ISSN 2526-8910
Cad. Bras. Ter. Ocup., São Carlos, v. 27, n. 1, p. 27-34, 2019
https://doi.org/10.4322/2526-8910.ctoAO1582

Original Article

Understanding the functionality of people concerned by Chronic Obstructive Pulmonary Disease (COPD) under the perspective and validation of the Comprehensive ICF Core Set of the International Classification of Functionality[1]

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Abstract: Introduction: The symptoms of chronic obstructive pulmonary disease (COPD) impact an individual's health by associating with specific functional disabilities. To identify the disabilities and functionality of people affected by COPD, one can use the International Classification of Functioning, Disability, and Health (ICF). Objective: To understand the incapacities of individuals affected by COPD assisted in a cardiorespiratory rehabilitation program and to relate to the categories that make up the comprehensive ICF core set for COPD by validating the same. Method: A descriptive, observational cross-sectional study with COPD patients, of both sexes, submitted to the interview script with open questions about functionality and disability. The interview was transcribed and analyzed through the identification of concepts related to the ICF categories, comparing their frequency with the categories proposed in the Comprehensive ICF Core Set for COPD and the validation obtained through Kappa. Results: 24 COPD participants, 10 men, and 14 women, mean aged 65.5±9.8 years, answered the interview whose concepts were linked to the 52 ICF categories and subcategories, 05 of these not represented in the Comprehensive ICF Core Set for COPD, being " d445 use of hand and arm, "d550 eat"; "d630 prepare meals"; "e210 physical geography" and "e2100 physical geography, orography". Conclusion: The study made it possible to recognize the incapacities of individuals affected by COPD, showing valid use of the Comprehensive ICF Core Set for COPD since 90.3% of the categories found in the study were present in the Core Set.

Keywords: *Pulmonary Disease, Chronic Obstructive, International Classification of Functioning, Disability, and Health, Rehabilitation.*

Entendendo a funcionalidade de pessoas acometidas pela Doença Pulmonar Obstrutiva Crônica (DPOC) sob a perspectiva e a validação do Comprehensive ICF Core Set da Classificação Internacional de Funcionalidade

Resumo: Introdução: Os sintomas da doença pulmonar obstrutiva crônica (DPOC) impactam a saúde do indivíduo, associando-se às específicas incapacidades funcionais. Para identificar as incapacidades e a funcionalidade de pessoas acometidas por DPOC, utiliza-se a Classificação Internacional de Funcionalidade, Incapacidade e Saúde (CIF). Objetivo: Compreender as incapacidades dos indivíduos acometidos por DPOC assistidos em programa de

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Received on Nov. 30, 2017; 1st Revision on July 18, 2018; 2nd Revision on Sep. 18, 2018; Accepted Nov. 4, 2018.

reabilitação cardiorrespiratória e relacionar com as categorias que compõem o comprehensive ICF core set para DPOC validando o mesmo. Método: Estudo qualiquantitativo, observacional descritivo transversal, realizado com pacientes acometidos por DPOC, de ambos os sexos, submetidos ao roteiro de entrevista com perguntas abertas sobre funcionalidade e incapacidade. A entrevista foi transcrita e analisada, por meio da identificação de conceitos relacionados às categorias CIF, comparando sua frequência com as categorias propostas no *Comprehensive ICF Core Set* para DPOC e a validação obtida através do teste *Kappa*. Resultados: 24 participantes com DPOC, 10 homens e 14 mulheres, com média de idade de 65,5±9,8 anos, responderam a entrevista cujos conceitos foram relacionados a 52 categorias e subcategorias CIF, 05 destas não representadas no *Comprehensive ICF Core Set* para DPOC, sendo"d445 utilização da mão e do braço", "d550 comer"; "d630 preparar refeições"; "e210 geografia física" e "e2100 geografia física, orografia". Conclusão: O estudo possibilitou reconhecer as incapacidades de indivíduos acometidos por DPOC, mostrando válido o uso do *Comprehensive ICF Core Set* para DPOC, visto que 90,3% das categorias encontradas no estudo estavam presentes no Core Set.

