

**76 - CHARACTERISTICS OF PEOPLE WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE OF PRIMARY HEALTH CARE**

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**INTRODUCTION**

Chronic obstructive pulmonary disease (COPD) has had an impact on the public health sector by the number of hospitalizations and higher costs for treatment in the National Health System. This fact attracted the attention of health professionals, as well the risk factors by the high incidence and morbidity and higher estimates of worldwide burden of people with COPD, this disease can be asymptomatic or have symptoms of little relevance to the person, hindering diagnosis and control (GOLD, 2013).

According to estimates from 2002, COPD was the fifth leading cause of death in the United States, but now passed the fourth cause. The incidence of COPD continues to increase, and the World Health Organization projects an increase of more than 30% of morbidity and mortality from COPD in the next 16 years, especially if no actions occur in primary health care, to reduce the risk factors. Estimates that organization, demonstrates that COPD may become, in 2030, the third largest cause of death worldwide (WHO, 2011).

In Brazil, according to epidemiological data for the year 2013 in the database of the National Health System, diseases of the respiratory system occupy the tenth position in morbidity and mortality in eleventh. In the South Region, the data are more alarming because the disease ranks seventh in morbidity and mortality in the sixth, the top positions compared with other regions of the country (BRAZIL, 2013).

Chronic disease symptoms are: shortness of breath, wheezing, cough, sputum production, and exercise intolerance associated with anxiety and depression, these being responsible for altering the relationship between health and quality of life for people with COPD (CAMELIER et al., 2006).

The American Thoracic Society (ATS) and European Respiratory Society (ERS), in 2004, adopted the definition of the treatment of people with COPD should follow an interdisciplinary program of assistance and molded individually aiming to optimize the physical, social performance and autonomy.

A large number of studies have demonstrated the value of this treatment in improving the performance of daily life activities with less fatigue, resulting in improved social and physical autonomy, making the person more independent, more physically active, helping it to become more educated about their own health care and, as a consequence, more sure of himself (RODRIGUES, VIEGAS, LIMA, 2002).

Studies reinforce the need for health professionals working in primary care, are more prepared to treat the person with COPD so that they can offer the best treatment, because these act next household form, can improve compliance with treatment, may allow greater control of symptoms and consequently decrease the number of hospitalizations and improved quality of life (BRAZIL, 2010).

The purpose of this study was to characterize patients with chronic obstructive pulmonary disease enrolled in two health centers.

**METHODOLOGY**

We conducted a descriptive exploratory study of people with COPD who used the primary healthcare system for treatment, more specifically, two health centers (HCs), a municipality in the south of the country, chosen intentionally, for ease of access and being practical scenarios of internships at a university that municipality.

The ethical aspects of working with human beings are respected, contemplating the provisions of Resolution no. 196/96 of the National Health Council, and the study was approved by the Research Ethics Committee of that university.

People with COPD were identified by medical evolution, given by health professionals, who recalled the people who had consulted at HCs and the very people with COPD who knew others with the same illness in households nearby. After being located, were invited to participate in the survey by phone or directly at home. Upon acceptance to participate, was scheduled to meet in the home of these people.

There were no restrictions regarding gender, age or disease severity, only exclusion criterion was considered people with changes in neuro-cognitive functions that were unable to answer a structured questionnaire, and those who had a spirometry test within normal limits.

The diagnosis of COPD was confirmed by symptoms and by spirometry, according to criteria used by the GOLD (2013). If the person agreed to participate, had not done any spirometry, was referred to the physiotherapy department of that university, to take the exam for free. Five people were in the charts description of HCs, the symptomatology of the disease, but had never performed an exam spirometry. These five people were sent to conduct the exam in college, but two had normal results, therefore, excluded from the sample.

The sample was intentional, as they were located people with COPD, occurred over a period of six months, consisting of 22 people with COPD.

Data collection was guided by a structured questionnaire containing the following data: age, sex, race, level of education, marital status, current occupation, salary, risk factors, associated diseases, degree of lung function impairment, type of treatment, expenses for the treatment and use of health centers.

The records were made of the information in the script itself and used the descriptive statistics of the variables, reporting the average percentage and standard deviation.

**OUTCOMES**

The age ranged from 41 to 81 years, generating an average of  $68 \pm 9.50$  years. Regarding gender, 64% were female and 36% male. All people are considered Caucasian.

Regarding educational level, 18% were illiterate, 68% had not completed primary education, 5% had not completed

high school and 9% completed tertiary education.

