

## ABSTRACT

**Background:** Mirtazapine is the newer noradrenergic and serotonergic antidepressant (NaSSA) and it has demonstrated efficacy that is significantly superior to placebo and other older antidepressants. The specific pharmacological profile of Mirtazapine leads to its lack of serotonergic side effects and faster onset of effect of antidepressant action that has been demonstrated in studies done in western countries.

**Aim:** The aim of the study was to compare efficacy and tolerability of Sertraline and Mirtazapine in acute treatment of major depression in Nepalese population.

**Method:** Patients with a major depressive episode according to ICD-10 DCR, were randomly assigned to either Mirtazapine (N=30, 15-45mg/day) or Sertraline (N=30, 50-150mg/day). Efficacy was evaluated by HAMD and CGI scale and UKU side effect rating scale was used for any noted adverse effects. Patients were followed up at 2, 4 and 6 weeks for assessment.

**Results:** The mean absolute change from baseline in HAMD score showed that Mirtazapine was significantly more effective than Sertraline at assessment during 2 ( $p=0.00$ ) and 4 ( $p=0.001$ ) weeks of the study, after which there was no statistically significant differences in efficacy ( $p=0.764$ ). There was statistically significant reduction in CGI- mean severity of illness rating scale score at 2 weeks ( $p=0.024$ ) in Mirtazapine treated patients compared to Sertraline treated patients after which mean reduction of score was similar in both groups. Both treatments were well tolerated. Tension (57.6%), palpitation / tachycardia (26.9%), sexual dysfunction (22.9%) were more frequent in Sertraline group compared to nausea / vomiting (26.9%), sleepiness / sedation (23.0%), increased duration of sleep (23.0%) in Mirtazapine group.

**Conclusion:** Mirtazapine was well tolerated and was equally effective as Sertraline in reducing depressive symptoms. However, Mirtazapine was significantly more effective than Sertraline after 2 and 4 weeks of treatment. The findings need to be confirmed with other large scale studies.