Palavras-chave: *Doença Pulmonar Obstrutiva Crônica, Classificação Internacional de Funcionalidade, Incapacidade e Saúde, Reabilitação.*

1 Introduction

Chronic obstructive pulmonary disease (COPD) is currently the fourth leading cause of death in the world and is expected to be the third one by 2020. Today, an estimated 210 million people have COPD, with 65 million being in the moderate and serious stage. In 2012, more than three million people died of COPD, accounting for 6% of all deaths worldwide (GLOBAL…, 2017). COPD is mainly related to smoking, which is the main risk factor for the disease. Characterized by persistent airflow limitation, usually progressive, COPD is associated with the chronic inflammatory response of the airways, caused by harmful particles or gases. This chronic inflammatory response may induce tissue destruction of the lung parenchyma, resulting in emphysema, disrupting normal repair and defense mechanisms, culminating in fibrosis of the small airways - changes that lead to air trapping and progressive airflow limitation (GLOBAL…, 2017; VESTBO et al., 2013).

Among the characteristic symptoms of COPD, there are chronic and progressive dyspnea, cough and sputum production (GLOBAL…, 2017; VESTBO et al., 2013). These symptoms impact on the health and functionality of individuals with COPD, which may develop limitations such as decreased exercise performance, functional limitations in lower limbs, and decreased musculoskeletal strength. The severity of the disease and dyspnea as the main symptom of the disease are directly related to the limitations and the functional decline of these individuals (EISNER et al., 2008; PARK; LARSON, 2016).

The International Classification of Functioning, Disability, and Health (ICF) is used to identify disabilities, incapacities and the functionality of populations. Developed by the World Health Organization and approved in May 2001 by the 54th World Health Assembly, the ICF contains more than 1,400 categories divided into four components, which are observed by the letter preceding the numerical code: body function ("b" body); structures of the body ("s" structure); activities and participation ("d" domain) and contextual factors ("e" environment). The numerical code consists of numerous categories and subcategories that are classes and subclasses within the domain that competes with them. The letters are followed by a numerical code beginning with the chapter number (one digit), followed by the second level (two digits) and the third and fourth levels (one digit each) (WORLD…, 2001; ORGANIZAÇÃO…, 2004; ORGANIZAÇÃO…, 2015).

In individuals with COPD using the ICF structure, Jácome et al. (2013) highlight the limitation in exercise tolerance; sensations associated with cardiovascular and respiratory functions; emotional functions and, even, to move through different places and acquisitions of goods and services as a restriction on the social participation of these individuals among their deficiencies.

If there is a need to use a list with a smaller number of categories, the ICF Core Sets have been developed, containing selections of categories considered more relevant for specific groups of people. In a systematic review, Yen et al. (2013) evidenced 174 ICF Core Sets, 129 in the Comprehensive and 45 in the Brief versions available in the literature.

The ICF Core Set for COPD was published by Stucki et al. (2004) and it has 71 categories in the Comprehensive version and 17 categories in the Brief version. The validation of existing Core Sets facilitates its definition, implementation, and

dissemination, and it is done through multi-centric studies, validation studies from the perspective of patients or from the perspective of professionals with knowledge about the study area. The use of ICF Core Sets in clinical practice is a comprehensive functional assessment tool, facilitating clinical reasoning (RIBERTO, 2011).

Thus, the objective of this study was to understand the disabilities from the perspective of the individuals affected by COPD assisted in a cardiorespiratory rehabilitation program, relating them and validating them from the categories of the Comprehensive ICF Core Set for COPD.

