Estenifer Marques Balco
João Mazzoncini de Azevedo Marques
Eduardo Santana Cordeiro

AVALIAÇÃO DA FUNCIONALIDADE DE PACIENTES COM WHODAS 2.0 APLICADO POR PROFISSIONAIS DA ATENÇÃO PRIMÁRIA NO COTIDIANO PROFISSIONAL: UM ESTUDO BRASILEIRO

EVALUATION OF PATIENTS' FUNCTIONING WITH WHODAS 2.0 APPLIED BY PHC PROFESSIONALS IN EVERYDAY WORK: A BRAZILIAN PILOT STUDY

Revista CIF Brasil. 2024;16(2):78-87

DOI: http://www.doi.org/10.4322/CIFBRASIL.2024.004

EVALUATION OF PATIENTS' FUNCTIONING WITH WHODAS 2.0 APPLIED BY PHC PROFESSIONALS IN EVERYDAY WORK: A BRAZILIAN PILOT STUDY

AVALIAÇÃO DA FUNCIONALIDADE DE PACIENTES COM WHODAS 2.0 APLICADO POR PROFISSIONAIS DA ATENÇÃO PRIMÁRIA NO COTIDIANO PROFISSIONAL: UM ESTUDO BRASILEIRO

Autores

ESTENIFER MARQUES BALCO

Terapeuta Ocupacional, Universidade de São Paulo.

estenifer@usp.br

Balco EM (0000-0001-5650-5532) - ORCID

JOÃO MAZZONCINI DE AZEVEDO MARQUES

Médico, Universidade de São Paulo.

jmaq@usp.br

Marques JMA (0000-0002-3100-3883) - ORCID

EDUARDO SANTANA CORDEIRO

Fisioterapeuta, Universidade de São Paulo.

edusantana@alumni.usp.br

Cordeiro ES (0000-0003-1621-951X) - ORCID

DOI: http://www.doi.org/10.4322/CIFBRASIL.2024.004

Abstract

We assess the psychometrics properties of World Health Organization Disability Assessment Schedule – WHODAS - 2.0 (12 items) applied by 09 PHC professionals on 120 patients, using mixed methodology. Concurrent validity with WHOQOL-BREF by Spearman Coefficient (0.54), Cronbach's alpha (0.83) and Inter- rater reliability by Intraclass Correlation Coefficient (0.97). Understandability of its application guidelines, questions, answers, brevity and relevance, were considered satisfactory by most patients and professionals, but professionals considered its use in the service routine unsatisfactory, due to doubts about how it should be integrated in the work routine. More studies are needed to use the measure in the work routine by PHC teams.

Keywords: Human functioning, Primary Care, Family Health Strategy, ICF, WHODAS 2.0, Psychometrics properties.

Resumo

Avaliamos as propriedades psicométricas do Cronograma de Avaliação de Incapacidade da Organização Mundial da Saúde – CAIOMS - 2.0 (12 itens) aplicado por 09 profissionais da APS em 120 pacientes, utilizando metodologia mista. Validade concorrente com o WHOQOL-BREF pelo Coeficiente de Spearman (0,54), Alfa de Cronbach (0,83) e Confiabilidade interavaliadores pelo Coeficiente de Correlação Intraclasse (0,97). A compreensibilidade de suas diretrizes de aplicação, perguntas, respostas, brevidade e relevância, foram consideradas satisfatórias pela maioria dos pacientes e profissionais, mas os profissionais consideraram seu uso na rotina do serviço insatisfatório, devido a dúvidas sobre como deveria ser integrado na rotina de trabalho. Mais estudos são necessários para utilizar a medida na rotina de trabalho das equipes de APS.

***Palavras-chave**: Funcionalidade humana, atenção primária, estratégia de saúde da família, CIF, CIAOMS 2.0, propriedades psicométricas.*

DOI: http://www.doi.org/10.4322/CIFBRASIL.2024.004

Introduction

Understanding the people´s functioning can play a significant role in planning, implementation and evaluating health actions, including integrated and interprofessional care. The International Classification of Functioning, Disability and Health (ICF), developed for this purpose, still needs to have its use expanded, including in Primary Health Care (PHC)[1 2].

