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Spanish cultural adaptation of the short version of the Multiple Sclerosis Work Difficulties Questionnaire (MSWDQ-23)☆

Adaptación cultural al español del cuestionario sobre las dificultades para trabajar con esclerosis múltiple. Versión corta de 23 ítems (MSWDQ-23)

Dear Editor,

Numerous studies have addressed the impact of multiple sclerosis (MS) on patients' work.[1] Most of these approach the question from a solely economic perspective, however: they calculate the number of days per year patients are absent from work due to MS and the indirect costs associated with work-related problems, and analyse the relationship between the level of disability (EDSS) and total cost due to MS.[1,2] In contrast, few studies address the specific professional difficulties facing MS patients and how these problems are perceived.[3] Furthermore, these studies use non-validated instruments, tools not specifically designed to evaluate work-related problems, or instruments that evaluate a limited set of difficulties.[1,3]

The Multiple Sclerosis Work Difficulties Questionnaire is a self-administered instrument evaluating the impact of MS on patients' professional lives; both the original 50-item version and the more recently developed shorter version (MSWDQ-23) have good psychometric properties.[4,5] Both were initially developed in English by a group of neuropsychologists from the University of New South Wales (Australia). The MSWDQ-23 contains 23 items with 5 response options (from 0 [never] to 10 [almost always]), which assess how frequently patients experienced difficulties in their current or most recent jobs over the previous 4 weeks. Items are grouped into 3 dimensions: physical, psychological/cognitive, and external barriers. The total scores for each dimension and for the questionnaire as a whole range from 0 to 100, with higher scores indicating greater difficulty. Patients' perception of cognitive barriers in the workplace, as measured with the MSWDQ-23, has been reported to be predictive of unemployment and reduced work hours since MS diagnosis.[6]

We describe the process of cultural adaptation of the MSWDQ-23 to the Spanish-speaking population. The adaptation followed the recommendations made by the International Society for Pharmacoeconomics and Outcomes Research[7]: (1) preparation, (2) forward translation, (3) reconciliation, (4) back translation, (5) back translation review, (6) harmonisation, (7) cognitive debriefing, (8) review of cognitive debriefing results, and (9) proofreading (Fig. 1).

Two independent native Spanish-speaking translators independently translated the questionnaire; the project coordinator subsequently reconciled the 2 translations with the assistance of the translators. The Spanish-language version introduced some language changes in the instructions

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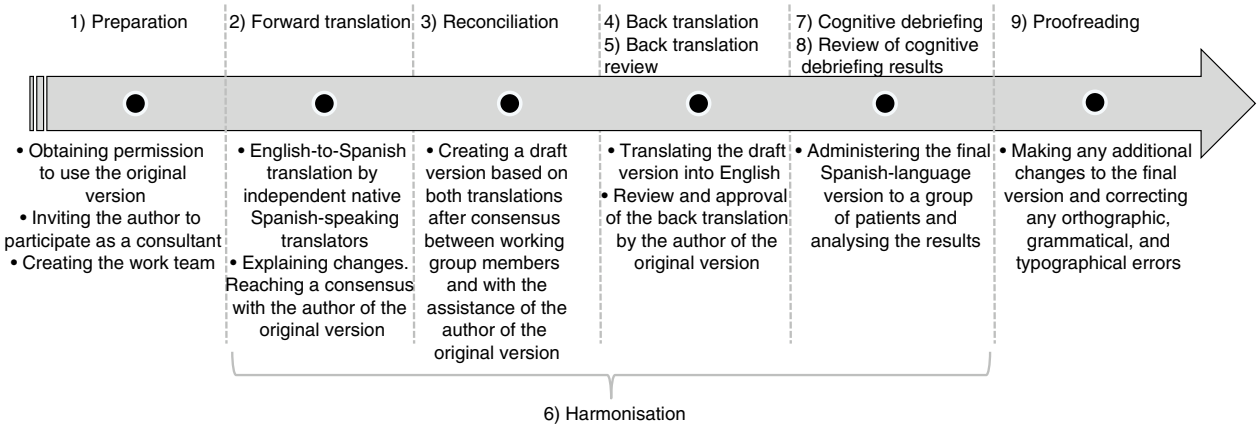

Figure 1 Stages of the standardised process of cultural adaptation of the MSWDQ-23 to the Spanish-speaking population.

