Spanish translation, adaptation, and validation of the 32-item quality of life questionnaire (IBDQ-32) for inflammatory bowel disease

M. Masachs, F. Casellas and J. R. Malagelada

Unitat d’Atenció Crohn-Colitis. Vall d’Hebron University Hospital. Ciberehd. Barcelona, Spain

RESUMEN

Introducción: la medida de la calidad de vida relacionada con la salud (CVRS) tiene una reconocida importancia en la evaluación, el manejo y el seguimiento de la enfermedad inflamatoria intestinal. El instrumento de medida más utilizado es la versión de 32 ítems del Inflammatory Bowel Disease Questionnaire (IBDQ-32), que no está adaptado al español.

Objetivo: traducir la versión del IBDQ-32 al español y determinar su validez, fiabilidad y sensibilidad tanto en la colitis ulcerosa como en la enfermedad de Crohn.

Método: estudio prospectivo en dos fases: traducción y posterior validación del IBDQ-32 al español. La traducción se ha basado en la versión al español validada del IBDQ-36, y los ítems del IBDQ-32 no incluidos en el IBDQ-36 se tradujeron “de novo”. Una vez terminada la traducción del IBDQ-32, se aplicó un cuestionario específico de comprensión. Para determinar las propiedades psicométricas del IBDQ-32, un grupo de pacientes completó el IBDQ-36 ya validado al español y el IBDQ-32.

Resultados: se han incluido 84 pacientes (53 con enfermedad de Crohn y 31 con colitis ulcerosa). La mediana de la puntuación global de ambos cuestionarios en los 84 pacientes no fue diferente (6,1 vs. 6,2, p = ns) y su correlación de Spearman fue muy significativa (r = 0,97, p < 0,001). La capacidad de discriminar entre pacientes con brote y remisión también fue equivalente en ambos cuestionarios (6,4 vs. 6,4 con r = 0,96 en remisión y 3,8 vs. 3,9 con r = 0,95 en actividad, p < 0,001 remisión vs actividad). Estos resultados se reproducieron en el análisis para EC y CU independientemente (6,4 vs. 6,4 y 6,7 vs. 6,6 respectivamente, p = ns).

Conclusión: la versión en castellano de 32 ítems del IBDQ es válida y discriminativa para ser aplicada en pacientes con enfermedad de Crohn o colitis ulcerosa.


ABSTRACT

Introduction: the measurement of health-related quality of life (HRQoL) has an established relevance in the assessment, management, and follow-up of inflammatory bowel disease. The most commonly used measuring instrument is the 32-item version of Inflammatory Bowel Disease Questionnaire (IBDQ-32), which has never been adapted to Spanish.

Objective: to translate IBDQ-32 into Spanish, and to establish its validity, reliability, and sensitivity both in ulcerative colitis and Crohn’s disease.

Method: a prospective study in two phases – translation into Spanish and subsequent validation of IBDQ-32. Translation was based on the validated Spanish version of IBDQ-36, and IBDQ-32 items not included in IBDQ-36 were translated from scratch. Once the IBDQ32 translation was completed a comprehensive-specific questionnaire was administered. To establish IBDQ-32 psychometric properties a group of patients completed both the validated Spanish version of IBDQ-36 and IBDQ-32.

Results: eighty-four patients (53 with Crohn’s disease and 31 with ulcerative colitis) were included. Median overall scores in both questionnaires for all 84 patients did not differ (6.1 vs. 6.2, p = ns), and Spearman’s correlation was highly significant (r = 0.97, p < 0.001). The ability to discriminate between patients in flare-up or remission was also equivalent for both questionnaires (6.4 vs. 6.4 with r = 0.96 in remission and 3.8 vs. 3.9 with r = 0.95 active, p < 0.001 for remission vs. activity). These results were obtained in both the analyses for CD and UC independently (6.4 vs. 6.4 and 6.7 vs. 6.6, respectively; p = ns).

Conclusion: the Spanish version of IBDQ-32 is valid and discriminating for patients with Crohn’s disease or ulcerative colitis.