The WHO Disability Assessment Schedule 2.0 (WHODAS 2.0) was developed to facilitate the use of ICF in a variety of contexts and populations. It evaluates functioning and disability in six domains of life: cognition, mobility, self-care, living with people, life activities and participation in society[3 4]. It has shown good psychometric properties and its use is currently recommended in the International Classification of Diseases 11 th Revision (ICD-11), in the V complementary section to assess functioning[4 5].

We did not find studies on the application of WHODAS 2.0 by members of PHC teams in their work routine, something necessary for its wide dissemination and use within health systems, so we planned this pilot study to assess the validity, reliability and feasibility of the version of 12 items applied by these professionals.

Methods

This is a descriptive and exploratory study, developed with a Brazilian Family Health Strategy (FHS) team in Ribeirão Preto, state of São Paulo, Brazil, carried out from March to September 2017[6]. We used qualitative and quantitative techniques, systematized according to guidelines in the WHODAS manual, psychometric properties analysis and studies on the feasibility of assessment measures in PHC[4 6 7 8]. The instruments used in data collection were field diary registration, WHODAS 2.0 (version 12 items), WHO Quality of Life-BREF (WHOQOL-BREF) and questionnaires of the scale's feasibility for professionals and patients with closed and opened questions. In this article we address the most significant quantitative and qualitative data[4 7 8].

Revista CIF Brasil. 2024;16(2):78-87 DOI: http://www.doi.org/10.4322/CIFBRASIL.2024.004

Before applying the scale, the professionals participated in training on the use of ICF and WHODAS 2.0. The patients answered WHODAS 2.0 applied by two different interviewers (the first application by a PHC team member and the second by an ICF specialist and in the use of WHODAS 2.0), then they answered the feasibility questionnaire and at the end they answered the WHOQOL-BREF. All the professionals who conducted at least 10 interviews, by the end of the research, answered a questionnaire of feasibility about the experience with the use of the scale[6 7 8].

We used the Statistical Package for the Social Sciences (SPSS) 20.0 for the analysis of quantitative data. The scoring and analysis of WHODAS 2.0 responses followed the guidance of the manual and related publications. We evaluated the concurrent validity by the Spearman coefficient with WHOQOL-Bref, the internal consistency by Cronbach's Alpha and the inter-rater reliability by the Intraclass Correlation Coefficient. We quantitatively analyzed the feasibility applicability by the data from the questionnaires with the responses of each item classified as "satisfactory" or "unsatisfactory" and presented them in terms of absolute number (n) and percentage (%) of satisfactory responses. We also categorize responses to open questions from professionals and patients[4 6 7 8].

The project was approved by the Research Ethics Committee of the Community Health Center of the Ribeirão Preto Medical School of the University of São Paulo (CAAE 47792415.1.0000.5414)[6].

Results

Nine professionals participated in the research: 03 community health workers (CHWs), 01 dentist, 01 physiotherapist, 02 family doctors, 01 psychologist and 01 occupational therapist. Among these professionals, only one knew ICF and none knew WHODAS 2.0[6].

The sociodemographic and personal identification data of the interviewed users are described at Table 1[6].

Revista CIF Brasil. 2024;16(2):78-87 DOI: http://www.doi.org/10.4322/CIFBRASIL.2024.004

TABLE 1 *(Page 86)*

The quantitative results on psychometric properties of WHODAS 2.0 are shown at table 2 [6].

TABLE 2 *(Page 87)*

In the qualitative assessment, health professionals expressed doubts about the use of WHODAS 2.0 in the daily clinical routine of all team members and also about its relevance to obtain new information that would be difficult to obtain otherwise, as can be seen in the examples below [6]:

"It would be difficult [use] not for WHODAS 2.0, but for the lack of professionals at PHC and patients are not always willing."
"We were unable to have time to apply the questionnaire."
"...the suggestion would be an occupational therapist or physical therapist to apply it." "Because of the intimacy with the patients, most of the time we always get this information easily through the trust they place in us."

Discussion

The scale, applied by PHC professionals after a brief training, presented adequate concurrent validity and internal consistency, as well as comprehensibility, brevity and relevance in the opinion of patients and professionals, findings that are similar to the results of studies in other contexts and populations [1 2 3 4 6].

Even though most professionals considered its use in the routine of the service as unfeasible, patients rated the scale as useful and relevant to their needs. A Brazilian case study on the use of an ICF-based checklist applied by CHWs described that it was possible to insert this instrument into the daily work routine of these professionals [6 9]. Another Brazilian study on the use of an instrument for assessing functioning - COOP / WONCA Charts - applied by CHWs also found good results in terms of feasibility [10].

