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health economics



NON-SMALL CELL LUNG CANCER'S BURDEN OF DISEASE IN

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Aim: To estimate the Disability Adjusted Life-Years (DALY) associated with Non-Small Cell Lung Cancer (NSCLC) during 2012 in Portugal.

Methods: DALY combines Years of Life Lost (YLL) due to premature mortality and Years Lost due to Disability (YLD). The YLL correspond to the number of deaths multiplied by the present valued socially weighted life expectancy at the age at which death occurs using a standardized life table. For the distribution of lung cancer mortality by age and gender the WHO European mortality database was used. To estimate the proportion of these deaths that is due to NSCLC we applied a ratio (85.7%) based on data from the Diagnosis-Related Groups database. To estimate YLD in a particular time period, the number of incident cases in that period is multiplied by the average duration of the disease on a scale ranging from 0 (perfect health) to 1 (death). NSCLC incidence was estimated from Portuguese National and Regional Cancer Registry. The average duration of the disease was derived from the survival curves published by the International Association for the Study of Lung Cancer. Disability weights were taken from the Disability Weights for Diseases in the Netherlands Study.

Results: A total of 3,180 deaths in Portugal in 2012 were caused by NSCLC, which corresponds to 2.0% of the total deaths in Portugal. The DALYs resulting from premature deaths caused by NSCLC in 2012 totaled 25,071 representing 4.5% of years lost generated by all deaths in the country. For 2012 it is estimated that 3,236 life years were lost due to disability. The total disease burden attributable to NSCLC is thus estimated at 28.307 DALY

Conclusions: NSCLC is an important cause of disease burden in Portugal and should receive adequate attention from policy makers.

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