2 Method

This is a qualitative, cross-sectional descriptive observational study. It was carried out together with the Cardiorespiratory and Metabolic Rehabilitation Program, Santa Cruz Hospital (HSC) and the Home Program of Respiratory Rehabilitation, at the Arroio Grande Health Unit, both in the city of Santa Cruz do Sul/RS. This research was duly approved by the Research Ethics Committee of the University of Santa Cruz do Sul - UNISC under the opinion number 1,855,754. All the individuals in the sample consented and signed the Free and Informed Consent Form.

People of both genders, with clinical diagnosis of COPD, independent of disease staging, above 18 years, with frequent participation in the Program of Cardiorespiratory and Metabolic Rehabilitation and of the Home Program of Respiratory Rehabilitation, were included to compose the sample of the research. The exclusion criterion was considered with the refusal to accept the Informed Consent Term, the refusal to answer the interview script with open questions, and the presence of cognitive deficit. For the cognitive screening, the database of the referred rehabilitation programs was accepted, since the Mini-Mental Examination (MMSE) is adopted as standard procedure for admission of the participants.

Sociodemographic data were collected, including gender, age, and data regarding functionality and disability, social participation before the components of the ICF. The data corresponding to the ICF were obtained in a qualitative way, through a direct interview and recorded with the people affected by COPD, based on a script of open questions based on the study of Marques et al. (2013), containing the following questions: "What did the key changes COPD bring to your personal and family life?"; "What are the main activities in which you find difficulties (physical, social and attitudinal environment)?"

2.1 Data analysis

Recorded interviews were transcribed and qualitatively analyzed and separated into units of text containing words, phrases, or paragraphs that contextualize information regarding health or quality of life in general, which can be linked to a ICF category. These units are called "concepts". The "concepts" identified were related to the ICF categories. This relationship between the "concepts" and the ICF categories is called linking (CIEZA et al., 2005). The linking was carried out by two researchers separately, both with prior knowledge about the ICF, in case of doubt about agreement, it was evaluated by a third researcher, following the standardization established by Cieza et al. (2005).

The quantitative analysis of the ICF categories frequency of gender, mean and standard deviation of the age and Cohen's Kappa value were performed using the IBM® Statistical Package for Social Sciences (SPSS) version 20.0. The frequencies of the categories were compared to the categories already proposed in the Comprehensive ICF Core Set for COPD.

The agreement level between the two researchers who carried out the linking of the concepts with the ICF categories was evaluated through the value of Cohen's Kappa. The interpretation of this value varies in the interval between 0 and 1, since the higher the value, the stronger the agreement level. Thus: values of 0.80 to 1 correspond to a near perfect agreement; 0.60 to 0.79 are a substantial agreement; 0.40 to 0.59 are a moderate agreement; 0.20 to 0.39 are a reasonable agreement; 0 to 0.19 the agreement is the same as might be expected by chance. The method cited is based on the validation studies of Coenen et al. (2006) and Marques et al. (2013).

3 Results

The study sample (n = 24 participants) diagnosed with COPD who answered the questionnaire were active participants in the HSC Cardiorespiratory Rehabilitation Program (n=21) and the Home Respiratory Rehabilitation Program (n=03). Ten male and 14 female, mean age 65.5 ± 9.8 years old participated in the study.

Through the qualitative analysis, there were 226 "concepts" related to 41 categories of ICF being in the second level, 9 subcategories in the third level

and 2 subcategories in the fourth level. Of them, 14 categories belong to the component "functions of the body", 27 for "activities and participation" and 11 for "environmental factors". Of the categories found, 47 (90.3%) were present in the Comprehensive ICF Core Set for COPD and described in the tables. Table 1 shows the "body functions" component, Table 2 shows "activities and participation" and Table 3 shows "environmental factors".

The agreement level among the researchers, performed through the value of Cohen's Kappa, obtained 0.80, minimum value of the band corresponding to the near perfect agreement.

