Proposal for a Consensus Version of the Fibromyalgia Impact Questionnaire (FIQ) for the Spanish Population

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Objective: To obtain an updated FIQ consensus version for patients in Spain, the Cuestionario de Impacto de la Fibromialgia (CIF).

Material and methods: The CIF elaboration was carried out with the participation of all the groups of researchers in the 4 previous FIQ Spanish versions, and taking into account the recent updated version of the original FIQ. The CIF was completed by a sample of fibromyalgia patients to explore how comprehensible its items are and to compare its global score with 2 fibromyalgia composite severity indexes, one semi-objective and one subjective. The corresponding Spearman correlation coefficients were determined.

Results: The main modifications introduced in the questionnaire are shown. Some patients were confused in their responses to subitem "j" and item 3, but not with regard to the remaining items or subitems. Correlation coefficients between the CIF and the semi-objective and subjective fibromyalgia severity indexes were 0.57 and 0.76, respectively (p < 0.001).

Conclusion: The CIF is proposed as an updated Spanish version of the FIQ.

Key words: Fibromyalgia. Consensus. Quality of life. Questionnaires.

Material y métodos: La confección del CIF se llevó a cabo con participación de todos los grupos de investigadores de las 4 versiones españolas previas del FIQ y teniendo en consideración la reciente versión actualizada del original. Se aplicó el CIF a una muestra de pacientes con fibromialgia para explorar la comprensibilidad de sus ítems y comparar las puntuaciones del cuestionario con 2 índices compuestos: "semiobjetivo" y "subjetivo" de gravedad de la fibromialgia. Se determinaron los correspondientes coeficientes de correlación de Spearman.

Resultados: Se exponen las principales modificaciones introducidas en el cuestionario. Algunos pacientes confundieron las respuestas al subítem "j" y al ítem 3, los restantes ítems y subítems no plantearon problemas. Los coeficientes de correlación entre las puntuaciones del CIF y los índices semiobjetivo y subjetivo fueron de 0,57 y 0,76, respectivamente (p < 0.001).

Conclusión: Se propone el CIF como versión española actualizada y de consenso del FIQ.


Introduction

The evaluation of patients with fibromyalgia is based, on a large scale, on the usage of health questionnaires, among which the presence of the Fibromyalgia Impact Questionnaire (FIQ) is notable. In a recent study it has been shown that there are 4 different versions in Spanish of this questionnaire, having been denominated FIQ1, FIQ2, FIQ3, and FIQ4, all of them derivations of the original version proposed in the United States, which has been recently updated. The objective of this study are: a) to reach a consensus version of the FIQ, that collects the improvements of the updated version of the original, and b) to carry out an initial, exploratory study of the resulting questionnaire.
Material and Methods

Building a Consensus Questionnaire

A consensus group was constituted formed by the persons responsible for adapting the FIQ to the Spaniard population and the comparative study between the 4 versions. FIQ3 was taken as a reference, authored by Rivera et al1, which presented better psychometric properties than the rest of the adaptations and a pilot version was elaborated from: a) the inclusion of improvements introduced in the updated versions of the original FIQ; b) the modifications proposed in the adaptation studies of the other Spanish versions of the FIQ; and c) the results of a study on semantic equivalence of the Spanish versions with respect to the original FIQ. This pilot version was evaluated and modified by the investigation team in successive phases between the months of April and June 2005, until an accord between the different contributions received. The final version of the consensus was denominated Cuestionario de Impacto de la Fibromialga (CIF) (Annex).

Initial Exploratory Study for the Cuestionario de Impacto de la Fibromialga

The following measures were undertaken: a) a qualitative evaluation of the questionnaire comprehensibility, and b) a criteria validity study done by comparing the punctuations of the CIF with 2 compound indexes, designed specifically for this work. Patients diagnosed with fibromyalgia according to the criteria proposed by the American College of Rheumatology (ACR) were included; they were sent from the outpatient rheumatology clinics dependent of the Hospital General Universitario de Alicante, Spain, and accepted to comply with the questionnaires and did not present any other incapacitated illness nor were they eager to receive economic compensation. The study followed all of the rulings of the local ethics committee.

