The global burden of thyroid cancer is increasing worldwide, according to a cross-sectional study with data from 195 countries just published in Jama Network Open. The study, by Jun Lyu and colleagues from the Jinan University in Guangzhou, China, evaluated the burden and variation trends of thyroid cancer between 1990 and 2017 at the global, regional, and national levels.

Epidemiologic data were gathered using the Global Health Data Exchange query tool, covering persons of all ages with thyroid cancer in 195 countries and 21 regions from January 1, 1990, to December 31, 2017; data analysis was completed on October 1, 2019. All participants met the Global Burden of Disease Study inclusion criteria.

This analysis is particularly important because thyroid cancer is the most pervasive endocrine cancer worldwide, but the association between thyroid cancer and country, sex, age, sociodemographic index (SDI) and other factors was not adequately examined.

The researchers measured incidence, deaths and disability-adjusted life-years (DALYs) of thyroid cancer, stratifying by sex, region, country, age, and sociodemographic index.

Marked increases were registered in incident cases (169%), deaths (87%) and DALYs (75%).

Almost half of the thyroid cancer burden was noted in Southern and Eastern Asia, and a third of patients with thyroid cancer resided in countries with a high sociodemographic index.

“The thyroid cancer burden was largely heterogeneous across various categories evaluated, possibly reflecting differences in the corresponding genetic and environmental risk factors, as well as levels of economic status, education, lifestyle, and access to medical screening and therapeutic care. These factors need further investigation to ascertain detailed mechanisms” Lyu and colleagues conclude. The geographic disparities may provide support for cancer health care planning and resource allocation.