Regarding marital status 14 people were married, five were widows, two were divorced and was single. Most people with COPD reported being retired (68%), 18% were still working and 14% reported that they always worked as housewives and they continued this kind of work.

Occupations considered as a risk factor for the disease, two people reported having worked with spraying of pesticides in urban agriculture. Other risk factors such as smoking, showed that 50% of people were ex-smokers with long smoking cessation ranging from three to 33 years; and 32% were smokers. The remaining 18% had bronchitis since childhood or have developed complications from recurrent respiratory infections.

Only 14% of people with COPD reported having only pulmonary disease, other (86%) reported having one or more associated diseases, such as diabetes, hypertension, vascular disease, heart failure, depression, osteoarthritis and stroke.

The results of spirometric tests showed that the majority of people with COPD were in more advanced stages of the disease, with 32% in very severe stage, 27% severe and 41% moderate, averaging  $VEF_1$  (%)  $26.8 \pm 3.63$ ,  $41.91 \pm 5.35$  and  $67.61 \pm 7.74$  respectively.

When asked about the treatment they performed, all reported medical consultations in HCs and medical specialists (pulmonologists, cardiologists and geriatricians) sporadically. Three people (14%) with COPD reported not engaging in any type of continuous treatment, 17 people (77%) were drug treatment and only two (9%) were drug treatment and used home oxygen therapy.

Regarding the medical treatment they performed only 5.5% used saline and nebulized bronchodilator, 58% used fumarate dihydrate and budesonide with formoterol inhaler, 25.5% used fumarate dihydrate and budesonide with formoterol inhaler and prednisone tablet, 5.5% had used salbutamol syrup, and 5.5% used beclomethasone dipropionate spray as continuous treatment.

The two people who used oxygen as the gas cylinder, remained in use for more than 12 hours a day, mainly during sleep and activities that generate more physical exertion such as bathing and walking. The home oxygen was ceded by the State Health Department of Santa Catarina.

Family income ranged from one to six minimum wages. All people with COPD reported having financial expenditures for the purchase of medicines for the treatment of COPD and associated diseases and to perform spirometry. Only 18% of people got free manner by the State Health Department of Santa Catarina, fumarate dihydrate and budesonide with formoterol inhaler, 14% reported purchasing at HCs prednisone tablet and salbutamol syrup and 68% reported buying the drug.

As people with COPD reported only on doctor visits and medical treatment, they were asked if they knew another treatment that was not the drug and only 14% reported having received physiotherapy treatment at your home university by the trainees. Others reported not knowing another treatment. However, 77% acknowledged that were referred to medical specialists.

## DISCUSSION

Based on the results obtained it was found an average age of  $68.33 \pm 9.50$  of the people participating in this study. Other studies have described about the average age of people with COPD and the findings were similar, as the study Casado, Novo and Preto (2011) who studied people with COPD with a mean age of  $70.28 \pm 11.50$  years.

Another finding, which however, differed in some studies, was compared to the gender of the population. In a study of Alves, Godoy and Luppi (2004) about 61% of people with COPD were male. In the study of Yaksic et al (2003) 70% of participants were male. According to this author the skyrocketing incidence of COPD among men with increasing age, and this gender difference may be related to greater smoking, and occupational exposure.

Other studies have shown a tendency to change as the Rodrigues et al (2007) with the highest percentage of people with COPD female (70%). Pisoni (2007) also reports a female majority in their sample and highlights the prevalence of females may be due to the greater longevity of women by healthcare frequent and early finding diagnoses.

Regarding the predominance of whites in the present study, we observed similar behavior in the study by Pisoni (2007) in which the majority (94.2%) of people with COPD were white.

Regarding the level of education, the results of this study were similar to studies Alves, Godoy and Luppi (2004) and Pisoni (2007) in which the majority of the sample had education up to high school.

Another factor observed in the characteristic of people with COPD was about the current occupation, in which 68% of participants were retired. Fields (2004) reported that COPD adds to the high cost of disease treatment, but the person has decreased productivity.

This is experienced by many people with COPD and second Brazil (2010) condition that can affect the quality of life of people particularly the financial and social impact. In addition, data on family income is also reported in the study of Alves, Godoy and Luppi (2004) who described most people receiving a minimum monthly wage.

Associating the genesis of pathology smoking habit, only 18% of the sample had never smoked, the other 82% were ex-smokers or kept the habit. With this same behavior, the study Yaskic et al (2003) found a minority of people with COPD who had never had contact with cigarette. However, the study by Pisoni (2007) reported a higher percentage of people who had never smoked (40.3%).

