Results of the Nursing Outcomes Classification/NOC for patients with obsessive-compulsive disorder

Resultados da Nursing Outcomes Classification/NOC para pacientes com transtorno obsessivo-compulsivo

Resultados de la Nursing Outcomes Classification/NOC para pacientes con trastorno obsesivo-compulsivo

Ananda Ughini Bertoldo Pires[I]
ORCID: 0000-0003-4873-2617

Amália de Fátima Lucena[I]
ORCID: 0000-0002-9068-7189

Andressa Behenck[I]
ORCID: 0000-0002-5043-0266

Elizeth Heldt[II]
ORCID: 0000-0002-4687-282X

[I] *Universidade Federal do Rio Grande do Sul. Porto Alegre, Rio Grande do Sul, Brazil.*
[II] *Hospital de Clínicas de Porto Alegre. Porto Alegre, Rio Grande do Sul, Brazil.*

Corresponding Author:
Ananda Ughini Bertoldo Pires
E-mail: ananda.pires@gmail.com

ABSTRACT

Objective: To analyze the application of nursing outcomes and indicators selected from the *Nursing Outcomes Classification* (NOC) to evaluate patients with obsessive-compulsive disorder (OCD) in outpatient follow-up. **Method:** Outcome-based research. First, a consensus was achieved between nurses specialized in mental health (MH) and in the nursing process to select NOC-related outcomes and indicators, followed by the elaboration of their conceptual and operational definitions. Then, an instrument was created with these, which was tested in a pilot group of six patients treated at a MH outpatient clinic. The instrument was applied to patients with OCD undergoing Group Cognitive Behavioral Therapy (GCBT). The study was approved by the Research Ethics Committee of the institution. **Results:** Four NOC outcomes and 17 indicators were selected. There was a significant change in the scores of nine indicators after CBGT. **Conclusion:** The study showed feasibility for evaluating symptoms of patients with OCD through NOC outcomes and indicators in an outpatient situation.
Descriptors: Obsessive-compulsive Disorder; Nursing Process; Nursing Care; Evaluation of Outcomes (Health Care); Mental Health.

RESUMO

Objetivo: Analisar a aplicação de resultados e indicadores de enfermagem selecionados na *Nursing Outcomes Classification* (NOC) para avaliar pacientes com Transtorno Obsessivo-Compulsivo (TOC) em acompanhamento ambulatorial. **Método:** Pesquisa de resultados. Primeiro, realizou-se consenso entre enfermeiros especialistas em saúde mental (SM) e em processo de enfermagem para seleção de resultados e indicadores da NOC, seguido da elaboração das suas definições conceituais e operacionais. Depois, construiu-se um instrumento com estes, que foi testado em grupo piloto de seis pacientes atendidos em ambulatório de SM. O instrumento foi aplicado aos pacientes com TOC submetidos a Terapia Cognitivo-Comportamental em Grupo (TCCG). Estudo aprovado pelo Comitê de Ética em Pesquisa da instituição. **Resultados:** Foram selecionados quatro resultados e 17 indicadores NOC. Observou-se modificação significativa dos escores de nove indicadores após a TCCG. **Conclusão:** O estudo apontou viabilidade de avaliação dos sintomas de pacientes com TOC através dos resultados e indicadores da NOC em cenário ambulatorial.
Descritores: Transtorno Obsessivo-Compulsivo; Processo de Enfermagem; Cuidados de Enfermagem; Avaliação de Resultados (Cuidados de Saúde); Saúde Mental.

RESUMEN

Objetivo: Evaluar la aplicación de resultados e indicadores de enfermería seleccionados en la *Nursing Outcomes Classification* (NOC) para examinar a los pacientes con Trastorno Obsesivo-Compulsivo (TOC) en seguimiento ambulatorio. **Método:** Investigación de resultados. Primeramente, se realizó un acuerdo entre enfermeros expertos en salud mental (SM) y en proceso de enfermería para seleccionar los resultados e indicadores de la NOC, seguido de la elaboración de sus definiciones conceptuales y operativas. Después, se construyó un instrumento con las informaciones recolectadas, y lo aplicaron a un grupo piloto con seis pacientes, que recibían atención en el ambulatorio de SM. Se aplicó el instrumento a los pacientes con TOC, sometidos a Terapia Cognitivo-Conductual en Grupo (TCCG). Estudio aprobado por el Comité de Ética en Investigación de la institución. **Resultados:** Se seleccionaron cuatro resultados y 17 indicadores NOC. Se observó una modificación significativa de los puntajes de nueve indicadores después de la TCCG. **Conclusión:** El estudio apuntó la viabilidad de evaluación de los síntomas de pacientes con TOC por medio de los resultados e indicadores de la NOC en el ámbito ambulatorio.
Descriptores: Trastorno Obsesivo-Compulsivo; Proceso de Enfermería; Atención de Enfermería; Evaluación de Resultado (Atención de Salud); Salud Mental.

