



## Role of Escitalopram in Elderly Depressed Patients

### KEYWORDS

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### ABSTRACT

Depression is common in old age with a community prevalence in people aged 65 and over of 12%–15%. Late life depression (LLD) carries additional risk for suicide, medical comorbidity, disability, family care giver burden. Aim is to find the efficacy of escitalopram, quickness of its action and adverse effects in elderly depressed patient and compare them with those in young depressed patient. Efficacy and adverse effects both were studied at week 0, 2, 4 and 12 using MADRS scale. 30 young and 30 elder patient were subjects as per inclusion criteria. Conclusion is that escitalopram is effective in lifting depression in both the groups—elderly and young depressed patients at the end of three months. In adverse effects sleeplessness and restlessness is most common in elderly patients as compared to headache and erectile dysfunction in young patients.

### Introduction

Depression results in more years lived with disability than any other disease, and ranks fourth in terms of disability-adjusted life year. Depression is common in old age with a community prevalence in people aged 65 and over of 12%–15%. Late life depression (LLD) carries additional risk for suicide, medical comorbidity, disability, family care giver burden.<sup>[1]</sup> Although treatment is effective in reducing symptoms, it is less successful in achieving and maintaining remission and in averting years lives with disability. Although response and remission rates to pharmacotherapy as well as electroconvulsive therapy (ECT) are comparable with those in midlife depression, relapse rates are higher, underscoring the challenge not only to achieve but also to maintenance wellness. Both in older and younger depressed patients, treatment may conventionally be conceptualized as having three phases—acute, continuation (relapse prevention), and maintenance (recurrence prevention). The guideline for the primary care management of late-life depression (LLD) in primary care concluded that “both tricyclic antidepressants and some SSRIs are efficacious in the prevention of relapse and recurrence over periods of 1–3 years.”<sup>[2]</sup> Open-label data suggest that escitalopram is safe and well tolerated in the long-term treatment of older patients with major depressive disorder (MDD). This suggests that the potential of escitalopram in the continuation treatment of older depressed patients merits full controlled trials.<sup>[3]</sup> This study attempts to address these issues in investigating the efficacy of escitalopram as three-month continuation treatment in older patients with major depression, to assess the quickness of its action and side effects in elderly depressed patients and compare these parameters with those in young depressed patients.

### Methods

The study was conducted in a General Hospital attached to a teaching medical college, Ahmedabad in accordance with the principles of Good Clinical Practice. Patients eligible for this study were outpatients with a primary diagnosis of MDD (current episode assessed by psychiatrists using the Mini International Neuropsychiatric Interview), moderate or severe, according to Diagnostic and Statistical Manual of Mental Dis-

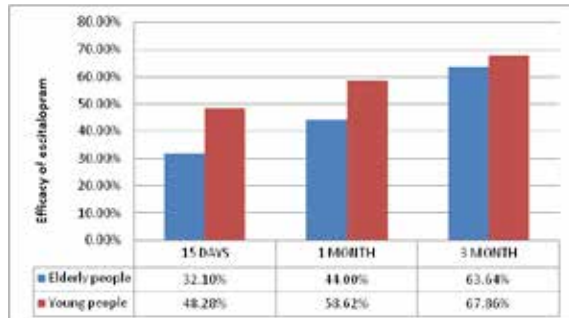
orders, Fourth Edition, Text Revision (DSM-IV-TR) criteria who had given informed consent. The patients should have no un-stabilized serious illnesses on the basis of medical history and the screening results of a physical examination, electrocardiogram, and clinical laboratory tests. Patients with any of the following disorders were excluded: 1. Current or past history of manic or hypomanic episode, schizophrenia, or any other psychotic disorder, including major depression with psychotic features, mental retardation, organic mental disorders, or mental disorders resulting from a general medical condition as defined in DSM-IV-TR and 2. Any substance abuse disorder, presence or history of a clinically significant neurologic disorder, neurodegenerative disorder, and any personality disorder that might compromise the study. Patients were also excluded if they had used any of the following recent/comcomitant therapies: oral antipsychotic drugs within 2 months and depot preparations within 6 months before screening; or electroconvulsive therapy or lithium, carbamazepine or valproate, within the past month before screening. Disallowed drugs within the last week before screening were: antidepressants (five weeks for fluoxetine); any benzodiazepines (except benzodiazepines in patients under stable low dose for at least six months); any nonbenzodiazepine anxiolytics or hypnotics (other than zolpidem, zopiclone, or zaleplon); serotonin agonists (for example, triptans); and any drug with potential psychotropic effects. In addition, patients with known hypersensitivity to citalopram and/or escitalopram, patients who continued or began formal psychotherapy, patients with current depressive symptoms that had been resistant to two well-conducted antidepressant treatments, and patients who had demonstrated a lack of response to previous treatment with citalopram or escitalopram (including current episode) were excluded. 30 consecutive elderly patients (>60yrs) and 30 patients of age group 18–60 years diagnosed to have MDD were included in study based on above mentioned criteria. This study started with both the groups were kept on 10 mg/day of escitalopram for one week and gradually increased upto 20 mg/day in week 2. The dose could subsequently be reduced to 10 mg per day in case of poor tolerability. From week 2, no dose adjustment was allowed. Efficacy and tolerability parameters were assessed after two, four and twelve

