

Abstract

Title: The prevalence of the Chronic Obstructive Pulmonary Disease in the city of Telavi, Georgia: a cross-sectional study.

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The study was conducted in cooperation with Family Medicine Center “Novomed.”

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Key words: Chronic Obstructive Pulmonary Disease (COPD), prevalence, risk factors, Telavi.

Background: COPD, which is defined as an airflow limitation is one of the leading causes of mortality and morbidity, health expenditures of which have been rising sharply. The major risk factors of COPD are smoking, outdoor pollution, and indoor pollution. The prevalence of COPD in Georgia is suspected to be high due to high smoking rates and air pollution. However, there is no exact definition for the diagnosis of COPD in the Georgian State Medical Standards list; alike definition is “Other Chronic Obstructive Diseases of Lung”, official statistics of which is low – 0.097 %. **Methods:** a quantitative cross-sectional study was carried out in the city of Telavi, in the Family Medicine Center “Novomed” for determining the prevalence of COPD and relation of the factors that affect the disease, in Telavi. The study included the subjects over 35 years of age who had symptoms of prolonged cough, sputum production, or dyspnea, and/or a history of exposure to risk factors of the disease. COPD diagnosis was made through a questionnaire and spirometric examination, after receiving the informed consent from the participants. **Findings:** Total of 101 patients participated in the study; The sex ratio M/F was 1.24. The mean age of study participants was 55 years. COPD was confirmed in 35.6% of the patients. The risk of COPD in men was 4.6. times higher than in women. Seven subjects in the age range of 35-39 years, were diagnosed with COPD. They did not report to be current or past smokers. There were no patients detected with the very severe form of COPD. The study results did not demonstrate neither, statistically significant association between the duration of cough and the severity of COPD, nor statistically significant association of smoking and the severity of COPD. Statistical tests demonstrated that COPD was dependant on outdoor pollution and the dependency was statistically significant $P < 0.05$. Statistically significant dependency between COPD and indoor pollution was not found. **Conclusion:** the estimate prevalence rates for COPD in Telavi appeared to be 1.7 times higher than the official rates for “Other Chronic Obstructive Diseases of Lung”. The results of the study can serve as the good baseline data for broader studies on COPD prevalence, which should focus on the impact of various risk factors. Specific public policy issues need to be re-examined from the angle of environmental contribution to the burden of COPD. Introduction of spirometric examination for diagnosing COPD should be ensured at all relevant health facilities. Anti-tobacco policies need to be reinforced. Definition of COPD has to be included in Georgian State Medical Standards list. Awareness needs to be raised on COPD among healthcare personnel.