INTRODUCTION

Obsessive-compulsive Disorder (OCD) is a chronic mental disorder, characterized by the unadapted response of psychic functions of thought regarding obsessions and behavior, which are compulsions[1]. OCD affects about 1.6% to 3.1% of the population at some point in life, and its symptoms cause a negative impact on quality of life[2-3].

Currently, there is evidence of effective treatment for OCD such as Exposure Response Prevention (ERP), Cognitive Behavioral Therapy (CBT), and medications[3]. CBT for OCD can be performed within a group (GCBT), with evidence of efficacy for reducing the intensity of symptoms[4].

The Hospital de Clínicas de Porto Alegre [Outpatient Clinic of Porto Alegre] (HCPA) uses the GCBT for the treatment of patients with OCD, and such is coordinated by a nurse. For the indication of the intervention, patients are individually evaluated in an outpatient nursing consultation, which is structured according to the stages of the Nursing Process (NP)[5]. During the appointment, patients are evaluated through the Mental State Examination (MSE) to define nursing diagnoses and interventions based on the NANDA-International (NANDA-I) and the Nursing Interventions Classification (NIC) taxonomies[6-7].

Currently, the response to the GCBT intervention is evaluated by instruments, such as the *Yale Brown Obsessive-Compulsive Scale* (Y-BOCS) and the *Obsessive Compulsive Inventory Revised* (OCI-R)[4,8], and not by a standardized nursing evaluation system. In this sense, the *Nursing Outcomes Classification* (NOC) has a list of clinical indicators for each of its proposed outcomes to assess patients' status and response to interventions in health care. The indicators can be selected by the nurse according to clinical status, and can be continuously measured by the five-point Likert scale, being 1 the worst possible score and 5 the best expected outcome. Patients should be evaluated at least twice to allow the comparison of results before and after a nursing intervention[9-10].

In this context, considering the need for a system to assess outcomes of the health care provided by nurses in outpatient care, and due to the scarcity of studies in this area, our motivation to conduct this study emerged in order to improve the knowledge of NOC within the clinical practice of mental health in the outpatient situation. We aim to select the most appropriate NOC outcomes and indicators for the evaluation of patients with OCD and to analyze their application into a group of patients undergoing the GCBT intervention.

OBJECTIVE

To analyze the application of nursing outcomes and indicators selected from the NOC to evaluate patients with OCD in outpatient follow-up.

METHOD

Ethical aspects

The study was approved by the Research Ethics Committee of the HCPA. Participants signed an informed consent form specific to each research step.

Study design, location, and period

This is an outcome-based research[11], carried out in the Mental Health Nursing Outpatient Clinic of the HCPA, and developed in two stages. The first was performed through a consensus-validation study of specialists, who selected NOC-related outcomes and indicators to be applied to the real healthcare scenario of patients with OCD. In the second stage, an instrument with the selected outcomes and indicators was applied in order to evaluate patients with OCD in outpatient follow-up and attending GCBT sessions, comparing the initial and final health status.

The used intervention protocol of 12 GCBT sessions was based on a previous study whose authors evidenced positive response in patients with OCD[4]. The group was coordinated by a nurse and a physician co-therapist resident in psychiatry. The meetings occurred weekly and lasted for 120 minutes each. During the sessions, different themes were approached, and in the initial sessions (from the 1st to the 3rd), techniques of psychoeducation and ERP were used. Patients were gradually exposed to the tasks performed in the session, at home, or in the work environment, considering the anxiety level for each exercise, in such a way they could be habituated. In intermediate sessions (from the 4th to the 9th), cognitive techniques were used to correct dysfunctional beliefs (cognitive distortions). After the 10th session, relapse prevention was approached. The family was invited to participate in the 1st and the 8th session for psychoeducation about OCD and about how relatives can assist in the treatment[4].

