

## The Proportion of and Factors Associated With Thyroid Dysfunction among Individuals Referred To A Tertiary Care Facility in Kabul, Afghanistan

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**Abstract :** Background: The thyroid gland, located just below the vocal cord on each side of and anterior to the trachea, is one of the main endocrine glands. Its normal weight is 15 to 20 grams in adults. The thyroid secretes two most important hormones, thyroxine and triiodothyronine, usually called T<sub>4</sub> and T<sub>3</sub>, respectively. These hormones greatly increase the metabolic rate of the body. In addition to T<sub>3</sub> and T<sub>4</sub>, the thyroid gland secretes calcitonin as well which is a significant hormone for calcium metabolism. Objective: The aim of this study is to estimate the proportion of and to identify factors associated with thyroid dysfunction among individuals coming to a tertiary care facility in Kabul, Afghanistan. Material and Methods: An analytical cross-sectional study design was conducted from July to Sep 2018. Blood samples were obtained, serum TSH levels were measured, and the patients were divided into three diagnostic categories according to their serum TSH concentrations. 1) Hypothyroidism 2) Hyperthyroidism 3) Normal thyroid Results: A total of 127 individuals were part of the sample for the final analysis. The majority of study participants (77%) were females. A large number of the participants (92%) did not have a family history of thyroid dysfunction and the majority of the female participants, (85%) were not pregnant in the last two years. Furthermore, 98% of participants, were non-smokers. Conclusion: The findings of the current study showed a high prevalence of thyroid dysfunctions in individuals coming to FMIC for thyroid functions tests. The findings also indicated that aging and smoking are the factors associated with thyroid dysfunctions. Further studies are needed to find out the prevalence of and factors associated with thyroid dysfunctions.

**Keywords :** Afghanistan, Kabul, hypothyroidism, hyperthyroidism, triiodothyronine, thyroxine

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