

Dangers of over-diagnosing a disease

Historically, the science of epidemiology was directed toward identifying and controlling epidemics of infectious disease. In a [study](#) just published in the New England Journal of Medicine, my colleagues and I highlight another important job for epidemiologists: identifying and controlling epidemics of medical care.

The setting is South Korea, where, over the last two decades, the incidence of thyroid cancer has increased fifteenfold. Nowhere in the world is the rate of any cancer growing faster.

We've all been taught to seek biological explanations for a significant rise in disease — perhaps a new infectious agent or environmental exposure. But in South Korea, we are seeing something different: an epidemic of diagnosis.

Where did all those new thyroid cancers come from? They were always there. As early as 1947 pathologists recognized that, although it was a very rare cause of death, thyroid cancer was a frequent finding during autopsies. Studies have since shown that over a third of adults have thyroid cancer. Virtually all of these cancers are small “papillary thyroid cancers,” many of which will never become evident during a person's life.

Unless that person receives a screening ultrasound. In fact, virtually all the newly identified thyroid cancers in Korea are papillary thyroid cancers. How do we know this is not a real epidemic of disease? Because the number of Koreans dying from thyroid cancer has not changed. If the screening were saving lives, the death rate would decline, or increase more slowly as the epidemic spread — but not stay perfectly flat.

An epidemic of diagnosis is not good for anyone's health. Resources are needlessly diverted; people are needlessly scared. But the biggest problem is that it begets an epidemic of treatment.

Read full original article: [An Epidemic of Thyroid Cancer?](#)