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THYROID CANCER IN PUGLIA: HETEROGENEITY OF INCIDENCE AND MORTALITY IN FOUR PROVINCES

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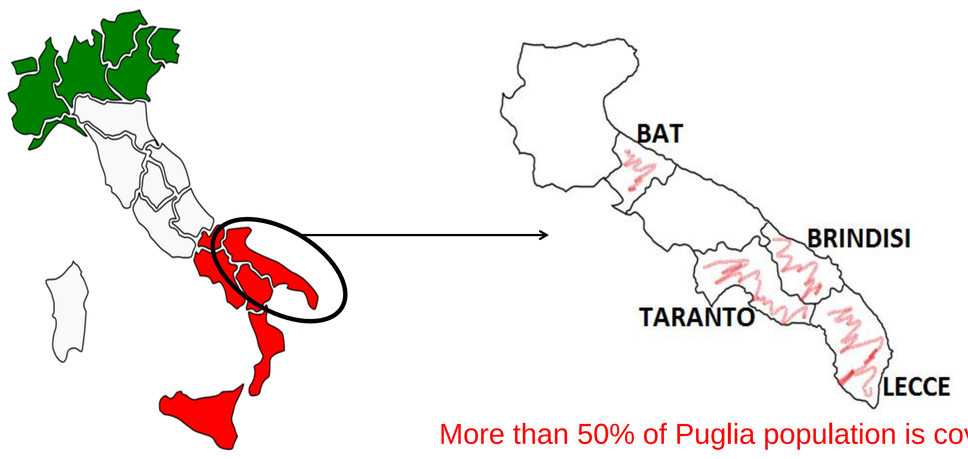
Background and introduction

Thyroid cancer incidence has been increasing in the last few decades, in Italy and in the rest of Europe. Increase was observed especially in females and for small papillary carcinomas. During the same span of time, thyroid cancer mortality has been stable so we supposed that increasing incidence trend could be mostly an over-diagnosis effect. We considered cancer registry data of four of the six regional sections, accredited by AIRTum (Association of Italian Cancer Registry).

Materials & Methods

Area and population

We considered all the incident cases of thyroid cancer (ICD-O-3 : C73) in the four accredited section of Puglia Cancer Registry



More than 50% of Puglia population is covered

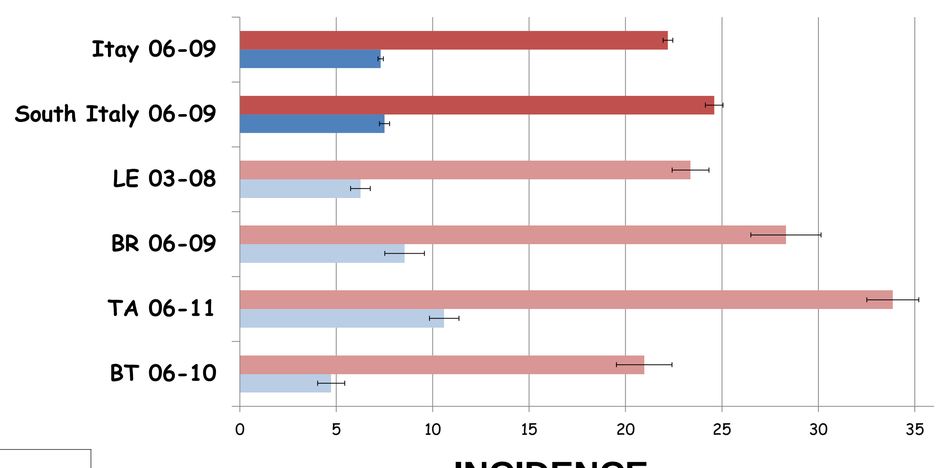
Incidence and mortality indicators

- Crude rates
- Age-specific rates
- Direct standardised rates (rif. EU pop.)

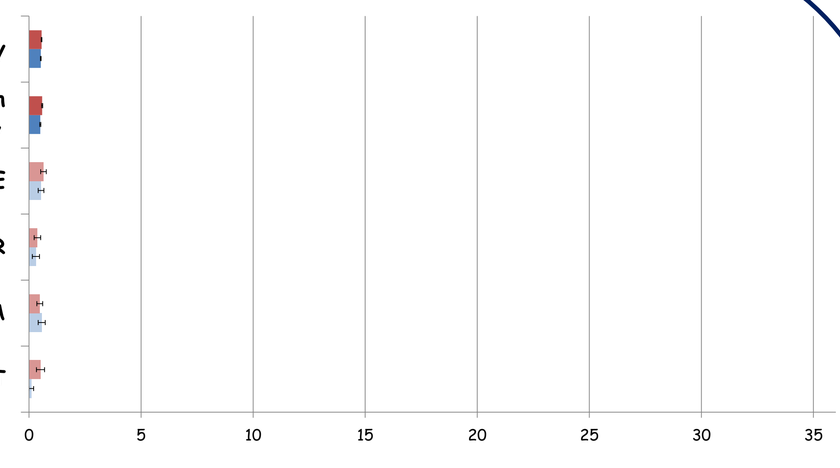
We studied incidence rates of the main morphologic groups:
papillary, follicular, medullary, anaplastic.

