Validation of the Brazilian version of the World Health Organization Disability Assessment Schedule in women with chronic pelvic pain

Validação da versão brasileira do World Health Organization Disability Assessment Schedule em mulheres com dor pélvica crônica

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ABSTRACT

BACKGROUND AND OBJECTIVES: Chronic pelvic pain (CPP) is a persistent pain perceived in structures related to the pelvis. It is often associated with negative functioning consequences that generate disability. There are currently no validated tools in the literature for measuring functioning according to the theoretical-conceptual model presented by the International Classification of Functioning, Disability and Health (ICF) for patients with CPP. The objective of this study was to test the measurement properties of the World Health Organization Disability Assessment Schedule (WHODAS 2.0) for women with CPP.

METHODS: This is a validation study. The auxiliary instruments used in the validation process of the WHODAS 2.0 were: the 12-item Short-Form Health Survey (SF-12), the Numerical Pain Rating Scale, and a form with sociodemographic and clinical data. Internal consistency was analyzed using Cronbach's alpha coefficient, construct validity was assessed using Spearman's correlation coefficient, discriminative validity was analyzed using the analysis of variance, and test-retest reliability was analyzed using the Intra-class Correlation Coefficient (ICC).

RESULTS: The study included 128 women with CPP. Reliability analysis showed satisfactory results in terms of internal consistency (a=0.71 to 0.94) and excellent in test-retest reliability (IIC= 0.69 to 0.91). Validity analysis showed a strong to moderate correlation in construct validity between the total WHODAS score and the physical (rho=0.7, p<0.001) and mental components of the SF-12 (rho-0.67, p<0.0001), and statistically significant values for discriminative validity according to pain intensity in the last 30 days.

CONCLUSION: The WHODAS 2.0 instrument proved to be a reliable and valid questionnaire for investigating the functioning and disability of women with CPP.

Keywords: Disability and health, International Classification of Functioning, Pelvic pain, Validation study.

RESUMO

JUSTIFICATIVA E OBJETIVOS: A dor pélvica crônica (DPC) é uma dor persistente percebida em estruturas relacionadas à pelve. Está frequentemente associada a consequências negativas que geram incapacidade, entretanto, atualmente não existem ferramentas validadas para medir a funcionalidade segundo a Classificação Internacional de Funcionalidade, Incapacidade e Saúde (CIF) em pacientes com DPC. O objetivo deste estudo foi testar as propriedades de medida do *World Health Organization Disability Assessment Schedule* (WHODAS 2.0) para mulheres com DPC.

MÉTODOS: Trata-se de um estudo de validação. Os instrumentos utilizados no processo de validação do WHODAS 2.0 foram: o 12-item *Short-Form Health Survey* (SF-12), a Escala Numérica da Dor e um formulário com dados sociodemográficos e clínicos. A consistência interna foi analisada pelo coeficiente alfa de Cronbach, a validade de construto foi avaliada pelo coeficiente de correlação de Spearman, a validade discriminativa foi analisada pela Análise de Variância e a confiabilidade teste-reteste foi analisada pelo coeficiente de correlação intraclasse (ICC).

RESULTADOS: O estudo incluiu 128 mulheres com DPC. As análises de confiabilidade mostraram resultados satisfatórios em termos de consistência interna (a=0,71 a 0,94) e excelentes na confiabilidade teste-reteste (ICC=0,69 a 0,91). As análises de validade mostraram uma correlação forte a moderada na validade de construto entre o escore WHODAS total e os componentes físicos (rho=0,7, p<0,001) e mentais do SF-12 (rho=0,67, p<0,0001) e valores significativos para validade discriminativa de acordo com a intensidade da dor nos últimos 30 dias.

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HIGHLIGHTS
- This study is the pioneer in WHODAS 2.0 validation in women with Chronic Pelvic Pain.
- The WHODAS 2.0 is a valid instrument to assess the functioning of women with CPP.
- The WHODAS 2.0 measurement properties are valid and reliable.
- The WHODAS 2.0 will help physiotherapists to manage women with CPP.