There were 2 subcategories of the 52 ICF categories found in the fourth level: "b28011 chest pain"; "B28015 lower limb pain" being present in the Comprehensive ICF Core Set for COPD by the second level "b280 pain". Six subcategories are represented in the third level: "d4101 crouching down"; "d4502 walking long distances"; "d4502 walking on different surfaces"; "d4551 going up/down"; "d4552 running" and "e1101 medications", present in the Comprehensive ICF Core Set for COPD by the second level: "d410 changing the basic position of the body"; "d450 walking"; "d455 moving"; "e110 products and substances for personal consumption". The data are expressed in Table 4.

Table 1. ICF categories for the "body functions" component found in people with COPD who are present in the Comprehensive ICF Core Set for COPD.

ICF Code	Description of the category	n(%)
b130	Power and impulse functions	18 (75)
b134	Sleep functions	6 (25)
b152	Emotional functions	6 (25)
b280	Feeling of pain	2 (8.3)
b2800	Generalized pain	1 (4.2)
b410	Cardiac functions	2 (8.3)
b440	Breath functions	21 (87.5)
b445	Respiratory muscles functions	21 (87.5)
b455	Exercise tolerance functions	23 (95.8)
b460	Feelings associated with cardiovascular and respiratory functions	20 (83.3)
b730	Muscular strength functions	10 (41.7)
b740	Muscular endurance functions	23 (95.8)

Source: Research data, 2017.

Table 2. ICF categories related to the "activities and participation" component found in people with COPD who are present in the Comprehensive ICF Core Set for COPD.

ICF Code	Description of the category	n (%)
d230	Performing daily routine	20 (83.3)
d240	Dealing with stress and other psychological demands	4 (16.7)
d330	Communicating and receiving oral messages	1 (4.2)
d410	Changing the basic body position	11 (45.8)
d430	Lifting and transporting objects	7 (29.2)
d450	Walking	19 (79.2)
d455	Moving	21 (87.5)
d475	Driving	3 (12.5)
d4750	Driving a human-powered transport	1 (4.2)
d510	Washing up	5 (20.8)
d540	Dressing up	1 (4.2)
d570	Caring for one's health	1 (4.2)
d640	Performing household chores	16 (66.7)
d650	Caring for household objects	3 (12.5)
d660	Helping others	1 (4.2)
d770	Intimating relationships	3 (12.5)
d845	Getting, keeping and leaving a job	7 (29.2)
d850	Paid work	10 (41.7)
d920	Recreation and leisure	8 (33.3)

Source: Research data, 2017.

Table 3. ICF categories for the "environmental factors" component found that are present in the Comprehensive ICF Core Set for COPD.

ICF Code	Description of the category	n (%)
e110	Products and substances for personal consumption	9 (37.5)
e115	Products and technologies for personal use in daily life	10 (41.7)
e120	Products and technologies to facilitate mobility and indoors and outdoors personal transport	1 (4.2)
e225	Climate	2 (8.3)
e260	Air quality	3 (12.5)
e310	Close Family	2 (8.3)
e450	Individual attitudes of health professionals	4 (16.7)
e580	Health-related services, systems, and policies	10 (41.7)

Source: Research data, 2017.

Table 4. ICF categories found among people with COPD on the third and fourth levels that are present in the Comprehensive ICF Core Set for COPD by the second level.

ICF Code	Description of the category	n (%)
b28011	Chest pain	2 (8.3)
b28015	Lower limb pain	1 (4.2)
d4101	Crouching down	9 (37.5)
d4501	Walking long distances	11 (45.8)
d4502	Walking on different surfaces	8 (33.3)
d4551	Going up/down	8 (33.3)
d4552	Running	14 (58.3)
e1101	Medications	8 (33.3)

Source: Research data, 2017.

Table 5. ICF categories found in people with COPD who are not present in the Comprehensive ICF Core Set for COPD.

ICF Code	Description of the category	n (%)
d445	Use of the hand and arm	4 (16.7)
d550	Eating	1 (4.2)
d630	Preparing meals	3 (12.5)
e210	Physical geography	13 (54.2)
e2100	Physical geography, orography	13 (54.2)

Source: Research data, 2017.

