43 - PROFILE PNEUMOPATHIC HOSPITALIZED AND SERVED IN PHYSICAL THERAPY SERVICE IN TEACHING HOSPITAL

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doi: 10.16887/85.a1.43

INTRODUCTION

Physiotherapy is a science that studies human movement in all its forms of expression and potential, as well as using it to treat dysfunctions cinesiofuncionais and maintaining quality of life. In recent decades, the therapy has glimpsed the hospital setting as a large area of professional practice, whose clinical practice grounded in scientific evidence has evolved satisfactorily (Barcellos et al. 2009).

The physiotherapist has emerged as an integral part of the multidisciplinary team in a hospital especially in ICUs. His work at the hospital is linked to the following conditions: prevent respiratory and musculoskeletal complications; aid in the treatment of pathologies installed; humanize the hospital and accelerate discharge. Recently, the Ministry of Health has recognized the critical importance of this work in the hospital setting and expanded its modus operandi beyond the already established professional skills (DRC, 2010). The current physiotherapist must, in addition to its attributions assists, participate effectively in the control of hospital infections recognizing and applying measures to control them.

In Brazil respiratory diseases are responsible for approximately 16% of all admissions (Cardoso et al. 1998). In the year of the Lung (2010), was proposed by various associations promoting research on the respiratory system by a decade of study (Correa, 2009).

Pneumonia accounted for 50% of disease groups designated acute respiratory infections, which compromise the upper and lower respiratory tract. In terms of demand for medical care, respiratory diseases are the first cause of consultation between greater than 65 years younger than 5 years and patients. They represent serious public health problem, in the first cause of death among infectious diseases and the third overall cause of death (Cardoso et al. 1998).

The rate of hospitalization for pneumonia has decreased over the last decade, while the rate of hospital mortality shows an upward trend, which due to various factors, such as hospitalization of severe cases of pneumonia and the aging population (CORREA, 2009).

Disease Pulmonary Chronic obstructive (COPD) is a leading cause of death worldwide, accounting for a significant economic and social costs (Godoy et al. 2001). According to the Ministry of Health in 2010 were registered 116 680 000 hospitalizations for COPD in Brazil, which cost the Ministry of Health and US $ 83.6 million in 2011, the number rose to 116 707 hospitalizations, costing R $ 87.1 million to state coffers (DATASUL). The high incidence of COPD, represented by coefficients above the national average in the South, with Rio Grande do Sul leading mortality rates in the country, makes the approach to patients with this condition of extreme relevance in patients with respect to the concepts of public health . These factors, combined with the increased life expectancy of the population, led WHO to consider COPD to be an epidemic, predicting its onset in 2020, when it will become the 3rd leading cause of death and disease in the 5th prevalence (GOLD, 2011).

Gradually COPD prevalence increases with age, where 7 to 1,000 people with age of 40 to 45 years old suffering from the disease. With increasing aging population this prevalence will continue to increase in the coming decades. In the same period a considerable increase in COPD female was observed while decreasing the prevalence slightly among men, and this is probably related to the increase of female smokers over the last 30 years (Langer et al. 2009) .

In this sense, the hospital physiotherapy service CCGS has consistently done the registration of the patients under their responsibility, in its own file, in order to examine the clinical characteristics of patients undergoing chest physiotherapy in the period from 2010 to 2011 at the Hospital Santa Cruz (HSC) as well as the seasonality of hospitalizations of these subjects.

METHODS

Retrospective study conducted in Santa Cruz Hospital, in the city of Santa Cruz do Sul, with data collection carried out by surveying own records of the company providing the service to Holy Cross Hospital - Hospital Physiotherapy CCGS being considered for this study period 2010 to 2011. the variables analyzed in the study were age, gender, clinical diagnosis and the period of hospitalization (as the seasons).

Included in the study were adults with a clinical diagnosis of pulmonary disease defined by the patient's physician and were excluded from the study patients rehospitalized during this period, accounting for this research only one hospitalization per subject (the first admission of each year).

Data were tabulated in Excel (v. 2013) and analyzed using the Statistical Package for Social Sciences (v. 20.0). Data were expressed as mean and standard deviation and median with interquartile ranges, as the destruction of data normality. Data normality was tested using the Shapiro-Wilk test and the rest of the variables expressed as frequency distribution.

DISCUSSION AND RESULTS

Clinical characteristics of patients undergoing physiotherapy in HSC between 2010 and 2011 are outlined in Table 1. In this study, 228 hospitalized patients, of which the average age corresponded to 67.41 years of age were evaluated. (mean age = 66.37 ± men 13.78 years; women = 68.56 ± 15.77 years). Most patients were diagnosed with COPD, reaching more clearly men (60.3%), followed by pneumonia and bronchopneumonia, which were more frequent in women (59.5% and 55.4% respectively), this fact can be justified most likely due to the fact the city in which this study was conducted is a reference in tobacco production, and therefore with high rates of smokers and COPD patients (Crestani et al. 2010).