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CONCLUSÃO: O instrumento WHODAS 2.0 mostrou-se um questionário confiável e válido para investigar a funcionalidade de mulheres com DPC.
Descritores: Classificação Internacional de Funcionalidade, Dor pélvica, Estudo de validação, Incapacidade e saúde.

INTRODUCTION

Chronic pelvic pain (CPP) is persistent pain perceived in structures related to the pelvis. The pain may be cyclic or non-cyclic and must be continuous or recurrent for at least 6 months. It may be associated with negative cognitive, behavioral, sexual, and emotional consequences, as well as symptoms suggestive of lower urinary tract, sexual, bowel, pelvic floor, or gynecological dysfunction[1]. The most common factors associated with CPP in women are endometriosis, irritable bowel syndrome, pelvic adhesions, genitourinary, neurological, and musculoskeletal symptoms. In addition to physical predictors, psychological factors such as stress, anxiety, and depression are also frequently associated[2].

CPP is a worldwide problem that affects women of all ages. Prevalence varies from 5.7% to 26.6% across countries[3]. It approaches of 20% in women of reproductive age[4]. The prevalence in the general population in Brazil is 11.5%, and the prevalence in women of reproductive age increases to 15.1% in the Southeast region[5] and may reach 19% in the Northeast region[6].

The impact of CPP on both work productivity and activities of daily living is substantial among women across countries and ethnicities[7]. On average, patients miss approximately one day of work per week, which can be detrimental to their work activities and professional growth[8,9]. There is also a direct relationship between the intensity of the symptoms experienced and the general loss of productivity at work and in domestic activities due to absenteeism[9]. In a multicenter study conducted in 10 countries, it was found that lost labor productivity translated into significant costs per woman/week, from US$4 in Nigeria to US$456 in Italy[7].

Compromised ability to carry out daily activities is directly related to functioning which, from the perspective of the biopsychosocial model, is an objective response to the relationship between health conditions and the individual's context. This is not only focused on the health condition, represented here by pain and its subjectivity, but on the individual and their life context[10]. The effects of CPP on people's functioning must be assessed to provide a more adequate interpretation for the diagnosis and to provide more appropriate health services. In this sense, the use of appropriate tools for measuring functioning at a clinical or academic level is of paramount importance, respecting the model recommended by the WHO[11].

The World Health Organization Disability Assessment Schedule (WHODAS 2.0) is an instrument specifically created for measuring functioning and disability, being the only instrument that stands out in incorporating the theoretical-conceptual framework of the ICF. The WHODAS is considered a generic instrument and can be used to measure functioning in individuals with different health conditions[12]. Since its release by the WHO in 2010, the WHODAS has been translated into a number of languages e health conditions[13-21]. The WHODAS 2.0 version translated into Brazilian Portuguese has not yet been validated for women with CPP, and the present authors didn't find studies in the literature which have validated it in other languages. It is important to test the measurement properties in a population with common conditions, as they determine the quality of an instrument, and indicate whether it can be considered reliable and valid for the intended measurements. Therefore, the present study's objective was to evaluate the measurement properties (internal consistency, test-retest reliability, construct validity and discriminative validity) of the WHODAS 2.0 in women with CPP.

METHODS

This is a validation study of the WHODAS 2.0 questionnaire in the 36-item version, applied by interviewers to Brazilian women with chronic pelvic pain. Followed the recommendations of Consensus-based Standards for the Selection of Health Measurement Instruments (COSMIN)[22]. This study was approved by the Ethics and Research Committee of the institution (CAAE: 12081319.2.0000.5050) and subsequently submitted for amendment with opinion number 4.377.323. All study participants signed Free Informed Consent Form (FICT). The study sample was obtained by convenience and the questionnaires were applied through two interviews (the first being face-to-face while waiting in the waiting room or after consultation, and the second via telephone between seven and 14 days after the first application), by researchers previously trained to apply the instrument.

