# A STUDY OF PSYCHIATRIC MANIFESTATIONS IN PATIENTS WITH HYPOTHYROIDISM

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## Introduction

Hypothyroidism is considered one of the most common endocrine disorders. It is diagnosed when the thyroid gland does not produce enough hormones for the body. Thyroxine (T4) and triiodothyronine (T3) are two thyroid hormones that are deficient in hypothyroidism. This condition is more common in women. The chance of hypothyroidism in women rises with age, as well as during menopause, the postpartum phase, and pregnancy. Several studies reported higher prevalence of psychiatric disorders such as depression, anxiety and others among patients with hypothyroidism. Early detection of such problems shortens the duration of the episode. It is important to identify the prevalence, and risk factors of different psychiatric disorders among patients with hypothyroidism, which not only affect their health but also their quality of life.

## Aim of the Work

The aim of this study was to assess the prevalence of psychiatric comorbidities among hypothyroid patients at Alexandria main university hospital endocrine clinic.

## Patients and Methods

A cross-sectional study was conducted at Alexandria main university hospital endocrine clinic on 235 patients with hypothyroidism to accomplish the study objectives. Informed consent was taken from patients, we collected baseline data about patients' age, gender, residency, marital status and smoking status.

Then patients who agreed to participate in our study were interviewed to allow screening for the most prevalent psychiatric disorders using culturally sensitive Arabic version of the Mini International Neuropsychiatric Interview (M.I.N.I.-AR). It is translated and culturally adapted version of the M.I.N.I which considered effective comprehensive diagnostic tool using the most recent DSM-5 criteria in Modern Standard Arabic (MSA).

## Results

Table 1: Distribution of the studied cases according to diagnoses (n = 235)

|  | No. | % |
|---|---|---|
| **MDD** | 85 | 36.2 |
| **Suicidality** | 0 | 0.0 |
| **Manic episode** | 0 | 0.0 |
| **Hypomanic episode** | 0 | 0.0 |
| **Panic attack** | 12 | 5.1 |
| **Agoraphobia** | 2 | 0.9 |
| **Social Anxiety** | 13 | 5.5 |
| **GAD** | 36 | 15.3 |
| **OCD** | 32 | 13.6 |
| **PTSD** | 2 | 0.9 |
| **Alcohol** | 0 | 0.0 |
| **SUD (non-alcohol)** | 0 | 0.0 |
| **Psychosis and mood with psychotic features** | 4 | 1.7 |
| **Anorexia nervosa** | 0 | 0.0 |
| **Bulimia nervosa** | 0 | 0.0 |
| **Binge eating disorder** | 3 | 1.3 |
| **Antisocial personality disorder** | 3 | 1.3 |

IQR: **Inter quartile range**          SD: **Standard deviation**

Table 2: Distribution of the studied cases according to diagnoses and total number of diagnoses (n = 235)

|  | No. | % |
|---|---|---|
| **Diagnoses** | | |
| No | 120 | 51.1 |
| Yes | 115 | 48.9 |
| **Total number of diagnoses** | | |
| 1 diagnoses | 58 | 24.7 |
| 2 diagnoses | 44 | 18.7 |
| 3 diagnoses | 7 | 3.0 |
| 4 diagnoses | 5 | 2.1 |
| 5 diagnoses | 1 | 0.4 |
| 1 diagnoses | 58 | 24.7 |
| 2 diagnoses | 44 | 18.7 |
| ≥ 3 diagnoses | 13 | 5.4 |
| **Min. – Max.** | 0.0 – 5.0 | |
| **Mean ± SD.** | 0.81 ± 1.03 | |
| **Median (IQR)** | 0.0 (0.0 – 1.0) | |

IQR: **Inter quartile range**          SD: **Standard deviation**

## Conclusion

In our study, psychiatric disorders have been reported in patients with hypothyroidism at Alexandria main university hospital endocrine clinic. Major depressive disorder (MDD) was the most common psychiatric diagnosis among the patients who participated in the interviews; 36.2% of them had it, followed by generalized anxiety disorder (GAD) (15.3%), obsessive compulsive disorder (OCD) (13.6%), social anxiety disorder (SAD) (5.5%), panic disorder (5.1%) and 6.1% of the participants had other psychiatric diagnoses.

We found that 24.7% of the participating patients had at least one psychiatric diagnosis, 18.7% of them had two diagnoses and 5.4% had three or more diagnoses.