Variables	n = 228
Age (years)	67,41 ± 14,77
Days of hospitalization	6,00 (1-38%)
Male	120 (52,6%)
Pathologies	
Pneumonia	37 (16,2%)
Broncopneumonia	65 (28,5%)
COPD	126 (55,3%)

Table 01. Clinical characteristics of subjects.

In one study, there was significant increase observed in hospitalizations for COPD, especially among those above 65 years, which also occurred in our study may be explained by the very population aging and longer exposure to smoking with passing years. There was also an increase in the number of hospitalizations for COPD in both sexes, being more pronounced in the female population, which can be explained by the increased incidence of smoking among women, which is becoming increasingly prevalent in countries such as India, Mexico, Cuba, Egypt, South Africa and China. The airways of women are more responsive to exogenous irritants, which consequently causes more damage in the lung tissue (Stephens et al 2008;. Toyoshima, GOUVEIA, ITO, 2005). According to a more recent study, performed by Hernandez et al. In 2009, it was found that COPD was the fourth leading cause of morbidity from respiratory disease and the fifth leading cause of hospitalization, also revealing that COPD was more common in men and in the age group above 45 years, meeting the results found in our study.

In the same previous study, it was observed that pneumonia was the leading cause of morbidity from respiratory disease and the second leading cause of hospitalization. As in our study, the disease was more common in women, and a higher incidence in the age group 45 to 64 years given the high prevalence of comorbid conditions that increase with age, such as hypertension and diabetes mellitus.

Godoy et al. 2001 conducted a study on the northwestern part of the state and found that the main causes for hospital admission for respiratory illness were 94 patients with COPD (41.3%), followed by pneumonia, 68 patients (29.8%) and asthma 22 (9.6%) patients, 75.8% of these patients were older than 50 years, confirming the findings of our study (Pan et al. 2012).

Discussing the seasonal pattern for hospitalizations according to the clinical diagnosis of patients (Figure 1), COPD presented more frequently in spring and autumn months in the summer followed by bronchopneumonia and pneumonia which was more pronounced in winter.

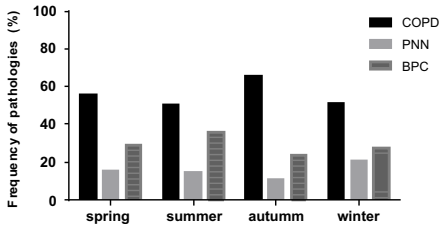

Fig. 1.Frequency of respiratory diseases according to the season.

In general, the hospitalization of the subjects in our study were also more frequent in the summer months and winter (Figure 2).

Our results are in the literature with regard to a station pattern for hospitalizations for pneumonia, being higher in the months related to autumn or winter. Most studies show that the seasonal pattern is located in temperate countries, where the station are more defined. In Finland, for example, large climatic differences between summer and winter play an important role in the seasonal pattern of hospital admissions for both COPD and for pneumonia, with the largest number of admissions during the winter (PAN et al. 2012).

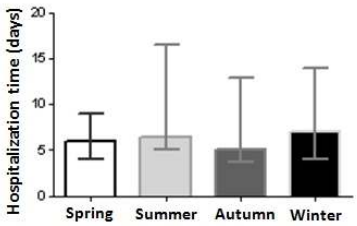

Fig. 2. Length of hospital days in the subjects studied in different seasons.

In another study cited just above, evidenced an increase in cases of hospitalization for respiratory disease in March and the months of extreme drought (July, August and September), down in the months of December, January and February, again confirming our findings. We know that months of extreme drought threatening respiratory system irritation and exacerbation of chronic diseases due to reduced relative humidity and increased air pollution. When the relative humidity rises at the end of September, the presence of fungi in the intra-household environment may also explain the peak observed in October (autumn), since these microorganisms are important allergens, especially in predisposed individuals (ROSA, et al . 2008).

The study by Godoy et al. 2001 pneumonia had a higher incidence in the period between May and November. COPD was more common from May to November. Seasonal variations were within expectations, with predominance of admissions in the fall, winter and spring. This behavior can be explained by three observations: a) northeast of Rio Grande do Sul, the transitions from fall to winter and winter to spring are characterized by sudden changes in humidity and temperature; b) there are two pollen seasons, one in the fall and another in spring; c) the influenza outbreak occurs between the months of May and August (Godoy et al. 2001).

Changes in temperature, humidity and rainfall may increase the effects of respiratory diseases, which can be observed in relation to asthma, allergies, bronchopulmonary infections and infections of the upper airways in susceptible

individuals, such as children and adults over 65 years (Barcellos et al. 2009).

As for the hospital stay found in our study, we found that men remained hospitalized longer than the female population being 1-38 days and 1-33 days, respectively, regarded as a high period of stay.

In the study by Toyoshima et al., There was little difference in the distribution of the number of admissions for respiratory diseases between genders. For COPD and pneumonia, there were more hospitalizations for males than females (PAN et al. 2012).

CONCLUSION

In summary, this study reveals that adult patients undergoing respiratory therapy in HSC subjects are in advanced adulthood, of both genders, with a clinical diagnosis of COPD predominantly. These patients also have a higher rate of hospitalization in the months of heat exchange (fall and spring) with a mean hospital stay of 8.57 days, with women for a longer period (average) compared to men.