Population: inclusion and exclusion criteria

In the first stage of the study, there were three researchers, who were nurses specialists in mental health, and one specialist in NP. As inclusion criterion, we considered the clinical nursing experience in mental health and in research on NP in the outpatient situation. Patients were chosen by convenience and the established criteria were in accordance with a previous study[12].

In the second stage, patients attended in the Nursing Program in Mental Health (*Programa de Enfermagem em Saúde Mental* – PESM) and selected for the GCBT participated in the pilot group. The inclusion criteria for attending the GCBT, according to a previous study[4], were: adult individuals (aging 18 to 65 years) with diagnosis of OCD, literate, and using medications or not. For patients who were undergoing pharmacological treatment, those with a stable dose of medication for at least four months were included. Exclusion criteria[4] were: patients with psychotic symptoms, risk of suicide, severe depression, or those who had previously undergone treatment with GCBT.

Admission of patients to attend GCBT consecutively occurred, to the extent that they were referred through an individual consultation conducted by the nurse coordinating the group, in which scales for assessing the severity of OCD were applied.

Study protocol

In the first stage, a meeting was held to discuss and select the NOC-related outcomes and indicators. At the meeting were

present the nurse coordinator of the GCBT, a nurse and teacher specialist in NP, a nurse and professor specialist in Mental Health, and a nurse researcher.

Prior to the meeting, the researcher made a previous selection of the nursing diagnoses (ND) most frequently listed for patients with OCD, according to NANDA-I, a diagnostic classification system used in the research field[7]. The ND were Anxiety (00146), Fear (00148), Ineffective coping (00069), and Ineffective activity planning (00199). After the selection, the researcher considered the chapter on NOC and NANDA-I relations[10], in which are described the suggested and additional results associated with the ND, considering its application into the clinical practice for evaluating patients. Then, specialists achieved a consensus for the selection of the most appropriate outcomes and indicators for the patients in question.

The second stage consisted of the evaluation of patients with OCD attending GCBT using the instrument that contained the NOC-related outcomes and indicators previously selected by consensus. The evaluation was performed by the researcher by observation during the sessions and in individual appointments that occurred at three different times: in the first, the sixth, and the last session of the group (equivalent to the 12th session). According to the literature, the interval between assessments is decided by the nurse, but the minimum of assessments required to measure a NOC outcome are two times, one at the beginning and the other at the end of the intervention[10]. Clinical and sociodemographic data were also collected in the initial evaluation consultation.

Instruments used to verify the severity of OCD were Y-BOCS[4] and the OCI-R[8], both validated for Portuguese language. They indicate that the higher the score, the more severe the OCD.

Analysis of results and statistics

For the selection of indicators and outcomes of NOC suggested in the first stage of the study, we selected those who obtained 100% of agreement among the specialists.

We used descriptive analysis to present sociodemographic and clinical characteristics. Continuous variables are expressed as mean and standard deviation or median and interquartile range, according to data distribution. Categorical variables were expressed as percentages and absolute numbers. To compare the scores of the NOC indicators identified in the patients under follow-up, we used the *Generalized Estimating Equations* (GEE).

Data were analyzed using the Statistical Package for the Social Sciences (SPSS) program, version 18.0. The adopted significance level adopted was 5% ($p < 0.05$), and confidence interval (CI) of 95%.

RESULTS

After the specialists' consensus, we selected 4 nursing outcomes and 17 NOC-related indicators. The selected outcomes were: Anxiety self-control (1402), with 4 indicators; Fear level (1210), with 6 indicators; Anxiety level (1211), with 3 indicators; and Personal time management (1635), with 4 indicators.

For each of these outcomes, the respective indicators were selected, which had established conceptual and operational definitions based on the literature, in order to make the evaluation of the patient as reliable as possible[1,13]. In a second meeting for the consensus of specialists, definitions and operational magnitude of each indicator according to the Likert scale were finalized. We show the conceptual and operational definitions of each outcome indicator in Chart 1.