The study was conducted from April 2019 to November 2021. The collection was performed at the CPP, endometriosis and pelvic physiotherapy outpatient clinic of the Assis Chateaubriand Maternity School, located in the city of Fortaleza, Ceará, Brazil, a reference in specialized healthcare of women for the state of Ceará.

The sample consisted of women with a clinical diagnosis of CPP (ICD 10 – R10.2), over 18 years old. The recommendations and definitions of the American College of Obstetricians and Gynecologists (ACOG) were used, which aims to standardize terminology in gynecology and obstetrics, and defines CPP as "painful symptoms perceived as originating from pelvic organs/structures, typically lasting longer than 6 months and is often associated with negative cognitive, behavioral, sexual, and emotional consequences, as well as symptoms suggestive of urinary tract, bowel, pelvic floor, myofascial, or gynecologic dysfunction"[1].

Participants who had a health condition that led to some type of additional functional impairment than expected in women with CPP were excluded from the study, for example, stroke, amputations, peripheral neuropathies, deafness, fibromyalgia, or chikungunya, among others. This procedure aims to ensure that the functioning measured in the validation process is solely related to the characteristic of the group, but not to another superimposed condition.

Women who did not answer a phone call after 3 attempts by the researchers and/or who started some type of treatment (drug,

physiotherapeutic or surgical) within a period of two weeks (between the first 14 days) after the 1st WHODAS 2.0 questionnaire application were discontinued from the study.
The number of subjects for instrument validation is approximately 100 individuals and at least 50 participants for the test-retest process. This sample allows obtaining a 95% CI of ±0.34 SD[23].

Data collection instruments
A specific form prepared by the researchers was used consisting of the following divisions: socioeconomic data (paid activity, education); personal data (age, marital status, skin color, body mass index, height, weight, telephone number); chief complaint and health condition history; associated comorbidities (systemic arterial hypertension, diabetes, psychological disorders, others); gynecological and obstetric history (number of pregnancies).

WHODAS 2.0 instrument 36-item version
The WHODAS 2.0 is a tool developed by the World Health Organization (WHO) based on the International Classification of Functioning, Disability and Health (ICF). It is a practical and generic instrument which aims to generally assess the health, deficiencies and functioning of the general and specific population. The 36-item instrument has been translated and cross-culturally adapted for Brazil and provides the individual's level of functioning across six domains: Cognition – understanding and communicating; Mobility – moving and getting around; Self-care – attending to one's hygiene, getting dressed, eating and staying alone; Getting along – interacting with other people; Life activities – domestic responsibilities, leisure, work and school; Participation – joining in community activities and participating in society. Its complex score ranges on a metric from 0 to 100 (where 0 = no impairment; 100 = complete impairment) for each domain and total score[12].

Auxiliary instruments for the validation process
The 12-item short-form health survey (SF-12)[24] has only 12 questions derived from the SF-36, whose scores explain about 90% of the variance of the physical and mental components of the original instrument. It proposes to assess the following dimensions: physical functioning, role physical limitations, pain, general health status, vitality, social functioning, role emotional limitations and mental health. Its domains are grouped into a Physical Component Summary (PCS) and Mental Component Summary (MCS)[25]. Like the SF-36, the SF-12 is a generic health-related quality of life questionnaire and its score ranges from 0 to 100 (where 0 = worst quality of life; 100 = best quality of life), reproducing the reliability and validity properties of the SF-36[26].
The Numeric Pain Rating Scale (NPRS) is a valid and reliable measure for classifying pain intensity. It is a straight 10 cm horizontal line with anchor points of no pain (score 0) and unbearable pain (score 10). Thus, it was possible to collect the pain intensity value on the day of the assessment and women were asked to report their average perception of pain of the last 30 days. Pain intensity was categorized considering the following intensity classification: ze – no pain, 1-3 – mild, 4-6 – moderate, and 7-10 – severe[27,28]. This instrument was later added to the data collection.

