Misconceptions about Chronic Obstructive Lung Disease - A Questionnaire Study

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Abstract
Background: The aim of our study was to ask the patients the questions if COLD was contagious and if COLD was an abbreviation and if so, what were the meanings of the relevant initials and evaluate the answers.

Materials and Methods: Men and women aged above 35 years who were diagnosed with COLD in Düzce It was planned to ask the participants the following questions separately: “Is this disease contagious?” , “Is COLD an abbreviation, and if so, what is the meaning of the initials?” and to evaluate the answers.

Results: A total of 504 individuals (112 women and 392 men) who completed the questionnaire successfully were included in the study. 31.6% of the individuals who participated in the study knew that COLD was not contagious. When the questions if COLD was an abbreviation, and if so what were the meanings of the initials were asked separately, 21% of the participants stated that the word COLD was an abbreviation and 21.7% knew the meanings of the initials.

Conclusion: The study demonstrates that physicians who treat COLD should give their patients more and explanatory information. In addition, we should clearly explain to each of our patients who have been diagnosed with COLD and are being treated with drugs for COLD that the disease is a chronic lung disease and leads to...
obstructive dyspnea (causing difficulty in breathing). Another notable point is that knowing that COLD is not contagious is important in terms of prevention of both ostracisation and isolation of the patient.

**Keywords:** Chronic obstructive lung disease; Questionnaire

1. Introduction

Chronic diseases are of great importance, because they lead to significant mortality and morbidity both in our country and in the world. When the causes of death were examined, it was observed that the grading related with the first three disease groups in 2014 did not change in 2015. Circulatory system diseases which constituted 40% of the mortality in 2014 were in the first order in 2015 by constituting 40.3% of the mortality. Mortality related with benign and malignant tumors which was in the second order with a rate of 20.4% in 2014 occurred with a rate of 20% in 2015. Mortality related with respiratory tract diseases which is in the third order occurred with a rate of 10.6% and 11.1%, respectively, in 2014 and 2015 [1]. Chronic airway diseases [Asthma, chronic obstructive lung disease (COLD)] constitute the majority (65%) of chronic respiratory diseases. Chronic airway diseases which show great similarity in terms of risk factors, prevention and treatment are one of the most important causes of morbidity and mortality and cause a significant social and economic burden in our country as in other countries. However, chronic airway diseases and their risk factors are not sufficiently known by healthcare workers and managers and by patients, patients’ relatives and the media. Therefore, diagnosis and treatment is inadequate and preventive measures cannot be taken sufficiently [2,3]. Chronic airway diseases are not sufficiently known especially by COLD patients and their relatives. Therefore diagnosis and treatment is inadequate and preventive measures cannot be taken sufficiently. The aim of our study was to ask the patients the questions if COLD was contagious and if COLD was an abbreviation and if so, what were the meanings of the relevant initials separately, evaluate the answers and to provide sufficient information about this disease to COLD patients and the community.

2. Materials and Methods

This study was approved by Sakarya University school of Medicine Ethical Commitee for Clinical Research (no:71522473/050.01.04/42; Jan 23,2017).

The individuals who accepted to participate in the study (men and women aged above 35 years with a diagnosis of COLD) were asked the questions included in our questionnaire. Male and female patients aged above 35 years who had a diagnosis of COLD and were using certified medication for this condition among the patients who presented to chest diseases clinic in the province of Düzce were randomly included in the study. The participants were evaluated by gender and age groups and were divided into four groups by age as 35-44, 45-54, 55-64 and 65 years and older. The statistical analysis of the study was performed using SPSS program. Pearson’s correlation test was used for comparison of the answers given to the questions included in the questionnaire by gender and age groups. A p value of <0.05 was considered statistically significant.
3. Results
The demographic properties of the patients who participated in the study are shown in Table 1. Male and female patients aged above 35 years who had a diagnosis of COLD and were using certified medication for this condition among the patients who presented to chest diseases clinic in the province of Düzce were randomly included in the study.

| Age (%) | 35-44 (11%) |
|---------|-------------|
|         | 45-54 (45.6%) |
|         | 55-64 (31.4%) |
|         | >65 (12%) |

| Marital status (%) | Married (84.5%) |
|                   | Single (10.9%) |
|                   | Widow (10.9%) |

| Educational Status (%) | Illiterate (7.4%) |
|                        | Literate (15.5%) |
|                        | Primary school (44.6%) |
|                        | High-school (18.5%) |
|                        | University or postgraduate (14%) |

Table 1: Demographic properties of the participants.

The questionnaire results in our study were evaluated and it was found that 58% of the population reported that COLD was not contagious, 15.2% reported that it was contagious and 26.8% reported that they did not know if it was contagious or not. The answers related with this question are shown in Table 2.

| Question | Answer | Women (%) n:112 | Men (%) n:392 | Total (%) n:504 | P |
|----------|--------|-----------------|---------------|-----------------|---|
| Is COLD contagious? Is it a contagious disease? | YES | 30.3 | 32.0 | 31.6 |
| | NO | 54 | 49.5 | 50.5 | 0.055 |
| | I don’t know | 15.7 | 18.5 | 17.9 | 0.053 |
| Is COLD an abbreviation? | Yes | 19.5 | 21.4 | 21 | 0.057 |
| | No | 56.0 | 57.6 | 57.25 | 0.054 |
| | I don’t know | 24.5 | 21.0 | 21.5 | 0.052 |
If COLD is an abbreviation, what are the meanings of the relevant initials?