The clinical evaluation consisted in counting the painful trigger points proposed by the ACR, a global passive motility evaluation of the patients (GPME), designed for this work (Table), and the collection, through an interview, of multiple clinical and socio-demographic variables, among which, as a severity measure, an evaluation of the presence (or absence) of psychiatric, medical or locomotive co morbidities was included, as well as the total number of medications taken in a habitual manner during the 2 weeks prior to the study.

The patients complied with the CIF and the following questionnaires: a numerical evaluation on the quality of nocturnal sleep; a Spanish version of the Fibromyalgia Health Assessment Questionnaire (FHAQ); built from a spanish version of the HAQ; the Spanish version of the Hospital Anxiety and Depression Scale (HADS) and a visual analog scale (HAQ) of current pain. Once the questionnaires were completed, the investigator reviewed them in the presence of the patients. A compound semi-objective index of severity of fibromyalgia was elaborated (index 1), by adding the following, recoded variables: co-morbidity (0 to 10 points), painful trigger point count (0–10), GPME (0–10), number of medications (0–10), work, family status (living alone =+5 points) and physical exercise (exercising =−3 points). Work was scored in the following manner: active full time =−5 points; active part time =−3 points; unemployed =+5 points; permamently incapacitated =+3 points; temporally incapacitated =+5 points. The final scoring of this index 1 could oscillate between 0 and 50.

In the same way, a compound subjective index of severity of fibromyalgia (index 2) was elaborated, parting from the sum of the following recoded variables: FHAQ (0 to 30 points), VAS of actual pain (0–30), total score HADS (0–30) and sleep quality scale (0–10). The final scoring of this index 2 could oscillate between 0 and 100. In both these indexes, a larger punctuation indicated greater severity of the disease.

Statistical Analysis

Descriptive statistics for the CIF scores were obtained, as well as for the GPME and indexes 1 and 2. The criteria for validity was evaluated using the Spearman correlation coefficient (rS), among the total CIF scores ad the 2 compound indexes.

Results

1. The CIF is very similar to the FIQ3,4 differentiated from it by the inclusion of the consideration of domestic

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**TABLE. Global Patient Motility Evaluation (GPME)**

<table>
<thead>
<tr>
<th>Score</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>0–2</td>
<td>No limitation</td>
</tr>
<tr>
<td>3–4</td>
<td>Limitation of movement in 1 of the 5 regions explored</td>
</tr>
<tr>
<td>5–6</td>
<td>Limitation of movement in 2 of the 5 regions explored</td>
</tr>
<tr>
<td>7–8</td>
<td>Limitation of movement in 3 of the 5 regions explored</td>
</tr>
<tr>
<td>9–10</td>
<td>Limitation of movement in 4 of the 5 regions explored</td>
</tr>
<tr>
<td>10</td>
<td>Limitation of the 5 explored regions</td>
</tr>
</tbody>
</table>

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- 0-2 No limitation
- 3-4 Limitation of movement in 1 of the 5 regions explored
- 5-6 Limitation of movement in 2 of the 5 regions explored
- 7-8 Limitation of movement in 3 of the 5 regions explored
- 9-10 Limitation of movement in 4 of the 5 regions explored
- 10 Limitation of the 5 explored regions

Passive movements of the shoulders, cervical, thoracic, lumbar column, and hips. Limitation is considered when motility is limited to 50% or more or is frankly impaired.
work in items 3 and 4, the addition of numeric VAS descriptors (items 4 to 10) and the modification of the quantifiable aspects of the answer to item 7 ("rested/very rested," instead of "well/very rested"). Apart from this, item 1 was completed with the inclusion of the item "climbing stairs," and small grammatical changes were done to sub-items "b," "d," and "h," that did not substantially alter their meaning. The sample was formed by 54 patients, with a mean age ± standard deviation (SD) of 44.2±9.3 years; 4 were men and the rest, women. The mean score ± SD of the CIF was 70.5±11.8 and the median (P10-P75) 71.3 (62-78.3). The median score of the GPME was 2 (1-4) and the distribution of this scale followed a bimodal curve; the scores in most patients fluctuated from 0 to 5 and in a more reduced group they were observed to be between 8 and 10. The median (P10-P75) of the 1 and 2 scores was 16.7 (10.3-21.8) and 56.2 (46.8-65.1), respectively.