and response options to make sentences flow well. The term ''workplace'' was translated as ''su trabajo'' (your job). Although ''por favor'' (please) is not commonly used in Spanish when giving instructions, we decided to preserve the expression but did not repeat it in subsequent sentences. In the final sentence of the instructions, the expression ''describing you'' was translated as ''en su caso'' (in your case) rather than literally. The response option ''rarely'' was translated as ''pocas veces'' (literally ''few times''), as in many other questionnaires. Minor changes were introduced to adapt sentences to colloquial Spanish. The words ''employer'' and ''manager'' were translated as ''jefe'' (boss). The expression ''tolerate the temperature'' was translated as ''aguantar la temperatura'' (cope with the temperature), since the term ''tolerar'' is more formal in Spanish and has a slightly different connotation than in English. The word ''struggle'' was changed for the expression ''me ha costado'' (I found it difficult). Item 20 (''I feared that I would be incontinent'') was the item with the greatest change since the adjective ''incontinente'' is rarely used in this context in Spanish; the sentence was rephrased to use the noun ''incontinencia'' (incontinence) and the verb ''fear'' was translated as the more natural expression ''sentir temor'' (to be afraid of). A native English-speaking translator participated in back translation and back translation review, using the Spanish-language version resulting from the reconciliation process. No significant differences were observed between the 2 translations; the first Spanish-language version agreed by all members of the research group was therefore used. The entire cultural adaptation process included a process of harmonisation, which involved active exchange of opinions between members of the research group; this stage constitutes a continuous quality control system to preserve concordance between the Spanish- and English-language versions. For the cognitive debriefing and the review of cognitive debriefing results, the Spanish-language version of the MSWDQ-23 was administered to 10 native Spanish-speaking patients with MS. This step is essential to ensure a good level of comprehension by the target population and to identify any potential sources of confusion. Mean age in the sample was 41.5 ± 11.4 years. Participants were predominantly women (80%) and had mainly completed primary and secondary education. All participants completed the questionnaire and none reported difficulty understanding any item, expression, or term. Some minor suggestions were made during the interviews. Contrary to the decision made during reconciliation, some patients preferred the expression ''tolerar la temperatura'' (tolerate the temperature), the literal translation of the English-language version, over ''aguantar la temperatura''. Item 12 (''He temido no ser capaz de mantenerme si no podía seguir trabajando''; I feared that I would not be able to support myself if I could no longer work) was not clear enough for some patients, so we decided to add the word ''económicamente'' (financially). These changes were incorporated to create the second Spanish-language version of the questionnaire. Finally, the project coordinator verified that there were no typographical, orthographic, or grammatical errors in the final version. The process of cultural adaptation of the MSWDQ-23 concluded after this final review, which produced the definitive version of the questionnaire for the Spanish-speaking population (Table 1).

During cultural adaptation, we detected no significant translation or comprehension difficulties that forced us to make major changes in the content of any item; this may be explained by the fact that items are short and simple and refer to very specific and common workplace situations. The number of patients included in the last phase is higher than that recommended by the International Society for Pharmacoeconomics and Outcomes Research, although the sample could have been more representative in terms of sex and education level. However, the fact that most participants had secondary studies ensures that the final version of the questionnaire is understandable for patients with higher levels of education. We can conclude that the Spanish-language version of the questionnaire is fully equivalent to the English-language version in terms of item content.

Using an appropriate methodology during the process of cultural adaptation is particularly relevant in a context where the results of patient-centred measures are becoming increasingly important for the approval of new therapies and are used by healthcare authorities to evaluate the benefits of certain treatments.[7–9]

The cultural adaptation of the MSWDQ-23 to the Spanish-speaking population constitutes the first step in evaluating the impact of MS on patients' professional lives. A psychometric validation of the questionnaire's properties (feasibility,

Table 1 Final Spanish-language version of the MSWDQ-23.

Instrucciones

Las personas con EM suelen experimentar dificultades en su trabajo que están relacionadas directa o indirectamente con sus síntomas. Las siguientes preguntas describen varias situaciones difíciles o problemáticas que una persona con EM puede encontrarse en el trabajo. Por favor, rodee con un círculo la respuesta adecuada 0, 1, 2, ...) según su experiencia diaria durante las últimas 4 semanas en su trabajo actual o más reciente. Conteste a todas las preguntas y si no está seguro/a de cuál respuesta elegir, escoja la que más se acerque a su caso.

Durante las últimas 4 semanas, mientras trabajaba en su puesto actual o más reciente, indique con qué frecuencia ha experimentado lo siguiente como consecuencia de su EM:

1. He experimentado una falta de coordinación en mis movimientos.
2. He considerado que mi jefe no era muy comprensivo con mis necesidades.
3. Me ha costado aprender cosas nuevas.
4. He pensado que mi jefe o mis compañeros de trabajo no me apoyaban.
5. He notado que las molestias en los intestinos o la vejiga me distraían a la hora de realizar una tarea.
6. Me han tenido que recordar que tenía que hacer una tarea en un momento determinado.
7. He notado que no podía rendir al nivel que se esperaba de mí.
8. Me ha costado tolerar la temperatura en el trabajo.
9. Me ha costado acceder a mi oficina o a mi lugar de trabajo.
10. Me ha costado recordar una conversación reciente.
11. He experimentado dolor mientras realizaba una tarea.
12. He temido no ser capaz de mantenerme económicamente si no podía seguir trabajando.
13. He sentido que me dormía mientras intentaba realizar una tarea larga.
14. Me ha costado mantener el equilibrio.
15. He tenido problemas para concentrarme en una tarea.
16. He tenido dificultades para comunicar mis pensamientos a mis compañeros de trabajo.
17. He notado que era más difícil compaginar el trabajo y las tareas domésticas.
18. Me ha costado escribir a mano o en el ordenador.
19. Me ha costado interactuar con la gente.
20. He sentido temor a tener incontinencia.
21. Me ha resultado difícil reducir mis horas de trabajo porque mi salario también se vería reducido.
22. He olvidado qué tarea tenía que hacer a continuación.
23. He sentido que el trabajo me resultaba más duro debido a las responsabilidades en casa.

validity, reliability, sensitivity to change) should be conducted in a Spanish-speaking population to confirm that the Spanish-language version is equivalent to the original questionnaire. The Spanish-language version of the MSWDQ-23 presented here is currently under validation in the Spanish population.