Chart 1 – Conceptual and operational indicators and definitions, with the respective magnitude, Porto Alegre, Rio Grande do Sul, Brazil, 2018

Outcome of the *Nursing Outcomes Classification* – Anxiety self-control (1402)	
Indicators	**Magnitude of the operational definition in the Likert scale**
Monitors intensity of anxiety **Conceptual definition:** Measures the degree of distress experienced at the time of exposure to the feared situation, varying from "no anxiety" to "extreme anxiety."	**1.** Never **2.** Rarely **3.** Several times a month **4.** Several times a week **5.** Daily
Uses effective coping strategies **Conceptual definition:** Plans in advance how to behave in risky situations, considering what should be done in terms of exposure and prevention of response. For example: attempt getting distracted during risky situations, with other thoughts or practical activities, chatting with yourself, or using reminders.	**1.** Never use strategies **2.** Rarely use a strategy **3.** Monthly use at least one strategy **4.** Weekly use at least one strategy **5.** Daily use at least one strategy
Maintains social relationships **Conceptual definition:** Manages to maintain a good relationship, with a certain frequency, with people who are part of your daily life, whether in a working group, friends, or family members, playing your respective role in certain situations, despite the symptoms of OCD.	**1.** Never relate to close people **2.** Relate to people only when necessary **3.** Relate to people maintaining a certain distance **4.** Relate to people, but make efforts to do so **5.** Usually relate to people
Monitor behavioral manifestations of anxiety **Conceptual definition:** Can perceive and distinguish what are behavioral and physical manifestations of anxiety from those that would be perceived manifestations/sensations and triggered by normal situations. Monitoring related to the level of disease insight.	**1.** Never monitor demonstrations **2.** Rarely monitor demonstrations **3.** Monitor demonstrations several times a month **4.** Monitor demonstrations several times a week **5.** Usually monitor demonstrations

Chart 1

Outcome of the *Nursing Outcomes Classification* – Fear level (1210)	
Indicators	**Magnitude of the operational definition**
Distress **Conceptual definition:** Feeling of general, physical, and psychic malaise, which usually accompanies anxiety, especially after exposure exercises and prevention of responses.	**1.** Feel distressed every day **2.** Feel distressed several times a week **3.** Feel distressed several times a month **4.** Rarely feel distressed **5.** Never feel distressed
Restlessness **Conceptual definition:** Psychomotor agitation due to peaks of anxiety, which may result in increased compulsive symptoms and invasive thoughts.	**1.** Presents restlessness every day **2.** Presents restlessness several times a week **3.** Presents restlessness several times a month **4.** Rarely presents restlessness **5.** Never presents restlessness
Difficulty concentrating **Conceptual definition:** Presents difficulty to concentrate on tasks/activities due to invasive thoughts, fears, and/or unfounded concerns.	**1.** Never concentrates for the entire period of activity **2.** Rarely concentrates for the entire period of activity **3.** Concentrates for the entire period of activity several times a month **4.** Concentrates for the entire period of activity several times a week **5.** Usually concentrates for the entire period of activity
Difficulty problem solving **Conceptual definition:** Excessive difficulty in solving everyday problems, due to fears arising from invasive thoughts and slowness by performing compulsive rituals/behaviors.	**1.** Never succeeds in solving problems **2.** Rarely succeeds in solving problems **3.** Succeeds in solving problems several times a month **4.** Succeeds in solving problems several times a week **5.** Succeeds in solving problems whenever they arise
Exaggerated concern about life events **Conceptual definition:** Worries exaggeratedly about situations of everyday life that may bring unfounded risks, due to fears and invasive and obsessive thoughts. For example: worries about knowing whether you locked the door or not.	**1.** Usually worries **2.** Worries several times a week **3.** Worries several times a month **4.** Rarely worries **5.** Never worries
Avoidance behavior **Conceptual definition:** Avoids people, situations, places, and objects because of the fear that major disasters may occur due to obsessive thoughts.	**1.** Never exposes to risky situations **2.** Rarely exposes to risky situations **3.** Exposes to risky situations several times a month **4.** Exposes to risky situations several times a week **5.** Usually exposes to risky situations
Outcome of the *Nursing Outcomes Classification* – Anxiety level (1211)	
Indicators	**Magnitude of the operational definition**
Indecisiveness **Conceptual definition:** Manifest indecisiveness about basic choices of daily life due to the lack of confidence in yourself, because of unfounded fears.	**1.** Is usually undecided **2.** Is undecided several times a week **3.** Is undecided several times a month **4.** Is rarely undecided **5.** Is never undecided
Sleep disturbance **Conceptual definition:** Suffer from sleep disorders, being characterized both by excess and lack of sleep.	**1.** Usually suffer from sleep disturbances **2.** Suffer from sleep disturbances several times a week **3.** Suffer from sleep disturbances several times a month **4.** Rarely suffer from sleep disturbances **5.** Never suffer from sleep disturbances
Decreased productivity **Conceptual definition:** Stops doing daily or exceptional activities due to rituals/obsessions/compulsions/fears, leading to the loss of several hours of the day because of the slowness to perform the activities and consecutive interruptions.	**1.** Never succeeds in performing all activities of the day **2.** Rarely succeeds in performing all activities of the day **3.** Succeeds in performing the activities of the day several times a month **4.** Succeeds in performing the activities of the day several times a week **5.** Usually succeeds in performing all activities of the day
Outcome of the *Nursing Outcomes Classification* – Personal time management (1635)	
Indicators	**Magnitude of the operational definition**
Sets time for completion of commitments **Conceptual definition:** Establish a precise time to conclude daily or exceptional tasks/commitments, aiming at not being interrupted by rituals/compulsions.	**1.** Never establishes time to conclude taks/commitments **2.** Rarely **3.** Several times a month **4.** Several times a week **5.** Whenever concludes tasks/appointments

