a primary diagnosis of generalized anxiety disorder, as defined by the DSM–IV–TR criteria. The Mini International Neuropsychiatric Interview (MINI) was employed to confirm the diagnosis and to assess the presence or absence of comorbid disorders. The primary outcome measure was the adjusted mean change in the Hamilton Anxiety Rating Scale (HAMA) total score from baseline to week 12, analyzed using the intention-to-treat principle and last-observation-carried-forward methodology. All data were documented in a Microsoft Excel spreadsheet for comparison. Statistical analyses were conducted using SPSS software.[10] Borwin Bandelow et al compared the efficacy of pharmacological, psychological and combined treatments for the three main anxiety disorders (panic disorder, generalized anxiety disorder and social phobia). Pre-post and treated versus control effect sizes (ES) were calculated for all evaluable randomized-controlled studies (n = 234), involving 37,333 patients. Medications were associated with a significantly higher average pre-post ES than psychotherapies. ES were 2.25 for serotonin-noradrenaline reuptake inhibitors (n = 23 study arms), 2.15 for benzodiazepines (n = 42), 2.09 for selective serotonin reuptake inhibitors (n = 62) and 1.83 for tricyclic antidepressants (n = 15). ES for psychotherapies were mindfulness therapies, 1.56 (n =

4); relaxation, 1.36 (n = 17); individual cognitive behavioural/exposure therapy (CBT), 1.30 (n = 93); group CBT, 1.22 (n = 18); psychodynamic therapy 1.17 (n = 5); therapies without face-to-face contact (e.g. Internet therapies), 1.11 (n = 34); eye movement desensitization reprocessing, 1.03 (n = 3); and interpersonal therapy 0.78 (n = 4). The ES was 2.12 (n = 16) for CBT/drug combinations. Exercise had an ES of 1.23 (n = 3). For control groups, ES were 1.29 for placebo pills (n = 111), 0.83 for psychological placebos (n = 16) and 0.20 for waitlists (n = 50). In direct comparisons with control groups, all investigated drugs, except for citalopram, opipramol and moclobemide, were significantly more effective than placebo. Individual CBT was more effective than waiting list, psychological placebo and pill placebo. When looking at the average pre-post ES, medications were more effective than psychotherapies. Pre-post ES for psychotherapies did not differ from pill placebos; this finding cannot be explained by heterogeneity, publication bias or allegiance effects.[11]

CONCLUSION
Escitalopram was more efficacious ingeneralized anxiety disorder in comparison to paroxetine.

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