



THYROID CANCER

Financial and health insurance status affect clinical management and quality of life in patients with thyroid cancer

BACKGROUND

Thyroid cancer affects more than 50,000 Americans each year, with the majority being young. In view of this, most patients diagnosed with thyroid cancer are working-age adults who do not yet qualify for government health insurance benefits. Health insurance plays a significant role for Americans to access and receive care, and whether or not a patient has health insurance may affect cancer treatment and outcomes. Additionally, it has been shown that thyroid cancer patients are at risk for financial difficulty and are at high risk for bankruptcy. Two recent studies addressed the impact of health insurance and financial status on thyroid cancer care. The first, by Ullmann et al, investigated the effect of health insurance status on diagnosis and treatment of patients with papillary thyroid cancer. The second, by Mongelli et al, evaluated the degree of financial difficulty among thyroid cancer survivors and its impact on quality of life.

THE FULL ARTICLE TITLES

Ullmann™ et al 2019 Insurance Status Is Associated with Extent of Treatment for Patients with Papillary Thyroid Carcinoma. *Thyroid* 29(12):1784-1791.

Mongelli MN et al 2020 Financial burden and quality of life among thyroid cancer survivors. *Surgery* 167(3):631-637.

SUMMARY OF THE STUDIES

Ullmann et al used the American College of Surgeons' National Cancer Database to identify 190,298 patients who had papillary thyroid cancer larger than 2 mm treated between 2004 and 2015. These patients were divided into four groups based on insurance status: privately insured, Medicare, Medicaid and no insurance. The majority of patients were women (76.1%) and had private insurance (73.4%). Patients with private insurance were the least likely to have thyroid cancer with high-risk features at diagnosis. Approximately twice the proportion of uninsured patients had spread of the

cancer outside of the neck compared with patients who were privately insured. Patients with any insurance were more likely to have small papillary cancers (microcarcinoma, <1 cm) at diagnosis compared to those without insurance, even when adjusting for other factors such as race/ethnicity, sex, age, income and education. Finally, patients with private insurance were also more likely to be treated with a total thyroidectomy, lymph node dissection and radioactive iodine therapy compared to those without insurance.

Mongelli et al conducted a survey administered to thyroid cancer patients aged 18-89 to collect information on financial difficulty and distress and quality of life. A total of 1,743 patients living in the United States completed the survey. The majority were women (88%), were white (95%), and had a diagnosis of papillary thyroid cancer (85%). Overall, patients who reported higher financial difficulty and distress were also more likely to report worse quality of life. At <5 years since thyroid cancer diagnosis, patients had higher financial difficulty and distress as compared with those at ≥5 years since diagnosis. Additionally, employment status was also found to be independently associated with quality of life in thyroid cancer survivors, such that those who reported being unable to get a new job or change jobs because of their thyroid cancer diagnosis had worse fatigue, pain and social functioning.

WHAT ARE THE IMPLICATIONS OF THESE STUDIES?

These studies highlight the significant impact health insurance status and finances have on thyroid cancer care and thyroid cancer survivors' quality of life in the United States. This is particularly important as thyroid cancer mostly affects younger individuals who are still working but don't necessarily qualify for government-subsidized health insurance benefits. The fact that patients with private insurance have less aggressive disease at the time of diagnosis and are also more likely to be treated more



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extensively, emphasizes the need for physicians to be mindful of these disparities when considering thyroid cancer treatment. It is also important for physicians to discuss cost of thyroid cancer care early in order to set realistic expectations. Finally, it is essential that proper

referral and follow-up is undertaken for uninsured and underinsured patients in order to improve care and quality of life.

— Maria Papaleontiou, MD

ATA THYROID BROCHURE LINKS

Thyroid Cancer (Papillary and Follicular): <https://www.thyroid.org/thyroid-cancer/>

Thyroid Surgery: <https://www.thyroid.org/thyroid-surgery/>

Radioactive Iodine Therapy: <https://www.thyroid.org/radioactive-iodine/>

ABBREVIATIONS & DEFINITIONS

Papillary thyroid cancer: the most common type of thyroid cancer.

Papillary microcarcinoma: a papillary thyroid cancer smaller than 1 cm in diameter.

Thyroidectomy: surgery to remove the entire thyroid gland. When the entire thyroid is removed it is termed a total thyroidectomy. When less is removed, such as in removal of a lobe, it is termed a partial thyroidectomy.

Lymph node: bean-shaped organ that plays a role in removing what the body considers harmful, such as infections and cancer cells.

Lymph node dissection: careful removal of lymphoid tissue in the neck thought to be cancerous.

Radioactive iodine (RAI): this plays a valuable role in diagnosing and treating thyroid problems since it is taken up only by the thyroid gland. I-131 is the destructive form used to destroy thyroid tissue in the treatment of thyroid cancer and with an overactive thyroid.