Statistical analysis
The sample was characterized through descriptive analysis and demonstrated through frequencies, central tendency, and dispersion measures. Data normality was verified using the Shapiro-Wilk test. Calculations were performed using the SPSS Windows version software program with a significance level of 5%. Internal consistency was analyzed using the Cronbach's alpha coefficient, for which a coefficient between 0.70-0.90 was considered satisfactory[29]. This type of validation process is dependent on a single application of the instrument in the studied group.
Construct validity was assessed using Spearman's correlation coefficient, as the data were not parametric. Correlation coefficient rho values = 0.10 to 0.30 (weak); rho = 0.40 to 0.60 (moderate); rho = 0.70 to 1 (strong)[30]. Discriminative validity was analyzed using the Analysis of Variance (Anova) test to compare WHODAS 2.0 means between pain intensity categories. For this analysis, the NPRS was recategorized into two groups: 1 – absence or mild to moderate pain (0-6); and 2 – severe pain (7-10), because of the small sample in the category mild. The test-retest reliability was analyzed using the Intra-class Correlation Coefficient (ICC), for which an ICC between 0.6 and 0.8 was considered as good reliability, and > 0.80 was considered as excellent[31].

RESULTS

The study included 128 women with a mean age of 34.97±8.0 years, most of whom were married (44.9%), with formal education up to high school (57.8%), engaged in some paid activity/employment (59.7%) and were nulliparous (38.8%). The mean NPRS score on the assessment day was 6.03±3.02; n=86, and the mean for the last month was 7.49±2.17; n=57 (Table 1).

Table 1. Description of the study sample of women with chronic pelvic pain in terms of sociodemographic and clinical characteristics.

Variables	Mean	SD
Age (n=128)	34.97	8.07
	n	(%)
Civil status (n = 127)		
Single	37	29.1
Married	57	44.9
Stable union	25	19.7
Divorced	7	5.5
Widowed	1	0.8
Schooling level (n = 128)		
Illiterate	1	0.8
Incomplete elementary	11	8.5
Complete elementary or incomplete high school	18	14.1
Complete high school or incomplete higher education	74	57.8
Complete higher education	18	14.1
Post-graduate	6	4.7
Paid employment (n = 124)		
Yes	74	59.7
No	50	40.3
Number of pregnancies (n = 111)		
0	43	38.8
1	27	24.3
2	24	21.6
3 or >	17	15.3

Continue...

Table 1. Description of the study sample of women with chronic pelvic pain in terms of sociodemographic and clinical characteristics – continued.

Variables	Mean	SD
Age (n=128)	34.97	8.07
	n	(%)
Pain intensity		
NPRS on the evaluation day (n=86)	6.03	3.02
Mean NPRS 30 days (n=57)	7.49	2.17
NPRS (evaluation day) (n=86)		
No pain (0)	7	8.1
Mild pain (1-3)	12	14.0
Moderate pain (4-6)	27	31.4
Intense pain (7-10)	40	46.5
NPRS (evaluation day)		
Mild to moderate pain (0-6)	46	53.5
Intense pain (7-10)	40	46.5
Mean NPRS 30 days (n=57)		
Absence or mild to moderate pain (0-6)	18	38.1
Intense pain (7-10)	38	67.9

The WHODAS 2.0 domain which had the highest score and consequently expressed greater functioning impairment was the Participation domain with a mean of 50.16±23.10, followed by the Mobility (44.62±24.83) and Life activities domain (41.34±26.21), in which domestic activities and work and/or school activities are evaluated. The domains with the lowest averages were Self-care (19.37±21.28), Getting along (26.95±19.96) and Cognition (31.32±19.53) (Table 2).

Table 2. Descriptive analysis of the SF-12 (n = 128).

