<u>Letter to Editor</u>

Lung cancer occurrence in Southern Iran

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ccording to WHO report in 2002, lung cancer was the 9th cause of death and responsible for 2% of mortalities and it is predicted to be the 7th cause of death and responsible for 3% of mortalities by 2030.¹ In southern Iran, lung cancer ASR is 2.18 in males and 0.82 in females.² This active hospital-based study aimed to investigate the characteristic of lung cancer in southern Iran.

The Fars Hospital-based Cancer Registry is the major referral center in southern Iran due to its equipped hospitals, and specialists in different fields of cancer. Data were recorded according to ICD-O and registered cases included all invasive cancers in ICD-10 categories of C-00 to C-80 and all duplicate cases were eliminated. The personnel interviewed the patients to get all the information face-toface. Statistical analysis was performed using Chi-Square and independent t-tests. P value less than 0.05 was considered significant.

Among 10,800 cases of cancer registered from January 2002 to December 2007, there were 238 cases of lung cancer (58.3 ± 14.6), including 181 males (60.4 ± 12.7; 76.1%) and 57 females (51.6 ± 18; 23.9%). The male to female ratio was 3:1.8. Eight patients (3.4%) were under 25 years of age, 30 (12.6%) were in 26-45 years age group, 119 (50%) in 46-65 year age group and 81 (34%) were above 65 years. The mean age was 58.3 ± 14.6 years. Among the patients, number of males was significantly higher than females (p = 0.001).

Seventy-eight subjects (32.7%) were nonsmokers (24.3% male and 59.6% female), 157 (66.1%) were current smokers (74.6% male and 38.7% female) and 3 persons (1.2%) were exsmokers (1.1% male and 1.7% female) and the difference between two genders were statistically significant (p < 0.001). The income of 10.5% of patients was high, 53.4% had a moderate and 36.1% had a low income. 39.9% of lung cancers were squamous cell carcinoma (41.4% male and 35.1% female), 14.7% were small cell (14.4% male and 26.3% female), 17.2% were adenocarcinoma (17.1% male and 7 female), and 28.2% were other types (27.1% male and 31.6% female).

Lung cancer was reported more in men due to more exposure to risk factors³ which is similar to our study. Bosetti et al reported the high proportion of cigarette smokers among lung cancer patients⁴ which was noticed in 66.1% of our male subjects, too. Ninety percent of our patients were in low to medium socioeconomic class identical to several other studies.⁵ In our study, the most common histological type was squamous cell carcinoma which was also reported by Rowan.⁵ However, adenocarcinoma was the most prevalent reported type in Southeastern Asia.⁶

Our results showed a higher prevalence of lung cancer in males, age group of 46-65, smokers and low and moderate socioeconomic classes. The most common type of cancer was squamous cell carcinoma. So, these findings may help authorities in health planning program. Also, more studies in a longer time span are needed to clarify the causes.

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Conflict of Interest

Authors have no conflicts of interest.

References

- 1. World Health Organization. Injuries violence and disabilities biennial report 2004-2005. Switzerland: WHO; 2006.
- 2. Mehrabani D, Tabei SZ, Heydari ST, Shamsina SJ, Shokrpour N, Amini M, et al. Cancer Occurrence in Fars Province, Southern Iran (2008). Iranian Red Crescent Med J 2008; 10(4):314-22.
- **3.** Belani CP, Marts S, Schiller J, Socinski MA. Women and lung cancer: epidemiology, tumor biology, and emerging trends in clinical research. Lung Cancer 2007; 55(1):15-23.
- 4. Bosetti C, Gallus S, Peto R, Negri E, Talamini R, Tavani A, et al. Tobacco smoking, smoking cessation, and cumulative risk of upper aerodigestive tract cancers. Am J Epidemiol 2008; 167(4):468-73.
- 5. Rowan S. Trends in cancer incidence by deprivation, England and Wales, 1990-2002. Health Stat Q 2007;(36):24-35.
- **6.** Morita T. A statistical study of lung cancer in the annual of pathological autopsy cases in Japan, from 1958 to 1997, with reference to time trends of lung cancer in the world. Jpn J Cancer Res 2002; 93(1):15-23.