

## **Respiratory cancers and pollution**

## Dear Editor,

We read with great interest the article by Ding et al<sup>1</sup> about the correlation between respiratory cancer and pollution.

The authors analyzed the relationship between the chronic exposure to household pollution and the most common cancer of the respiratory tract.

It is well known that long-term exposure to household pollution is associated with elevated risk of lung and others cancers<sup>2</sup>.

The major environmental cause of death worldwide is air pollution, which accounts for nearly 4 million deaths annually, and women and children living in severe poverty in third world countries are the most exposed to household air pollution and, thus, suffer its consequences maximally<sup>3</sup>. Respiratory tumors include cancers of the lung, larynx, tracheas, and bronchus and depending on the location of the cancer, the symptoms change. The risk, incidence, and survival outcomes differ considerably and according to stage disease, histotype, type of cancers, performance status and comorbidities.

Unfortunately we did not find any considerations and/or data subdivided according to the geographic area of environment and the risk related to the kind of environment.

Another consideration regards the use of devices against the pollution, able to reduce the environmental pollution and that are few utilized in emerging countries and not mentioned in the text.

Moreover, we know that the risk of respiratory cancers also depend on worldwide tobacco consumption especially for lung cancer<sup>4</sup>.

Some consideration should be taken on the concomitant cigarette smoking habit and air pollution that could influence the risk of respiratory cancer and could be a confounding factor.

Regarding the clinical characteristics reported, we agree with the authors about the symptoms described that depend by the location and extension of cancer disease.

We think and believe that pollution represents an emerging problem for the incidence of chronic disease and particularly for cancer disease.

Moreover, we hope that the multidisciplinary approach to the air pollution, involving institutions, population and public health will be able to face efficaciously the problem with the aim to improve and reduce the risk of cancer disease.

Considering that each day nearly 3 billion people, mostly women and children worldwide are exposed to toxic levels of household pollution coming from the use of solid fuels, the enormity of the respiratory cancer problem in under developed countries cannot be ignored.

We absolutely agree with the authors on improving the living conditions and reducing the hazards from occupations like welding, industrial work, etc. are desperately needed to control the incidence of respiratory cancers.

We conclude considering that in the complex oncologic scenario<sup>5</sup> it is mandatory to take part in this emerging problem.

## **Conflict of Interest**

The Authors declare that they have no conflict of interests.

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R. Fisichella<sup>1</sup>, A. Llleshi<sup>2</sup>

<sup>1</sup>Department of Surgery, University of Catania, Catania Italy <sup>2</sup>Department of Medical Oncology, National Cancer Institute, Aviano (PN) Italy