There were 5 of the 52 categories not represented in the Comprehensive ICF Core Set for COPD: "d445 use of the hand and arm", "d550 eating"; "d630 preparing meals"; "e210 physical geography" and "e2100 physical geography, orography", according to Table 5.

4 Discussion

The objective of this study was to understand the validity of the categories that compose the Comprehensive ICF Core Set for COPD, from the perspective of individuals affected by COPD assisted in a cardiorespiratory rehabilitation program, being identified through linking with the concepts, where 47 (90, 3%) of them are present in the Comprehensive ICF Core Set for COPD.

According to the validation of Rauch et al. (2009), 78.5% of the categories found were present in the Core Set for COPD, supporting the validation. Jobst et al. (2013), also with the purpose of validating the Core Set for COPD, found only 9 of the 148 categories identified as not being present in the referred Core Set. Marques et al. (2013), with the objective of validating the "activities and participation" component of the Comprehensive ICF Core Set for COPD, observed that 87.5% of the categories found were included. Marques et al. (2014) identified the presence of 86% of the categories found in a validation study of the Core Set for COPD, from the perspective of the patients.

Through the interview method with open questions and the linking with the ICF categories pertinent

to each concept found, the relevant disabilities of the study participants was identified. For the "body functions" component, 75% of the sample had disability in categories "b130 energy and impulse functions", "b440 respiration functions" with presence of 87.5%, "b445 respiratory muscles functions" of 87.5%, "b455 exercise tolerance functions" of 95.8%, and "b740 muscle endurance functions" of 95.8%. Respiration, exercise tolerance and muscular endurance functions are present in the ICF Core Set Brief for COPD published by Stucki et al. (2004).

In the study published by Jobst et al. (2013), a high percentage of relevance of the categories found in the present study was observed from the perspective of specialists, being 66.1% for energy levels and 76.7% for motivation, 98% for breathing functions and of respiratory muscles, 100% for exercise tolerance and 62.1% for muscle endurance functions. The study by Marques et al. (2014) found a high relation of the ICF categories with the concepts obtained in an open interview in the COPD sample, mainly for tolerance to exercise, cardiovascular and respiratory functions.

For the "activities and participation" component, there were 83.3% with the inability for the categories "d230 performing the daily routine", often associated with the category "d640 performing the domestic tasks" with 66.7%. Also, with 87.5%, the category "d455 moving", since, in the present study, it was associated to the third level with 33.3% "d4551 going up/down" when for inclined surfaces such as slopes or stairs and "d4552 running" affecting 58.3% of the sample of our study. The disability in "d4501 walking long distances" is present for 45.8% of the study sample, as well as 33.3% for "d4502 walking on different surfaces" which relates to the category "d4551 going up/down". The category "d410 changing the basic position of the body" was related to the third level "d4101 crouching down" affecting 37.5% of the sample. All categories of our study concerning the "activities and participation" component were identified in the validation study of the Core Set for COPD performed by Marques et al. (2013), through the qualitative analysis of open-ended questions with individuals diagnosed with COPD.

Jobst et al. (2013) emphasized the relevance of the categories found in this study, since they were analyzed by specialists, being 61% incapacitated in "d230 performing the daily routine", 31% in "d640 performing household tasks", 46.7% for "d4551 going up/down" and 65% for "d450 walking". However, categories referring to third levels, such as "d4552 running", "d4501 walking long distances", "d4502 walking on different surfaces" and "d4101 crouching down" were not identified in this study.

The categories most frequently identified in the component "environmental factors" are "e110 products and technologies for personal use in daily life" and "e580 health-related services, systems and policies", both with 41.7%, being qualified as facilitators and present in the Comprehensive ICF Core Set for COPD. The category "e2100 physical geography, orography" such as slopes, and steps is present with 54.2% qualified as barriers for people affected by COPD and they are not part of the Comprehensive ICF Core Set for COPD, besides not being identified in the validation studies performed by Jobst et al. (2013) and Rauch et al. (2009).