SF-12 domains	Mean	SD
Physical functioning domain	44.53	36.71
Role physical limitations domain	17.58	36.36
Pain domain	47.07	29.53
General health status domain	32.46	25.37
Physical component	35.41	13.48
Vitality domain	34.69	24.52
Social functioning domain	47.03	29.86
Role emotional limitations domain	36.33	42.42
Mental health domain	43.13	23.53
Mental component	40.29	5.78

The SF-12 presented similar scores in its domains. The Physical component composed the Physical functioning, Role physical limitations, Pain and General health status domains grouped together and presented an average score of 35.41±13.48, while the Mental component grouped the Vitality, Social functioning, Role emotional limitations, and Mental health domains, and had an average of 40.29±5.78 (Table 2).

Internal consistency was tested using Cronbach's Alpha coefficient and satisfactory coefficients were obtained for the domains: Self-care (0.71), Cognition (0.74), Mobility (0.82), Participation (0.87) and Life activities (0.94); and after removing item 5 from the Getting along domain (regarding the difficulty of having sexual intercourse), it presented a satisfactory value (0.72), with a total Cronbach's coefficient of 0.94 (Table 3).

The Intraclass Correlation Coefficient (ICC) showed values > 0.6 for all WHODAS 2.0 domains, indicating good test-retest reliability. The ICC was 0.84 considering the total WHODAS 2.0 score, also indicating excellent reliability and consistency of the collected responses (Table 4).

The coefficients between the WHODAS 2.0 and the SF-12 showed a strong and negative correlation between the total WHODAS 2.0 values and the Physical Component Summary (PCS) of the SF-12 (-0.70), a moderate and negative correlation between the Mental Health Component Summary (MCS) and WHODAS 2.0 total values (-0.67). The correlation when comparing each domain of WHODAS 2.0 with those of SF-12 generally ranged from weak to moderate and always negative. As the scores are inversely proportional, it can be assumed that when the SF-12 presents lower values and indicates worse QoL, the WHODAS 2.0 will display higher values indicating greater incapacity (Table 5).

Table 4. Test-retest reliability analysis of WHODAS 2.0 in women with chronic pelvic pain (n=50).

WHODAS 2.0 domains			
	ICC	95% CI	p-value
Cognition	0.69	0.46-0.83	< 0.001
Mobility	0.78	0.62-0.88	< 0.001
Self-care	0.73	0.52-0.84	< 0.001
Getting along*	0.72	0.50-0.84	< 0.001
Life activities*	0.80	0.65-0.89	< 0.001
Participation	0.91	0.85-0.95	< 0.001
Total	0.842	0.71-0.91	< 0.001

ICC = Intra-class Correlation Coefficient. * n=49

Table 3. Descriptive analysis and internal consistency analysis (Cronbach's alpha) of WHODAS 2.0 in women with chronic pelvic pain (n=128).

WHODAS 2,0 domains	Mean	SD	Minimum	Maximum	Cronbach's Alpha
Cognition (6 items)	31,32	19,53	0,00	95,00	0,74
Mobility (5 items)	44,62	24,83	0,00	100,00	0,82
Self-care (4 items)	19,37	21,28	0,00	90,00	0,71
Getting along (5 items)	26,95	19,96	0,00	91,66	0,66/0,72*
Life activities (8 items)	41,34	26,21	0,00	100,00	0,94
Participation (8 items)	50,16	23,10	0,00	100,00	0,87
Total score	38,24	16,88	0,00	84,90	0,94

*After removing item 5 related to sexual activity. SD = standard Deviation.

Table 5. Construct validity analysis between the WHODAS and SF-12 domains in women with chronic pelvic pain.