INTRODUCTION

The goal of medical procedures is the management of disease and the restoration of health. In this respect the medical treatment of chronic conditions is basically focused on improving symptoms, reducing morbidity or lowering mortality. It has been recently acknowledged that a better perceived quality of life is highly beneficial and a key element in treating chronic diseases. Therefore health-related quality of life (HRQoL) has been brought to the fore in medicine, particularly in gastroenterology. Such interest is reflected by the fact that the subject is regularly cited in medical literature (1).

Based on the definition by World Health Organization (2), perceived health should be considered in the various domains of life. Organic symptoms, or their effects, are a basic domain of HRQoL. However, other dimensions functional, social, psychological, financial, spiritual, occupational, etc., in nature also exist. An assessment of the influence of health on the whole or specific dimensions is usually achieved by using questionnaires.

There are both generic and specific questionnaires available. The latter are specific for a selected disease, population, function, condition, or problem. Disease-specific instruments have the benefits of higher sensitivity, and of their being related to areas routinely analyzed by clinicians. Specific instruments have been developed to assess HRQoL in various diseases, including inflammatory bowel disease.

Crohn’s disease (CD) and ulcerative colitis (UC) are immunoinflammatory conditions that are relevant for patients, their families, and society (3,4). Based on the definition of health according to World Health Organization, CD and UC are chronic conditions that influence the physical, psychological, familial, and social dimensions of life. Physical and psychological involvement manifests as emotional or physical discomfort, sexual changes, loss of independence, life perception changes, fear of losing control and its consequences, etc. Familial involvement manifests as loss of family role, changes in family-related responsibilities, and family distancing while in hospital. Social involvement manifests as workplace changes, social isolation, and restricted salary or leisure activities. Implications for HRQoL are enhanced by the need for prolonged treatment and adverse events, the need for surgical resections with potential ostomies, regular visits, and likely hospital stays. In this respect the assessment of HRQoL plays a relevant role not only in the evaluation of the impact of inflammatory bowel disease on HRQoL but also in the evaluation of treatment effects.

Inflammatory bowel disease permanently impairs HRQoL. Its impact is more pronounced during flare-ups and subsides with remission periods; however, normal population HRQoL levels are never fully restored (5). HRQoL is influenced by a number of disease-related factors such as activity, hospitalization need, or number of annual flare-ups. Other well-known independent factors such as female gender and education also count (6). Anyhow, disease flare-ups are the most relevant HRQoL factor in IBD, with both a qualitative and quantitative impact (7,8). However, prior experience with IBD does not significantly influence perceived health (9).

Several instruments have been used to assess HRQoL in IBD. The most commonly administered questionnaire is the 32-item Inflammatory Bowel Disease Questionnaire (IBDQ-32) (10), and the extended 36-item Inflammatory Bowel Disease Questionnaire (IBDQ-36) (11). Unitat d’Atenció Crohn-Colitis (UACC) at Hospital Universitari Vall de Hebron has designed and validated an IBDQ-36-based short questionnaire including 9 items, with adequate psychometric properties (12) and correlation to endoscopic activity in patients with UC (13).

IBDQ was designed and validated in the English language and culture. Its cross-cultural Spanish adaptation requires that psychometric properties be established for the translated questionnaire in the setting of the new culture and language (14,15). When such methodological aspects are considered only IBDQ-36 has been translated and validated into Spanish (16). However, other countries have selected the adapted IBDQ-32 version. The lack of a properly translated Spanish version of IBDQ-32, both adapted to and validated in Spanish, limits the participation of Spanish centers in international studies, and precludes comparison with HRQoL results obtained in other countries in our area. Therefore, the goal of this study was to translate IBDQ-32 into Spanish, and to validate its understandability in said language as well as the questionnaire’s psychometric properties.

MATERIAL AND METHOD

Patients

The inclusion of a group of patients seen at UACC was suggested. An investigator explained study goals to patients, who gave their oral consent to take part. Patients refusing to participate because of inability to read or failure to complete questionnaires were excluded from the study.

Patients included had either CD or UC. A diagnosis was reached according to clinical, endoscopic, radiographic, and histological criteria (17). Demographic (age, sex, smoker status, occupational status, education) and basic clinical data on inflammatory bowel disease were collected.