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PROFILE PNEUMOPATHIC HOSPITALIZED AND SERVED IN PHYSICAL THERAPY SERVICE IN TEACHING HOSPITAL

ABSTRACT

In Brazil respiratory diseases are responsible for over 15% of all admissions, becoming a serious public health problem. The aim of this study was to analyze the profile of lung disease patients treated by chest physiotherapy CCGS service between 2010 to 2011 at the Hospital Santa Cruz, as well as the seasonality of admissions. Retrospective study, conducted through a survey of patient records lung, resulting from the company CCGS Physiotherapy Hospital between 2010 and 2011, where age, gender, clinical diagnosis and time (seasonal) and hospital stay were evaluated. COPD was the most frequent disease (55.3%), followed by pneumonia (28.5%) and pneumonia (16.2), with a median hospital stay of 6.00 (1-38). The higher incidence in this study was COPD, where the majority of admissions occurred during periods of temperature inversions.

KEYWORDS: Lung; epidemiology; hospital physiotherapy service.

PROFIL D'EMBARQUEMENT PNEUMOPATHIC ET A SERVI DANS LE SERVICE DES IMMEUBLES THERAPIE CHU

RÉSUMÉ

AuBrésilmaladiesrespiratoiressontresponsables de plus de 15% de touteslesadmissions, de devenirunproblème de santé publique grave. Le but de cetteétudeétait d'analyserleprofil de patientsatteints de maladiespulmonairestraitées par leservice NGCC poitrine de physiothérapie entre 2010-2011 à l'Hôpital Santa Cruz, ainsi que lasaisonnalitédesadmissions. Étuderétrospective, menée par une enquêtesurlesdossiersdespatientspoumon, résultant de lacompagnieHôpital NGCC physiothérapie entre 2010 et 2011, oùl'âge, lesexe, lediagnostic clinique et letemps (de saison) et séjour à l'hôpitalontétéévalués. MPOC est lamaladielaplusfréquente (55,3%), suivie par lapneumonie (28,5%) et lapneumonie (16,2), avecunséjour à l'hôpitalmédian de 6,00 (1-38). L'incidenceplusélevéedanscetteétudeétaitla MPOC, oùlamajorité desentréesproduitelors de périodes d'inversion de température.

MOTS-CLÉS: poumon; épidémiologie; service de physiothérapie de l'hôpital.

PERFIL DE EMBARQUE NEUMOPATÍAS Y SIRVIÓ EN FÍSICAS SERVICIO DE TERAPIA EN HOSPITAL DE ENSEÑANZA

RESUMEN

En Brasil lasenfermedadesrespiratoriassonresponsables de más del 15% de todos losingresos, convirtiéndoseenun grave problema de salud pública. El objetivo de este estudiofueanalizarel perfil de los pacientes conenfermedad de pulmón tratados por elservicio CCGS fisioterapia torácica entre 2010-2011 enel Hospital de Santa Cruz, así como laestacionalidad de

losingresos. Estudio retrospectivo, realizado a través de una encuesta de los registros de pacientes de pulmón, que resulta de la empresa Hospital de CCGS Fisioterapia entre 2010 y 2011, donde se evaluaronlaedad, sexo, diagnóstico clínico y eltiempo (de temporada) y la estancia hospitalaria. La EPOC eslaenfermedad más frecuente (55,3%), seguida de laneumonía (28,5%) y neumonía (16,2), con una estancia media hospitalaria de 6,00 (1-38). La mayorincidenciaen este estudiofuela EPOC, donde lamayoría de lasadmisiones se produjo durante los períodos de inversiones de temperatura.

PALABRAS CLAVE: pulmón; epidemiología; servicio de fisioterapia del hospital.

PERFIL DE PNEUMOPATAS INTERNADOS E ATENDIDOS POR SERVIÇO DE FISIOTERAPIA EM HOSPITAL DE ENSINO

RESUMO

No Brasil as doenças respiratórias são responsáveis por mais de 15% de todas as internações, tornando-se um grave problema de saúde pública. O objetivo deste estudo consistiu em analisar o perfil de pacientes pneumopatas atendidos pelo serviço de fisioterapia respiratória CCGS entre 2010 a 2011 no Hospital Santa Cruz, bem como a sazonalidade das internações. Estudo retrospectivo, realizado através de levantamento de registros de pacientes pneumopatias, advindos da empresa Fisioterapia Hospitalar CCGS entre 2010 e 2011, onde foram avaliados idade, gênero, diagnóstico clínico e período (estacional) e tempo de internação hospitalar. A DPOC foi a doença mais encontrada (55,3%), seguida de broncopneumonia (28,5%) e pneumonia (16,2), com mediana de internação de 6,00 (1-38). A maior incidência no presente estudo foi por DPOC, onde a maioria das internações ocorreram em períodos de inversões térmicas.

PALAVRAS-CHAVE: Pneumopatias; epidemiologia; serviço hospitalar de fisioterapia.