	SF-12 Domains									
WHODAS 2.0 Domains	Physical functioning	Role physical limitations	Pain	General health status	Physical component summary	Vitality	Social functioning	Role emotional limitations	Mental health	Mental component summary
Cognition	-0.302**	-0.352**	-0.285**	-0.374**	-0.425**	-0.246**	-0.406**	-0.329**	-0.301**	-0.458**
Mobility	-0.667**	-0.490**	-0.421**	-0.400**	-0.662**	-0.350**	-0.433**	-0.208*	-0.312**	-0.411**
Self-care	-0.366**	-0.437**	-0.304**	-0.178*	-0.421**	-0.222*	-0.438**	-0.314**	-0.181*	-0.417**
Getting along	-0.170	-0.233*	-0.143	-0.228*	-0.246**	-0.318**	-0.333**	-0.408 (0.108)	-0.349*	-0.499**
Life activities	-0.306**	-0.533**	-0.398**	-0.494**	-0.540**	-0.208*	-0.420**	-0.301**	-0.248**	-0.429**
Participation	-0.442**	-0.446**	-0.434**	-0.426**	-0.581**	-0.391**	-0.599**	-0.436**	-0.468**	-0.646**
Total	-0.531**	-0.577**	-0.490**	-0.551**	-0.700**	-0.408**	-0.625**	-0.455**	-0.436**	-0.674**

Spearman's correlation test. *p≤0.05; **p≤0.01.

Table 6. Discriminative validity – Comparison of mean WHODAS scores between pain intensity groups on the assessment day and in the last 30 days.

	NPRS evaluation Day (n=86)			Average NPRS 30 Days (n=56)		
WHODAS domains	NPRS 0-6 (n=46) Mean (SD)	NPRS 7-10 (n=40) Mean (SD)	p-value	NPRS 0-6 (n=18) Mean (SD)	NPRS 7-10 (n=38) Mean (SD)	p-value
Cognition	30.97 (17.04)	37.87 (18.70)	0.077	27.77 (14.26)	38.55 (15.80)	0.017
Mobility	39.94 (21.94)	47.81 (24.69)	0.122	31.94 (21.42)	47.69 (21.96)	0.014
Self-care	13.04 (12.6)	23.75 (21.68)	0.006	12.22 (10.60)	16.05 (16.19)	0.365
Getting along	25.72 (18.49)	31.25 (22.70)	0.217	19.90 (14.61)	33.77 (20.86)	0.014
Life activities	43.11 (22.3)	44.06 (25.61)	0.855	37.26 (24.31)	51.20 (23.74)	0.047
Participation	49.09 (16.80)	53.12 (24.45)	0.371	42.36 (19.39)	58.88 (19.33)	0.004
Total score	36.89 (12.93)	42.14 (17.08)	0.109	31.49 (12.66)	44.73 (14.05)	0.001

NPRS = Numeric pain rating scale: zer to 6 = Absence or mild to moderate pain; 7 to 10 = Severe pain. Analysis performed using the ANOVA test. SD = standard deviation.

Discriminative validity was assessed by comparing participants' level of disability and pain intensity on the assessment day and in the last 30 days. The study found a statistically significant difference in the WHODAS 2.0 self-care domain score and pain intensity on the assessment day. The study also found significant values for the other domains and the total score when comparing the mean pain in the last 30 days (Table 6).

DISCUSSION

The results obtained indicate that the WHODAS 2.0 presented satisfactory results in the measurement properties in the studied population, which allows using the tool to evaluate and monitor the functioning of women with CPP. Reliability analyzes showed satisfactory results for internal consistency and excellent results for test-retest reliability. The validity analyzes showed a strong to moderate correlation in construct validity between the total WHODAS score and the physical and mental components of the SF-12, and statistically significant values for discriminative validity according to pain intensity in the last 30 days.

The internal consistency showed satisfactory results for all domains, except for the getting along domain, which showed a value below expectations (α=0.66). When item 5 is removed from the analysis (regarding the difficulty of having sexual intercourse), the Cronbach's alpha value becomes satisfactory (α=0.72). This data points out that the item deserves attention, as some women avoid sexual activity because of pain, sexual dysfunction, or the absence of a partner. It corroborates what the literature suggests, namely that women with CPP have higher dyspareunia rates[32], sexual dysfunction is more common, and they have worse rates in most domains of the FSFI (Female Sexual Function Index)[33], generating a negative impact on female sexual function[34].