Comprehensibility

The review of the CIF by the main investigator (JEV) showed that 17 of the 54 patients (31.5%) responded to sub item "j" (using public transportation) with a 3 (never able to do it) or a 2 (occasionally able to do it) when, if the instructions of the questionnaire were followed, they should have crossed out the answer, they left it unanswered. Item 3 (a few days…could not do their usual job…) was incorrectly understood by 3 of the 54 patients (5.6%). The rest of the items and sub-items did not pose an important problem regarding their comprehension.

Criteria Validity

CIF scores were correlated in an acceptable manner to the semi-objective index (rS=0.57; P<0.001) and especially well with the subjective index (rS=0.76; P<0.001).

Discussion

The main contribution of this work has been to build a reference group with the investigators that have adapted the 4 validated versions in Spanish of the FIQ,10-13 which has enabled the incorporation of the latest modifications of the updated version of the original FIQ and to elaborate an improved consensus version. This version, the CIF allows the evaluation in all patients of 2 dimensions of functional capacity, the frequency with which activities of daily living are carried out (items 1 and 3) and the difficulty to carry out these activities (item 4). With the previous versions, this type of evaluation was only possible in the sub-group of patients with a paying job.

The comprehension study of the CIF showed confusion by the patients on the response to item 3 and, especially, to item "j" (using public transportation), suggesting a brief review of the questionnaire once it has been completed by the patient. With the transformation of the VAS in numeric scales an easier compliance was achieved on the part of the patient, making the precess of correction of the questionnaire easier also. A classic study14 already demonstrated that numeric scales have a greater degree of trustworthiness than VAS, especially in patients with limited reading comprehension skills.

The mean score of the CIF in our sample was 70.5 points, similar to that published in other Spanish studies.11 The mean scores of the FIQ in other countries are generally lower: 57.2 in the Italian version,11 57.6 in the German version14 (after normalizing it to a 0-100 scale), or 58.2 in the Swedish version.12

The criteria validity study showed a good correlation to the CIF with the semi-objective and subjective indexes. The evaluation of the severity of fibromyalgia from a compound index of semi-objective measures, such as the GPME and the ACR trigger-point count, is a new concept that can be interesting to future studies of this disease. Though the present study cannot be considered a validation study in all of its aspects, we consider that the proposed questionnaire can be of interest in the evaluation of patients with fibromyalgia in Spain.

References


**ANNEX. Cuestionario de Impacto de la Fibromialga (CIF) (Spanish Version)**

Rodee con un círculo el número que mejor describa cómo se encontró durante la última semana. Si no tiene costumbre de realizar alguna actividad, tache la pregunta.

<table>
<thead>
<tr>
<th>1. ¿Ha sido usted capaz de...</th>
<th>Siempre</th>
<th>La mayoría de las veces</th>
<th>En ocasiones</th>
<th>Nunca</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Hacer la compra?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>b. Hacer la colada con lavadora?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>c. ¿Preparar la comida?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>d. ¿Lavar a mano los platos y los cacharros de cocina?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>e. ¿Pasar la fregona, la mopa o la aspiradora?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>f. ¿Hacer las camas?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>g. ¿Caminar varias manzanas?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>h. ¿Visitar a amigos o parientes?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>i. ¿Subir escaleras?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>j. ¿Utilizar transporte público?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

2. ¿Cuántos días de la última semana se sintió bien? 0 1 2 3 4 5 6 7

3. ¿Cuántos días de la última semana no pudo hacer su trabajo habitual, incluido el doméstico, por causa de la fibromialgia? 0 1 2 3 4 5 6 7

Redondee con un círculo el número que mejor indique cómo se sintió en general durante la última semana:

<table>
<thead>
<tr>
<th>4. En su trabajo habitual, incluido el doméstico, ¿hasta qué punto el dolor y otros síntomas de la fibromialgia dificultaron su capacidad para trabajar?</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. ¿Cómo ha sido su fuerte el dolor?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>6. ¿Cómo se ha encontrado de cansado/a?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>7. ¿Cómo se ha sentido al levantarse por las mañanas?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>8. ¿Cómo se ha notado de rígido/a o agotado/a?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>9. ¿Cómo se ha notado de nervioso/a, tenso/a o angustiado/a?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>10. ¿Cómo se ha sentido de deprimido/a o triste?</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
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