To be continued

Chart 1 (concluded)

Plan activities by the week **Conceptual definition:** Succeeds in making schedule of commitments/activities for the following week and perform it, without interruptions or changes of time due to rituals/obsessions/compulsions.	**1.** Never succeeds in planning activities for the next week **2.** Rarely succeeds in planning activities for the next week **3.** Succeeds in planning activities for the next week one week a month **4.** Succeeds in planning activities for the next week almost every weeks a month **5.** Usually succeeds in planning activities for the next week
Minimizes interruptions **Conceptual definition:** Decrease the number of ritual-related interruptions (e.g., checking, repeating) during daily or exceptional tasks.	**1.** Usually interrupts tasks **2.** Interrupts tasks several times a week **3.** Interrupts tasks several times a month **4.** Rarely interrupts tasks **5.** Never interrupts tasks
Uses strategies to reduce anxiety **Conceptual definition:** Uses personal or learned strategies aimed at reducing anxiety in moments of crisis, without confusing strategies with "masked" rituals. Examples of strategies: The STOP technique, seeking to be distracted to cut the flow of invasive thoughts, doing another activity etc.	**1.** Never uses strategies **2.** Rarely uses strategies **3.** Uses strategies several times a month **4.** Uses strategies several times a week **5.** Usually uses strategies

In order to verify the potential use in the clinical practice, the 4 NOC-related outcomes and the respective 17 indicators were applied to a pilot group of patients with OCD who attended GCBT.

Pilot group: Nursing Outcomes Classification/NOC characteristics and outcomes

The pilot group of our study was attended by six patients. Regarding sociodemographic characteristics, 5 patients (83%) were women, with mean (standard deviation) age of 40.8 (SD = 13.7) years, and 5 (83%) self-reported being of white ethnicity. Regarding occupation and marital status, 3 (50%) had formal job and 3 (50%) were married. The education found was 4 (66%) with high school degree and 2 (33%) with higher education degree. During the initial consultation, the severity of the patients'

symptoms was assessed by the nurse coordinator of the group with the Y-BOCS and OCI-R scales, and the mean was 30 (SD = 10.8) and 37.8 (SD = 14.9), respectively.

The nursing outcomes Anxiety self-control (1402), Fear level (1210), Anxiety level (1211), and Personal time management (1635) totaled 17 assessments for each indicator, considering that 6 patients participated in the first and second evaluation, and 5 participated in the third due to the withdrawal of one of them in the 7th session (Table 1).

We observed that there was a significant change after the GCBT in the indicator "Uses effective coping strategies" (p< 0.001) concerning the Anxiety self-control outcome (1402). The remaining four indicators related to this outcome were not significant when compared with the evaluations during the intervention.