The Harvey-Bradshaw index (18) was used to establish CD clinical activity, and Rachmilewitz’s index was used for UC (19). Both indexes are based on clinical variables such as stool number, presence of abdominal pain, general status, complications, fever, or extraintestinal manifestations. The disease was deemed active if the Harvey-Bradshaw index was greater than 2 or Rachmilewitz’s index was higher than 6.
Procedure

The translation of the native questionnaire was based on the Spanish translation and adaptation of IBDQ-36, and thus most questions required no new translation. IBDQ-32 questions not included in the Spanish IBDQ-36 were translated by bilingual experts. To ensure adequate understanding for newly translated items, a comprehension-specific questionnaire was designed upon completion of IBDQ32 translation (“Have you had difficulties understanding the question? What does the question mean to you? Do you consider the question relevant for your current situation? How would you pose this question yourself? Do you find a logical relationship between question and answer?”), which was administered to a reduced number of patients. The Annex includes questionnaire IBDQ-32 with all items and responses included.

To establish the psychometric properties of the Spanish IBDQ-32 version the one quality-of-life questionnaire for IBD that has been translated into Spanish, namely IBDQ-36, was used for reference (16). Each patient completed two HRQoL questionnaires—the previously validated IBDQ36, and the new IBDQ32. The Spanish IBDQ-36 version was selected as gold standard because of its being the only specific questionnaire already translated into and validated in Spanish (16). It has 36 items in 5 domains (gastrointestinal symptoms, systemic symptoms, emotional involvement, social involvement, and functional impact). Responses to every item are scored 7 points, where 7 is the highest and 1 the lowest level. The instrument yields an overall score for all items, and 5 scores for each domain (gastrointestinal symptoms, systemic symptoms, emotional involvement, and social impact). IBDQ-32 has no functional domain. Responses to every item are scored on a 7-point scale where 7 is the best and 1 the poorest perceived HRQoL. The instrument yields an overall score for all items, and 5 scores for each domain.

Statistical analysis

Variables are described as median and 25-75 percentile values. Differences between median values were established using the Mann-Whitney or Kruskal-Wallis test. Correlations were estimated using Spearman’s correlation test. Statistical significance was accepted for p < 0.05 (5%).

RESULTS

A total of 84 patients, 53 with CD and 31 with UC, were included. Population characteristics are listed in Table I. Median age for the study population was 38 years (37-43), similar for both UC45 (43-53) and CD32 (32-39). Gender distribution shows a slight masculine predominance with 46 males and 38 females. Smokers also predominated among CD patients. Regarding site, pancolitis was first followed by proctocolitis and left colitis in patients with ulcerative colitis. Ileocolic and terminal ileal involvement was most common among subjects with CD. At questionnaire completion most patients were in clinical remission (73 vs. 27% in active stages).

Regarding overall results median overall IBDQ-32 scores for all 84 patients were no different from those obtained using IBDQ-36 (6.1 vs. 6.2, p = ns) (Table II), and Spearman’s correlation was highly significant (r = 0.97, p < 0.001) (Table III), which suggests adequate equivalence between both questionnaires. Results per domain (gastrointestinal symptoms, systemic symptoms, emotional involvement, and social impact) also did not differ between IBDQ-32 and IBDQ-36 (Table II). The power to discriminate between patients in flare-up or remission was also similar for both questionnaires (6.4 vs. 6.4 with r = 0.96 in remission, and 3.8 vs. 3.9 with r = 0.95 in activity, p < 0.001 for remission and activity), which shows that the new IBDQ-32 has adequate discriminating power.

### Table I. Characteristics of patients included in the study. Results are described as median (25-75 percentiles) or number (%) values