Revista CIF Brasil. 2024;16(2):78-87 DOI: http://www.doi.org/10.4322/CIFBRASIL.2024.004

This study was unprecedented in Brazil and internationally. We emphasize that the data found cannot be generalized, as it is an experience with a single Brazilian FHS team and the population accompanied by it [6].

These data show the need for further studies on strategies for using instruments to assess functioning by PHC teams, particularly those based on ICF, as has been done in other countries [1].

Acknowledgments

This study have finance by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – Brasil (CAPES) – Finance Code 001. We would like to thank the CAPES for financial support and the World Health Organization for permission to use the WHODAS 2.0 in this research.

References

1. Muller J, Snyman S, Slogrove A, Couper I. The value of interprofessional education in identifying unaddressed primary health-care challenges in a community: a case study from South Africa. J Interprof Care . 2019 Jul-Aug;33(4):347-355. doi: 10.1080/13561820.2019.1612332. Epub 2019 May 19. PMID: 31106626.

2. Araujo ES, Neves SFP. ICF or ICPC: what remains to be classified in primary care.
Acta Fisiatr. 2014;21(1):46-48.

3. Ustün TB, Chatterji S, Kostanjsek N, Rehm J, Kennedy C, Epping-Jordan J, Saxena S, von Korff M, Pull C; WHO/NIH Joint Project. Developing the World Health Organization Disability Assessment Schedule 2.0. *Bull World Health Organ*. 2010 Nov 1;88(11):815-23. doi: 10.2471/BLT.09.067231. Epub 2010 May 20. PMID: 21076562; PMCID: PMC2971503.

4. Federici S, Bracalenti M, Meloni F, Luciano JV. World Health Organization disability assessment schedule 2.0: An international systematic review. *Disabil Rehabil.* 2017 Nov;39(23):2347-2380. doi: 10.1080/09638288.2016.1223177. Epub 2016 Nov 7. PMID: 27820966.

5. World Health Organization. ICF-11 for Mortality and Morbidity Statistics: V Supplementary section for functioning assessment. Available at: https://icd.who.int/browse11/l-m/en#/http%3a%2f%2fid.who.int%2ficd%2fentity%2f231358748. Accessed: Mar 2021.
6. Balco E. [Use of the WHODAS 2.0 Scale in Primary Health Care: perspectives for disability prevention and promotion of human functionality by the Family Health Strategy.] 2018. 155 p. Dissertation (Master Degree). Ribeirão Preto Medical School, University of São Paulo, Ribeirão Preto, São Paulo, Brazil, 2018.
7. Ustün TB, Kostanjsek N, Chatterji S, Rehm J. Measuring health and disability: manual for WHO Disability Assessment Schedule (WHODAS 2.0). World Health Organization; 2010.
8. Azevedo-Marques, JM. [Detection and diagnosis of mental disorders by the team of the family health program]. 2009. 172p. Thesis (Doctoral) – Ribeirão Preto Medical School, University of São Paulo, Ribeirão Preto, São Paulo, Brazil, 2009.
9. Araujo ES, Neves SFP. [International classification of functioning, disability and health, e-sus and tabwin: experiences of Barueri and Santo André, São Paulo]. Revista Baiana de Saúde Pública. 2015 abr/jun;39(2):470-477. doi: 10.5327/ Z0100-0233- 2015390200021.
10. de Azevedo-Marques JM, Zuardi AW. COOP/WONCA charts as a screen for mental disorders in primary care. Ann Fam Med. 2011 Jul-Aug;9(4):359-65. doi: 10.1370/afm.1267. PMID: 21747108; PMCID: PMC3133584.