With regard to other diseases, about 86% reported having one or more, which is against the findings in the study by Roberts et al (2007), which reported large numbers of people with COPD who had other associated diseases such as hypertension and diabetes mellitus.

Regarding the type of treatment used for people with COPD in the present study, we found that 14% did not perform any type of continuous treatment and other treatment performed only through sporadic and medication clinic visits. Birth (2006) in their study obtained data showed that people with COPD perform some treatment. According to the author, may be due to difficulty in diagnosing the disease and a decline in respiratory symptoms for the affected person. Also highlights that programs for smoking cessation, influenza vaccination, and pulmonary rehabilitation as other forms of non-pharmacological treatment are essential for these people.

## CONCLUSIONS

Studies like this, which is characterized by a specific population attending primary healthcare system, may be able to minimize the morbidity and mortality factors of disease, because important features were highlighted as the prevalence of disease in the elderly, with one or more associated diseases, with active smoking, in advanced disease, low education level, low purchasing power because they are retired and with major physical impairments due to the limitations the disease imposes, coupled with greater financial outlay for treatment of COPD and associated diseases.

The characteristics of this population assisted by the primary care network can facilitate the conduct of a more appropriate treatment at the same time, stimulate the planning of Health Care Programs, geared for people with COPD, to

provide interdisciplinary treatment and education health, able to promote the individual's autonomy and incentive to continued treatment.

It is also conducive to the understanding of health professionals, about the difficulties of people with COPD in procurement of medicines and high spending with them. As well as strategies for health promotion and prevention of this disease.

The prevalence of medical treatment and medical consultations, may demonstrate the lack of other therapeutic practices by health professionals themselves and people with COPD, enabling reflect that clarification, information and guidance given to these persons may be limited, since the need for a broader clinical practice.

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#### CHARACTERISTICS OF PEOPLE WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE OF PRIMARY HEALTH CARE

##### ABSTRACT

The study aimed to characterize people with chronic obstructive pulmonary disease enrolled in two health centers. It is an exploratory and descriptive study, conducted through individual interviews using a structured questionnaire, at homes of the people. The structured questionnaire was composed of data such age, sex, race, level of education, marital status, current occupation, salary, risk factors, associated diseases, degree of lung function impairment, type of treatment, expenses for the treatment and use of health centers. Data analysis was by descriptive statistics using percentage, mean and standard deviation. The sample consisted of 22 people, all caucasians, mostly female, married, low education, retired, ex-smokers, with associated diseases, aged 41 to 81 years and receiving from one to six Brazilian minimum salary. The disease predominantly people with severe lung function. The predominant treatment was medical consultation with prescription medications, with high costs for treatment. The health centers are used more during periods of acute exacerbations of the disease. It was concluded that there is a need to plan for the Health Care Programs in primary health care, directed for people with chronic obstructive pulmonary disease to provide an interdisciplinary treatment and health education that promotes autonomy of the subject and encouragement of continued treatment.

**KEYWORDS:** Primary Care, Chronic Obstructive Pulmonary Disease, Basic Health Services

#### CARACTÉRISTIQUES DES PERSONNES OBSTRUCTIVE PULMONAIRE CHRONIQUE MALADIE BAISCA ATTENTION À LA SANTÉ

##### RÉSUMÉ

L'étude visait à caractériser les personnes avec la maladie pulmonaire obstructive chronique inscrits dans deux unités de santé de base. Il est une étude exploratoire et descriptive, réalisée au moyen d'entrevues individuelles en utilisant un script structuré, les maisons des gens. L'entrevue structurée est composée de données, tels que l'âge; sexe; course; niveau d'éducation; état civil; occupation actuelle; montant du salaire minimum; facteurs de risque; maladies associées; degré de déficience de la fonction pulmonaire; le type de traitement; Les dépenses pour le traitement; et utiliser des unités de santé de base. L'analyse des données a été par des statistiques descriptives à l'aide de pourcentage, la moyenne et l'écart type. L'échantillon était composé de 22 personnes, tous les Caucasiens, en majorité des femmes, le sexe mariés, faible niveau d'instruction, à la retraite, les ex-fumeurs, atteints de maladies associées, âgé de 41 ans à 81 ans et recevant une six salaires minimums. La maladie principalement les personnes dont la fonction pulmonaire grave. Le traitement prédominant était une

consultation médicale avec des médicaments d'ordonnance, qui fournissent des efforts financiers pour la plupart de ces personnes. Les unités de santé de base sont utilisés plus pendant les périodes d'exacerbation aiguë de la maladie. Il a été conclu qu'il ya une nécessité de planifier les programmes de soins de santé dans le système de santé de base, destinées aux personnes atteintes de la maladie pulmonaire obstructive chronique afin de fournir une équipe de traitement interdisciplinaire et l'éducation de la santé qui favorise l'autonomie du sujet et l'encouragement de la poursuite du traitement.