<table>
<thead>
<tr>
<th>Variables</th>
<th>Total</th>
<th>Ulcerative colitis</th>
<th>Crohn’s disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of patients</td>
<td>84</td>
<td>31</td>
<td>53</td>
</tr>
<tr>
<td>Age</td>
<td>38</td>
<td>45 (43-53)</td>
<td>32 (32-39)</td>
</tr>
<tr>
<td>Gender (male/female)</td>
<td>46/38</td>
<td>17/14</td>
<td>21/32</td>
</tr>
<tr>
<td>Tobacco use</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoker</td>
<td>34 (40%)</td>
<td>7 (23%)</td>
<td>27 (51%)</td>
</tr>
<tr>
<td>Ex-smoker</td>
<td>14 (17%)</td>
<td>5 (16%)</td>
<td>9 (17%)</td>
</tr>
<tr>
<td>Non-smoker</td>
<td>36 (43%)</td>
<td>19 (61%)</td>
<td>17 (32%)</td>
</tr>
<tr>
<td>Site</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proctitis (E1)</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colitis ileq. (E2)</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pancolitis (E3)</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G-I alto (L4)</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remission</td>
<td>68 (81%)</td>
<td>27 (87%)</td>
<td>41 (77%)</td>
</tr>
<tr>
<td>Flare-up</td>
<td>16 (19%)</td>
<td>4 (13%)</td>
<td>12 (23%)</td>
</tr>
<tr>
<td>Clinical activity index</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remission</td>
<td>1 (0.6-1.9)</td>
<td>1 (0.6-1.1)</td>
<td>1 (0.6-1.1)</td>
</tr>
<tr>
<td>Flare-up</td>
<td>6 (5.4-7)</td>
<td>6 (4.8-7.9)</td>
<td></td>
</tr>
<tr>
<td>Months standing</td>
<td>108 (93-124)</td>
<td>126 (89-145)</td>
<td>108 (85-122)</td>
</tr>
<tr>
<td>Activity index (flare-up/yr)</td>
<td>0.49 (0.5-0.77)</td>
<td>1 (0.8-2.3)</td>
<td>1 (1.36-2.8)</td>
</tr>
</tbody>
</table>

### Table II. Results obtained in questionnaires IBDQ-36 and IBDQ-32 for all 84 patients, expressed as median and percentile values

<table>
<thead>
<tr>
<th></th>
<th>IBDQ-36</th>
<th>IBDQ-32</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>6.2 (5.3-5.9)</td>
<td>6.1 (5.3-5.9)</td>
</tr>
<tr>
<td>DI</td>
<td>6.1 (5.5-6.6)</td>
<td>6.2 (5.6-6.6)</td>
</tr>
<tr>
<td>Systemic</td>
<td>5.6 (5.1-5.6)</td>
<td>5.6 (4.8-5.5)</td>
</tr>
<tr>
<td>Emotional</td>
<td>6.2 (5.2-5.9)</td>
<td>6.1 (5.2-5.8)</td>
</tr>
<tr>
<td>Functional</td>
<td>6.4 (5.6-6.6)</td>
<td>6.8 (5.5-6.3)</td>
</tr>
<tr>
<td>Social</td>
<td>6.5 (5.6-6.1)</td>
<td>6.8 (5.5-6.3)</td>
</tr>
</tbody>
</table>
As regards results from CD and UC independent analyses, median overall IBDQ-36 scores did not differ from IBDQ-32 scores (6.4 vs. 6.4 and 6.7 vs. 6.6 for CD and UC, respectively; p = ns) (Tables IV and V), and Spearman’s correlation between both questionnaires was highly significant (r = 0.97 and p < 0.0001 for CD, and r = 0.98 and p < 0.0001 for UC). Results per domain (gastrointestinal symptoms, systemic symptoms, emotional involvement, and social impact) also did not differ between IBDQ-36 and IBDQ-32 when CD and UC were independently analyzed (Tables IV and V). The capability to discriminate between patients with CD in flare-up or remission was similar for both questionnaires. For patients with CD in remission questionnaire scoring was 6.4 and 6.4 for IBDQ-36 and IBDQ-32, respectively, with a correlation between both questionnaires of r = 0.94 (p < 0.001); for patients with CD in flare-up it was 4 and 4.1 for IBDQ-36 and IBDQ-32, respectively, with r = 0.99 (p < 0.001) between both questionnaires.