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Conflicts of interest

Mònica Sarmiento works for QuintilesIMS and Jorge Maurino belongs to the medical department of Roche España. The remaining authors have no conflicts of interest to declare.

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Bilateral haemorrhagic papilloedema secondary to carboplatin use☆

Edema de papila bilateral hemorrágico secundario a carboplatino

Dear Editor,

Carboplatin is a chemotherapeutic agent used for the treatment of lung, head and neck, kidney, ovarian, and breast cancer; it is better tolerated than cisplatin and is associated with a low incidence of non-haematological complications. The most frequent adverse reactions result from myelosuppression: anaemia, thrombocytopaenia, and neutropaenia. Neurotoxicity is usually associated with peripheral neuropathy and ototoxicity; ocular toxicity, a frequent adverse reaction to cisplatin, is rare in patients treated with carboplatin. Adverse reactions also depend on the route of administration[1]; intracarotid administration may cause palpebral oedema and erythema, ptosis, conjunctival hyperaemia, chemosis and corneal oedema of the eye ipsilateral to the injection, acute glaucoma, optic neuropathy, macular pigment changes, and exudative retinal detachment.[2–5] The literature also reports cases of orbital pseudotumour ipsilateral to the site of intracarotid infusion of carboplatin in patients with brain tumours.[6] Adverse reactions to intravenous carboplatin, as administered in the case presented here, include cortical blindness, eye pain, blurred vision, chorioretinitis, and optic neuritis.

We present the case of a 61-year-old woman diagnosed with invasive ductal breast carcinoma. She had received chemotherapy and radiotherapy (doxorubicin-cyclophosphamide, capecitabine-bevacizumab); an initially good response was followed by tumour progression and metastasis. She was finally treated with 4 cycles of carboplatin at standard doses (carboplatin area under the curve of 6 every 21 days), showing good tolerance with the exception of anaemia and thrombocytopaenia. She was referred to the neuro-ophthalmology department due to a one-month history of vision loss in the right eye, coinciding with the end of the last cycle of treatment. Visual acuity was 0.5 in the right eye and 0.8 in the left. Biomicroscopy revealed no abnormalities; intraocular pressure was normal bilaterally. The eye fundus examination revealed bilateral papilloedema with a haemorrhagic component, predominantly in the left eye (Fig. 1). The 24-2 Humphrey visual field test revealed inferior field loss, which was deeper in the right eye. Optical coherence tomography (Heidelberg Engineering Inc., Heidelberg, Germany) showed increased nerve fibre layer thickness, especially in the left eye, and increased macular thickness in both eyes, predominantly in the right. Complementary test results were normal (lumbar puncture, complete blood count, serology study). MRI showed residual punctiform lesions from previously treated brain metastases, radiotherapy-induced leukoencephalopathy, and chronic thrombosis of the right transverse and sigmoid venous sinuses, which had been observed previously and showed no changes from previous MRI studies; we ruled out differential diagnosis of bilateral tumoural infiltration of the optic nerve and primary or secondary intracranial hypertension. The oncologist discontinued carboplatin; papilloedema disappeared progressively over the following 4 months (Fig. 2), leaving papillary pallor in the right eye and atrophy in the posterior pole of both eyes. The patient displayed visual acuity of 0.8 in the right eye and 1.0 in the left; the 24-2 Humphrey visual field test showed mild improvements in the depth and extension of the inferior field defects. Optical coherence tomography revealed decreased nerve fibre layer thickness in the superior quadrant of both eyes and improvements in macular thickness in the right eye.

The literature includes few cases of papilloedema secondary to carboplatin; the cases reported are usually associated with high-dose treatment and kidney failure. In 1992, O'Brien et al.[7] described 2 cases of cortical blindness in patients with ovarian cancer treated with high-dose carboplatin (720 and 900 mg, respectively). According to the authors, CNS toxicity may result from carboplatin crossing the blood–brain barrier combined with impaired renal excretion. Until that time, pharmaceutical companies marketing carboplatin had reported only 10 cases of ocular toxicity (eye pain, blurred vision, chorioretinitis, optic neuritis, and eye alterations), but no cases of cortical blindness had been described. Both cases showed nearly complete recovery.

In 1993, Rankin and Pitts[8] presented the cases of 2 patients with ovarian cancer treated with carboplatin who

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