

Thyroid Cancer - Rising Incidence and Healthcare Challenges in Nepal

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Thyroid cancer is the most common malignancy of the endocrine system and has witnessed a marked increase in incidence worldwide over recent decades. This trend is largely attributed to improve in detection methods, including the widespread use of high-resolution ultrasound and fine-needle aspiration cytology, which enable identification of small, often asymptomatic tumors.¹

Nepal, similarly, is experiencing a rise in thyroid cancer cases, underscoring the need for heightened clinical awareness, improved diagnostic infrastructure, and comprehensive management strategies.

Globally, the predominant forms of thyroid cancer are differentiated thyroid carcinomas, primarily papillary and follicular types, which generally carry favorable prognoses with appropriate treatment. Papillary thyroid carcinoma (PTC) accounts for approximately 85% of all thyroid cancers and tends to affect younger adults, with a higher incidence in females.²

Despite the generally good prognosis, thyroid cancer poses significant challenges. The rising incidence increases the demand for specialized healthcare services, which are often limited in Nepal's resource-constrained settings, especially outside urban centers. Limited access to advanced diagnostic modalities and specialist care can delay diagnosis and treatment, adversely affecting outcomes. Furthermore, thyroid cancer treatment necessitates lifelong follow-up and thyroid hormone replacement, impacting patients' quality of life and imposing a financial burden on both individuals and the healthcare system.

Beyond clinical management, public health interventions are crucial. Awareness campaigns can educate the public on thyroid health and the importance of early evaluation of thyroid nodules. Healthcare providers at primary and secondary levels should be trained in identifying suspicious thyroid lesions and in referring patients promptly to specialized centers. Additionally, strengthening diagnostic capabilities, such as ultrasound and cytology services, at district hospitals can facilitate earlier detection and reduce disease progression.

Iodine nutrition plays a critical role in thyroid health. Nepal has historically been an iodine-deficient country, but the introduction of universal salt iodization programs has significantly reduced iodine deficiency disorders. Continuous monitoring of iodine status is essential since both deficiency and excess iodine can influence thyroid pathology, including cancer risk.³

Research tailored to Nepal's unique epidemiological and environmental context is needed to better understand thyroid cancer risk factors and outcomes. Local data will help develop evidence-based policies and treatment guidelines adapted to Nepalese patients' needs. Establishing a national thyroid cancer registry could support such efforts by providing robust data on incidence, treatment patterns, and survival.

In conclusion, thyroid cancer is an emerging public health concern in Nepal, paralleling global trends. While most cases have favorable outcomes with early diagnosis and appropriate treatment, challenges remain in ensuring easy access to care and long-term patient support. A multi-pronged approach combining clinical excellence, public health initiatives, and research is essential to address this growing burden effectively.

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