These results were reproduced for UC (Tables VI and VII). For patients with UC in remission questionnaire scoring was 6.4 and 6.4 for IBDQ-36 and IBDQ-32, respectively, with a correlation between both questionnaires of r = 0.98 (p < 0.001); for patients with UC in flare-up it was 3.6 and 3.6 for IBDQ-36 and IBDQ-32, respectively, with r = 0.40 (p > 0.05) between both questionnaires. The presence of the aforementioned differences between IBDQ-32 scores per activity extent validate the new questionnaire construct for both patients with CD and UC. Figures 1 and 2 depict the correlation between clinical activity index and IBDQ-32 score. A significant correlation is seen, and overall scores parallel the clinical activity index.
DISCUSSION

IBD entails a health impairment that manifests in changed attitudes and behaviors at the physical, emotional, and social level. The study of HRQoL in IBD allows not only a better understanding of this condition and its impact, but also has relevant repercussions other than purely clinical. HRQoL involvement in IBD has been seen to have predictive value for healthcare resource use (20), is a good marker for therapeutic effects on disease (21), and is routinely included in pharmacoeconomic analyses (22). All this suggests that understanding the impact of IBD on patient HRQoL is useful because of medical, social, and healthcare resource distribution implications.

Most questionnaires measuring HRQoL in IBD have been specifically designed and validated for English-speaking populations. A simple literal translation of a questionnaire into another language will not ensure reliability; item understandability in the target language and the psychometric properties of every translated questionnaire must be established before administration. In this respect IBDQ has been appropriately translated into and validated in a number of languages including Spanish. Validated 36-item and 9-item IBDQ versions are available in Spanish. However, the most widely used instrument on an international basis is currently the 32-item version of IBDQ (IBDQ-32); the fact that this version had not been appropriately translated into and validated in the Spanish language led to the present study. To simplify translation items shared by IBDQ-32 and IBDQ-36 have been taken from the Spanish version of IBDQ-32. IBDQ-32 questions not included in IBDQ-36 were translated by English-speaking individuals, and their understandability was then established.

IBDQ-32 psychometric properties were then established. The new questionnaire has proven capable of discriminating between patients in remission or flare-up both

Annex. IBDQ-32 after its Spanish translation, adaption, and validation

<table>
<thead>
<tr>
<th>MARQUE CON UN CÍRCULO LA RESPUESTA QUE CORRESPONDE MÁS EXACTAMENTE CON SU SITUACIÓN DURANTE LAS ÚLTIMAS DOS SEMANAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ¿Con qué frecuencia ha ido de vientre durante las últimas dos semanas?</td>
</tr>
<tr>
<td>☐ 1. Más frecuentemente que nunca</td>
</tr>
<tr>
<td>☐ 2. Extremada frecuencia</td>
</tr>
<tr>
<td>☐ 3. Con mucha frecuencia</td>
</tr>
<tr>
<td>☐ 4. Moderado aumento de la frecuencia de defecación</td>
</tr>
<tr>
<td>☐ 5. Ligero aumento de la frecuencia de defecación</td>
</tr>
<tr>
<td>☐ 6. Aumento mínimo de la frecuencia de defecación</td>
</tr>
<tr>
<td>☐ 7. Normal, sin ningún aumento de la frecuencia de defecación</td>
</tr>
</tbody>
</table>

2. ¿Con qué frecuencia le ha causado problemas la sensación de fatiga o de cansancio y agotamiento durante las últimas dos semanas?
   ☐ 1. Siempre
   ☐ 2. Casi siempre
   ☐ 3. Bastantes veces
   ☐ 4. A veces
   ☐ 5. Pocas veces
   ☐ 6. Casi nunca
   ☐ 7. Nunca

3. ¿Con qué frecuencia se ha sentido frustrado, impaciente o inquieto a causa de su problema intestinal durante las últimas dos semanas?
   ☐ 1. Siempre
   ☐ 2. Casi siempre
   ☐ 3. Bastantes veces
   ☐ 4. A veces
   ☐ 5. Pocas veces
   ☐ 6. Casi nunca
   ☐ 7. Nunca

4. ¿Con qué frecuencia se ha visto incapacitado para ir a estudiar o al trabajo a causa de su problema intestinal durante las últimas dos semanas?
   ☐ 1. Siempre
   ☐ 2. Casi siempre
   ☐ 3. Bastantes veces
   ☐ 4. A veces
   ☐ 5. Pocas veces
   ☐ 6. Casi nunca
   ☐ 7. Nunca