| Answered all the questions correctly | 22.6 | 21.2 | 21.7 | 0.055 |
| Answered the questions partially correctly | 23.4 | 23.2 | 23.1 | 0.059 |
| Answered none of the questions correctly | 54.0 | 55.6 | 55.2 | 0.053 |

Which organ is COLD related with?

| Lung | 56.4 | 57.7 | 57.3 | 0.054 |
| The participants who answered the question as another organ | 19.7 | 21.6 | 20.9 | 0.057 |
| I don’t know | 23.9 | 20.7 | 21.8 | 0.052 |

Do drugs used for COLD lead to addiction?

| Yes | 17.8 | 18.1 | 18.0 | 0.058 |
| No | 25.6 | 27.5 | 26.7 | 0.053 |
| I don’t know | 56.6 | 54.4 | 55.3 | 0.055 |

Table 2: Comparison of the level of knowledge related with the questionnaire by gender.

COLD: Chronic obstructive lung disease

The p value was found to be above 0.05 and statistically significant difference was not found between the genders in terms of the answers given to the questions.

4. Discussion

Chronic obstructive lung disease (COLD) which is a preventable and treatable condition is characterized with permanent and usually progressive airflow restriction accompanied by increased chronic inflammatory response against harmful particles and gases in the lung and airways. Development of COLD is multifactorial and the risk factors related with development of this condition include environmental and genetic factors. Smoking among environmental factors is the most significant preventable factor which is responsible for development of COLD and worsening of the prognosis [4,5]. COLD is a worldwide major health problem which has been reported as a cause of morbidity and mortality with a gradually increasing significance. COLD causes to conditions which harm the economies of countries in terms of labour loss [6]. According to the World Health Organization (WHO), COLD is the 4th leading cause of mortality and causes 29 million deaths each year [7]. Both patients and their relatives do not have the sufficient level of knowledge about the issue if COLD is a contagious disease or not. This is frequently
realized by physicians who care about this condition in daily life based on the questions of patients and their relatives about this issue. However, it is quite notable that there is a lack of studies investigating the issue if COLD is contagious or not. When it was asked if COLD was a contagious disease in our study, 50.5% of the population reported that it was not contagious, 31.6% reported that it was contagious and 17.9% reported that they did not know if it was contagious or not. It is important to know that COLD is not contagious in terms of prevention of both ostracisation and isolation of patients with COLD. Therefore, it was thought that the awareness which would be created by our questionnaire would draw attention. In a study conducted in England in relation with awareness of COLD, it was reported that only 14% of the participants with low public awareness heard of the definition of COLD [8]. As a result of a study conducted to evaluate the awareness of asthma and COLD in Turkey, 49.6% of the participants reported that they knew that COLD was a condition which was related with the lung [9]. In our study, 57.3% of the participants knew that COLD was a condition related with the lung. This shows that almost half of the patients who have a diagnosis of COLD do not even know which organ this condition is related with. Based on these points, we concluded that even the simplest aspects related with this condition were not known sufficiently by the patients.

In addition, the level of awareness of the community and patients with COLD was very low even in terms of simple information. Another point is the fact we, physicians, do not explain this condition sufficiently or draw the attention of patients sufficiently. Hence, we cannot create sufficient awareness related with this condition. In a study conducted by Miravitlles et al. to specify the level of knowledge about COLD, only 8.6% of the participants reported that they knew the definition of COLD [10]. In another study conducted in Spain, it was reported that 17% of the participants knew the definition of COLD and the level of awareness related with COLD was still insufficient despite the works performed in previous years [8]. In our study, 55.3% of the population reported that they had no idea about the issue if the drugs used for treatment of COLD caused addiction or not and only 18% reported that these drugs did not cause addiction. 26.7% of the individuals who participated in our study answered “yes” to this question. Our study is important, because there are no sufficient studies investigating if the drugs used for treatment of COLD cause addiction or not. Incorrect information and misconceptions of patients about this issue cause them to discontinue drug treatment. Our study is the best example for demonstrating the awareness about this issue. In a study conducted in Brazil in relation with asthma which is another chronic obstructive lung disease, 70% of the participants reported they thought these drugs could cause addiction [11]. Our study is important because the awareness of COLD is still low. Our study was conducted to fill a gap in this area and to increase the level of awareness.

Both patients and their relatives do not have a sufficient level of knowledge about the question if COLD is a contagious disease or not. This is frequently realized by physicians who care about this condition in daily life based on the questions of patients and their relatives about this issue. However, it is clear that there is a lack of studies investigating the issue if COLD is contagious or not. When the literature and references were examined, it was found that there were no sufficient scientific studies. COLD is not known sufficiently by patients and their relatives. Therefore, the diagnosis and treatment is insufficient and preventive measures cannot be taken. In our study, we
planned to ask the patients the questions if COLD was contagious and if COLD was an abbreviation and if so, what were the meanings of the relevant initials and evaluate the answers. The final aim was to enable the community and patients with COLD to have sufficient knowledge about this condition. Knowing that COLD is not contagious is important in terms of prevention of both ostracisation and isolation of patients. Therefore, the awareness created by our questionnaire demonstrated a notable and interesting outcome. In addition, we should explain each patient diagnosed with COLD and treated for this condition that this is a chronic condition and an obstructive lung disease which may cause difficulty in breathing. It is important that each patient with COLD knows that this is a chronic disease and is informed so that he/she lives a life accordingly.

Conflict of Interest
The author declare that he has no conflict of interest.

Acknowledgement
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