**MOTS-CLÉS:** Baisca Atención à la Santé, Obstructive Pulmonaire Chronique Maladie, Services de Soins Primaires

### **CARACTERÍSTICAS DE LAS PERSONAS CON ENFERMEDAD PULMONAR OBSTRUCTIVA CRÓNICA DE LA RED BÁSICA DE SALUD**

#### **RESUMEN**

El objetivo del estudio fue caracterizar a las personas con enfermedad pulmonar obstructiva crónica inscrito en dos unidades básicas de salud. Se trata de un estudio exploratorio y descriptivo, realizado a través de entrevistas individuales utilizando un guión estructurado, los hogares de la gente. La entrevista estructurada se compone de datos, como la edad; sexo; raza; nivel de educación; estado civil; ocupación actual; monto de los salarios mínimos; factores de riesgo; enfermedades asociadas; grado de deterioro de la función pulmonar; tipo de tratamiento; Los gastos para el tratamiento; y el uso de las unidades básicas de salud. El análisis de datos fue por estadística descriptiva utilizando porcentaje, media y desviación estándar. La muestra estuvo conformada por 22 personas, todos de raza blanca, en su mayoría mujeres, sexo casadas, bajo de educación, jubilados, ex fumadores, con enfermedades asociadas, con edades entre 41-81 años, y que reciben un seis salarios mínimos. La enfermedad predominantemente personas con función pulmonar grave. El tratamiento predominante fue la consulta médica con los medicamentos recetados, que proporcionan desembolso económico para la mayoría de estas personas. Las unidades básicas de salud se utilizan más durante los periodos de las exacerbaciones agudas de la enfermedad. Se concluyó que existe la necesidad de planificar para los programas de salud en el sistema de salud básica, orientada a las personas con enfermedad pulmonar obstructiva crónica con el fin de proporcionar un equipo de tratamiento interdisciplinario y educación para la salud que promueve la autonomía del sujeto y el fomento de la continuación del tratamiento.

**PALABRAS CLAVE:** Atención Primaria a la Salud, Enfermedad Pulmonar Obstructiva Crónica, Servicios de Salud

### **CARACTERIZAÇÃO DAS PESSOAS COM DOENÇA PULMONAR OBSTRUTIVA CRÔNICA DA REDE BÁSICA DE SAÚDE**

#### **RESUMO**

O estudo teve por objetivo caracterizar pessoas com doença pulmonar obstrutiva crônica, cadastrados em duas unidades básicas de saúde. É um estudo do tipo exploratório descritivo, realizado através de entrevistas individuais, com roteiro estruturado, no domicílio das pessoas. O roteiro estruturado foi composto por dados, como: idade; sexo; raça; nível de escolaridade; estado civil; ocupação atual; salário; fatores de risco; doenças associadas; grau de comprometimento da função pulmonar; tipo de tratamento; gastos com o tratamento; e utilização das unidades básicas de saúde. A análise dos dados foi com estatística descritiva utilizando porcentagem, média e desvio padrão. A amostra constituiu-se de 22 pessoas, todas da raça branca, em sua maioria do sexo feminino, casadas, com baixa escolaridade, aposentadas, ex-tabagistas, com doenças associadas, na faixa etária dos 41 aos 81 anos e que recebiam de um a seis salários mínimos. O predomínio foi de pessoas com função pulmonar grave. O tratamento predominante foi a consulta médica com receita de medicamentos, os quais proporcionam gastos financeiros para a maioria dessas pessoas. As unidades básicas de saúde são utilizadas mais nos períodos de agudizações da doença. Concluiu-se que existe a necessidade de planejar Programas de Atenção à Saúde na rede básica de saúde, voltada para as pessoas com doença pulmonar obstrutiva crônica, a fim de proporcionar um tratamento com equipe interdisciplinar e educação em saúde, capaz de promover autonomia do sujeito e incentivo ao tratamento continuado.

**PALAVRAS-CHAVE:** Atenção básica, Doença Pulmonar Obstrutiva Crônica, Serviços Básicos de Saúde