

Trends in the Prevalence of COPD in Elderly Individuals in an Air Polluted City in Japan: A Cross-sectional Study

Kenji Kotaki*

Department of Physical Therapy, Teikyo University, Omuta, Japan

COMMENTARY

COPD is significant reason of morbidity and mortality in both high and low economic nations. While impact of cigarette smoking is the most significant risk factor throughout the world which is to be eradicate. These open and indoor air pollutants can cause or exacerbate COPD [1].

In high economics countries, notable air contaminations occasions give clear proof that introduction to elevated levels of open air toxins is related with expanded mortality and bleakness due to COPD.

WHO said COPD is the 4th ranked driving reason for death throughout the globe, and it is anticipated to become the third driving reason by 2020 [2].

Japan experienced high levels of air pollution during the period of rapid economic growth in the 1960s and many people who lived in these areas complained about respiratory symptoms. The high concentrations of air pollutants around 1970 resulted in a decrease in respiratory function and an increase in respiratory symptoms [3].

The exacerbation of respiratory illnesses caused by air pollution, including PM 2.5, is became a major problem throughout the world at present.

In Omuta City (Fukuoka prefecture), there is extreme air contamination and the extent of the populace matured ≥ 75 years is 35%, speaking to a super-maturing society

Omuta is a former coal mine city 50 years ago. But now Omuta is air Pollution designated area.

The annual every day mean degrees of PM 2.5 were recorded from 2013 to 2017. As indicated by the Ministry of the Environment of Japan, the national mean PM 2.5 concentrations were 15.4 $\mu\text{g}/\text{m}^3$ in 2011, 14.5 $\mu\text{g}/\text{m}^3$ in 2012, 15.37 $\mu\text{g}/\text{m}^3$ in 2013 and 15.0 $\mu\text{g}/\text{m}^3$ in 2014. The mean PM 2.5 concentration in Omuta city was a lot higher than the recorded national mean worth [4].

We chose to develop a framework for planning nearby clinics, hospitals, and medical associations to raise awareness, improve

open doors for early finding, and describe the province of COPD in the city, which had been formally assigned an air-contaminated locality [5].

As an extra procedure, an agreeable local system concentrating on early diagnosis and treatment has recently been developed.

This cooperative effort between Universities, medical facilities and health centres has prompted improvement in early identification of COPD and prevented exacerbation of this disease and, reduced health costs [6].

Health centres and universities jointly conducted screening and introduced suspected patients with COPD to medical facilities for early detection and diagnosis of COPD.

Screening for COPD was also performed during routine health examinations at four various general health centres from 2015 to 2018. All patients who were aged more than 50 years were eligible for screening to experience COPD screening. Patients suspected of having COPD were referred to nearby emergency clinics for additional diagnosis [7]. They consist of Spirometry testing and (IPAG) COPD questionnaire.

We conducted a COPD survey (IPAG) on all occupants as the main screening. Furthermore, did a Spirometry testing straightaway. Estimations of FEV1/(FVC) $<70\%$ showed symptoms suggestive of COPD.

The National Institute for Health and Care Excellence study (called NICE study) in 2004 said that suspected COPD rate was accounted for to be 8.5% in the total population, 12.4% in smokers and 5% in non-smokers [8].

According to our medical examinations conducted during this study indicated an expected prevalence of COPD of 14% in the complete gathering of patients and 17% in smokers.

The explanation behind a higher assessed prevalence in smokers might be that the two fold presentation of smoking and contamination has a solid unfavorable impact on respiratory function and respiratory symptoms. Of the 37 patients with suspected COPD who were referred to/neighborhood hospitals, just 20 really experienced a proper diagnosis process [9].

Corresponding author: Kenji Kotaki, Department of Physical Therapy, Teikyo University, Omuta, Japan, Tel: +81-09044887348; E-mail: koutaki@fnt.teikyo-u.ac.jp

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Finally, we would like to talk about the merit of a cooperative regional systems.

We can see data which we can analyze at the moment.

We can Predict trends of the prevalence of COPD.

We effectively detect other early-stage respiratory illnesses.

We can reduce national insurance cost of COPD medical treatment.

In many Asian countries, contamination of air is increasing and it is being identified as a prominent emerging environmental and public health risk factor. Air pollution is expected to become the major risk factor of death throughout the globe by 2050. We believe that a reinforced cooperative regional system can play a prominent role in regulating respiratory illness.

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