

## HYPOTHYROIDISM IN MENOPAUSAL WOMEN RECOMMENDATIONS DEVELOPED ON THE BASIS OF EXPERIENCE

*Komiljonova Oygul Olimjonovna*

*Assistant of the Department of Clinical Sciences Asian International University, Bukhara, Uzbekistan*

**Annotation:** The authors conducted a study among women of fertile age in menopause, where they identified a pathological state of health against the background of a lack of the hormone TSH and free T4. A condition survey was conducted consisting of 15 questions, examination of the skin, muscle tone, swelling in the extremities, BMI, palpation and ultrasound of the thyroid gland. Characteristic pathological conditions for this age were identified, and therefore the authors suggest early prevention of this disease in order to improve the quality of life of patients.

**Key words:** hypothyroidism, menopause, health conditions, TSH and free T4, quality of life.

**Relevance of the topic:** The incidence of thyroid disease in the world as of 2020 is 30%. Among thyroid diseases, primary hypothyroidism in adults, as of 2017, was 65%. Thyroid function has been studied in various populations.

An inverse relationship between TSH and age is observed in iodine-deficient populations, in which the most common pathology of the thyroid gland is the presence of nodules, and the function of the thyroid gland also increases with age.<sup>1</sup>

emotional, and social well-being. Additionally, our objective is to furnish contemporary diagnostic, therapeutic, and supportive methodologies geared towards enhancing the quality of life for women grappling with the dual challenges of climacterium and hypothyroidism.

**Materials and Methods:** A retrospective approach was employed to identify 50 patients under the care of the endocrinological dispensary in Bukhara city. The patients were categorically stratified by age into three groups: premenopausal, menopausal, and postmenopausal. Comprehensive evaluations were conducted, including analysis of thyroid-stimulating hormone (TSH), free thyroxine (T4), thyroid ultrasound imaging, palpation of the thyroid gland, body mass index (BMI) assessment, examination for peripheral edema, skin condition, muscle tone, and surveys addressing mood swings, memory impairments, attention deficits, diminished libido, sleep disturbances or insomnia, weakness, fatigue, drowsiness, and depressive states.

Extensive screening studies conducted in the United States have delineated significant disparities in the frequencies of thyroid dysfunction and serum antibody concentrations across diverse ethnic groups. Concurrently, investigations conducted in Europe have illuminated the impact of iodine consumption on the development of thyroid dysfunction.<sup>1</sup> Studies on the prevalence of autoimmune thyroid disorders have been undertaken in several developed countries. This represents the most comprehensive systematic review of thyroid disorders conducted in the past two decades, revealing an annual incidence of 350/100,000 for hypothyroidism in women and 80/100,000 in men, while hyperthyroidism exhibited an annual incidence of 80/100,000 in women and 8/100,000 in men.<sup>1</sup>

Global morbidity has been on the rise in recent years, with its etiology influenced by a diverse array of factors such as dietary habits, iodine deficiency, selenium consumption, environmental pollutants, ionizing radiation, thyroid-stimulating hormone (TSH) levels, among others.<sup>1</sup>

Charles Land's data reveals a thyroid pathology prevalence of 18% and 39% among men and women, respectively, in the northeastern region of Kazakhstan near the Semipalatinsk Nuclear Test Site. In this region, a direct correlation has been established between thyroid neoplasms, ionizing radiation,<sup>1</sup> gene polymorphism,<sup>1</sup> and chromosomal aberrations.<sup>1</sup>

Currently, numerous studies conducted in the northeastern region of Kazakhstan provide compelling evidence of the heightened prevalence of thyroid disorders resulting from radiation pollution of the territory. However, certain aspects remain contentious, and ongoing research endeavors persist in the region.

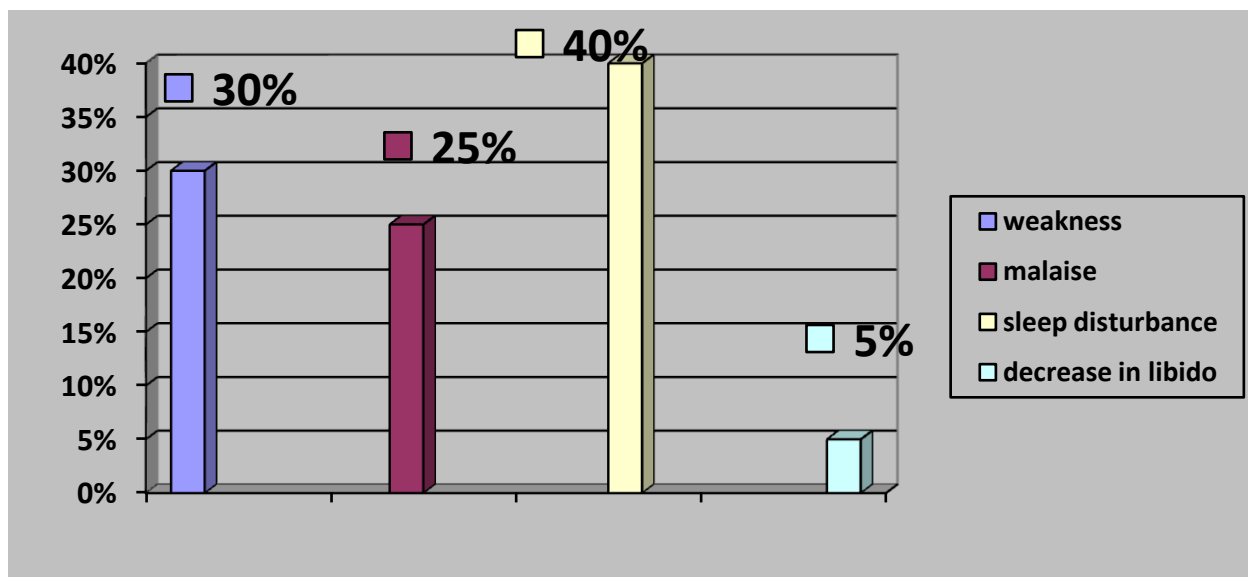
International scholars are actively investigating diverse facets, including risk factors, clinical features, ethnic and regional variations, characteristics specific to children and pregnant women, and complications affecting other organs and systems, among other considerations. The medicosocial significance of iodine deficiency disorder is underscored by the widespread occurrence of endemic goiter in most regions of Russia on the one hand, and the adverse impacts of hypothyroxinemia on the physical health and intellectual capabilities of the population on the other.<sup>1</sup>

