

The epidemiology of NSCLC in Queensland: quantifying the impact

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Abstract

Background

Lung cancer is responsible for the most cancer deaths each year in Queensland. We describe the changing patterns in incidence and mortality and potential years of life lost (PYLL) due to various subtypes of lung cancer.

Methods

We analysed lung cancer data from Queensland between 1982 and 2013. Incidence and mortality trends across the period were described by sex, rural residence and indigenous status as well as by lung cancer subtype (non-small cell lung cancer (NSCLC), small cell lung cancer (SCLC), other lung cancer). Further descriptive patterns by morphological subtype and demographic factors were explored.

Results

Contrasting trends in lung cancer incidence and mortality were observed in men and women (decreasing and increasing respectively) between 1982 and 2013. Recent trends in lung cancer incidence by indigenous status show a 25% increase over the last decade in indigenous people while non-indigenous lung cancer incidence remained steady.

Incidence of NSCLC and SCLC have remained constant over the full 30-year period, however within NSCLC the incidence of squamous cell carcinoma decreased and adenocarcinoma incidence increased. The sharpest decline was observed in the incidence of male squamous cell carcinoma.

With almost 25,000 of potential years of life lost in 2013, lung cancer accounted for the largest number (21%) of PYLL due to cancer.

Conclusions

Despite decreases in the percentage of people currently smoking, lung cancer remains the largest cause of premature mortality due to cancer in Queensland, though decreasing proportions of smoking among males appears likely to be responsible for a decrease in the incidence of squamous cell carcinoma.

There are no conflicts of interest.