Table 1 – Result of the means of indicators in the assessments of the Nursing Outcomes Classification/NOC nursing outcomes defined in the consensus of specialists during the Group Cognitive Behavioral Therapy, Porto Alegre, Rio Grande do Sul, Brazil, 2018

Outcomes and indicators	Mean of the indicators in the assessments (standard deviation)			p value
	1st evaluation (n = 6)	2nd evaluation (n = 6)	3rd evaluation (n = 5)	
Anxiety self-control (1402)				
Monitors the intensity of anxiety	4.67 (0.30)	4.50 (0.20)	4.99 (0.01)	0.069
Uses effective coping strategies	3.50 (0.73)	1.67 (0.45)	4.04 (0.47)	**< 0.001**
Maintains social relationships	3.50 (0.56)	4.33 (0.30)	4.28 (0.49)	0.111
Monitors behavioral manifestations of anxiety	4.33 (0.45)	4.00 (0.57)	4.93 (0.06)	0.174
Fear level (1210)				
Distress	1.17 (0.15)	2.00 (0.33)	2.12 (0.48)	**< 0.001**
Restlessness	1.17 (0.15)	1.50 (0.31)	2.07 (0.49)	0.028
Difficulty concentrating	1.33 (0.30)	3.17 (0.49)	2.96 (0.74)	**< 0.001**
Difficulty problem solving	3.17 (0.54)	4.17 (0.28)	3.73 (0.60)	0.103
Exaggerated concern about life events	1.17 (0.15)	1.33 (0.19)	2.01 (0.39)	0.040
Avoidance behavior	3.00 (0.57)	2.67 (0.69)	3.38 (0.61)	0.223
Anxiety level (1211)				
Indecisiveness	1.33 (0.19)	1.33 (0.19)	2.66 (0.45)	0.004
Sleep disturbance	1.17 (0.15)	1.33 (0.19)	2.27 (0.65)	0.067
Decreased productivity	2.50 (0.45)	4.17 (0.43)	4.42 (0.16)	**< 0.001**
Personal time management (1635)				
Sets time for completion of commitments	2.17 (0.68)	1.83 (0.45)	3.16 (0.33)	0.019
Plans activities by the week	3.83 (0.59)	4.83 (0.15)	4.38 (0.21)	0.103
Minimizes interruptions	2.00 (0.57)	2.33 (0.65)	3.17 (0.66)	0.040
Uses strategies to reduce anxiety	2.67 (0.69)	3.17 (0.68)	3.91 (0.57)	0.336

Note: Data presented on average and standard error, and analyzed with the Generalized Estimating Equations (GEE).

Regarding the Fear level outcome (1210), four out of six indicators had significant changes in their scores after the intervention, namely: "Distress" (p < 0.001), "Restlessness" (p = 0.028), "Difficulty concentrating" (p < 0.001), and "Exaggerated concern about life events" (p = 0.040).

In the Anxiety level outcome (1211), both indicators "Indecisiveness" (p = 0.004) and "Decreased productivity" (p < 0.001) had significant differences in the evaluation, among the three evaluated.

In the indicators "Sets time for completion of commitments" (p = 0.019) and "Minimizes interruptions" (p = 0.040), regarding the Personal time management outcome (1635), we observed a significant change before and after the intervention, among the four evaluated.

During the sessions and in the course of the progress of the GCBT pilot group, we could establish a bond with patients and notice a feeling of confidence and expectation concerning the evaluations with the constructed instrument. To the extent the ERP exercises proposed by the therapy were more complex, and the patients were willing to make them, their advances were more perceptible during the evaluations, measured by the indicators of evaluation of the NOC-related outcomes and the researcher's perception.

At the end of the last evaluation, we exposed to the patients, individually, the evaluation instrument containing the scores of each indicator, together with an explanation of the significance of the evolution of the scores throughout the therapy, as well as what each indicator represented to their treatment.

DISCUSSION

Our study was based on the stages of the NP as a guideline, starting from the selection of the ND most frequently listed for OCD patients, followed by the consensus of specialists to establish the expected outcomes for these patients and the application of an instrument based on the NOC for evaluating the intervention in the outpatient practice scenario.

According to the ND that sought to comprise the different dimensions of OCD, this represents a combination between Anxiety (00146) and Fear (00148), which results in Ineffective coping (00069) of everyday situations and consequently can cause an Ineffective activity planning (00199), impairing social and family relationships-related issues and directly affecting the lifestyle of patients with the disease[1,7].

Consensus of specialists

In the consensus among specialists, based on the composition between the knowledge about mental health and NP, we could list nursing outcomes that encompass important issues to be considered about the different dimensions of OCD and, at the same time, indispensable factors for the correct evaluation of these patients in the clinical practice; focusing on the interventions performed during the GCBT, from the psychoeducation provided to the patients, and the access to knowledge and self-monitoring of their symptoms.