weeks of treatment. Efficacy assessments at each study visit included the MADRS score. Patient ratings were conducted by the same person at each visit whenever possible. The tolerability and safety evaluations were based on spontaneously reported adverse events (AEs), vital signs, body weight, and physical examination. The sample size and power calculations were based on methods from time to event analysis. All efficacy analyses in the period were conducted on the modified intent-to-treat (ITT) dataset, consisting of all patients who took at least one dose of escitalopram in the treatment period, using the last observation carried forward (LOCF) approach. In the current study, the statistical analysis was done by SPSS 20. The significance was measured using Fisher's Exact test.

## Results

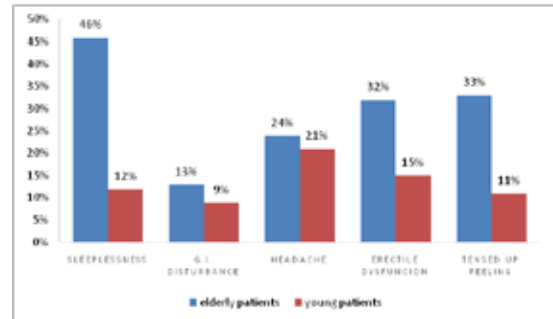
Of the 60 patients who received escitalopram, 30 were aged 18-60 years and 30 were  $\geq 60$  years of age. The baseline characteristics of these two groups were similar, apart from differences in mean age at MDD onset. There were no clinically relevant differences in the severity of depression as measured by MADRS between young and old patients. The 30 young patients had a mean baseline MADRS total score of  $31.1 \pm 5.0$  at entry, which decreased over time to  $9.0 \pm 9.5$  (LOCF). Similarly, of the 30 old patients had a mean baseline MADRS total score of  $30.9 \pm 4.1$  at inclusion, which decreased over time to  $10.9 \pm 9.8$  (LOCF). A significantly higher proportion of young patients achieved complete remission (MADRS  $\leq 5$ ) at week 12 (young=73.86%; old=61.13%) (Fisher's Exact test,  $p=0.010$ ) (ITT, LOCF). The mean score of individual MADRS items for patients completing treatment indicates that the old patients had slightly more residual symptoms at the end of the phase of treatment, particularly in the form of persistent inner tension and sleep disturbance.

**Graph 1: RESULTS-EFFICACY OF ESCITALOPRAM AMONG ELDER AND YOUNG PEOPLE.**



Graph 1 shows efficacy of escitalopram in young was 48.28% as compared to elders 32.14% at 15 days of visit, at week 4 the percentage of young and elders increased by 10% and 14% respectively. At week 12 there was further increase by 10% in young patient and by 20% in elders which suggests that younger patients shows marked efficacy at initial stage of treatment in reduction of severity with escitalopram but eventually shows nearly equal response to elders with slight higher rate of 4% in younger group at final visit.

**Graph2: ADVERSE EFFECTS OF ESCITALOPRAM AMONG ELDER AND YOUNG PATIENTS.**



Graph 2 shows adverse effects of escitalopram shows significant variation among elder and young group. Among elder patients 46% had disturbance of sleep compare to 12% in young patients. Erectile dysfunction and tensed up feeling were higher in elder patients compare to young adults. Gastrointestinal side effects and headache were found nearly equal among elder and young patients. Data suggest that escitalopram shows better tolerability among younger patients.