Silva e Silva et al. (2016) in a sample of 24 patients to evaluate the functional disability of patients with COPD through the World Health Organization Disability Assessment Schedule (WHODAS) observed a slight difficulty in carrying out activities of daily living, also highlighting domains such as cognition, mobility, self-care, and interpersonal relationships.

Cruz et al. (2015) observed greater functional deficiency in patients with COPD when associated with impaired balance for energy, pain, respiratory system functions, exercise tolerance, cardiovascular and respiratory functions, coping with stress and other psychological demands, and mobility-related activities such as walking, changing the position of the body and lifting and carrying objects are also associated. This study had the memory bias as limiting factor, considering the format of the script of the interview to be with open questions.

5 Conclusion

Therefore, it is concluded that the Comprehensive ICF Core Set for COPD was valid from the perspective of individuals affected by COPD, from a biopsychosocial perspective, to reveal information on the main needs of patients by health professionals according to the individual experiences lived by each member of the sample studied.

The relationship with energy and impulses, related to the fatigue present in these individuals, breathing functions and respiratory muscles, exercise tolerance and muscular endurance were among the most significant limitations found in individuals with COPD. These may be associated with limiting activities such as performing the daily routine, linked to performing household chores, limiting crouching, walking long distances, running and moving on sloping surfaces such as steep slopes or

steps, with sloped surfaces also identified as a barrier for the study sample.

The Comprehensive ICF Core Set for COPD proved to be a useful, applicable and valid instrument since 90.3% of the categories found in the study were present in the Core Set. Its use favors clinical reasoning and evaluation, enabling the limitations and functional disabilities of people affected by COPD. This will enable to relate the practice of physical therapy through objective interventions, together with patients, both for treatment and for the prevention, maintenance or rehabilitation of their clinical condition. Also, the relevance of the study to multidisciplinary practices in multi-professional rehabilitation team can be highlighted, integrating preventive and rehabilitative actions for broader view of the COPD patient.

References

CIEZA, A. et al. ICF linking rules: An update based on lessons learned. *Journal of Rehabilitation Medicine*, Uppsala, v. 37, n. 4, p. 212-218, 2005.

COENEN, M. et al. Validation of the International Classification of Functioning, Disability and Health (ICF) Core Set for rheumatoid arthritis from the patient perspective using focus groups. *Arthritis Research & Therapy,* Windy, v. 8, n. 4, p. 1-14, 2006.

CRUZ, J. et al. Global Functioning of COPD Patients Withand Without Functional Balance Impairment: An Exploratory Analysis Based on the ICF Framework. *Journal of Chronic Obstructive Pulmonary Disease*, London, v. 12, n. 2, p. 207-216, 2015.

EISNER, M. et al. COPD as a Systemic Disease: Impact on Physical Functional Limitations. *The American Journal of Medicine*, New York, v. 121, n. 9, p. 789-796, 2008.

GLOBAL INITIATIVE FOR CHRONIC OBSTRUCTIVE LUNG DISEASE – GOLD. *Global Strategy for the Diagnosis, management, and prevention of Chronic Obstructive Pulmonary Disease updated Fontana*. USA: GOLD, 2017. Disponível em: <http://goldcopd.org/gold-2017-global-strategy-diagnosis-management-prevention-copd/>. Acesso em: 09 nov. 2017.

JÁCOME, C. et al. Chronic obstructive pulmonary disease and functioning: implications for rehabilitation based on the ICF framework. *Disability and rehabilitation*, Ipswich, v. 35, n. 18, p. 1534-1545, 2013.

JOBST, A. et al. Content validity of the comprehensive ICF core set for chronic obstructive pulmonary diseases: An international Delphi survey. *Open Respiratory Medicine Journal*, Sharjah, v. 7, n. 1, p. 33-45, 2013.