During the consensus we addressed the need to balance the amount of outcomes that could be evaluated by the evaluator's observation, and those that could be assessed by the patient's information, since information provided by patients is rarely compatible with the reality, making the nurse the main evaluator of the evolution of the expected outcomes.

Authors of recent studies[9,14] have used the specialists' consensus method to establish the nursing outcomes based on the most appropriate NOC taxonomy for patients' evaluation, in addition to concluding that conceptual and operational definitions of indicators enable the use of this taxonomy in the clinical practice.

Result of the pilot group

The sample characteristics of our study showed similarity regarding previous studies, since there are patients categorized as severe and according to the scores obtained by the evaluation scales Y-BOCS and OCI-R[4].

Themes and exercises related to the ERP therapy mostly comprise techniques to cope with fears and beliefs deemed as real on the part of the patients, associated with the prevention of rituals for decreasing anxiety[4]. Therefore, we could observe a significant improvement in relation to coping strategies addressed in the Anxiety self-control outcome (1402).

Distress and restlessness are considered physical and psychic symptoms related to peaks of anxiety that may be caused by the performance of the ERP exercises[4,7]. From the habituation of the exposures, the progressive improvement of these symptoms is expected, as we observed through the Fear level outcome (1210). Moreover, concerning the difficulty concentrating and exaggerated concern about everyday situations, such as those that are addressed during therapy, the improvement of the insight throughout the treatment is expected from the understanding of the cognitive therapy, as observed in this study[1].

The Anxiety level outcome (1211) comprises issues such as indecisiveness and decreased productivity in daily activities. Both are closely related to the anxiety generated due to the obsessions of doubts and the consequent accomplishment of compulsions[4,15]. According to the progressive cessation of rituals and the understanding of the uncertainty present and inherent in daily activities, the reduction of these symptoms was observed throughout the treatment.

The Personal time management outcome (1635) covers issues related to the time demanded by the accomplishment of compulsions. During the GCBT, the establishment of exact periods of time for the accomplishment of daily tasks is suggested, aiming to minimize interruptions due to rituals, in order to improve productivity[15]. Through the indicators "Sets time for completion of commitments" and "Minimizes interruptions," a significant change was observed between the assessments.

Based on the scores obtained from the evaluation of the selected indicators, we could observe the oscillation of symptoms throughout the therapy: before the treatment scores were higher, during the treatment, they fell, and in the end the scores increased. These alterations are opposed to the process of awareness and understanding of patients throughout the therapy about their symptoms and the functioning mechanisms of the OCD cycle. Before the beginning of therapy, there is no knowledge about the disease yet, and the insight can be considered as low, (most of the time) leading the patients to higher scores; throughout

the treatment, some ERP exercises could already be performed (there were some failures), and there is a greater understanding of the symptoms and functioning of the OCD, leading the patients to become aware of the situation and to lower scores; at the end of therapy, the improvement of symptoms, quality of life, and social relationships is expected, with consequent higher scores in those evaluated[4,15].

Study limitations

Among the limitations of this study, firstly we mention the number of patients in the sample, since this is a pilot study and there was a loss in the final evaluation. There should be more time for evaluating new patients with OCD through the created instrument in other CBT groups. It is worth highlighting that information was collected by the same evaluator at all stages and based on the patients' reports about their healthcare status at a given time.

Contributions to the field of nursing

This study contributes to the improvement of the evaluation of patients with OCD from the use of instruments to measure nursing outcomes, reflecting the expansion of knowledge about the application of NOC to the mental health outpatient scenario .

The prepared conceptual and operational definitions of the indicators selected for these patients contribute to the more accurate identification of signs and symptoms presented by them throughout the established treatment (GCBT), favoring the diagnostic accuracy and the consequent process of critical reasoning of the nurse, focused on decision-making about the expected results, thus providing safer evidence-based health care and increasing the quality of the provided care.

CONCLUSION

The consensus of specialists allowed the selection of the four NOC-related nursing outcomes, with 17 indicators more appropriate for the evaluation of patients with OCD attending GCBT. The instrument created with conceptual and operational definitions of each indicator for evaluating the patients in the pilot group confirmed the possibility of detecting differences in their scores, especially regarding questions addressed during the GCBT.