## Discussion

Of comparative studies that have examined relapse or recurrence, outcome appears to be poorer in the elderly. In studies conducted by Conwell et al. (1989)[5], Musetti et al. (1989)[6] Alexopoulos et al. (1996)[7] no differences detected in remission between those over 65 and those who were younger; 2) there was little clinical difference between groups, although the older groups were more symptomatic at discharge ( $p < 0.04$ ). However a study by Meats et al. shows older patients had lower remission rate.[8] In a study done by Wesson et al. (1997) (Age  $\geq 65$ ,  $N=33$ ; age  $< 65$ ,  $N=30$ ), shows 67% of those over 65 years were well at follow-up compared to only 40% of the younger group.[9] Katon et al. study (2002) age younger than 60 years (odds ratio=2.68) were more likely to achieve remission with SSRI. [10] Fischer et al. (2003) 1,023 patients were included in Naturalistic pharmacotherapy study, primary care survey with 3-month follow-up older patients were less likely to have remission at the 3-month follow up.[11] Zanardi et al. (2003) better antidepressant (SSRI) response in younger than older subjects. In this study a significantly higher proportion of young patients achieved complete remission (MADRS  $\leq 5$ ) at week 12 (young=73.86%; old=61.13%) (Fisher's Exact test,  $p=0.010$ ) (ITT, LOCF) as supported by results of previous studies.

## CONCLUSION

The study has clear and relevant implications for clinical practice. The study suggests that escitalopram is effective in lifting depression in both the groups-elderly and young depressed patients at the end of three months but in elderly, onset of antidepressant effect of escitalopram is delayed as compared to young patients. In adverse effects sleeplessness and restlessness is most common in elderly patients as compared to headache and erectile dysfunction in young patients. It is therefore clear that escitalopram is highly effective in treating depressive episodes in all age groups, although further study with large sample size is required.

## REFERENCE

- Moussavi, S., Chatterji, S., Verdes, E., Tandon, A., Patel, V., & Ustun, B. (January 01, 2007). Depression, chronic diseases, and decrements in health: results from the World Health Surveys. *Lancet*, 370, 9590, 851-8.
- Chapman, D. P., & Perry, G. S. (January 01, 2008). Depression as a major component of public health for older adults. *Preventing Chronic Disease*, 5, 1.
- Bruce, M. L., Have, T. R. T., Reynolds, I. I. C. F., Katz, I. I., Schulberg, H. C., Mulsant, B. H., Brown, G. K., ... Alexopoulos, G. S. (January 01, 2004). Reducing Suicidal Ideation and Depressive Symptoms in Depressed Older Primary Care Patients: A Randomized Controlled Trial. *Jama : the Journal of the American Medical Association*, 291, 9, 1081.
- Beyer, J. (January 01, 2007). Managing Depression in Geriatric Populations. *Annals of Clinical Psychiatry*, 19, 4, 221-238.
- Conwell Y, Nelson JC, Kim KM, Majure CM: Depression in late life: age of onset as marker of a subtype. *J Affect Disord* 1989;17:189-195.
- Musetti, L., Perugi, G., Soriani, A., Rossi, V. M., Cassano, G. B., & Akiskal, H. S. (January 01, 1989). Depression before and after age 65. A re-examination. *The British Journal of Psychiatry : the Journal of Mental Science*, 155, 330-6
- Alexopoulos, G. S., Meyers, B. S., Young, R. C., Kakuma, T., Feder, M., Einhorn, A., & Rosendahl, E. (January 01, 1996). Recovery in geriatric depression. *Archives of General Psychiatry*, 53, 4, 305-12.
- Meats, P., Timol, M., & Jolley, D. (January 01, 1991). Prognosis of depression in the elderly. *The British Journal of Psychiatry : the Journal of Mental Science*, 159, 659-63.
- Wesson, M. L., Wilkinson, A. M., Anderson, D. N., & Cracken, C. M. (January 01, 1997). Does age predict the long-term outcome of depression treated with ECT? (a prospective study of the long-term outcome of ECT-treated depression with respect to age). *International Journal of Geriatric Psychiatry*, 12, 1, 45-51.
- Katon, W., Russo, J., Frank, E., Barrett, J., Williams, J. W. J., Oxman, T., Sullivan, M., ... Cornell, J. (January 01, 2002). Predictors of nonresponse to treatment in primary care patients with dysthymia. *General Hospital Psychiatry*, 24, 1.
- Current awareness in geriatric psychiatry. (March 01, 2004). *International Journal of Geriatric Psychiatry*, 19, 3, 297-304.
- Current awareness in geriatric psychiatry. (May 01, 2004). *International Journal of Geriatric Psychiatry*, 19, 5, 501-508.