5. ¿Durante cuánto tiempo en las últimas dos semanas ha tenido diarrea?
   ☐ 1. Siempre
   ☐ 2. Casi siempre
   ☐ 3. Bastantes veces
   ☐ 4. A veces
   ☐ 5. Pocas veces
   ☐ 6. Casi nunca
   ☐ 7. Nunca

6. ¿Cuánta energía ha tenido durante las últimas dos semanas?
   ☐ 1. Ninguna energía
   ☐ 2. Muy poca energía
   ☐ 3. Poca energía

Fig. 2. Correlation of clinical activity index to overall IBDQ-32 score in patients with ulcerative colitis.
7. ¿Con qué frecuencia ha estado preocupado ante la posibilidad de tener que operarse por su problema intestinal durante las últimas dos semanas?
   - Siempre
   - Casi siempre
   - Bastantes veces
   - A veces
   - Pocas veces
   - Casi nunca
   - Nunca

8. ¿Con qué frecuencia ha tenido que aplazar o anular una cita o compromiso social a causa de su problema intestinal durante las últimas dos semanas?
   - Siempre
   - Casi siempre
   - Bastantes veces
   - A veces
   - Pocas veces
   - Casi nunca
   - Nunca

9. ¿Con qué frecuencia ha tenido retortijones durante las últimas dos semanas?
   - Siempre
   - Casi siempre
   - Bastantes veces
   - A veces
   - Pocas veces
   - Casi nunca
   - Nunca

10. ¿Con qué frecuencia ha tenido malestar general durante las últimas dos semanas?
    - Siempre
    - Casi siempre
    - Bastantes veces
    - A veces
    - Pocas veces
    - Casi nunca
    - Nunca

11. ¿Con qué frecuencia ha estado preocupado por temor a no encontrar un lavabo cerca durante las últimas dos semanas?
    - Siempre
    - Casi siempre
    - Bastantes veces
    - A veces
    - Pocas veces
    - Casi nunca
    - Nunca

12. ¿Qué dificultad ha tenido, a causa de su problema intestinal, en las actividades de ocio o deportes que le hubiera gustado hacer durante las últimas dos semanas?
    - Muchísima dificultad; imposible hacer actividades
    - Mucho dificultad
    - Bastante dificultad
    - A algo de dificultad
    - Un poco de dificultad
    - Apenas ninguna dificultad
    - Ninguna dificultad; mi problema intestinal no ha limitado mis actividades de ocio ni deportivas

13. ¿Con qué frecuencia ha tenido dolor abdominal durante las últimas dos semanas?
    - Siempre
    - Casi siempre
    - Bastantes veces
    - A veces
    - Pocas veces
    - Casi nunca
    - Nunca

14. ¿Con qué frecuencia ha tenido problemas porque se ha despertado por la noche durante las últimas dos semanas?
    - Siempre
    - Casi siempre
    - Bastantes veces
    - A veces
    - Pocas veces
    - Casi nunca
    - Nunca

15. ¿Con qué frecuencia se ha sentido deprimido o desanimado a causa de su problema intestinal durante las últimas dos semanas?
    - Siempre
    - Casi siempre
    - Bastantes veces
    - A veces
    - Pocas veces
    - Casi nunca
    - Nunca

16. ¿Con qué frecuencia durante las últimas dos semanas ha tenido que dejar de asistir a actos sociales porque no había un lavabo cerca?
    - Siempre
    - Casi siempre
    - Bastantes veces
    - A veces
    - Pocas veces
    - Casi nunca
    - Nunca

17. En general, ¿hasta qué punto ha sido un problema tener gases durante las últimas dos semanas?
    - Un gran problema
    - Un problema importante
18. En general, ¿hasta qué punto ha sido un problema durante las últimas dos semanas el mantenir o llegar al peso que a Vd. le gustaría?

- 1. Un gran problema
- 2. Un problema importante
- 3. Bastante problemático
- 4. Algo problemático
- 5. Muy poco problemático
- 6. Casí ningún problema
- 7. Ningún problema

23. ¿Con qué frecuencia durante las últimas dos semanas se ha sentido avergonzado en público por olores desagradables o ruidos causados por su problema intestinal?