MARQUES, A. et al. Comprehensive ICF Core Set for Obstructive Pulmonary Diseases: Validation of the Activities and Participation component through the patient's perspective. *Disability and Rehabilitation,* Ipswich, v. 35, n. 20, p. 1686-1691, 2013.

MARQUES, A. et al. Validation of the Comprehensive ICF Core Set for obstructive pulmonary diseases from the patient's perspective. *International Journal of Rehabilitation Research*, London, v. 37, n. 2, p. 152-158, 2014.

ORGANIZAÇÃO MUNDIAL DA SAÚDE – OMS. *CIF:* Classificação Internacional de Funcionalidade. Lisboa: OMS, 2004. Disponível em: <http://www.inr.pt/uploads/docs/cif/CIF_port_%202004.pdf>. Acesso em: 10 nov. 2017.

ORGANIZAÇÃO MUNDIAL DA SAÚDE – OMS. *Classificação Internacional de Funcionalidade, Incapacidade e Saúde – CIF.* São Paulo: Editora da Universidade de São Paulo, 2015.

PARK, S.; LARSON, J. Multiple symptoms, functioning, and general health perception in people with severe COPD over time. *Applied Nursing Research*, Cleveland, v. 29, p. 76-82, 2016.

RAUCH, A. et al. Validation of the Comprehensive ICF Core Set for obstructive pulmonary diseases from the perspective of physiotherapists. *Physiotherapy Research International,* Medford, v. 14, n. 4, p. 242-259, 2009.

RIBERTO, M. Core sets da Classificação Internacional de Funcionalidade, Incapacidade e Saúde. *Revista Brasileira de Enfermagem,* Brasília, v. 64, n. 5, p. 938-946, 2011.

SILVA E SILVA, C. et al. Assessment of patients with functional chronic obstructive pulmonar disease through WHODAS. *Acta Fisiátrica*, São Paulo, v. 23, n. 3, p. 125-129, 2016.

STUCKI, A. et al. ICF Core Sets for obstructive pulmonary diseases. *Journal of Rehabilitation Medicine*, Uppsala, v. 36, n. 44, p. 114-120, 2004.

VESTBO, J. et al. Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease GOLD executive summary. *American Journal of Respiratory and Critical Care Medicine*, New York, v. 187, n. 4, p. 347-365, 2013.

WORLD HEALTH ORGANIZATION – WHO. *International classification of functioning, disability and health:* ICF. Geneva: World Health Organization, 2001.

YEN, T. et al. Systematic review of ICF core set from 2001 to 2012. *Disability and Rehabilitation*, Ipswich, v. 36, n. 3, p. 1-8, 2013.

Author's Contributions

Cássio Henrique Züge: He is the main author of the article, which is a conclusion graduation course work. This author was responsible for collecting sociodemographic data and ICF data through recorded interview, transcription of data and linking of concepts with ICF categories, quantitative data analysis and

value of Cohen's Kappa and he is the article writer. Murilo Rezende Oliveira: He is the second author, also responsible for the linking of the concepts with the ICF categories to enable evaluation through the value of Cohen's Kappa and assistance in the final text of the manuscript. Also, he was responsible for formatting the article according to the norms of the journal and for its submission. Andrea Lúcia Gonçalves da Silva: She is a co-advisor, responsible for assisting in the final text of the article. Tânia Cristina Malezan Fleig: She is an advisor, responsible for assisting in the progress of sociodemographic data collection and ICF data, participated as the third person in charge of linking the concepts with the ICF categories and in the final text of the article. All authors approved the final version of the text.

Notes

[1] Article from the research project "PROMOTING THE INVESTIGATION AND UNDERSTANDING OF FUNCTIONALITY IN PERSON WITCH COPD CORCENING THE PERSPECTIVE OF PHYSIOTHERAPISTS".