Table

TABLE 1 | SOCIODEMOGRAPHIC AND FUNCTIONING CHARACTERISTICS OF THE SAMPLE OF 120 PHC PATIENTS

CHARACTERISTICS			
GENERAL	**SPECIFIC**	**N**	**%**
Condition in which you live at the time of the interview	Independent in the community	114	95.0 %
	With assistance in the community	6	5.0 %
Gender	Female	92	76.7 %
	Male	28	23.3 %
Age	18 to 39 years	58	49.0 %
	from 40 to 64 years	46	38.0 %
	65 and over	16	13.0 %
Study time (years)	0 to 3 years	16	13.3 %
	4 to 7 years	32	26.7 %
	8 to 11 years	44	36.7 %
	12 years or more	28	23.3 %
Education level	illiterate	10	8.3 %
	incomplete elementary school	47	39.2 %
	complete elementary school	13	10.9 %
	incomplete high school	11	9.2 %
	complete high school	32	26.6 %
	incomplete higher education	4	3.3 %
	complete higher education	3	2.5 %
Marital status	single	31	25.8 %
	married	43	35.8 %
	separated *	6	5.0 %
	divorced **	6	5.0 %
	widower	11	9.2 %
	lives with a partner	23	19.2 %
Work situation	paid work	27	22.5 %
	self-employed	26	21.7 %
	unpaid work ***	0	0.0 %
	student	2	1.7 %
	housewife ****	16	13.3 %
	retired	19	15.8 %
	unemployed (with health problems)	9	7.5 %
	unemployed (for other reasons)	12	0.0 %
	other *****	9	7.5 %
Functionin g according WHODAS 2.0 applied by PHC profession als	some level of disability reported (light to extreme)	115	95.8 %
	no reported disability level	5	4.2 %

*WHEN THE COUPLE JUST STOPS LIVING TOGETHER AS HUSBAND AND WIFE WITHOUT RESORTING TO THE JUDICIARY.
** DIVORCE IS WHEN THE COUPLE GO TO COURT AND BREAK ALL TIES OF MARRIAGE.
*** VOLUNTEER WORK OR CHARITY.
**** OPTION NOTED AS SHOWN IN THE SCALE TRANSLATION.
***** RETIRED DUE TO ILLNESS / DISABILITY, REMOVED FOR HEALTH REASONS, RECEIVING BENEFIT, IN THE PROCESS OF RETIREMENT.

Revista CIF Brasil. 2024;16(2):78-87 DOI: http://www.doi.org/10.4322/CIFBRASIL.2024.004

TABLE 2 - WHODAS 2.0 PROPERTIES VALUES FOUND IN THE SAMPLES OF 120 PHC'S PATIENTS AND 09 PROFESSIONALS

PSYCHOMETRIC PROPERTIES	MEASURES	VALUES
Internal consistency	Cronbach's Alpha	0.83
Interrater Reliability	Intraclass Correlation Coefficient (ICC) of the total score	0.97 - 95%
	Confidence Interval	0.95 - 0.98
	Intraclass Correlation Coefficient (ICC) of Individual Items	0.73 - 0.91
Concurrent validity (between WHODAS and WHOQOL- SHORT)	Spearman's Correlation Coefficient	0.54
APPLICABILITY		
Applicability in the evaluation of 120 users	Understandability of guidelines (n (%) of satisfactory responses)	87 (72.50)
	Understanding questions (n (%) of satisfactory responses)	95 (79, 20)
	Understanding responses (n (%) of satisfactory responses)	96 (80.00)
	Brief interview (n (%) of satisfactory responses)	117 (97.50)
	Relevance to day-to-day needs (n (%) of satisfactory responses)	86 (71.70)
	Relevance of use by FHS Professionals (n (%) of satisfactory responses)	113 (94.20)
Applicability in the evaluation of the 7 professionals	Understandability of guidelines by professionals (n (%) of satisfactory responses)	7 (100)
	Understandability of questions by professionals (n (%) of satisfactory answers)	7 (100)
	Understanding of professionals on how to give the answers to the scale (n (%) of satisfactory responses)	7 (100)
	Ease of filling in the answer sheet (n (%) of satisfactory answers)	7 (100)
	Brief assessment (n (%) of satisfactory responses)	7 (100)
	Understandability of questions by respondents (n (%) of satisfactory answers)	7 (100)
	Understanding of respondents on how to answer questions (n (%) of satisfactory answers)	7 (100)
	Relevance to the needs of people monitored by the team (n (%) of satisfactory responses)	7 (100)
	Relevance and differential information obtained (n (%) of satisfactory responses)	4 (57.14)
	Feasibility of insertion and use in the professional's work routine (n (%) of satisfactory responses)	2 (28.58)

Revista CIF Brasil. 2024;16(2):78-87 DOI: http://www.doi.org/10.4322/CIFBRASIL.2024.004