From the measurement of indicators selected during the GCBT, we can observe the improvement of symptoms related to anxiety, restlessness, concentration, indecisiveness, productivity, and excess of responsibility related to exaggerated concern. We also observed a decrease in the performance of rituals, the establishment of periods determined to perform tasks, and the use of coping strategies.

The created instrument containing nursing outcomes and indicators proved to be sensitive to survey the alteration of symptoms throughout the treatment, being suitable for the evaluation of the expected outcomes for patients with OCD attending GCBT.

We suggest the performance of future studies with the application by different evaluators of the created instrument and to a larger sample of patients, in order to corroborate the findings found in the pilot study.

REFERENCES

1. American Psychiatric Association (APA). Manual diagnóstico e estatístico de transtornos mentais: DMS-5. 5ª ed. Porto Alegre: Artmed; 2014.

2. Vivan AS, Rodrigues L, Wendt G, Bicca MG, Braga DT, Cordioli AV. Obsessive-compulsive symptoms and obsessive-compulsive disorder in adolescents: a population-based study. Rev Bras Psiquiatr. 2014;36(2):111-8. doi: 10.1590/1516-4446-2013-1113

3. Pietrabissa G, Manzoni GM, Gibson P, Boardman D, Gori A, Castelnuovo G. Brief strategic therapy for obsessive-compulsive disorder: a clinical and research protocol of a one-group observational study. BMJ Open. 2016;6(3):e009118. doi: 10.1136/bmjopen-2015-009118

4. Behenck AS, Gomes JB, Heldt E. Patient rating of therapeutic factors and response to cognitive-behavioral group therapy in patients with obsessive-compulsive disorder. Issues Ment Health Nurs. 2016;37(6):392-9. doi: 10.3109/01612840.2016.1158335

5. Thomé ES, Centena RC, Behenck AS, Marini M, Heldt E. Applicability of the NANDA-I and Nursing Interventions Classification Taxonomies to Mental Health Nursing Practice. Int J Nurs Knowl. 2014;25(3):168-72. doi: 10.1111/2047-3095.12033

6. Bulechek G, Butcher H, Dochterman JMC, Wagner C. Nursing Interventions Classification (NIC). 6ª ed. St. Louis: Elsevier; 2016.

7. Herdman TH, Kamitsuru S, editors. Nursing Diagnoses: definitions and classification 2015-2017. 10ª ed. Porto Alegre: Artmed; 2015.

8. Souza FP, Foa EB, Meyer E, Niederauer KG, Cordioli AV. Psychometric properties of the Brazilian Portuguese version of the Obsessive-Compulsive Inventory – Revised (OCI-R). Rev Bras Psiquiatr. 2011;33(2):137-42. doi: 10.1590/S1516-44462011000200008

9. Tastan S, Linch GC, Keenan GM, Stifter J, McKinney D, Fahey L, et al. Evidence for the Existing American Nurses Association- Recognized Standardized Nursing Terminologies: A Systematic Review. Int J Nurs Stud. 2014;51(8):1160-70. doi: 10.1016/j.ijnurstu.2013.12.004

10. Moorhead S, Johnson M, Maas M, Swanson E. Nursing Outcomes Classification (NOC). 5th ed. St. Louis: Elsevier; 2016.

11. Polit DF, Beck CT. Fundamentos de pesquisa em enfermagem: avaliação de evidências para a prática da enfermagem. 7ª ed. Porto Alegre: Artmed; 2011.

12. Bavaresco T, Lucena AF. Nursing Intervention Classifications (NIC) validated for patients at risk of pressure ulcers. Rev Latino-Am Enfermagem. 2012;20(6):1109-16. doi: 10.1590/S0104-11692012000600013

13. Heldt E, Behenck A, Marini M. Diagnóstico de enfermagem em saúde mental no cenário ambulatorial. In: Heardman TH, editor. PRONANDA Programa de Atualização em Diagnósticos de Enfermagem: ciclo 3, volume 2. Porto Alegre: Artmed; 2015. p. 37-68.

14. Mantovani VM, Acelas ALR, Lucena AF, Almeida MA, Heldt EPS, Boaz AK, et al. Nursing Outcomes for the Evaluation of Patients During Smoking Cessation. Int J Nurs Knowl. 2017;28(4):201-10. doi: 10.1111/2047-3095.12138

15. Cordioli AV, editor. TOC: manual de terapia cognitivo-comportamental para o transtorno obsessivo-compulsivo. 2ª ed. Porto Alegre: Artmed; 2014.