



Papillary type mostly accounts for rise in incidence rates of thyroid cancer in Germany

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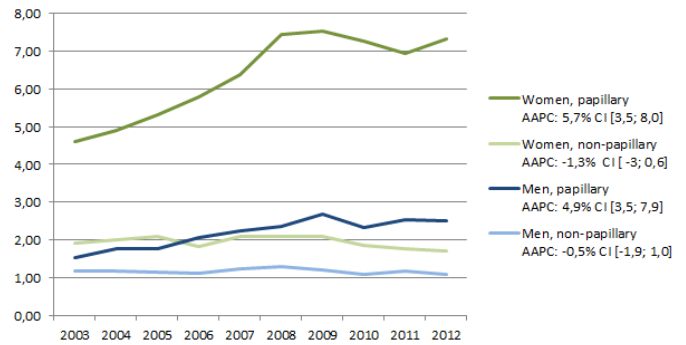
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Objectives

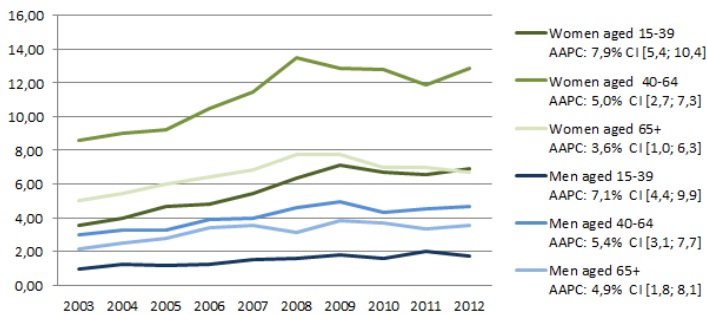
In recent years, the age-standardized incidence rates for thyroid cancer have increased considerably for both sexes in many industrialised countries, predominantly in younger adults. However, mortality rates are staying relatively stable or are even decreasing. In Germany, an estimated 4,386 women and 1,817 men have been diagnosed with thyroid cancer in 2012¹. We aim to provide an overview on recent developments of thyroid cancer incidence in Germany, using population-based cancer registry data.

Methods

We analysed thyroid cancer incidence using pooled data from 14 population-based German cancer registries (13 of 16 federal states and one district) from 2003 to 2012 stratified by sex, age group and histological subtype (according to IARC classification²). For geographical differences data from 2010 to 2012 was analysed on a federal state level. The Average Annual Percentage Change (AAPC) was calculated in a joinpoint regression model using Joinpoint Trend Analysis Software (95% confidence limits).



Age-standardised incidence rates, per 100.000 (European Standard), ICD-10 C73, papillary and non-papillary types, by sex



Age-standardised incidence rates, per 100.000 (European Standard), ICD-10 C73 papillary type, by sex and age group

	Average Annual Percentage Change (AAPC) by histological subtype			
	Women		Men	
Follicular carcinoma	-0,3%	CI [-2,6; 2,1]	-0,9%	CI [-3,5; 1,7]
Papillary carcinoma	5,7%	CI [3,5; 8,0]	4,9%	CI [3,5; 7,9]
Medullary carcinoma	-3,3%	CI [-5,4; -1,1]	-2,2%	CI [-6,6; 2,3]
Anaplastic carcinoma	1,8%	CI [-2,7; 6,0]	0,8%	CI [-3,3; 5,1]

Results

In the period from 2003 to 2012, age-standardised incidence rates of thyroid cancer have been steadily rising, reaching a plateau in 2008. However, looking at histological subtypes, there is a striking difference in the development of incidence rates to be noticed. For all non-papillary types, incidence rates are either stable or even declining whereas they are rising for the papillary type. This increase was predominantly observed at a younger age (15 to 39 years).

Within Germany, the highest incidence rates by far are to be observed in Bavaria, however there was no clear geographical pattern to be found.

Discussion

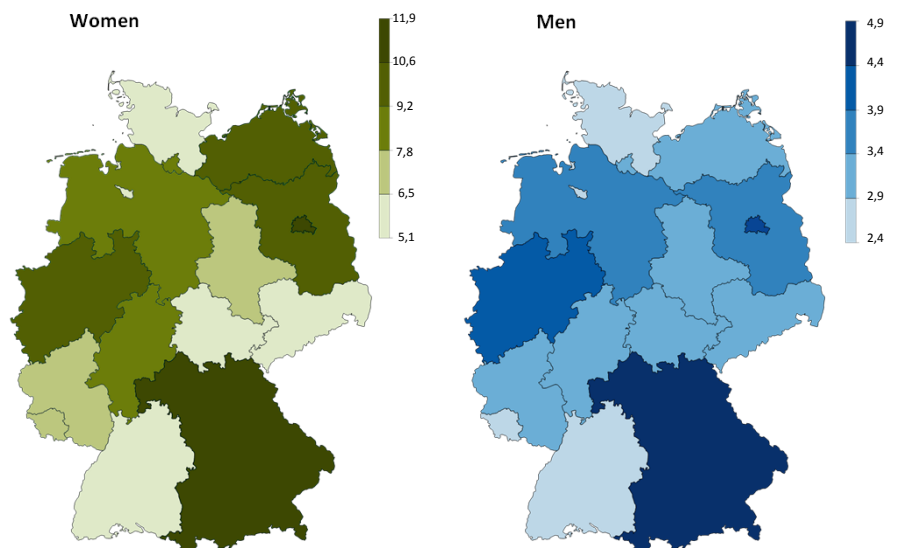
Papillary carcinomas are predominantly responsible for the increase in thyroid cancer incidence in Germany, this subtype affects mostly young adults. The reasons for the rising numbers still remain unclear, improvements in imaging techniques might play a role. However, the rather favourable prognosis of the papillary subtype is reflected in a slight decline in mortality rates for thyroid cancer. The high incidence rates in Bavaria correspond to similar rates reported from Austria³ and Switzerland⁴ where similar increases occurred.

References

- <http://www.krebsdaten.de/datenbank>
- IARC, Cancer Incidence in Five Continents Vol. X, Chapter 4
- Statistik Austria: Krebserkrankungen in Österreich 2016
- <http://www.nicer.org/de/statistiken-atlas/krebsinzidenz/>

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Age-standardised incidence rates, ICD-10 C73, Germany 2010-2012, per 100.000 (European Standard), by sex