Results

Direct standardized rates (per 100.000 inhab.) using European population, by sex.



INCIDENCE



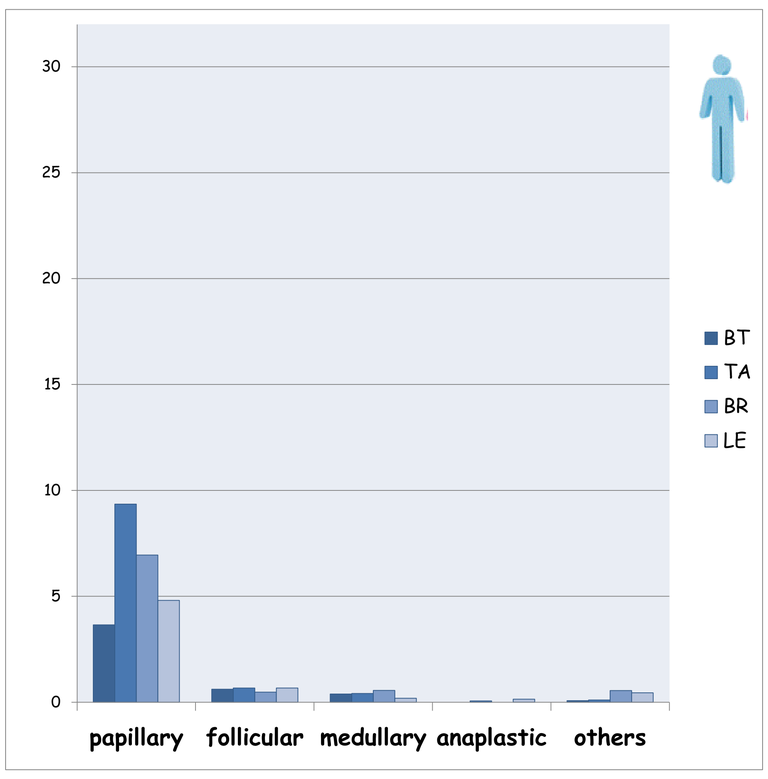
MORTALITY 2006-2012

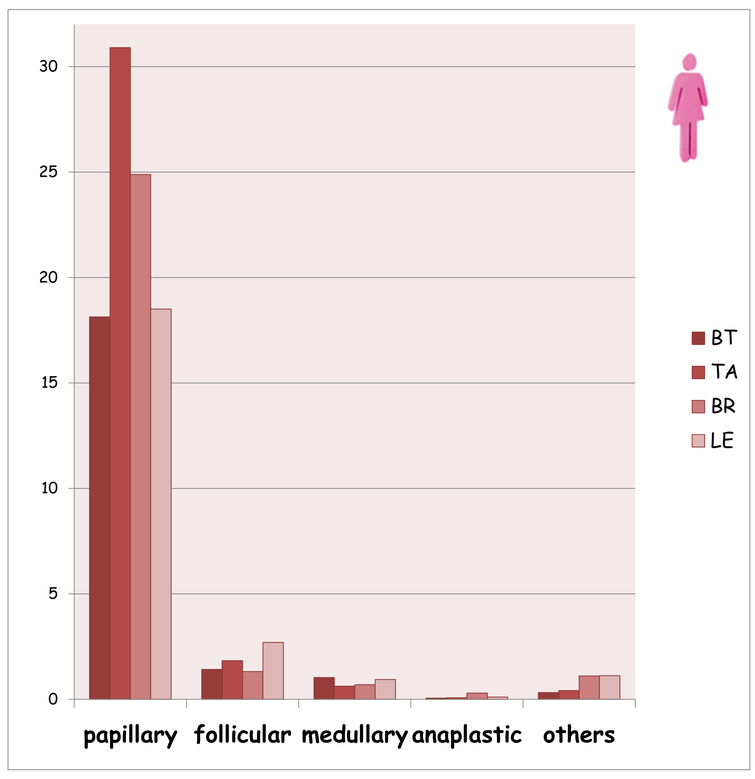
Incidence age: summary

	Total	%	avg	median
M	472	21,3	50,3	50
F	1741	78,7	47,9	47
Total	2213	100,0		

98% of cases are histologically confirmed

Direct standardized incidence rates (per 100.000 inhab.) using European population, by morphologies and sex.





Conclusions

We observe a geographical heterogeneity of thyroid cancer incidence in Puglia, especially in females. Taranto shows statistically significant higher incidence in both sexes and females incidence is particularly higher in intra- and extra-regional comparisons. Brindisi follows Taranto for high incidence, however excess is significant only in females. The other two sections show an alignment with South Italy and Italy as a whole. On the other hand the data of mortality indicates different results: Lecce shows an higher mortality, especially in females, although the excess is not statistically significant when compared with the South and Italy. However mortality rates are much lower than incidence rates and, as known from the literature, the deaths for thyroid cancer are related mainly to anaplastic forms, followed by the medullary histotype, whereas the papillary and follicular carcinomas only in very advanced stages lead to death. These reasons may explain why the high incidence in Taranto and Brindisi, mostly related to the papillary histotype, is not reflected in mortality; furthermore Taranto and Brindisi are environmental risk areas, therefore we suppose a propensity to opportunistic screening in resident population.

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