ABSTRACT

Background: Depression has been linked with many medical comorbidities since time unknown. Endocrinological disorders are a frequent association with depression, the most common being thyroid dysfunction. Thyroid dysfunction is common in patients with depression and depression is also common in patients with thyroid dysfunction. Depressed patients share many of the clinical features with hypothyroidism and hyperthyroidism, making their recognition difficult. Undiagnosed thyroid dysfunction in depressed individuals leads to improper management and poorer treatment response.

Objectives: The objectives of this study were to find out the prevalence estimate of thyroid dysfunction in newly diagnosed depressed patients attending outpatient setup in a tertiary level teaching hospital and also to find any correlation between the two. This was also aimed to find out the association of socio-demographic variables of depressed patients visiting Psychiatry OPD.

Methods: A cross- sectional study was carried out among the newly diagnosed depressed patients in Psychiatry outpatient department meeting inclusion criteria after taking informed consent. Depression was diagnosed using semi structured proforma and ICD-10 DCR criteria. HDRS was used as an objective rating scale. TFTs for these patients were sent and analyzed on follow- up visits for their thyroid status. Data were analyzed using SPSS version 16 (Chicago, IL, USA). Descriptive analysis was performed, and mean, median, and range were calculated. The data were explained as mean± standard deviation (SD) wherever suitable. Spearman's rank correlation was performed for ordinal dataset; this was utilized to find out the correlation between thyroid status and degree of depression. Chi- square test was applied for categorical data. Independent sample t test,

ANOVA tests were applied wherever applicable. P- value of <0.05 was considered significant.

Results: Out of total 70 patients, three- fourth of them had visited Psychiatry OPD on their own. 70% were females, 65% were married and, 35% were housewives. Almost half of the patients were from Kathmandu valley. Thyroid dysfunction was found in 21% of all patients, the most common being subclinical hypothyroidism, found in 11% of all patients. Thyroid dysfunction was found to have positive correlation with depression severity ($r=0.530$, $p=0.003$) and ICD-10 DCR diagnosis positively correlated with HDRS grading of depression ($r=0.493$, $p=0.007$). Socio-demographic variables did not reveal any significant association with depression.

Conclusion: Thyroid dysfunction was found to be common among newly diagnosed depressed outpatients, subclinical hypothyroidism being the most common. With depression being more severe, there was tendency for patients to have thyroid dysfunction and it was more common in females. There was no significant association with any of the socio- demographic variables for depression. The study calls the need to have recommendation for routine thyroid function testing in depressed outpatients for better management and a treatment protocol for these subgroup of depressed outpatients.