Does Asthma Lose its Importance in Respiratory System Deaths?

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Objectives: In this study, the distribution of respiratory system deaths in 2009 and 2017 according to causes were investigated, according to 2009 increase rates were determined in 2017, asthma related deaths were aimed to examine.

Methods: The data of death statistics of Turkish Statistical Institute according to the causes of death due to respiratory diseases were divided according to their distribution. The rates of increase in mortality were compared according to gender, cause of death.

Results: While 24,996 patients died due to respiratory system diseases in 2009, 99.5% increased to 49,855 in 2017. The increase rate was calculated as 12.4% per annum. Only deaths due to pneumonias increased by 57.8% and the total mortality rate was 5.8 times higher. Deaths due to asthma increased by about half (44.8%) of the total increase by 44.6%. This shows that the treatment of asthma patients is effective. In 2017, the rate of death increase was less in males than females (82.6% versus 128.6%) compared to 2009 (p<0.001). While the rate of increase in males was lower in all respiratory system diseases, the increase in males due to asthma was 5.4 times lower than the rate of increase in males by 13% and 69.9% in females. This is because asthma is more prevalent in women than men. In 2017, the percentage of respiratory system deaths increased from 8.8% to 11.96% compared to 2009, while this rate increased by 2.54% in men, but increased by 3.76% in women (p<0.0001). The annual increase rate was 3.19% in men and 6.32% in women. Deaths due to respiratory system increased by 2 times more in women than in men. It was calculated that this increase was mostly due to pneumonia-related deaths. Although the rate of deaths related to COPD in deaths due to asthma in 2009 did not change significantly in 2017, the rate of deaths due to COPD increased in males, while the rate of deaths due to asthma decreased from 4.71 to 3.76 (p<0.01). It was thought that the prevalence of COPD was higher in men than in asthma.

Conclusion: Compared to 2009 and 2017, deaths due to respiratory system in women, especially deaths due to pneumonia, have increased. Deaths due to respiratory system increased by 2 times more than all deaths. The rate of increase in asthmatic deaths, especially men, was lower than the rate of increase in other causes of death.

Keywords: Asthma, mortality rate, respiratory disease