

ABSTRACT

Hyperthyroidism or an overactive thyroid, has been linked to depression, suicidal ideation, and other mental health issues. However, it is still unclear how certain amounts of thyroid hormone relate to suicidal ideation. So, the purpose of this research was to investigate the relationship between thyroid hormone levels specifically serum FT3, FT4, and TSH and suicidal ideation or attempts in patients with hyperthyroidism. Medical, psychological, and laboratory tests were administered during the data-collection phase. The study used enzyme immunoassay (EIA) to accurately estimate blood FT3, FT4, and TSH levels, a trio of thyroid hormones crucial to physiological homeostasis. FT3, FT4, and TSH levels revealed the subjects' endocrine profile. Specifically, the study aimed to quantify these hormonal levels, assess their prevalence using the 19-question Beck Scale for Suicidal Ideation, and explore their potential utility as biomarkers for forensic identification of individuals at high risk for suicide. Results indicated that suicidal patients had significantly decreased serum FT4 and TSH levels compared to healthy subjects. Beck Scale scores provide a numerical representation of the intensity of suicidal thoughts within the patient group. Ranging from 2 to 25, these scores highlight the diversity of psychological distress experienced by individuals with hyperthyroidism. Such a wide range could indicate differing degrees of mental health impact due to hyperthyroidism. These findings illustrate hyperthyroidism's severe toll on one's psychological health. Finding that 70% of the sample had hyperthyroidism highlights the importance of the condition throughout the cohort as a whole. Furthermore, expanding the sample size for more accuracy is encouraged.