The escalating incidence of iodine deficiency disorders necessitates an intensified preventive approach within the healthcare system to address iodine deficiency in our population. Over the past decade, measures have been implemented to prevent harm to the physical and cognitive development of children, women in the climacteric period, and the economic and social potential of the present and future generations of our republic.

**Study Findings:** In the survey of women in the fertile age group undergoing the climacteric period through structured questionnaires, the following symptomatology was identified: weakness was reported by 30% of respondents, malaise by 25%, sleep disturbances or difficulty initiating sleep by 40%, and diminished libido by 5%.

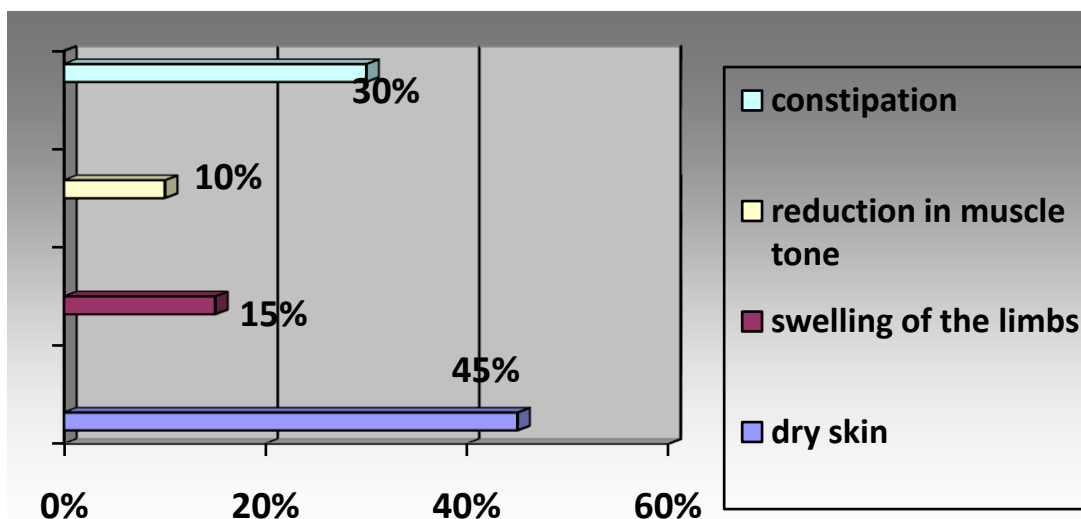
Today, menopausal women make up 10% of the world's population. Of these, 10-75% of women have a pathological menopause.

**Figure 1. The Symptomatology in Women of Fertile Age during the Climacteric Period.**



When examining women of fertile age and menopause, the following was revealed: dry skin - 45%, swelling of the limbs 15%, decreased muscle tone - 10%, constipation -30%.

**Figure 2: Clinical Manifestations in Women of Reproductive Age during the Climacteric Period.**



In the assessment of Body Mass Index (BMI), the prevalence of overweight was observed in 20%, while individuals classified with first-degree obesity constituted

43%, those with second-degree obesity accounted for 27%, and individuals characterized by third-degree obesity constituted 10%.

Hypothyroidism is characterized by elevated serum TSH levels and can be subclinical or clinically active. The diagnosis of hypothyroidism is often untimely, since in its initial stage the symptoms detected are extremely nonspecific. In addition, hypothyroidism syndrome can imitate various non-thyroid diseases, which is associated with multi-organ lesions found in conditions of thyroid hormone deficiency. Indeed, symptoms such as dry skin, alopecia, loss of appetite, weakness, dementia, etc., are similar to the manifestations of the menopause process. Typical symptoms of hypothyroidism are detected only in 25-50% of women of fertile age during menopause, while the rest have either extremely mild symptoms or hypothyroidism is clinically realized in the form of some kind of monosymptom.

**Objective:** The aim of this study is to illuminate research endeavors focused on elucidating the impact of hypothyroidism on the quality of life among women in the climacteric period.

In recent years, sclerotherapy has gained widespread application, presenting an alternative operative technique for treating certain thyroid gland conditions. Literature documents suggest that the introduction of alcohol into cysts and nodules as a method of treatment was proposed as early as the late 19th century. With the advent of new sclerosants in the arsenal of researchers and physicians, this method is continually evolving and acquiring broader applications each day.

Medical rehabilitation therapy in Uzbekistan constitutes a distinct field of practical and scientific investigation, demanding the application of contemporary models of screening and comprehensive rehabilitation for effective implementation, as substantiated in the source.<sup>1</sup> With the aim of enhancing the quality of life and preventing the development of hypothyroidism in women during the climacteric period,

it is judicious to conduct preventive measures during the pre-climacteric phase to counteract the onset of diseases.

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