The WHODAS 2.0 showed excellent reproducibility indices in the studied population. The ICC for the test-retest reliability was 0.84, like the value of 0.82 found in the study[35], which validated the WHODAS 2.0 for adults with poor vision in Brazil[35]. The value found was higher than in the study by the authors[15], who validated the WHODAS for post-stroke people and their families (15) and reported an ICC of 0.67; and the authors[36], who validated it for people with chronic diseases and reported an ICC above 0.7 for only four domains. However, the results of these last two studies can be explained by the long interval (six months and six weeks, respectively) between the two applications while being tested between 7 to 14 days to ensure that there were no treatments changes that may interfere in the health condition.

No specific or generic questionnaire validated for Portuguese was identified in the literature to assess the functioning of women with CPP. Thus, the present authors used the SF-12, which is a questionnaire used to assess quality of life (QoL), to analyze the construct validity. Similar studies also used a QoL questionnaire for this analysis and found similar values[18,36]. The moderate correlation found between the two questionnaires demonstrates that the WHODAS 2.0 and the SF-12 measure aspects of related concepts (functioning and QoL, respectively). These findings show that the instruments are correlated and complementary, which also demonstrates the validity of the WHODAS 2.0 to measure functioning and its use as a variable that complements QoL.

It is worth mentioning the data obtained in the participation (n=50.16±23.10), mobility (n=44.62±24.83) and life activities (n= 41.34±26.21) domains, in which the participants had the worst scores. Such findings may indicate that these domains are able to identify a high disability rate in this population taking these aspects into account and indicate that the loss of functioning is manifested in the social context.

WHODAS 2.0 can detect differences between groups according to pain severity. Those patients classified as having severe pain had worse disability scores than patients who reported mild or moderate pain. These results consider the mean pain and disability in the last month of the assessment date. As argued in the WHODAS 2.0 manual prepared by the WHO[11], the present authores believe that memory skills are more accurate for the one-month period and that some women experience variability in the degree of difficulty and pain over the 30 days. In these cases, the participants giving a score which takes good days and bad days as an average makes the report more representative of their health status than NRPS on the assessment day.

The purpose of this study is to provide the scientific community and clinical care with an adequate and reliable tool for measuring and monitoring the functioning of women with CPP. This instrument, which is patient-centered, will provide individualized data with its items being based on the ICF domains according to the biopsychosocial model, and seeks an interaction of contextual factors with the individual's health condition[11]. Furthermore, as functioning is the third health indicator, this study makes it possible for this measure to become a health indicator for this population, thus favoring better service, care, and health policy planning for these women, as well as providing an indicator for health management[37].

Some difficulties were encountered during this study which can be configured as limitations, such as: the collection data period coinciding with the period of the first and second waves of the COVID-19 Pandemic, in which the outpatient clinics had to close or work at reduced capacity to avoid crowding; the telephone contact to conduct the retest of the questionnaire, as some participants did not answer or finished the answers. Still, the study was carried out in a reference center of CPP and endometriosis for the state of Ceará to ensure the homogeneity of the sample. Lastly, this study is a pioneer in the validation of the WHODAS 2.0 instrument in women with CPP. Thus, this tool can be used as a disability assessment strategy from a biopsychosocial perspective in this population.

CONCLUSION

Brazilian version of the WHODAS 2.0 with 36 items showed that the measurement properties of internal consistency, test--retest reliability, construct validity and discriminative validity are reliable and valid. Thus, WHODAS 2.0 is a stable and adequate instrument to assess the functioning of the Brazilian population of women with CPP. This tool will provide excellent evidence of the needs of this population, which can help to elaborate better care policies. In addition, WHODAS 2.0 stands out for being the only instrument based on the ICF biopsychosocial model.

AUTHORS' CONTRIBUTIONS

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Statistical Analysis, Data Collection, Writing - Preparation of the Original, Writing - Review and Editing
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Data Collection, Resource Management, Writing - Preparation of the Original
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