- 1. Siempre
- 2. Casi siempre
- 3. Bastantes veces
- 4. A veces
- 5. Pocas veces
- 6. Casí nunca
- 7. Nunca

19. Muchos pacientes con un problema intestinal tienen frecuentes preocupaciones y angustias a causa de su enfermedad. En general, ¿con qué frecuencia durante las últimas dos semanas se ha sentido preocupado o angustiado por llegar a tener cáncer, o por pensar que nunca más volvería a encontrarse bien, o por tener una recaída?

- 1. Siempre
- 2. Casi siempre
- 3. Bastantes veces
- 4. A veces
- 5. Pocas veces
- 6. Casí nunca
- 7. Nunca

24. ¿Con qué frecuencia durante las últimas dos semanas ha tenido ganas de ir al lavabo sin realmente hacer de vientre?

- 1. Siempre
- 2. Casi siempre
- 3. Bastantes veces
- 4. A veces
- 5. Pocas veces
- 6. Casí nunca
- 7. Nunca

25. ¿Con qué frecuencia se ha sentido deprimido, lloroso o desanimado a causa de su problema intestinal durante las últimas dos semanas?

- 1. Siempre
- 2. Casi siempre
- 3. Bastantes veces
- 4. A veces
- 5. Pocas veces
- 6. Casí nunca
- 7. Nunca

26. ¿Con qué frecuencia durante las últimas dos semanas ha manchado accidentalmente su ropa interior?

- 1. Siempre
- 2. Casi siempre
- 3. Bastantes veces
- 4. A veces
- 5. Pocas veces
- 6. Casí nunca
- 7. Nunca

27. ¿Con qué frecuencia durante las últimas dos semanas se ha sentido enfadado a causa de su problema intestinal?

- 1. Siempre
- 2. Casi siempre
- 3. Bastantes veces
- 4. A veces
- 5. Pocas veces
- 6. Casí nunca
- 7. Nunca
28. En general, durante las últimas dos semanas, ¿hasta qué punto su problema intestinal ha sido un problema para sus relaciones sexuales?
   - 1. Un gran problema
   - 2. Un problema importante
   - 3. Bastante problemático
   - 4. Algo problemático
   - 5. Muy poco problemático
   - 6. Casi ningún problema
   - 7. Ningún problema

29. ¿Con qué frecuencia ha tenido náuseas o ganas de vomitar durante las últimas dos semanas?
   - 1. Siempre
   - 2. Casi siempre
   - 3. Bastantes veces
   - 4. A veces
   - 5. Pocas veces
   - 6. Casi nunca
   - 7. Nunca

30. ¿Con qué frecuencia se ha sentido de mal humor durante las últimas dos semanas?
   - 1. Siempre
   - 2. Casi siempre
   - 3. Bastantes veces
   - 4. A veces
   - 5. Pocas veces
   - 6. Casi nunca
   - 7. Nunca

31. ¿Con qué frecuencia durante las últimas dos semanas se ha sentido incomprendido por los demás?
   - 1. Siempre
   - 2. Casi siempre
   - 3. Bastantes veces
   - 4. A veces
   - 5. Pocas veces
   - 6. Casi nunca
   - 7. Nunca

32. ¿Hasta qué punto ha estado satisfecho, contento o feliz con su vida personal durante las últimas dos semanas?
   - 1. Muy insatisfecho, infeliz
   - 2. Bastante insatisfecho, infeliz
   - 3. Algo insatisfecho, descontento
   - 4. Algo satisfecho, contento
   - 5. Bastante satisfecho, contento
   - 6. Muy satisfecho, feliz
   - 7. Extremadamente satisfecho, no podría ser más feliz

for CD and UC. On the other hand, IBDQ-32 scores did not differ from those of IBDQ-36, which indicates a good equivalence with the previously available “gold standard”. While the present manuscript was being prepared an IBDQ-32 validation study has been published, which confirms the questionnaire’s adequate psychometric properties with no reference to linguistic validation, and which uses as a reference for properties assessment questionnaires that are nonspecific for IBD, but rather psychological assessment (23).

In conclusion, the Spanish version of the 32-item IBDQ questionnaire is valid and discriminating, and may be used to measure HRQoL in patients with Crohn’s disease or ulcerative colitis.

REFERENCES